



Chelsea® Power Take-Off

2023 Applications Catalog



ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

 **WARNING:** This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

General Safety InformationPages 1.1 thru 1.11

Proper Matching of PTO	1.1
Rotating Auxiliary Driveshafts	1.2 thru 1.3
Pump Installation Precautions	1.4
How to Use the Catalog	1.5 thru 1.8
Power Take-Off Worksheet	1.9
Transmission Opening Chart	1.10
Input Gear Designators	1.11

**Section
1****PTO Options & Kits**Pages 2.1 thru 2.44

Mechanical 6-Bolt PTOs	2.1 thru 2.6
Mechanical 8-Bolt PTOs	2.7 thru 2.13
Mechanical Rear Mount	2.14
PowerShift Hydraulic 6-Bolt PTOs	2.15 thru 2.16
PowerShift Pneumatic or Hydraulic 6/8-Bolt PTOs	2.17 thru 2.19
PowerShift 8-Bolt PTOs	2.20
PowerShift Hydraulic 10-Bolt PTOs....	2.21 thru 2.23
Constant Mesh 10-Bolt PTOs	2.24 thru 2.25
Split Shaft Gear Boxes	2.26
Crankshaft Driven	2.27 thru 2.28
Geared Adapters.....	2.29 thru 2.37
Kits	2.38 thru 2.41
PTO Shift Options	2.42
Pumps	2.43

**Section
2****Flange Dimensions**Pages 3.1 thru 3.47

This section can be used for quick reference of flange dimensions.

**Section
3****Assembly Options**Pages 4.1 thru 4.43

This section can be used for quick reference to PTO options or ordering units.

**Section
4****Applications**Pages 5.1.1 thru 5.16.36

This section contains the latest Transmission/PTO application information by Transmission Manufacturer.

**Section
5****Offer of Sale**Page 5.17.1 thru 5.17.3

GENERAL SAFETY INFORMATION



General Safety Information	.....	1.1 thru 1.11
Proper Matching of PTO	.....	1.1
Rotating Auxiliary Driveshafts	.....	1.2 thru 1.3
Pump Installation Precautions	.....	1.4
How to Use the Catalog	.....	1.5 thru 1.8
Power Take-Off Worksheet	.....	1.9
Transmission Opening Chart	.....	1.10
Input Gear Designators	.....	1.11

Safety

These instructions are intended for the safety of the installer, operator, and supporting personnel. Read them carefully and make sure you understand them thoroughly.

To Prevent Injury to Yourself and/or Damage to the Equipment:

- Read carefully all owner's manuals, service manuals, and/or other instructions.
- Always follow proper procedures, and use proper tools and safety equipment.
- Be sure to receive proper training.
- Never work alone while under a vehicle or while repairing or maintaining equipment.
- Always use proper components in applications for which they are approved.
- Be sure to assemble components properly.
- Never use worn-out or damaged components.
- Always block any raised or moving device that may injure a person working on or under a vehicle.
- Never operate the controls of the Power Take-Off (PTO) or other driven equipment from any position that could result in getting caught in the moving machinery.

Proper Matching of PTO

⚠ WARNING: A Power Take-Off must be properly matched to the vehicle transmission and to the auxiliary equipment being powered. An improperly matched Power Take-Off could cause severe damage to the vehicle transmission, the auxiliary driveshaft, and/or the auxiliary equipment being powered. **Damaged components or equipment could malfunction causing serious personal injury to the vehicle operator or to others nearby.**

To avoid personal injury and/or equipment damage:

- Always refer to Chelsea catalogs, literature, and owner's manuals and follow Chelsea recommendations when selecting, installing, repairing, or operating a Power Take-Off.
- Never attempt to use a Power Take-Off not specifically recommended by Chelsea for the vehicle transmission.
- Always match the Power Take-Offs specified output capabilities to the requirements of the equipment to be powered.
- Never use a Power Take-Off whose range of speed could exceed the maximum.

Cold Weather Operation of PowerShift PTOs

⚠ WARNING: During extreme cold weather operation [32°F (0°C) and lower], a disengaged PowerShift Power Take-Off can momentarily transmit high torque that will cause unexpected output shaft rotation. This is caused by the high viscosity of the transmission oil when it is extremely cold. As slippage occurs between the Power Take-Off clutch plates, the oil will rapidly heat up and the viscous drag will quickly decrease.

The Power Take-Off output shaft rotation could cause unexpected movement of the driven equipment resulting in serious personal injury, death, or equipment damage.

To avoid personal injury and/or equipment damage:

- Driven equipment must have separate controls.
- The driven equipment must be left in the disengaged position when not in operation.
- Do not operate the driven equipment until the vehicle is allowed to warm up.



This symbol warns of possible personal injury.

Rotating Auxiliary Driveshafts

WARNING: Rotating auxiliary driveshafts are dangerous. You can snag clothes, skin, hair, hands, etc. This can cause serious injury or death.

- Do not go under the vehicle when the engine is running.
- Do not work on or near an exposed shaft when the engine is running.
- Shut off the engine before working on the Power Take-Off or driven equipment.
- Exposed rotating driveshafts must be guarded.

Guarding Auxiliary Driveshafts

WARNING: We strongly recommend that a Power Take-Off and a directly mounted pump be used to eliminate the auxiliary driveshaft whenever possible. If an auxiliary driveshaft is used and remains exposed after installation, it is the responsibility of the vehicle designer and PTO installer to install a guard.

Using Set Screws

WARNING: Auxiliary driveshafts may be installed with either recessed or protruding set screws. If you choose a square head set screw, you should be aware that it will protrude above the hub of the yoke and may be a point where clothes, skin, hair, hands, etc. could be snagged. A socket head set screw, which may not protrude above the hub of the yoke, does not permit the same amount of torquing as does a square head set screw. Also a square head set screw, if used with a lock wire, will prevent loosening of the screw caused by vibration. Regardless of the choice made with respect to a set screw, an exposed rotating auxiliary driveshaft must be guarded.

Important: Safety Information and Owner's Manual

Chelsea Power Take-Offs are packaged with safety information decals, instructions, and an owner's manual. These items are located in the envelope with the PTO mounting gaskets. Also, safety information and installation instructions are packaged with some individual parts and kits. Be sure to read the owner's manual and safety information before installing or operating the PTO. Always install the safety information decals according to the instructions provided. Place the owner's manual in the vehicle glove compartment.

Operating the PTO with the Vehicle in Motion

WARNING: Some Power Take-Offs may be operated when the vehicle is in motion. To do so, the PTO must have been properly selected to operate at highway speeds and correctly matched to the vehicle transmission and the requirements of the driven equipment.

If in doubt about the PTOs specifications and capabilities, avoid operating the PTO when the vehicle is in motion. Improper application and/or operation can cause serious personal injury or premature failure of the vehicle, the driven equipment, and/or the PTO

Always remember to disengage the PTO when the driven equipment is not in operation.



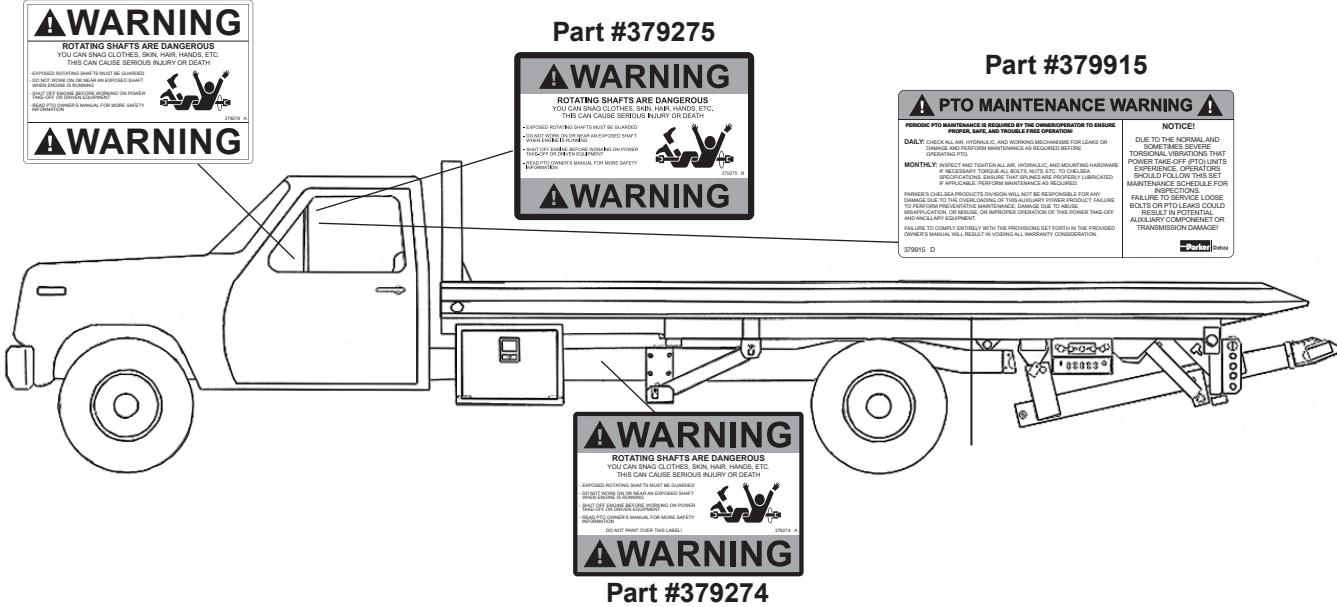
This symbol warns of possible personal injury.

Chelsea PTO Safety Label Instructions

1. The two black and orange on white 5" x 7" pressure sensitive vinyl labels, part number 379274, must be placed on the vehicle frame rails (one (1) on each side), in a position that would be **HIGHLY** visible to anyone that would go under the truck near the PTO rotating shaft. If the vehicle is to be painted after these labels are installed, cover them with two (2) blank masking covers. Remove the masking covers after painting.
2. Place the one (1) black and orange on white 3.5" x 5" pressure sensitive vinyl label, part number 379275, on the visor nearest the operator of the vehicle, this must be placed near the PTO visor label.
3. Place the one (1) red and white with black lettering 3.5" x 7" pressure sensitive vinyl label, part number 379915, on the opposite side of the visor from the above label part number 379275.
4. Place the one (1) white and black heavy duty card, part number 379276, in the vehicle glove box in a position highly visible to the operator. For example, try to place this card on top of whatever may be in the glove box.

If you require labels, please order part number 328946X at no charge from your local Chelsea Warehouse or send request direct to:

Parker Hannifin Corporation
Chelsea Products Division
8225 Hacks Cross Road
Olive Branch, MS 38654
Customer Service: (662) 895-1011

Part #379276**Safety**

! This symbol warns of possible personal injury.

Pump Installation Precautions

Use a bracket to secure and support the pump to the transmission if:

- Do not go under the vehicle when the engine is running.
- The pump, fittings, hose assemblies, and oil weighs 40 pounds or more.
- The combined length of the PTO and pump is 18 inches or more, from the PTO centerline to the end of the pump.
- Extreme or unknown conditions of application such as, duty cycles, vehicle vibrations, engine harmonics, terrain, or driven equipment harmonics, are present.

ALSO: remember to pack the female pilot of the PTO pump shaft with grease before installing the pump on the PTO.

Use caution to ensure that the bracket does not pre-load or stress the pump/PTO bolts or installation hardware. Brackets must be designed and manufactured to adequately eliminate deflections from weight, vibration, and truck movements.

Please refer to the PTO Series' Owner's Manual for more information.

Power Take-Off Maintenance

Due to the normal and sometime severe torsional vibrations that Power Take-Off units experience, operators should follow a set maintenance schedule for inspections. Failure to service loose bolts or Power Take-Off leaks could result in potential auxiliary Power Take-Off or transmission damage.

Periodic PTO MAINTENANCE is required by the owner/operator to ensure proper, safe, and trouble free operation.

Daily: Check all air, hydraulic and working mechanisms before operating PTO.
Perform maintenance as required.

Monthly: Inspect for possible leaks and tighten all air, hydraulic, and mounting hardware, if necessary. Torque all bolts, nuts, etc. to Chelsea specifications. Ensure that splines are properly lubricated, if applicable. Perform maintenance as required.

With regards to the direct mounted pump splines, the PTO requires the application of a specially formulated anti-fretting, high pressure, high temperature grease. The addition of the grease has been proven to reduce the effects of the torsional vibrations, which result in fretting corrosion on the PTO internal splines as well as the pump external splines. Fretting corrosion appears as a "rusting and wearing" of the pump shaft splines. Severe duty applications, which require long PTO running times and high torque may require more frequent regreasing. Applications such as Utility Trucks that run continuously and are lightly loaded also require frequent regreasing due to the sheer hours of running time. It is important to note that service intervals will vary for each and every application and is the responsibility of the end user of the product. Chelsea also recommends that you consult your pump owner's manuals and technical services for their maintenance guidelines. Fretting corrosion is caused by many factors and without proper maintenance the anti-fretting grease can only reduce its effectiveness on components.

Chelsea offers the grease to our customers in two packages. The first is a 5/8 fluid ounce tube (379688), which is included with every applicable PTO, and the second is a 14-ounce grease cartridge (379831).

Warranty: Failure to comply entirely with the provisions set forth in the appropriate Owner's Manual will result in voiding of ALL Warranty consideration.

CHELSEA®**EATON FULLER****FLR-58****Safety**

1 FOM-16D313E-LEP
RTAO-10710C-AC
RTAO-10710C-AS
RTAO-12710C-AC
RTAO-12710C-AS
RTAO-14710C-AC
RTAO-14710C-AS
RTAO-16710C-AS

RTLC-16609E (Convertible 9 to 13 Speed)
RTLO-12713A
RTLO-13118-AMT
RTLO-14713A
RTLO-14713A-T2
RTLO-14718B
RTLO-14718B-T2
RTLO-14918A-AS2

RTLO-14918A-AS3
RTLO-14918B
RTLO-14918B-AS
RTLO-16713A
RTLO-16713A-T2
RTLO-16718B
RTLO-16718B-T2
RTLO-16913A

BOTTOM SIDE ONLY**RIGHT SIDE ONLY**

2 TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

3 PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION Application Approval required for PTO Output Shaft Speeds Above 2500 RPM

4 PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Filler Block	Adapter Assy	Stud Kit
-------------	--------------	---------	--------------	--------------	--------------	----------	-----------	--------------	---------	--------------	--------------	--------------	----------

5 ONE SPEED - TWO GEAR - MECHANICAL SHIFT													
489XAAHX-*5 (11)	250 I	Opp	61	Furnished	221XCAHX-*3	250 I	Eng	66	7-A-032(P)(27)	329138X	Furnished		
489XCAHX-*5 (12)	250 I	Opp	78	Furnished	221XEAHX-*3	250 I	Eng	76		329138X	Furnished		
489XFAHX-*5 (2)	250 I	Opp	96	Furnished	221XPAHX-*3	200 I	Eng	124		329138X	Furnished		
489XHAHX-*5 (14)	250 I	Opp	111	Furnished	442XAAHX-*3 (11)	250 I	Opp	58			Furnished		
489XLAHX-*5 (1)	222 I	Opp	124	Furnished	442XBAXH-*3 (17)	250 I	Eng	58			REQUIRED	Furnished	
489XQAHX-*5 (1)	206 I	Opp	134	Furnished	442XCAHX-*3 (12)	250 I	Opp	74				Furnished	
489XRAHX-*5 (1)	178 I	Opp	155	Furnished	442XFAHX-*3 (2)	250 I	Opp	92				Furnished	
489XSAHX-*5 (1)	150 I	Opp	184	Furnished	442XHAHX-*3 (14)	250 I	Opp	107				Furnished	
680XFAHX-*3 (9)	288 I	Opp	96	Furnished	442XLAHX-*3 (1)	233 I	Opp	119				Furnished	
680XHAHX-*3 (19)	249 I	Opp	111	Furnished	442XQAHX-*3 (1)	216 I	Opp	128				Furnished	
680XQAHX-*3 (10)	206 I	Opp	134	Furnished	442XRAHX-*3 (1)	187 I	Opp	148				Furnished	
680XRAHX-*3 (18)	178 I	Opp	155	Furnished	660XFAHX-*3 (9)	301 I	Opp	92				Furnished	
680XSAHX-*3 (13)	150 I	Opp	184	Furnished	660XHAHX-*3 (19)	260 I	Opp	107				Furnished	
823XBAHX-*3 (21)	423 I	Opp	65	Furnished	660XQAHX-*3 (10)	216 I	Opp	128				Furnished	
823XDAHX-*3 (25)	357 I	Opp	77	Furnished	660XRAHX-*3 (18)	187 I	Opp	148				Furnished	
823XGAHX-*3 (26)	329 I	Opp	84	Furnished									
823XJAHX-*3 (22)	279 I	Opp	99	Furnished									
823XMAHX-*3 (20)	238 I	Opp	116	Furnished									
823XRAHX-*3 (24)	172 I	Opp	160	Furnished									
823XTKTX-*3 (16)	142 I	Opp	194	8-A-165(T)(27)									
880XBAHX-*3 (3)	423 I	Opp	65	Furnished									
880XDAHX-*3 (4)	357 I	Opp	77	Furnished									
880XGAHX-*3 (8)	329 I	Opp	84	Furnished									
880XJAHX-*3 (5)	279 I	Opp	99	Furnished									
880XMAHX-*3 (6)	238 I	Opp	116	Furnished									
880XQAHX-*3 (15)	203 I	Opp	136	Furnished									
880XRAHX-*3 (7)	172 I	Opp	160	Furnished									

11 ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3	300 C	Opp	54	328481X	Furnished	272XAAJX-*3	300 C	Opp	51				
272XAAJX-*3	300 C	Opp	53	328481X	Furnished	272XBAJX-*3	300 C	Opp	62				
282XBAJX-*3	300 C	Opp	65	Furnished		272XCAJX-*3	300 C	Opp	76				

Continued at Page

† = Intermittent Torque Only - De-Rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

13 **IMPORTANT:** Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing. Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103

(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1135
(9) Input Gear Part No. 5-P-1242
(10) Input Gear Part No. 5-P-1246
(11) Input Gear Part No. 5-P-1280
(12) Input Gear Part No. 5-P-1287

(13) Input Gear Part No. 5-P-1322
(14) Input Gear Part No. 5-P-1364
(15) Input Gear Part No. 5-P-1385
(16) Input Gear Part No. 5-P-1395
(17) Input Gear Part No. 5-P-1418
(18) Input Gear Part No. 5-P-1441

(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(24) Input Gear Part No. 5-P-721
(25) Input Gear Part No. 5-P-971

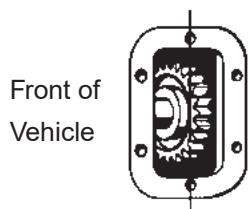
(26) Input Gear Part No. 5-P-980
(27) Filler block furnished with PTO

① Transmission Models

- Models that apply to this application page.

② Transmission Gear Data

- Location of PTO opening on the transmission and opening size (SAE standard or non-standard).
- Gear position within the opening - either Gear to Rear of Centerline or Gear Forward of Centerline by 1/2 inch.



Rear of
Vehicle



Front of
Vehicle

Rear of
Vehicle

- Description of the PTO driver gear - tooth count of the gear and description of the cut of the gear teeth (Spur, Left Hand Helix, or Right Hand Helix).



SPUR - teeth are cut straight across from its face from the side



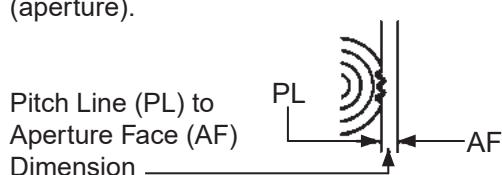
LH HELIX - teeth slant upwards from left to right



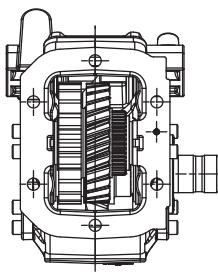
RH HELIX - teeth slant upwards from right to left

③ Pitch Line to Aperture Face

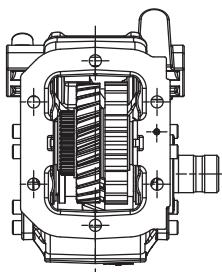
- The distance between the pitch line of the transmission PTO driver gear and the mounting face (aperture).

**④ PTO Model**

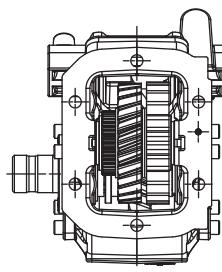
- The PTOs listed are normally mounted to the transmission with the output shaft toward the rear of the vehicle, with the shaft below the center of the opening.
- To complete the model number refer to the Assembly Options charts in section 4.



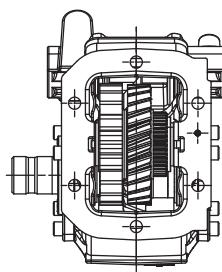
Ass'y 3



Ass'y 4



Ass'y 5



Ass'y 6

5 PTO Torque Ratings (shown in lbs-ft)

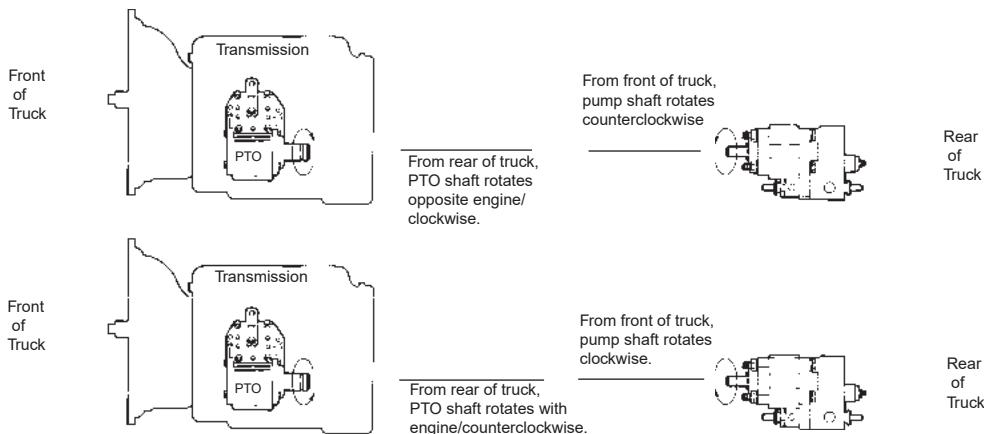
- Intermittent = Torque rating when the PTO operates only 5 minutes out of every 15. A PTO being used more than 5 minutes at a time is considered continuous duty and should have its torque rating reduced by 30%. To do this, multiply the given torque rating by .7. (i.e. 140 lbs-ft x .7 = 98 lbs-ft).
- Continuous = Some newer PTOs are designed with one torque rating for either Intermittent or Continuous operations. There is no need to de-rate the torque rating for PTOs that are rated as Continuous Duty.

6 PTO Direction of Rotation

- Viewed by standing at the rear of the vehicle, looking forward at the PTO shaft, with the PTO shaft pointing toward the rear of the vehicle.

PTO	Driven Equipment
OPP (looks "clockwise")	Driven equipment must rotate counterclockwise (also called left-hand rotation, A for anti-clockwise or CCW for counterclockwise).
ENG (looks "counterclockwise")	Driven equipment must rotate clockwise (also called right-hand rotation or C for clockwise).

- Remember that the PTO is specified looking from the rear of the truck to the front of the truck, and the driven equipment is specified looking from the front of the truck to the rear of the truck.

**7 Output Shaft Speed Percentage**

- The output shaft speed percentage is based upon engine RPM.

Ex: If the engine speed is 1000 RPM and the PTO rating is 90% of engine speed, the PTO output shaft will turn 900 RPM ($1000 \times .90$). If the engine speed is 1000 RPM and the PTO rating is 127% of engine speed, the PTO output shaft will turn 1270 RPM (1000×1.27).

NOTE: Output shaft speeds should not exceed 2500 RPM without application approval from Chelsea.

⑧ Filler Block

- If a filler block is required to properly mount the PTO or an adapter, the correct part number will be shown here. It must be ordered separately from the PTO.
- If a (T) is shown next to the part number, the filler block should be positioned next to the transmission.
- If a (P) is shown next to the part number, the filler block should be positioned next to the Power Take-Off.

⑨ Adapter Assembly

- An adapter or adapter plate listed in this column is required to mount the PTO to the transmission and must be ordered separately.
- Geared Adapters - used to change the rotation of the output shaft, clear an interference problem, or reach a drive gear that may be deep within the transmission.
- Adapter Plates - used to mount a six-bolt PTO to an eight-bolt opening.
- A geared adapter should not be mounted to an adapter plate.
- Do not mount two or more geared adapters together.
- A geared adapter should not be used on automatic transmissions.

⑩ Stud Kit

- When the word *Furnished* appears in this column, the stud kit is included with the PTO.
- A stud kit number listed in this column (i.e. 7170-1X) means that the stud kit must be ordered separately from the PTO.

⑪ PTO Header

- PTO headers with type of shift mechanism. This describes the type of PTO listed in the section below the header.
- Mechanical = Gear into Gear Shifting
- PowerShift (Air), PowerShift (Hydraulic) = Clutch type

⑫ Torque Rating Duty Type

- Footnote explaining the PTO torque type relating to Intermittent and Continuous Duty. See arrow #5 on page 1.10.

⑬ Safety Notes

- Caution & Warning notes that pertain to the safe operation of the transmission and PTO. Each application section has notes relating to each specific application page that are important to the application of a PTO. All notes must be read prior to specifying a PTO.
- The notes section can be found in the back of each transmission section.

⑭ Numbered Footnotes

- These footnotes provide input gear numbers and filler block information by PTO model number.

Information from the Customer:

1. Make and model of transmission.

2. Type of driven equipment.

3. Input horsepower required of driven equipment.

4. Desired operating speed of driven equipment.

5. Approximate engine speed desired during operation.

Figure the equipment speed expressed as a percentage of the desired engine speed during the duty cycle.

$$\text{Driven equipment} \div \text{Engine speed} = \text{PTO\%}$$

6. Direction of driven equipment shaft rotation in relation to direction of engine rotation (check one).

- Opposite Engine Rotation
 Engine Rotation

7. Type of connection between PTO and driven equipment (check one).

- Driveshaft
 Direct mount pump flange
 Pulleys and belts (requires eng. approval)

8. Mounting location (check all suitable locations).

- Left
 Right
 Bottom
 Top
 Countershaft

9. Duty cycle (check one).

- Intermittent
 Continuous (Greater than 5 mins in a 15 min period)

10. Other PTO speeds or reverse gear requirements.

Using the HY25-3000/US, Find:

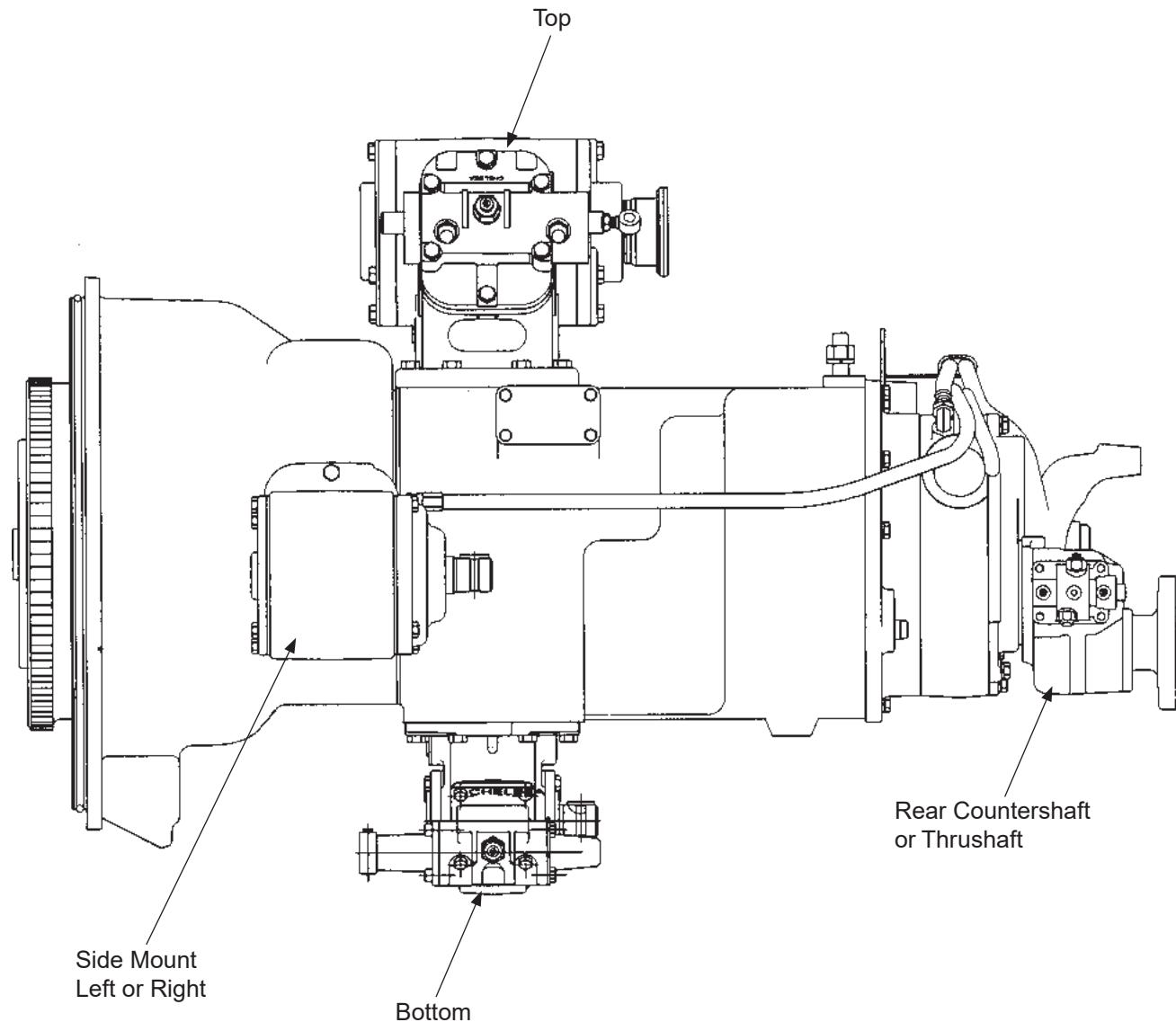
11. Application page number for make and model of transmission.
12. From items 3 and 4 determine the intermittent torque requirements of the driven equipment using this formula:

$$(HP \times 5252) \div RPM = \text{lbs-ft}$$

$$T = \text{_____ lbs-ft (intermittent)}$$

13. If torque requirements are continuous (more than 5 minutes operation every 15 minutes) divide the torque figure by .7. The result will be the torque required for continuous operation.
14. Find the PTO in the HY25-3000/US catalog that meets the torque, rotation, and speed percentage requirements of the application. Note the PTO model number and all numbers for mounting parts on the lines below.

15. Determine what options are needed and change model number prefix and suffix to obtain correct options. (See Model Number Construction in section 4).



Input Gear Designators**Applications
General Safety Information**

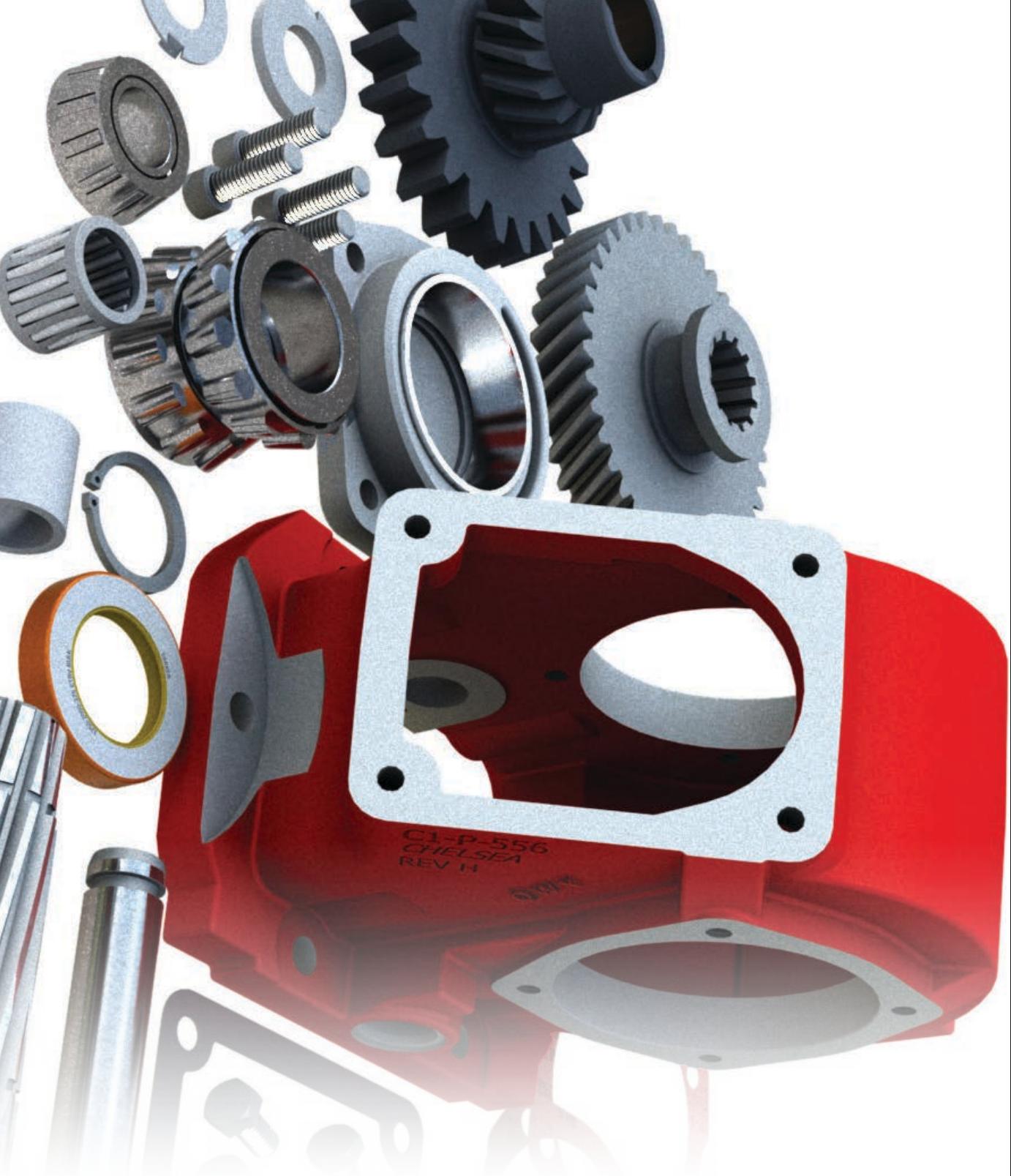
AB	Universal	DS	Warner	HD	Mitsubishi	KV	Caterpillar
AC	Fiat	DU	Eaton Fuller	HD	Ford	KX	ZF
AD	Spicer	DX	Chevrolet	HE	Adapter Gear	KY	ZF
AG	Spicer	DY	Clark	HF	Adapter Gear	KZ	Isuzu
AH	Universal			HG	Adapter Gear		
AJ	Universal	EC	ZF	HH	Adapter Gear	LA	CAT
AK	Universal	ED	ZF	HJ	Adapter Gear	LB	ZF
AL	Eaton Fuller	EF	New Process	HK	Adapter Gear	LC	Eaton
AP	Spicer	EL	Isuzu	HL	Adapter Gear	LD	Eaton
AQ	Spicer	EP	Warner	HM	Adapter Gear	LE	Eaton
AR	Spicer	ER	Isuzu	HP	Adapter Gear	LG	Eaton
AU	Chelsea	ES	Eaton Fuller	HQ	Adapter Gear	LH	Eaton
AW	New Process	ET	Eaton Fuller	HR	Adapter Gear	LK	Eaton
AX	Eaton Fuller	EV	Eaton Fuller	HU	Mack	LL	Ford
		EW	Eaton Fuller	HV	Allison	LM	Eaton
BA	Navistar			HY	ZF	LP	Eaton
BC	Eaton Fuller	FA	Jatco/Isuzu	HZ	Eaton Fuller	LQ	Eaton
BE	Chevy	FB	GM/Chevy			LR	Eaton
BF	Warner	FC	Dodge	JB	Adapter Gear	LS	Mitsubishi
BG	Spicer	FE	Getrag	JD	Tremec	LT	Eaton
BH	Spicer	FJ	Allison	JE	Adapter Gear	LU	Eaton
BJ	Chevy	FL	ZF	JG	Mercedes	LV	Eaton
BK	New Process	FM	Nissan	JH	Mercedes	LX	Eaton
BL	New Process	FN	Spicer	JK	Eaton Fuller	LY	Eaton
BM	Eaton Fuller	FP	Mack/Renault	JL	Adapter Gear	LZ	Eaton
BN	New Process	FQ	Mack/Renault	JM	Eaton Fuller		
BP	Chevy/Spicer	FR	Eaton Fuller	JN	Adapter Gear	MA	Detroit
BQ	Chevy/Spicer	FS	Hino	JP	NVG	MB	Detroit
BR	Hino	FT	Mitsubishi	JQ	Adapter Gear	MC	Detroit
BS	New Process	FV	Isuzu	JR	Eaton Fuller	ME	Eaton
BU	Eaton Fuller	FW	Eaton Fuller	JS	Spicer	MF	Ford
BY	Warner	FZ	Hino	JT	Spicer	MG	ZF
BZ	Warner			JU	Spicer		
		GE	Eaton Fuller	JV	Eaton Fuller	QT	Allison
CB	New Process	GF	Eaton Fuller	JW	Eaton Fuller		
CC	New Process	GP	Eaton Fuller	JX	Adapter Gear		
CD	Warner	GQ	Tremec	JY	Adapter Gear		
CJ	Saab/Scania	GR	ZF	JZ	Adapter Gear		
CM	New Process	GS	ZF				
CR	Spicer	GW	Nissan	KA	Adapter Gear		
		GX	Mitsubishi	KB	Adapter Gear		
DA	Mack/Detroit	GX	Adapter Gear	KH	Mercedes		
DB	Eaton Fuller/ Detroit	GY	Adapter Gear	KJ	ZF		
		GZ	Adapter Gear	KK	Adapter Gear		
DC	Hino/Nissan	GZ	Eaton Fuller	KL	ZF		
DD	Spicer/Detroit			KM	Adapter Gear		
DH	Renault	HA	Adapter Gear	KN	TTC		
DJ	Renault	HA	Mitsubishi	KP	TTC		
DK	Renault	HB	Adapter Gear	KR	Adapter Gear		
DM	Eaton Fuller	HB	Mitsubishi	KS	Ford		
DN	Eaton Fuller	HC	Mitsubishi	KT	Universal		
DQ	Saab/Scania	HD	Adapter Gear	KU	Aisin		

Safety

NOTES



PTO OPTIONS & KITS



Parker | Chelsea

ENGINEERING YOUR SUCCESS.

Mechanical Shift 6-Bolt PTOs

PTO Options Chart	2.1 thru 2.2
Output Conversion Kits	2.3 thru 2.4
Shifter & Cover Kits	2.5
Installation Kits & Filler Blocks	2.6

Mechanical Shift 8-Bolt PTOs

PTO Options Chart	2.7 thru 2.8
Output Conversion Kits	2.9 thru 2.11
Shifter & Cover Kits	2.12
Filler Blocks & Adapter Plates	2.13

Mechanical Shift Rear Mount PTOs

PTO Options Chart	2.14
Installation Kits	2.14

PowerShift Hydraulic 6-Bolt PTOs

PTO Options Chart	2.15
Installation Kits	2.16

PowerShift Pneumatic or Hydraulic 6/8-Bolt PTOs

PTO Options Chart	2.17
Installation Kits	2.18 thru 2.19

PowerShift Hydraulic 8-Bolt PTOs

PTO Options Chart	2.20
-------------------------	------

PowerShift Hydraulic 10-Bolt PTOs

PTO Options Chart	2.21 thru 2.22
Installation & Conversion Kits	2.23

Constant Mesh 10-Bolt PTOs

PTO Options Chart	2.24
Output Conversion Kits	2.25

Split Shaft Gear Boxes

PTO Options Chart	2.26
Specification Charts	2.26

Crankshaft Driven

PTO Options Chart	2.27
Output Conversion Kits	2.28

Continued on next page

Geared Adapters

Guide to Specifying Geared Adapters	2.29
Standard Geared Adapters	2.30
Specifying Standard Geared Adapters	2.31 thru 2.32
Kit-Style Dimensional Data	2.33 thru 2.34
Gear Charts	2.35 thru 2.36
Geared Adapters & Plates for Import Transmissions	2.37

Kits

Gasket Kits	2.38
Gasket & Seal Kits	2.39
PTO Options & Kits	2.40
Bracket Kits	2.41

PTO Shift Options

Shift Options Overview	2.42
------------------------------	------

Pumps

Dump Pump	2.43
-----------------	------

PTO Options Chart – Mechanical PTOs		221	340
Lubrication			
P	Pressure Lube	x	
X	No Pressure Lube	x	x
Shifting			
A	Air Shift (Same Side as Output)		x
A	Air Shift	x	
C	Special Shift Control & Bracket Kit	x	
G	Air Shift (Opposite Output)		x
H	No Shift Assembly	x	
M	Constant Mesh	x	
P	12V Elec/Air Shift	x	
S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return	x	
T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return	x	
U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return	x	
V	Air Shift w/o Installation Kit	x	x
W	Wire Shift	x	
X	Wire Shift w/o Cable & Knob	x	
Y	Lever Shift		x
Output			
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x	
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	
AZ	SAE B 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x	
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	x	
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	x	
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x	
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	
GQ**	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x	
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)	x	
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x	
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)	x	
RK	Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft	x	
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)	x	x
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)	x	
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	
XQ**	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x	
XX***	1-1/4" Tapered Output Shaft w/Keyway	x	
XY	ISO 7653 Pump Mount DIN 5462 Shaft	x	

** XQ/GQ same as XK/GK except flange rotated 90°

*** Order companion (379824) separately

NOTE: Always check current price book for available options

PTO Options Chart – Mechanical PTOs		442	447	660
Lubrication				
P	Pressure Lube	X	X	X
X	No Pressure Lube	X	X	X
Shifting				
A	Air Shift	X	X	X
C	Special Shift Control & Bracket Kit	X	X	X
D	Eaton Procision™ 12V Elec/Air	X		
E	Hydraulic Shift (Eaton Procision™)	X		
H	No Shift Assembly	X	X	X
M	Constant Mesh	X	X	X
P	12V Elec/Air Shift	X	X	X
S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return	X	X	X
T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return	X	X	X
U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return	X	X	X
V	Air Shift w/o Installation Kit	X	X	X
W	Wire Shift	X	X	X
X	Wire Shift less Cable & Knob	X	X	X
Output				
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	X	X	X
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	X	X	X
AZ	SAE B 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	X	X	X
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	X	X	X
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	X	X	X
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	X	X	X
GH	Greaseable SAE B 2-Bolt Rotatable Flange, SAE BB Shaft (1" - 15T)			X
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	X	X	X
GQ**	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	X	X	X
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	X	X	X
GY	Greaseable ISO 7653 Pump Mount DIN 5462 Shaft			X
GZ	Greaseable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)			X
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	X	X	X
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	X	X	X
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)	X	X	X
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	X	X	X
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)	X	X	X
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)	X	X	X
RJ	Rotatable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)			X
RK	Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	X	X	X
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft	X	X	X
SQ	SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	X		
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)	X	X	X
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)	X	X	X
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	X	X	X
XQ**	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	X	X	X
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	X	X	X
XV	1410 Series Companion Flange			X
XX***	1-1/4" Tapered Output Shaft w/ Keyway	X	X	X
XY	ISO 7653 Pump Mount DIN 5462 Shaft	X	X	X

** XQ/GQ same as XK/GK except flange rotated 90°

*** Order companion (379824) separately

NOTE: Always check current price book for available options

For converting the 221, 290, 442, 447, 660 Series Chelsea PTOs from a driveshaft output, or as listed, to a new pump flange output, use the following kits. Consult the Chelsea price book for availability by series.

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type (SAE)
AF	XD to AF	328591-30X	SAE B 2 or 4-Bolt	1" - 15 Tooth Splined (BB)
AF (Wet Spline 221)	XD to AF	328591-140X	SAE B 2 or 4-Bolt	1" - 15 Tooth Splined (BB)
AK	XD to AK	328591-28X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
AK (B Ratio)	XD to AK	329436-7X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
AZ	XD to AZ	328591-70X	SAE B 2 or 4-Bolt	1-1/4" - 14 Tooth Splined (C)
SQ	XD to SQ	328591-149X	SAE B 4-Bolt	7/8" - 13 Tooth Splined (B)
SQ (B Ratio)	XD to SQ	329436-9X	SAE B 4-Bolt	7/8" - 13 Tooth Splined (B)
XE	XD to XE	328591-27X	SAE A 2 or 4-Bolt	5/8" - 9 Tooth Splined (A)
XK	XD to XK	328591-16X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XK (B Ratio)	XD to XK	329436-3X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XQ	XD to XQ	328591-17X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XQ (B Ratio)	XD to XQ	329436-6X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XR	XD to XR	328591-52X	Chelsea Special (Cloverleaf)	7/8" - 13 Tooth Splined (B)
XV	XD to XV	328591-130X	1410 Series Companion Flange	1-1/4" Output Shaft w/ Keyway
XX	XD to XX	328591-122X	Not Included	1-1/4" Tapered Output Shaft w/ Keyway
XY	XD to XY	328591-121X	Not Included	DIN 5462 (B8x32x36 - 8T)
RC (Rotatable)	XD to RC	328591-112X	SAE A 2-Bolt	5/8" - 9 Tooth Splined (A)
RD (Rotatable)	XD to RD	328591-113X	SAE A 2-Bolt	7/8" - 13 Tooth Splined (B)
RD (B Ratio) (Rotatable)	XD to RD	329436-8X	SAE A 2-Bolt	7/8" - 13 Tooth Splined (B)
RA (Rotatable)	XD to RA	328591-55X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
	XR to RA	328591-53X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
RA (B Ratio) (Rotatable)	XD to RA	329436-1X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
RF (Rotatable)	XD to RF	328591-78X	SAE B 2-Bolt	1" - 15 Tooth Splined (BB)
RB (Rotatable)	XD to RB	328591-56X	SAE B 4-Bolt	7/8" - 13 Tooth Splined (B)
	XR to RB	328591-54X	SAE B 4-Bolt	7/8" - 13 Tooth Splined (B)
RB (B Ratio) (Rotatable)	XD to RB	329436-2X	SAE B 4-Bolt	7/8" - 13 Tooth Splined (B)
RE (Rotatable)	XD to RE	328591-134X	SAE B 4-Bolt	1" - 15 Tooth Splined (BB)
RK (Rotatable)	XD to RK (WS)	328591-160X	SAE B 2 or 4-Bolt Rotatable	7/8" - 13 Tooth Splined (B)
	XD to RK (DS)	328591-159X		
RY (Rotatable)	XD to RY	328591-131X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
GA (Greaseable)	XD to GA	328591-72X		
	XR to GA	328591-73X	SAE B 2-Bolt Rotatable	*7/8" - 13 Tooth Splined (B)
	RA to GA	328591-106X		
GA (660 Series) (Greaseable)	XD to GA	328591-124X		
	RA to GA	328591-109X	SAE B 2-Bolt	*7/8" - 13 Tooth Splined (B)
GH (Greaseable)	XD to GH	328591-116X		
	RF to GH	328591-114X	SAE B 2-Bolt Rotatable	*1" - 15 Tooth Splined (BB)
GH (660 Series) (Greaseable)	XD to GH	328591-117X		
	RF to GH	328591-115X	SAE B 2-Bolt Rotatable	*1" - 15 Tooth Splined (BB)
GB (Greaseable)	XD to GB	328591-74X		
	XR to GB	328591-75X	SAE B 4-Bolt Rotatable	*7/8" - 13 Tooth Splined (B)
	RB to GB	328591-107X		
GB (660 Series) (Greaseable)	XD to GB	328591-125X		
	RG to GB	328591-110X	SAE B 4-Bolt	*7/8" - 13 Tooth Splined (B)
GK (Greaseable)	XD to GK	328591-89X		
	XK to GK	328591-86X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Splined (B)
GK (660 Series) (Greaseable)	XD to GK	328591-99X		
	XK to GK	328591-96X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Splined (B)
GQ (Greaseable)	XD to GQ	328591-91X		
	XQ to GQ	328591-86X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Splined (B)
GQ (660 Series) (Greaseable)	XD to GQ	328591-101X		
	XQ to GQ	328591-96X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Splined (B)

*Grease fitting on end of shaft

Continued on Next Page

For converting the 660 Series Chelsea PTOs from a driveshaft output, or as listed, to a new pump flange output, use the following kits. Consult the Chelsea price book for availability by series.

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type (SAE)
GF (Greaseable)	XD to GF AF to GF	328591-71X 328591-108X	SAE B 2 or 4-Bolt	*1" - 15 Tooth Splined (BB)
GF (660 Series) (Greaseable)	XD to GF AF to GF	328591-123X 328591-111X	SAE B 2 or 4-Bolt	*1" - 15 Tooth Splined (BB)
GZ (Greaseable)	XD to GZ AZ to GZ	328591-93X 328591-88X	SAE B 2 or 4-Bolt	*1-1/4" - 14 Tooth Splined (C)
GZ (660 Series) (Greaseable)	XD to GZ AZ to GZ	328591-103X 328591-98X	SAE B 2 or 4-Bolt	*1-1/4" - 14 Tooth Splined (C)
GR (Greaseable)	XD to GR	328591-76X	Chelsea Special (Cloverleaf)	*7/8" - 13 Tooth Splined (B)
GR (660 Series) (Greaseable)	XD to GR	328591-126X	Chelsea Special (Cloverleaf)	*7/8" - 13 Tooth Splined (B)
GY (Greaseable)	XD to GY XY to GY	328591-92X 328591-87X	ISO 7653 Pump Mount	*DIN 5462 (B8x32x36 - 8T)
GY (660 Series) (Greaseable)	XD to GY XY to GY	328591-102X 328591-97X	ISO 7653 Pump Mount	*DIN 5462 (B8x32x36 - 8T)

*Grease fitting on end of shaft

PTO Shift Mechanisms Field Conversion Kits

Series/ Application	Assembly Arrangement	Wire to Air	Lever to Air	Wire to Elec. Over Air	Lever to Elec. Over Air
221	3, 4, 5 & 6	328390-88X	N/A	328390-109X (12V)	N/A
340	4 & 5	N/A	328390-92X	N/A	N/A
442	3, 4, 5 & 6	328390-117X	328390-117X	328390-119X (12V) 328390-120X (24V)	328390-119X (12V) 328390-120X (24V)
447	3, 4, 5 & 6	N/A	328390-117X	328390-127X (12V)	N/A
660	3, 4, 5 & 6	328390-117X	328390-117X	328390-119X (12V) 328390-120X (24V)	N/A

N/A – Non Applicable

Options**6-Bolt Cover Assemblies**

Series/ Application	Assembly Arrangement	Wire Control	Air Control
221	3 & 6	328805-1X	328723X
221	4 & 5	328805-2X	328723X
340	G4 & A5 A4 & G5	N/A	328911X 328912X
442 Q, W & X	3 & 6	329119-1X	
442 Q, W & X	4 & 5	329119-2X	
442 F, L, R, S & U	3 & 6	329121-1X	
442 F, L, R, S & U	4 & 5	329121-2X	
442 A, B & C	3 & 6	329271-1X	
442 A, B & C	4 & 5	329271-2X	
442 (All Ratios)	All		329361X
447 Q & W	3 & 6	329151-1X	
447 Q & W	4 & 5	329151-2X	
447 S, U & R	3 & 6	329152-1X	
447 S, U & R	4 & 5	329152-2X	
447 (All Ratios)	All		329363X
660 Q & W	3 & 6	329119-1X	
660 Q & W	4 & 5	329119-2X	
660 F, S & U	3 & 6	329121-1X	
660 F, S & U	4 & 5	329121-2X	
660 (All Ratios)	All		329361X

Installation Kits

Series/ Application	Assembly Arrangement	Wire Control	Air Control	Electric Over Air		Air Shift w/ Combo Valve Less Kick Out	Air Shift w/Combo Valve
				12 Volt	24 Volt		
221	3, 4, 5 & 6	328380X	328388-98X	328388-47X	328388-48X	N/A	328388-65X
340	A & G Shift	N/A	328388-40X	N/A	N/A	N/A	N/A
442	3, 4, 5 & 6	328380X	328388-98X	328388-47X	328388-48X	328388-72X	328388-65X
447	3, 4, 5 & 6	328380X	328388-98X	328388-47X	328388-48X	N/A	328388-65X
660	3, 4, 5 & 6	328380X	328388-98X	328388-47X	328388-48X	328388-72X	328388-65X

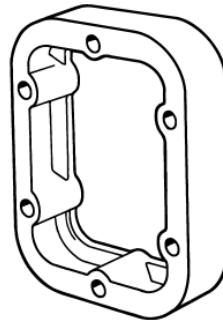
N/A – Non Applicable

Filler Blocks

A filler block, or spacer, may be required on certain transmissions to properly space the PTO and get the correct backlash. The application page will call out the filler block as required.

Two filler blocks may be used in combination with one or more gaskets between the filler block surfaces to obtain the proper spacing.

In computing the total thickness of the filler block and gasket combination, use a factor of .012" (compressed thickness of a .020" gasket 35-P-9-2 or 35-P-15-2) for every .020" gasket required in the installation.

**6-Bolt Filler Blocks**

Part Number	A Thickness	Material	Part Number	A Thickness	Material
7-A-032	.032"	Fiber	7-A-500	.500"	Cast Iron
7-A-062	.062"	Fiber	7-A-500	.500"	Cast Iron
7-A-093	.093"	Steel	7-A-550	.550"	Cast Iron
7-A-125	.125"	Steel	7-A-562	.562"	Cast Iron
7-A-140	.140"	Steel	7-A-700	.700"	Cast Iron
7-A-165	.165"	Steel	7-A-800	.800"	Cast Iron
7-A-187	.187"	Steel	7-A-1000	1.000"	Cast Iron
7-A-200	.200"	Cast Iron	7-A-1180	1.180"	Cast Iron
7-A-240	.240"	Cast Iron	7-A-1250	1.250"	Cast Iron
7-A-270	.270"	Cast Iron	7-A-1468	1.468"	Cast Iron
7-A-300	.300"	Cast Iron	7-A-1520	1.520"	Cast Iron
7-A-350	.350"	Cast Iron	7-A-1640	1.640"	Cast Iron
7-A-400	.400"	Cast Iron	7-A-1875	1.875"	Cast Iron
7-A-450	.450"	Cast Iron	7-A-2000	2.000"	Cast Iron

PTO Options Chart – Mechanical PTOs		348	489	680	823	863	880
Lubrication							
P Pressure Lube			X	X	X	X	X
W Wet Spline					X		
X No Pressure Lube		X	X, DT12	X, DT12	X, DT12	X	X, DT12
Shifting							
A Air Shift			X	X	X, DT12		X, DT12
A Air Shift (Same Side as Output)		X					
C Special Shift Control & Bracket Kit			X	X			
D 12V Elec/Air Shift Eaton Endurant™			X	X			X
G Air Shift (Opposite Output)		X					
H No Shift Assembly			X	X			X
M Constant Mesh			X, DT12	X, DT12	X		X, DT12
P 12V Elec/Air Shift			X	X	X, DT12		X, DT12
Q 24V Elec/Air Shift			X	X			
S Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return			X	X			
T Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return			X	X			
U Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return			X	X			
V Air Shift w/o Installation Kit		X	X	X	X, DT12		X, DT12
W Wire Shift			X	X			
X Wire Shift w/o Cable & Knob			X	X			
Y Lever Shift		X			X	X	X
5 Double Acting Air Shift w/o Installation Kit			DT12	DT12			
6 Double Acting (DA) Shift for Endurant XD				X			
Output							
AB DIN 120						X, DT12	
AC DIN 100						X, DT12	
AF SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)			X	X			X, DT12
AK SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)			X	X			
AZ SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)							X, DT12
AZ SAE B 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)			X	X			
GA Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)			X	X			
GB Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)			X	X			
GF Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)			X	X			
GH Greaseable SAE B 2-Bolt Rotatable Flange, SAE BB Shaft (1" - 15T)				X			
GK Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)			X	X			
GQ** Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)			X	X			
GR Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)			X	X			
GS Greaseable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)						X, DT12	X, DT12
GU Greaseable SAE C 2-Bolt Flange, SAE C Shaft (1-1/4" - 14T)						X, DT12	
GY Greaseable ISO 7653 Pump Mount DIN 5462 Shaft					X		
GZ Greaseable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)					X		
RA Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)			X	X			
RB Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)			X	X			
RC Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)			X	X			
RD Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)			X	X			
RE Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)			X	X			
RF Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)			X	X			
RJ Rotatable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)			X				
RK Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)			X, DT12	X, DT12			
RY Rotatable ISO 7653 Pump Mount DIN 5462 Shaft				X	X		

** XQ/GQ same as XK/GK except flange rotated 90°

w = Wet Spline Option

DT12 = Detroit DT12™

NOTE: Always check current price book for available options

Continued on Next Page

Options

PTO Options Chart – Mechanical PTOs
348 | **489** | **680** | **823** | **863** | **880**

Output (Cont'd)							
SQ	SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		x	x			
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)		x	x, DT12	x, DT12		
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)		x	x			
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		x	x			x, DT12
XQ**	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		x	x			
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)		x	x			
XS	SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)						x, DT12
XS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)				x, w, DT12		
XU	SAE C 2-Bolt Flange, SAE C Shaft (1-1/4" - 14T)				x, w, DT12		
XV	1410 Series Companion Flange		DT12	x, DT12	x, DT12	x	x, DT12
XX***	1-1/4" Tapered Output Shaft w/ Keyway		x	x			
XY	ISO 7653 Pump Mount DIN 5462 Shaft	x, DT12	x, DT12				x, DT12
Self-Lube							
LG	1410 Series Companion Flange w/ Self Lube						x
LA	SAE B 2-Bolt w/Self Lube Pump, SAE B Shaft (7/8" - 13T)		x	x			
LB	SAE A 2-Bolt w/Self Lube Pump, SAE B Shaft (7/8" - 13T)		x	x			

** XQ/GQ same as XK/GK except flange rotated 90°

*** Order companion (379824) separately

w = Wet Spline Option

DT12 = Detroit DT12™

NOTE: Always check current price book for available options

For converting 8-Bolt Chelsea PTOs from a driveshaft output to a pump flange output, use the following kits.

489 Series

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type (SAE)
AF	XD to AF	328591-30X	SAE B 2 or 4-Bolt	1" - 15 Tooth Splined (BB)
AK	XD to AK	328591-28X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
AZ	XD to AZ	328591-70X	SAE B 2 or 4-Bolt	1-1/4" - 14 Tooth Splined (C)
SQ	XD to SQ	328591-149X	SAE B 4-Bolt	7/8" - 13 Tooth Splined (B)
XE	XD to XE	328591-27X	SAE A 2 or 4-Bolt	5/8" - 9 Tooth Splined (A)
XK	XD to XK	328591-16X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XK (B Ratio)		329436-3X		
XQ	XD to XQ	328591-17X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XQ (B Ratio)		329436-6X		
XR	XD to XR	328591-52X	Chelsea Special (Cloverleaf)	7/8" - 13 Tooth Splined (B)
XX	XD to XX	328591-122X	Not Included	1-1/4" Tapered Output Shaft w/ Keyway
XY	XD to XY	328591-121X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
RC (Rotatable)	XD to RC	328591-112X	SAE A 2-Bolt	5/8" - 9 Tooth Splined (A)
RD (Rotatable)	XD to RD	328591-113X	SAE A 2-Bolt	7/8" - 13 Tooth Splined (B)
RD (B Ratio)	XD to RD	329436-8X	SAE A 2-Bolt	7/8" - 13 Tooth Splined (B)
RA (Rotatable)	XD to RA	328591-55X	SAE B 2-Bolt	7/8" - 13 Tooth Internal Spline (B)
RA (B Ratio)	XR to RA	328591-53X		
RA (B Ratio)	XD to RA	329436-1X	SAE B 2-Bolt	7/8" - 13 Tooth Internal Spline (B)
RF (Rotatable)	XD to RF	328591-78X	SAE B 2-Bolt	1" - 15 Tooth Splined (BB)
RB (Rotatable)	XD to RB	328591-56X	SAE B 4-Bolt	7/8" - 13 Tooth Internal Spline (B)
RB (B Ratio)	XR to RB	328591-54X		
RB (B Ratio)	XD to RB	329436-2X	SAE B 4-Bolt	7/8" - 13 Tooth Internal Spline (B)
RE (Rotatable)	XD to RE	328591-134X	SAE B 4-Bolt	1" - 15 Tooth Splined (BB)
RK (Wet Spline)	XD to RK	328591-160X	SAE B 2 or 4-Bolt Rotatable	7/8" - 13 Tooth Splined (B)
RK (Dry Spline)	XD to RK	328591-159X	SAE B 2 or 4-Bolt Rotatable	7/8" - 13 Tooth Splined (B)
RY (Rotatable)	XD to RY	328591-131X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
GA (Greaseable)	XD to GA	328591-72X		
GA (Greaseable)	XR to GA	328591-73X	SAE B 2-Bolt Rotatable	*7/8" - 13 Tooth Internal Spline (B)
GA (Greaseable)	RA to GA	328591-106X		
GB (Greaseable)	XD to GB	328591-74X		
GB (Greaseable)	XR to GB	328591-75X	SAE B 4-Bolt Rotatable	*7/8" - 13 Tooth Internal Spline (B)
GB (Greaseable)	RB to GB	328591-107X		
GK (Greaseable)	XD to GK	328591-89X		
GK (Greaseable)	XK to GK	328591-86X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Internal Spline (B)
GQ (Greaseable)	XD to GQ	328591-91X		
GQ (Greaseable)	XQ to GQ	328591-86X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Internal Spline (B)
GF (Greaseable)	XD to GF	328591-71X		
GF (Greaseable)	AF to GF	328591-108X	SAE B 2 or 4-Bolt	*1" - 15 Tooth Internal Spline (BB)
GR (Greaseable)	XD to GR	328591-76X	Chelsea Special (Cloverleaf)	*7/8" - 13 Tooth Internal Spline (B)

*Grease fitting on end of shaft

NOTE: Use 329097-1X to convert PTOs with AK, XP, XQ, XN, or XK output to the self-lube pump option.

NOTE: Contact Chelsea Customer Service for kits not listed.

680 Series

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type (SAE)
AF	XD to AF	328591-30X	SAE B 2 or 4-Bolt	1" - 15 Tooth Internal Spline (BB)
AK	XD to AK	328591-28X	SAE B 2-Bolt	7/8" - 13 Tooth Internal Spline (B)
AZ	XD to AZ	328591-70X	SAE B 2 or 4-Bolt	1-1/4" - 14 Tooth Internal Spline (C)
XE	XD to XE	328591-27X	SAE A 2 or 4-Bolt	5/8" - 9 Tooth Internal Spline (A)
XK	XD to XK	328591-16X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Internal Spline (B)
XQ	XD to XQ	328591-17X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Internal Spline (B)
XQ (B Ratio)	XD to XQ	329436-6X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Internal Spline (B)
XR	XD to XR	328591-52X	Chelsea Special (Cloverleaf)	7/8" - 13 Tooth Internal Spline (B)
XV	XD to XV	328591-130X	1410 Series Companion Flange	1-1/4" Output Shaft w/ Keyway
XX	XD to XX	328591-122X	Not Included	1-1/4" Tapered Output Shaft w/ Keyway
XY	XD to XY	328591-121X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
RC (Rotatable)	XD to RC	328591-112X	SAE A 2-Bolt	5/8" - 9 Tooth Internal Spline (A)
RA (Rotatable)	XD to RA	328591-55X	SAE B 2-Bolt	7/8" - 13 Tooth Internal Spline (B)
RA (B Ratio)	XR to RA	328591-53X	SAE B 2-Bolt	7/8" - 13 Tooth Internal Spline (B)
RB (Rotatable)	XD to RB	328591-56X	SAE B 4-Bolt	7/8" - 13 Tooth Internal Spline (B)
RB (B Ratio)	XR to RB	328591-54X	SAE B 4-Bolt	7/8" - 13 Tooth Internal Spline (B)
RE (Rotatable)	XD to RE	328591-134X	SAE B 4-Bolt	1" - 15 Tooth Internal Splined (BB)
RK (Rotatable)	XD to RK	328591-159X	SAE B 2 or 4-Bolt Rotatable	7/8" - 13 Tooth Splined (B)
RY (Rotatable)	XD to RY	328591-131X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
GA (Greaseable)	XD to GA	328591-124X	SAE B 2-Bolt Rotatable	*7/8" - 13 Tooth Internal Spline (B)
GA (Greaseable)	RA to GA	328591-109X		
GH (Greaseable)	XD to GH	328591-117X	SAE B 2-Bolt Rotatable	*1" - 15 Tooth Internal Spline (BB)
GH (Greaseable)	RF to GH	328591-115X		
GB (Greaseable)	XD to GB	328591-125X	SAE B 4-Bolt Rotatable	*7/8" - 13 Tooth Internal Spline (B)
GB (Greaseable)	RB to GB	328591-110X		
GK (Greaseable)	XD to GK	328591-99X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Internal Spline (B)
GK (Greaseable)	XK to GK	328591-96X		
GQ (Greaseable)	XD to GQ	328591-101X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Internal Spline (B)
GQ (Greaseable)	XQ to GQ	328591-96X		
GF (Greaseable)	XD to GF	328591-123X	SAE B 2 or 4-Bolt	*1" - 15 Tooth Internal Spline (BB)
GF (Greaseable)	AF to GF	328591-111X		
GZ (Greaseable)	XD to GZ	328591-103X	SAE B 2 or 4-Bolt	*1-1/4" - 14 Tooth Internal Spline (C)
GZ (Greaseable)	AZ to GZ	328591-98X		
GR (Greaseable)	XD to GR	328591-126X	Chelsea Special (Cloverleaf)	*7/8" - 13 Tooth Internal Spline

*Grease fitting on end of shaft

NOTE: Contact Chelsea Customer Service for kits not listed.

823 Series

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type (SAE)
GS (Greaseable)	XS to GS	328591-136X	SAE C 2 or 4-Bolt Flange	1-1/4" - 14 Tooth Spline
	XV to GS	328591-137X		

880 Series

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type (SAE)
AZ (Splash Lube)	XV to AZ	328591-127X	SAE B 2 & 4-Bolt	1-1/4" - 14 Tooth Internal Spline
AZ (Pressure Lube)	AV to AZ	328591-128X		
XK (Splash Lube)	XV to XK	328591-32X	SAE B 2 & 4-Bolt	7/8" - 13 Tooth Internal Spline
XK (Pressure Lube)	XV to XK	328591-58X		
XS (Splash Lube)	XV to XS	328591-31X	SAE C 2 & 4-Bolt	1-1/4" - 14 Tooth Internal Spline
XS (Pressure Lube)	XV to XS	328591-49X		
XY	XV to XY	328591-34X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
GS (Greaseable)	XS to GS	328591-133X	SAE C 2 & 4-Bolt	1-1/4" - 14 Tooth Internal Spline
	XV to GS	328591-135X		

Options

PTO Shift Mechanisms Field Conversion Kits

Series	Assembly Arrangement	Wire to Air	Lever to Air	Wire to Elec. Over Air	
				12 Volt	24 Volt
348	A & G Shift		328390-92X		
489	3, 4, 5 & 6	328390-117X	328390-117X	328390-119X	328390-120X
680	3, 4, 5 & 6	328390-117X	328390-117X	328390-119X	328390-120X
823	3, 4, 5 & 6		328390-154X		

Cover Assemblies

Series/ Application	Assembly Arrangement	Wire Control	Lever Control	Air Control
489 Q, W & X	3 & 6	329119-1X	No Longer Available	
489 Q, W, & X	4 & 5	329119-2X	No Longer Available	
489 F,L,R,S & U	3 & 6	329121-1X	No Longer Available	
489 F,L,R,S & U	4 & 5	329121-2X	No Longer Available	
489 A & C	3 & 6	329271-1X	No Longer Available	
489 A & C	4 & 5	329271-2X	No Longer Available	
489 (All Ratios)	All		No Longer Available	329361X
680 Q & W	3 & 6	329119-1X	No Longer Available	
680 Q & W	4 & 5	329119-2X	No Longer Available	
680 F, S & U	3 & 6	329121-1X	No Longer Available	
680 F, S & U	4 & 5	329121-2X	No Longer Available	
680 (All Ratios)	All		No Longer Available	329361X
880	3, 4, 5 & 6		329125X	329126X

Installation Kits

Series/ Application	Assembly Arrangement	Wire Control	Air Control	Electric Over Air		Air Shift w/ Combo Valve PTO Kick Out	Air Shift w/ Valve Combo
				12 Volt	24 Volt		
489	3, 4, 5 & 6	*328380X	328388-98X	328388-47X	328388-48X	328388-72X	328388-65X
680	3, 4, 5 & 6	*328380X	328388-98X	328388-47X	328388-48X	328388-72X	328388-65X
823			328388-61X				
880			329216-3X				

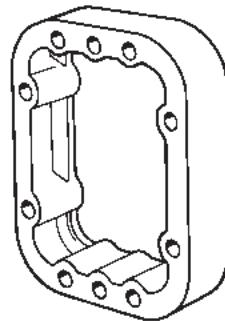
* Control Cable & Knob not Included

Filler Blocks

A filler block, or spacer, may be required on certain transmissions to properly space the PTO and get the correct backlash. The application page will call out the filler block as required.

Two filler blocks may be used in combination with one or more gaskets between the filler block surfaces to obtain the proper spacing.

In computing the total thickness of the filler block and gasket combination, use the factor given in the chart below for each gasket being used.



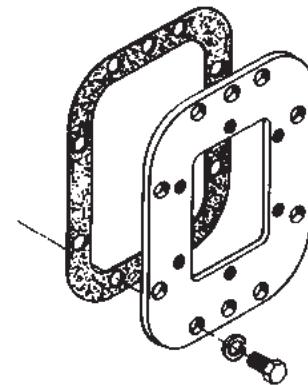
8-Bolt Gaskets		
Part Number	Nominal Thickness	Crushed Thickness (Factor)
35-P-9-1	.010"	.006"
35-P-9-2	.020"	.012"
35-P-15-1	.010"	.006"
35-P-15-2	.020"	.012"

8-Bolt Filler Blocks					
Part Number	A Thickness	Material	Part Number	A Thickness	Material
8-A-032	.032"	Fiber	8-A-295	.295"	Cast Iron
8-A-093	.093"	Steel	8-A-375	.375"	Cast Iron
8-A-062	.062"	Fiber or Steel	8-A-500	.500"	Cast Iron
8-A-165	.165"	Steel	8-A-600	.600"	Cast Iron
8-A-190	.190"	Steel	8-A-700	.700"	Cast Iron
8-A-248	.248"	Steel or Cast Iron			

8-Bolt Adapter Plates

8-Bolt adapter plates are used to convert an SAE 8-Bolt aperture or a non Standard opening to an SAE 6-Bolt aperture.

Adapter Plates			
Adapter Kit Number	A Thickness or Angularity	Adapter Plate Part Number	Stud Kit Number
310778X	.375"	26-P-22	328170-127X
328787X	.460"	26-P-27	328170-129X
328564X	.460"	26-P-27	328170-127X
328481X	.248"	328453X	328170-128X



PTO Options Chart – Rear Mount PTOs		511	524	541
Input Gear Designator				
AA ZF		X	X	
AC ZF-AS Tronic Meritor Freedomline™		X	X	
AH ZF		X	X	
AQ ZF		X	X	
AS Volvo I-Shift/Mack mDrive		X	X	
AU Fuller				X
BD Fuller				X
DA Detroit DT12™			X	
DB Detroit DT12™			X	
DD Detroit DT12™			X	
LZ Eaton Endurant™		X	X	
ME Eaton Endurant™ XD (18 Speed)			X	
Lubrication				
X Non Wet Spline		X	X	
W Wet Spline		X		
Shifting				
A Air Shift		X	X	X
D Eaton Endurant™		X	X	
F 12V Elec/Air ZF-AS Tronic Meritor Freedomline™		X	X	
H No Shift Kit		X	X	
P 12V Elec/Air Shift		X	X	
Q 24V Elec/Air Shift		X	X	
V Volvo I-Shift/Mack mDrive Kit		X	X	
Y Lever Shift				X
Output				
XK SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		X	X	X
XV 1410 Series Companion Flange		X	X, W	X
XY ISO 7653 Pump Mount DIN 5462 Shaft		X, W	X, W	

w = Wet Spline Option

DT12 = Detroit DT12™

NOTE: Always check current price book for available options

Installation Kits					
Series/ Application	Air Shift	Electric Over Air		Volvo I-Shift Mack mDrive	Electric Over Air (ZF-AS Tronic) 12 Volt
		12 Volt	24 Volt		
511	328388-98X	328388-47X	328388-48X	329809X	N/A
524	328388-98X	328388-47X	328388-48X	329809X	328388-82X
541	328388-61X	N/A	N/A	N/A	N/A

N/A – Non Applicable

PTO Options Chart – PowerShift PTOs	249	249V	252
Lubrication			
P Pressure Lube			X
X No Pressure Lube	X	X	X
Shifting			
B 12V Elec/Hyd	X	X	X
E Less Wiring Harness	X	X	
K 12V Elec/Hyd w/ EOC	X	X	
Output			
08 Hyd. Pump 10.8 GPM @1200 Eng. RPM	X		
09 Hyd. Pump 12.6 GPM @1200 Eng. RPM	X		
11 Hyd. Pump 14.4 GPM @1200 Eng. RPM	X		
15 Hyd. Pump 17.0 GPM @1200 Eng. RPM	X		
16 Hyd. Pump 2.1 GPM @1200 Eng. RPM	X		
26 Hyd. Pump 3.5 GPM @1200 Eng. RPM	X		
32 Hyd. Pump 4.2 GPM @1200 Eng. RPM	X		
37 Hyd. Pump 4.9 GPM @1200 Eng. RPM	X		
42 Hyd. Pump 5.7 GPM @1200 Eng. RPM	X		
55 Hyd. Pump 7.4 GPM @1200 Eng. RPM	X		
61 Hyd. Pump 8.1 GPM @1200 Eng. RPM	X		
71 Hyd. Pump 9.6 GPM @1200 Eng. RPM	X		
82 Hyd. Pump 11.0 GPM @1200 Eng. RPM	X		
87 Hyd. Pump 11.6 GPM @1200 Eng. RPM	X		
1121 Hyd. Pump 2.1 GPM @1000 RPM			X
1126 Hyd. Pump 2.6 GPM @1000 RPM			X
1137 Hyd. Pump 3.7 GPM @1000 RPM			X
1449 Hyd. Pump 4.9 GPM @ 1000 RPM			X
1462 Hyd. Pump 6.2 GPM @1000 RPM			X
AD SAE A 2-Bolt Flange, SAE AH Sahft (3/4" - 11T)	X		X
SD Smart Start - Rd Standard Shaft (1-1/4" - 5/16" Key)	X		
XB 1" Round Shaft w/ 1/4" Key			X
XD Rd Standard Shaft (1-1/4" - 5/16" Key)	X		
XE SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)			X
XP Special SAE A Pilot 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	X		
P37 Hyd. Pump 3.7 GPM @1000 RPM			X
P42 Hyd. Pump 4.2 GPM @1000 RPM			X
P71 Hyd. Pump 7.1 GPM @1000 RPM			X
P82 Hyd. Pump 8.2 GPM @1000 RPM			X
V08 Cartridge @ 1.61 in ³ /rev		X	
V10 Cartridge @ 2.08 in ³ /rev		X	
V12 Cartridge @ 2.26 in ³ /rev		X	
V14 Cartridge @ 2.81 in ³ /rev		X	
V17 Cartridge @ 3.56 in ³ /rev		X	
V20 Cartridge @ 3.89 in ³ /rev		X	
V22 Cartridge @ 4.29 in ³ /rev		X	
V25 Cartridge @ 4.84 in ³ /rev		X	
VIT Less Cartridge		X	

NOTE: 249/249V Only can be ordered with Internal Pressure Lube. See model configuration for ordering codes.

NOTE: Always check current price book for available options

Installation Kits

Series Application	Electric Over Hydraulic 12 Volt		
	G - Metric Mount (Allison)	D - Dodge/Aisin	R - Ram/Aisin
252 w/o EOC	329296-8X	329296-9X	329669-12X

NOTE: Dodge/RAM Mounting Codes by Transmission Model Years

D: AS68RC (MY2010 & Prior)

R: AS66RC (MY2014 & Later Gas engine)

R: AS68RC (MY2011 & 2012)

R: AS69RC (MY2013 & Later Diesel engine)

Installation Kits

Series Application	Electric Over Hydraulic 12 Volt					
	B Shift Option w/ F Mount	K Shift Option w/ G Mount	B Shift Option w/ F Mount V Arrangement	B Shift Option w/ G Mount V Arrangement	K Shift Option w/F Mount	K Shift Option w/ F Mount V Arrangement
249 w/o EOC	329651X	329804X	N/A	N/A	N/A	N/A
249V w/o EOC	N/A	N/A	329836X	329838X	N/A	N/A
249 w/ EOC	N/A	N/A	N/A	N/A	329652X	N/A
249V w/ EOC	N/A	N/A	N/A	N/A	N/A	329837X

NOTE: Use 329650X - Speed Limiter Control Assembly for all EOC applications

N/A – Non Applicable

PTO Options Chart – PowerShift PTOs		272	272F	272U	282
Lubrication					
P Pressure Lube		X	X	X	X
R Pressure Lube Valve Body Rotated 120°		X			X
S Pressure Lube Valve Body Rotated 240°		X			X
V Wet Spline Valve Body Rotated 120°		X			X
W Wet Spline		X			X
X No Pressure Lube		X			X
Y Wet Spline Valve Body Rotated 240°		X			X
Shifting					
A Manual Air Shift		X			X
B 12V Elec/Hyd		X	X	†X	X
D 24V Elec/Hyd		X		†X	X
E 12V Elec/Hyd w/o Installation Kit		X	X		X
G 12V Elec/Hyd Remote Valve w/o EOC		X		†X	X
H 24V Elec/Hyd Remote Valve w/o EOC		X		†X	X
N 24V Elec/Hyd w/o Installation Kit		X			X
J 12V Elec/Air w/ EOC		X			X
K 12V Elec/Hyd w/ EOC		X	X	†X	X
L 24V Elec/Hyd w/ EOC		X		†X	X
P 12V Elec/Air Remote		X			X
Q 24V Elec/Air Remote		X			X
R 12V Elec/Air Remote w/ EOC		X			X
V Manual Air Shift w/o Installation Kit		X		X	X
1 12V Elec/Air		X			X
2 24V Elec/Air		X			X
3 24V Elec/Air w/ EOC		X			X
4 24V Elec/Air Remote w/ EOC		X			X
Output					
AB DIN 120 Flange		X	X	†X	X
AC DIN 100 Flange		X	X	†X	X
BD Shaft Brake - 1-1/4" Round w/ 5/16" Key		X			X
BV Shaft Brake - 1410 Series Companion Flange		X			X
RB Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		X	X	X	X
RE Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)		X	X		X
RF Rotatable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)		X	X	X	X
RK Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		X	X	X	X
RS Rotatable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)		X	X	X	X
RY Rotatable ISO 7653 Pump Mount DIN 5462 Shaft		X	X	X	X
RZ Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)		X	X	X	X
SD Smart Start - Rd Standard Shaft (1-1/4" - 5/16" Key)		X	X	†X	X
SV Smart Start - 1410 Series Companion Flange		X	X	†X	X
XD Rd Standard Shaft (1-1/4" - 5/16" Key)		X	X	†X	X
XR Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)		X	X		X
XV 1410 Series Companion Flange		X	X	†X	X

† Coming Soon

NOTE: Always check current price book for available options

Options

Options

272 Series Installation Kits								
Shift Option	Input Gear	Mounting Option	Hydraulic					
			Integral				Remote	
			12V		24V		12V	
			w/o EOC	w/ EOC	w/o EOC	w/ EOC	w/o EOC	w/ EOC
B	HV KU	D F LL J H	329882-12X 329884-12X 329918X 329920X 329922X					
D	HV				329882-24X			
E	LL	All	329952X					
N					Excludes Installation Kit			
G	AJ HV KU	D R					329885-12X 329842-12X 329888-12X 329887-12X	
H	AJ HV							329885-24X 329842-24X
K	HV KU LL	D, R F, H		329883X 329886X 329919X				
L	HV KU	D, R				329883X 329886X		

Shift Option	Input Gear	Manual Air Valve	Air							
			Integral				Remote			
			12V		24V		12V		24V	
			w/o EOC	w/ EOC	w/o EOC	w/ EOC	w/o EOC	w/ EOC	w/o EOC	w/ EOC
A		328388-113X								
1			329893-12X							
2					329893-24X					
3						329894-24X				
4	AJ HV									329889-24X 329890-24X
J				329894-12X						
P							329891-12X			
Q										329891-24X
R	AJ HV							329889-12X 329890-12X		
V		Excludes Installation Kit						Excludes Installation Kit		

282 Series Installation Kits

Shift Option	Hydraulic					
	Integral				Remote	
	12V		24V		12V	24V
	w/o EOC	w/ EOC	w/o EOC	w/ EOC	w/o EOC	w/o EOC
B	328892-12X					
D			328892-24X			
E	Excludes Installation Kit					
G					329885-12X	
H						329885-24X
K		329900X				
L				329900X		
N			Excludes Installation Kit			

Shift Option	Manual Air Valve	Air							
		Integral				Remote			
		12V		24V		12V		24V	
		w/o EOC	w/ EOC	w/o EOC	w/ EOC	w/o EOC	w/ EOC	w/o EOC	w/ EOC
A	328388-113X								
J			329894-12X						
P						329891-12X			
Q								329891-24X	
R							329889-12X		
1		329893-12X							
2				329893-24X					
3					329894-24X				
4									329889-24X
V	Excludes Installation Kit						Excludes Installation Kit		

Options

PTO Options Chart – PowerShift PTO		852	885
Lubrication			
P Pressure Lube		X	X
X No Pressure Lube			X
Shifting			
A Air Shift - Manual			X
B 12V Elec/Hyd		X	
D 24V Elec/Hyd		X	
F No Valve		X	
J 24V Elec/Air w/ EOC			X
K 12V Elec/Hyd w/ EOC		X	
L 24V Elec/Hyd w/ EOC		X	
N 12V Elec/Air w/ EOC			X
P 12V Elec/Air Shift			X
Q 24V Elec/Air Shift			X
Output			
XS SAE C 4-Bolt, SAE C Shaft (1-1/4" - 14T)		X	
XS SAE C 2 or 4-Bolt, SAE C Shaft (1-1/4" - 14T)			X
XU SAE C 2-Bolt, SAE C Shaft (1-1/4" - 14T)		X	
XV 1410 Series Companion Flange		X	X

NOTE: Always check current price book for available options

PTO Options Chart – PowerShift PTOs	210	280	870	870XL	890	892
Lubrication						
P Internal Pressure Lubrication	X					
P Pressure Lube		X	X			
R Pressure Lube Valve Body Rotated 120°		X	X			
S Pressure Lube Valve Body Rotated 240°		X	X			
V Wet Spline Valve Body Rotated 120°		X	X	X		
Y Wet Spline Valve Body Rotated 240°		X	X	X		
W Wet Spline		X	X	X	X	X
Shifting						
B 12V Elec/Hyd		X	X	X	X	X
B Diesel - 12V Elec/Hyd	X					
B Gas - 12V Elec/Hyd	X					
D 24V Elec/Hyd		X	X	X	X	X
E Reduced Wiring Harness	X					
E 12V Elec/Hyd w/o Installation Kit		X	X	X		
N 24V Elec/Hyd w/o Installation Kit		X	X	X		
K 12V Elec/Hyd Valve - Remote w/ EOC	X	X	X	X	X	X
L 24V Elec/Hyd Valve - Remote w/ EOC		X	X	X	X	X
G 12V Elec/Hyd - Remote w/o EOC		X	X	X	X	X
H 24V Elec/Hyd - Remote w/o EOC		X	X	X	X	X
S Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return		X				
T Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return		X				
X No Harness	X					
Output						
08 Hyd. Pump 12.5 GPM @1200 Eng. RPM	X					
09 Hyd. Pump 14.6 GPM @1200 Eng. RPM	X					
11 Hyd. Pump 16.7 GPM @1200 Eng. RPM	X					
15 Hyd. Pump 19.7 GPM @1200 Eng. RPM	X					
18 Hyd. Pump 23.6 GPM @1200 Eng. RPM	X					
20 Hyd. Pump 26.3 GPM @1200 Eng. RPM	X					
21 Hyd. Pump 3.3 GPM @1200 Eng. RPM	X					
26 Hyd. Pump 4.1 GPM @1200 Eng. RPM	X					
32 Hyd. Pump 4.9 GPM @1200 Eng. RPM	X					
37 Hyd. Pump 5.7 GPM @1200 Eng. RPM	X					
42 Hyd. Pump 6.6 GPM @1200 Eng. RPM	X					
50 Hyd. Pump 7.8 GPM @1200 Eng. RPM	X					
55 Hyd. Pump 8.6 GPM @1200 Eng. RPM	X					
61 Hyd. Pump 9.4 GPM @1200 Eng. RPM	X					
71 Hyd. Pump 11.1 GPM @1200 Eng. RPM	X					
82 Hyd. Pump 12.7 GPM @1200 Eng. RPM	X					
87 Hyd. Pump 13.5 GPM @1200 Eng. RPM	X					
AB DIN 120 Flange		X	X		X	X
AC DIN 100 Flange		X	X		X	X
AD SAE A 2-Bolt Flange (3/4" - 11T)	X					
AF SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)					X (5)	X (5)
AZ SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)					X (5)	X (5)
BB Shaft Brake - DIN 120 Flange			X			
BC Shaft Brake - DIN 100 Flange			X			
BD Shaft Brake - Rd Standard Shaft (1-1/4" - 5/16" Key)		X				
BV Shaft Brake - 1410 Series Companion Flange	X	X				
CF SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)					X, W (3)	X, W (3)
CK SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)					X, W (3)	X, W (3)
CS SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)					X, W (3)	X, W (3)
CZ SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)					X, W (3)	X, W (3)
DA SAE D 4-Bolt Flange, SAE D Shaft (1-3/4" - 13T)					X, W (5)	X, W (5)

Continued on Next Page

(3) = 3 Assembly Arrangement (5) = 5 Assembly Arrangement

w = Wet Spline Option

NOTE: Always check current price book for available options

Options

PTO Options Chart – PowerShift PTOs	210	280	870	870XL	890	892
Output (Cont'd)						
RB Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		X, W				
RF Rotatable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)		X, W	X, W			
RK Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		X, W	X, W			
RS Rotatable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)		X, W	X, W			
RY Rotatable ISO 7653 Pump Mount DIN 5462 Shaft		X, W	X, W			
RZ Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)		X, W	X, W			
SB Smart Start - DIN 120		X	X			
SC Smart Start - DIN 100		X	X			
SD Smart Start - Rd Standard Shaft (1-1/4" - 5/16" Key)	X	X				
SV Smart Start - 1410 Series Companion Flange		X	X			
TF SAE B 2 or 4-Bolt Rotatable Flange, SAE BB Shaft (1" - 15T)					X	
TK SAE B 2 or 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)					X	
TS SAE C 2 or 4-Bolt Rotatable Flange, SAE C Shaft (1-1/4" - 14T)					X	
TY DIN 5462 Pump Mount					X	
TZ SAE B 2 or 4-Bolt Rotatable Flange, SAE C Shaft (1-1/4" - 14T)					X	
XD Rd Standard Shaft (1-1/4" - 5/16" Key)		X				
XK SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)					X, W (5)	X, W (5)
XP SAE A Pilot 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	X					
XR Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)		X				
XS SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)					X, W (5)	X, W (5)
XV 1410 Series Companion Flange		X	X		X	X
XY ISO 7653 Pump Mount DIN 5462 Shaft					X, W	X, W
ZS SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)					X	X

(3) = 3 Assembly Arrangement (5) = 5 Assembly Arrangement w = Wet Spline Option

NOTE: Always check current price book for available options

Installation Kits

Series Application	Electric Over Hydraulic w/ Remote Valve		Electric Over Hydraulic		PTO/Dump (S)	PTO/Dump (T)
	12 Volt	24 Volt	12 Volt	24 Volt		
Allison (FJ)						
280/870 w/o EOC	329237-12X	329237-24X	329024-12X	329024-24X		
280/870 w/ EOC			329076X	329076X		
280 w/ PTO Dump Pump Valve					328388-65X	328388-86X
890/892 w/o EOC	329653-12X	329653-24X	329024-12X	329024-24X		
890/892 w/ EOC			329076X	329076X		
Caterpillar (KV)						
280/870 w/o EOC	329445-12X	329445-24X	329443-12X	329443-24X		
280/870 w/ EOC			329444X	329444X		
280 w/ PTO Dump Pump Valve					328388-65X	328388-86X

NOTE: Controls for Electronic Overspeed Control (EOC) - 329650X

Conversion Kits

Series Application	Electric Over Hydraulic w/ Remote Valve		Electric Over Hydraulic	
	12 Volt	24 Volt	12 Volt	24 Volt
(FJ & KV)				
280/870 w/ EOC	329354-12X	329354-24X		
Allison (FJ)				
280/870 w/o EOC			329175-12X	329175-24X
Caterpillar (KV)				
280/870 w/ EOC			329448-12X	329448-24X

PTO Options Chart – Constant Mesh PTOs		267*	287	877	877XL	897	899
Lubrication							
P Pressure Lube		X	X	X			
R Pressure Lube Valve Body Rotated 120°			X				
S Pressure Lube Valve Body Rotated 240°			X				
V Wet Spline Valve Body Rotated 120°			X				
W Wet Spline		X	X	X	X	X	X
Y Wet Spline Valve Body Rotated 240°			X				
Shifting							
M Constant Mesh		X	X	X	X	X	X
Output							
AB DIN 120 Flange				X	X	X	X
AC DIN 100 Flange				X	X	X	X
AF SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)		X, W				x, w (5)	x, w (5)
AK SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)		X, W					
AZ SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)						x, w (5)	x, w (5)
AZ SAE B 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)			X				
CF SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)						x, w (3)	x, w (3)
CK SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)						x, w (3)	x, w (3)
CS SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)						x, w (3)	x, w (3)
CZ SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)						x, w (3)	x, w (3)
DA SAE D 4-Bolt Flange, SAE D Shaft (1-3/4" - 13T)						x, w (5)	x, w (5)
GA Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)		X					
GB Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)		X					
GF Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)		X					
GK Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		X					
GQ Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		X, W					
GR Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)		X					
RA Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)		X					
RB Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		X	X, W				
RC Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)		X					
RD Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)		X					
RE Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)		X					
RF Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)		X					
RF Rotatable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)			X, W	X, W			
RJ Rotatable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)		X					
RK Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		X	X, W	X, W			
RS Rotatable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)			X, W	X, W	X, W		
RY Rotatable ISO 7653 Pump Mount DIN 5462 Shaft		X, W	X, W	X, W			
RZ Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)			X, W	X			
TF SAE B 2 or 4-Bolt Rotatable Flange, SAE BB Shaft (1" - 15T)						X	
TK SAE B 2 or 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)						X	
TS SAE C 2 or 4-Bolt Rotatable Flange, SAE C Shaft (1-1/4" - 14T)						X	
TV Tapered Shaft with 1410 Series Companion Flange		X					
TY DIN 5462 Pump Mount						X	
TZ SAE B 2 or 4-Bolt Rotatable Flange, SAE C Shaft (1-1/4" - 14T)						X	
XD Rd Standard Shaft (1-1/4" - 5/16" Key)		X	X				
XE SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)		X					
XK SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		X, W				x, w (5)	x, w (5)
XQ SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		X, W					
XR Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)		X					
XS SAE C 2 or 4-Bolt, SAE C Shaft (1-1/4" - 14T)						x, w (5)	x, w (5)
XV 1410 Series Companion Flange			X	X		X	X
XX 1-1/4" Tapered Output Shaft w/ Keyway		X (5)					
XY ISO 7653 Pump Mount DIN 5462 Shaft		X				X, W	X, W
ZS SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)						X, W	X, W

* Any 267 Series using a 3 Arrangement requiring a SAE B Output must use the XQ or AK Output Option due to interference between the XK Flange and the Pressure Lube Fitting.

(3) = 3 Assembly Arrangement

(5) = 5 Assembly Arrangement

w = Wet Spline Option

NOTE: Always check current price book for available options

For converting Chelsea PowerShift PTOs from a driveshaft output (XD or XV) to a pump flange output and/or a wet spline output.

267 Series

Pump Suffix	Kit Number	Assembly	Flange Type	Shaft Type (SAE)
AF	328591-129X	3, 4, 5 & 6	SAE B 2 or 4-Bolt	1" - 15 Tooth Splined (BB)
AK	328591-141X	3, 4, 5 & 6	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
AZ	328591-70X	3, 4, 5 & 6	SAE B 2 or 4-Bolt	1-1/4" - 14 Tooth Splined (C)
XE	328591-27X	4, 5 & 6	SAE A 2 or 4-Bolt	5/8" - 9 Tooth Splined (A)
XK	328591-16X			
XK (B Ratio)	329436-3X	3, 4, 5 & 6	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XK (Wet Spline)	328591-157X			
XQ	328591-17X	3, 4, 5 & 6	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XQ (B Ratio)		3, 4, 5 & 6		
XR	328591-52X	3, 4, 5 & 6	Chelsea Special (Cloverleaf)	7/8" - 13 Tooth Splined (B)
XX	328591-122X	3, 4, 5 & 6	Not Included	1-1/4" Tapered Output Shaft w/ Keyway
XY	328591-121X	3, 4, 5 & 6	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
RC (Rotatable)	328591-112X	3, 4, 5 & 6	SAE A 2-Bolt	5/8" - 9 Tooth Splined (A)
RA (XD to RA)	328591-55X			
RA (XR to RA)	328591-53X	3, 4, 5 & 6	SAE B 2-Bolt	7/8" - 13 Tooth Internal Spline (B)
RA (XD to RA) (B Ratio)	329436-1X			
RF (Rotatable)	328591-78X	3, 4, 5 & 6	SAE B 2-Bolt	1" - 15 Tooth Splined (BB)
RB (XR to RB)	328591-54X			
RB (XD to RB)	328591-56X	3, 4, 5 & 6	SAE B 4-Bolt	7/8" - 13 Tooth Internal Spline (B)
RB (XD to RB) (B Ratio)	329436-2X			
RK (Rotatable)	329973X 329974X	3, 4, 5 & 6	SAE B 2 or 4-Bolt Rotatable	7/8" - 13 Tooth Splined (B)
RY (Rotatable)	328591-132X 328591-131X	3, 4, 5 & 6	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
GA (Greaseable)	328591-72X	3, 4, 5 & 6	SAE B 2-Bolt Rotatable	*7/8" - 13 Tooth Internal Spline (B)
GB (Greaseable)	328591-74X	3, 4, 5 & 6	SAE B 4-Bolt Rotatable	*7/8" - 13 Tooth Internal Spline (B)
GK (XD to GK)	328591-89X			
GK (XK to GK)	328591-86X	3, 4, 5 & 6	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Internal Spline (B)
GQ (XD to GQ)	328591-91X			
GQ (XQ to GQ)	328591-86X	3, 4, 5 & 6	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Internal Spline (B)
GF (XD to GF)	328591-71X			
GF (AF to GF)	328591-108X	3, 4, 5 & 6	SAE B 2 or 4-Bolt	*1" - 15 Tooth Internal Spline (BB)
GF (RF to GF)	328591-114X			
GR (Greaseable)	328591-76X	3, 4, 5 & 6	Chelsea Special (Cloverleaf)	*7/8" - 13 Tooth Internal Spline (B)

*Grease fitting on end of shaft

NOTE: Use 329097-1X to convert PTOs with AK, XP, XQ, XN, or XK output to the self-lube pump option.

NOTE: Contact Chelsea Customer Service for kits not listed.

PTO Options Chart – Split Shaft PTOs		901	912
Shifting			
A	Air Shift	X	X
Y	Lever Shift	X	X
Input-Output Shaft			
C	1-3/4" - 10T Spline Input-Output	X	
G	2-3/4" w/ 1710 1/2 Rd. Yoke		X
H	2-3/4" w/ 1810 1/2 Rd. Yoke		X
J	2-3/4" Input-Output w/o Yoke		X
M	2-3/4" w/ 1610 Companion Flange		X
P	SPL-170 Yoke		X
S	SPL-250 Yoke		X
PTO Output Shaft			
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	X	
XS	SAE C 4-Bolt, SAE C Shaft (1-1/4" - 14T)	X	
XU	SAE C 2-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	X	
XV	1410 Series Companion Flange	X	
XX	8-Bolt Apertures Available		X

Specifications Chart – 901 Series

Standard Output Shaft Size	— 1-3/4" - 10 Tooth —	
Intermittent Torque Rating (lbs-ft)	500	
Intermittent Torque Rating (Nm)	678	
Horsepower Rating for Intermittent Service		
At 500 RPM of the Output Shaft (HP)		48
At 1000 RPM of the Output Shaft (HP)		95
At 500 RPM of the Output Shaft (Kw)		36
At 1000 RPM of the Output Shaft (Kw)		75
Approximate Weight:	— 185 lbs. [84 kg] —	

Specifications Chart – 912 Series

Standard Output Shaft Size	— 2-3/4" - 10 Tooth —	
Max Thru Torque Capacity	lbs-ft	Nm
w/ Diesel Engine		
Automatic Transmission	13,000	17,625
Manual Transmission	12,000	16,270
w/ Gas Engine		
Automatic Transmission	16,000	21,693
Manual Transmission	15,000	20,337
Approximate Weight:	— 130 lbs. [59 kg] —	

PTO Options Chart – Crank Shaft PTO		2442
Shifting		
A	Air Shift	x
C	Heavy Duty Bracket less Cable	x
H	No Shift Assembly	x
M	Constant Mesh	x
P	12V Elec/Air	x
S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return	x
T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return	x
U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return	x
V	Air Shift less Installation Kit	x
W	Cable Shift	x
X	Less Cable & Knob	x
Output		
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
AZ	SAE B 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	x
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	x
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
GQ**	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)	x
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)	x
RK	Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft	x
SQ	SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)	x
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)	x
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
XQ**	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x
XX***	1-1/4" Tapered Output Shaft w/ Keyway	x
XY	ISO 7653 Pump Mount DIN 5462 Shaft	x

** XQ/GQ same as XK/GK except flange rotated 90°

*** Order companion (379824) separately

NOTE: Always check current price book for available options

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type
AF	XD to AF	328591-30X	SAE B 2 or 4-Bolt	1" - 15 Tooth Splined (BB)
AK	XD to AK	328591-28X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
AZ	XD to AZ	328591-70X	SAE B 2 or 4-Bolt	1-1/4" - 14 Tooth Splined (C)
XE	XD to XE	328591-27X	SAE A 2 or 4-Bolt	5/8" - 9 Tooth Splined (A)
XK	XD to XK (B Ratio)	328591-16X 329436-3X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined
XQ	XD to XQ (B Ratio)	328591-17X 329436-6X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XR	XD to XR	328591-52X	Chelsea Special (Cloverleaf)	7/8" - 13 Tooth Splined (B)
XX	XD to XX	328591-122X	Not Included	1-1/4" Tapered Output Shaft w/ Keyway
XY	XD to XY	328591-121X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
RC (Rotatable)	XD to RC	328591-112X	SAE A 2-Bolt	7/8" - 9 Tooth Splined (A)
RD (Rotatable)	XD to RD (B Ratio)	328591-113X 329436-8X	SAE A 2-Bolt	7/8" - 13 Tooth Splined (B)
RA (Rotatable)	XD to RA XR to RA XD to RA (B Ratio)	328591-55X 328591-53X 329436-1X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
RF (Rotatable)	XD to RF	328591-78X	SAE B 2-Bolt	1" - 15 Tooth Splined (BB)
RB (Rotatable)	XD to RB XR to RB XD to RB (B Ratio)	328591-56X 328591-54X 329436-2X	SAE B 4-Bolt	7/8" - 13 Tooth Splined (B)
RE (Rotatable)	XD to RE	328591-134X	SAE B 4-Bolt	1" - 15 Tooth Splined (BB)
RK (Rotatable)	XD to RK (Wet Spline) XD to RK (Dry Spline)	328591-160X 328591-159X	SAE B 2 or 4-Bolt Rotatable	7/8" - 13 Tooth Splined (B)
RY (Rotatable)	XD to RY	328591-131X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
GA (Greaseable)	XD to GA XR to GA RA to GA	328591-72X 328591-73X 328591-106X	SAE B 2-Bolt Rotatable	*7/8" - 13 Tooth Splined (B)
GB (Greaseable)	XD to GB XR to GB RB to GB	328591-74X 328591-75X 328591-107X	SAE B 4-Bolt Rotatable	*7/8" - 13 Tooth Splined (B)
GK (Greaseable)	XD to GK XK to GK	328591-89X 328591-86X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined
GQ (Greaseable)	XD to GQ XQ to GQ	328591-91X 328591-86X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Splined (B)
GF (Greaseable)	XD to GF AF to GF RF to GF	328591-71X 328591-108X 328591-114X	SAE B 2 or 4-Bolt	*1" - 15 Tooth Splined (BB)
GR (Greaseable)	XD to GR	328591-76X	Chelsea Special (Cloverleaf)	*7/8" - 13 Tooth Splined (B)

*Grease fitting on end of shaft

NOTE: Contact Chelsea Customer Service for kits not listed.

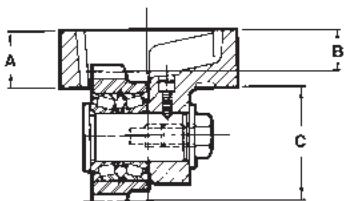
A Guide to Specifying Chelsea Geared Adapters

When you need to change PTO output shaft rotation or clear a mounting obstacle, a geared adapter may be required. However, it is important to note the following:

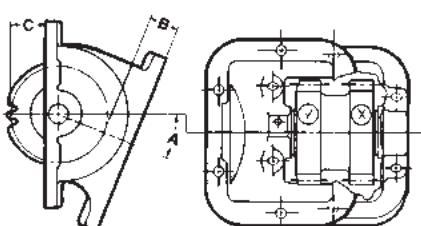
- Geared adapters will change the direction of PTO rotation. Consider this when specifying driven equipment.
- Not all applications can use geared adapters. These situations are called out on the bottom of the Chelsea applications catalog pages. Check there before you spend time trying to specify a geared adapter.
- If an application cannot use an adapter, consider changing the PTO assembly arrangement, moving the PTO to the other side of the transmission, or using a change rotation gear box.
- Adapters are not available for use with PTOs on automatic transmissions except the Allison 1000, 2000/2400 Series.
- Adapters are not available for use with 8-Bolt PTOs.
- Current model Chelsea adapters do not change the PTO speed.

Applications
Geared Adapters**Standard Geared Adapter Assemblies**

Assembly Number	Figure Number	Number of Teeth	A Body Thickness or Degree of Angularity	B Pitch Line to Outer Face	C Pitch Line to Inner Face
328530-1X	1	22	1.650"	1.085"	3.100"
328530-2X	1	18	1.650"	1.117"	3.067"
328554-1X	2	19	22°	1.085"	1.110"
329138X,-1X	3	24	49°	1.085"	1.085"

Figure 1328530-1X
328530-2X**Where Used****328530-1X, -2X:**

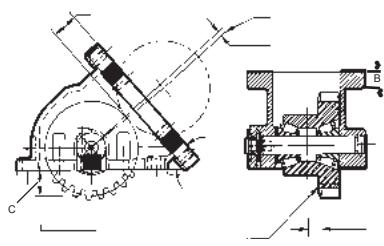
Use on either side, any assembly arrangement, where the transmission gear pitch and pressure angle allows. These adapters will move the PTO straight out from the transmission. These are deep reach geared adapters that generally require the use of extra spacers and special stud kits.

Figure 2

328554-1X

328554-1X:

Use on the R.H. side of transmissions with a 6 pitch 20° pressure angle PTO drive gear located towards the front of the opening. The adapter will move the PTO down and towards the rear of the truck. Use a PTO with a 3 assembly and an AH gear designator. This adapter requires the application to be derated by 30%.

Figure 3

329138X,-1X

329138X:

Use on the R.H. side of transmissions with a 6 pitch 20° pressure angle PTO drive gear located towards the **front** of the truck, or on the L.H. when the PTO drive gear is located towards the **rear** of the truck. The adapter will drop the PTO down at a 49° angle. Use PTOs with the same assembly arrangement and gear detail as shown in the application catalog.

329138-1X:

Use on the R.H. side of transmissions with a 6 pitch 20° pressure angle PTO drive gear located towards the **rear** of the truck, or on the L.H. when the PTO drive gear is located towards the **front** of the truck. The adapter will drop the PTO down at a 49° angle. Use PTOs with the same assembly arrangement and gear detail as shown in the application catalog.

Specifying Standard Geared Adapters

When a geared adapter can be used, four steps will help you specify it correctly.

1. Identify the correct gear detail and gear location.
2. Select the style that will perform the necessary function.
3. Calculate the correct backlash/spacing.
4. Select the correct stud kit.

Step 1: Identify the Gear Detail and Gear Location

The first step is to find adapters that will fit your application.

At the top of each transmission application page, Chelsea lists gear data. For example, on FLR-34, on the right hand side, the transmission gear is a 6 pitch, 20° spur gear (AH Input Gear). The transmission gear is forward of the centerline of the PTO opening.

To select an adapter for this application, look only at adapters that have a 6 pitch, 20° spur gear (AH Input Gear) that is forward of the adapter body centerline when used on the right hand side of a transmission.

NOTE: If gear pitch unknown contact Chelsea Customer Service.

Step 2: Select the Style

The second step is to further narrow down your choices according to your application requirement.

If the purpose of specifying a geared adapter is simply to change rotation, look for the least expensive adapter available. Typically, this means an adapter that will bring the PTO straight out from the transmission. Also check whether the adapter requires you to derate the PTO torque rating. This occurs when the adapter contains needle bearings rather than roller bearings.

If the purpose of specifying a geared adapter is to clear mounting obstacles, determine whether moving the PTO away from the transmission is enough, or whether it is necessary to angle the PTO down to clear the object.

Applications Geared Adapters

Always keep in mind how much room you have to work with and what mounting obstacles exist.

For our example, let's say we have 328530-1X on the shelf and it looks like it will work.

Step 3: Calculate the Backlash and Spacing.

Next, you must establish correct backlash between the transmission and the geared adapter. To do this, calculate the adapter P.L. (pitch line) to inner face dimension minus the transmission pitch line to aperture face dimension.

On page 2.30 of this booklet, we see that the adapter P.L. (pitch line) to inner face dimension for adapter 328530-1X is 3.100. On FLR-34 application page, for the right hand opening, we see that the P.L. (pitch line) to aperture face dimension for the transmission is 1.0850.

3.100 (adapter pitch line to inner face dimension)
- 1.085 (transmission P.L. to aperture face dimension)
2.015

In this example, we would need to back the adapter away from the transmission gear 2.015" to establish correct backlash. We would select a 7-A-2000 filler block (page 2.22 of this booklet), and use a thin gasket (.010") on each side of the filler block.

Our theoretical backlash is .003". We need to have between .006" and .012". Most likely, once the adapter is actually mounted and backlash is measured, it will fall between the accepted range. This is because the transmission case and the adapter may vary a few thousandths from the listed measurements.

NOTE: It is always the responsibility of the installer to measure and establish correct backlash. Follow the instructions given in the PTO Owner's Manual and the Adapter Gears Owner's Manual.

Step 4: Select the Correct Stud Kit

To calculate the necessary length of the mounting studs for a PTO/adapter combination, add the following dimensions together:

Transmission Thread Depth

- + Lock Nut Thickness
 - + Body Thickness of Adapter
 - + Spacer/Filler Block Thickness
 - + PTO mounting flange Thickness
 - + Crush Thickness of Gaskets between the transmission, adapter, and PTO collectively
 - + 1/16" Extra Length
- Required Stud Length

Example:

.500" – Transmission Thread Depth (Example Only)

- + .380" – Lock Nut Thickness
 - + 1.650" – 328530-1X Body Thickness of Adapter
 - + .240" – 7-A-240 Spacer/Filler Block Thickness
 - + .793" – PTO Mounting Flange Thickness
 - + .024" – (4) 35-P-9-1 Gaskets* - Crush Thickness
 - + .0625" – Extra Length
- 3.6495" (3.65") – Total Stud Length

Stud kit 328170-168X contains studs that are 3.750" long. Stud kits are listed in Chelsea publication HY25-2002-M1/US.

Remember that each application is different. It is up to the installer to make sure backlash between the transmission and adapter, and between the adapter and the PTO, is correct.

Applications Geared Adapters

The 626, 628, 630 and 645 family of adapters are designed to simplify your selection and installation of a geared adapter when you require a change in rotation or are trying to clear an obstacle.

These adapters use the same input gears as the 442 and 489 Series PTOs, and are available in kits. The 626 adapter fits a 6-Bolt opening and moves the PTO straight out from the transmission. The 630 fits a 6-Bolt opening and angles the PTO down at a 30° angle. The 645 fits a 6-Bolt opening and angles the PTO down at a 45° angle. The 628 adapter fits an 8-Bolt transmission opening and accommodates a 6-Bolt PTO.

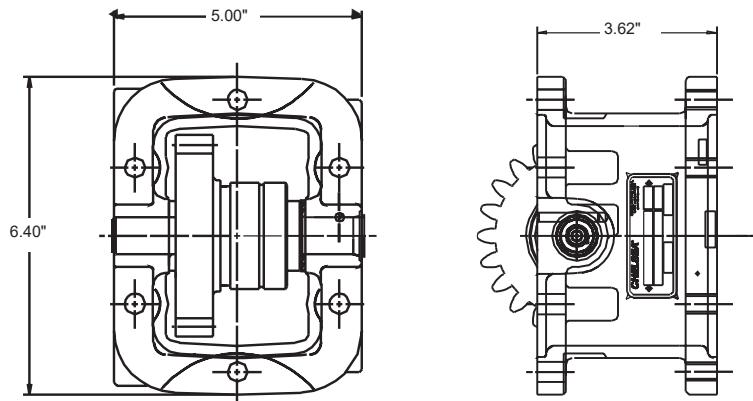
The 626, 630 and 645 adapter assemblies have the same pitch line to mounting face dimensions as the 442 Series, while the 628 will have the same mounting dimensions as the 489 Series. This means the same mounting hardware and spacers you use to mount the PTO to a specific application will be the same hardware you use to mount the geared adapter to that application.

Using the 626, 628, 630 or 645 will change the direction of PTO rotation. It will not change the speed of the PTO.

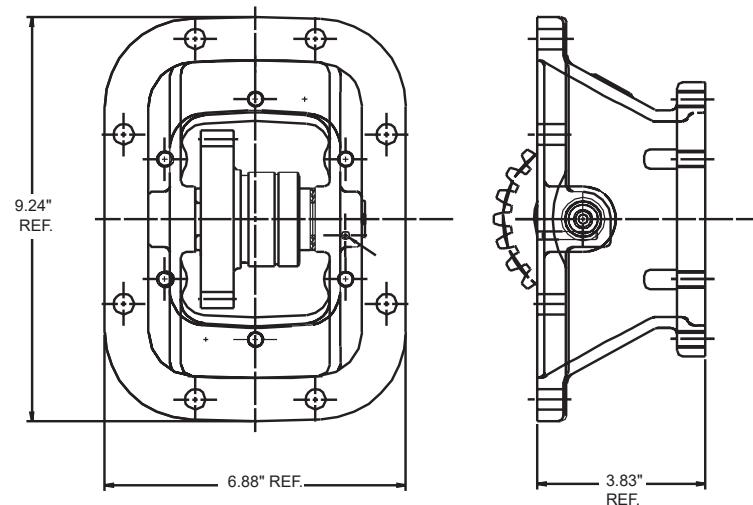
* A .010" gasket will compress to .006" if the capscrews or nuts are torqued properly. A .020" will compress to .012".

626 Series**Six Bolt to Six Bolt Straight**

- 6-Bolt PTO for a 6-Bolt Transmission Opening
- Moves the PTO straight out from the transmission
- Uses the same input gears as the 442 and 489 Series
- Uses the same mounting hardware and spacers used to mount a 442 Series to a specific application

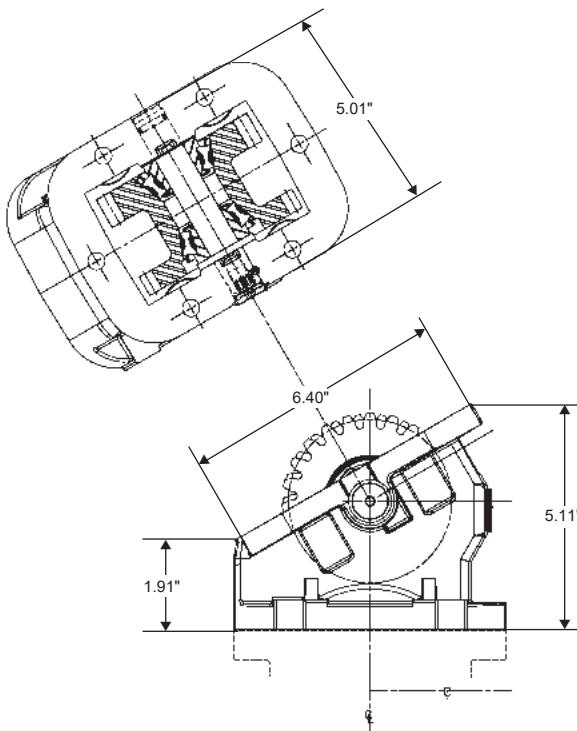
**628 Series****Eight Bolt to Six Bolt Straight**

- 6-Bolt PTO for a 8-Bolt Transmission Opening
- Moves the PTO straight out from the transmission
- Uses the same input gears as the 442 and 489 Series
- Uses the same mounting hardware and spacers used to mount a 489 Series to a specific application

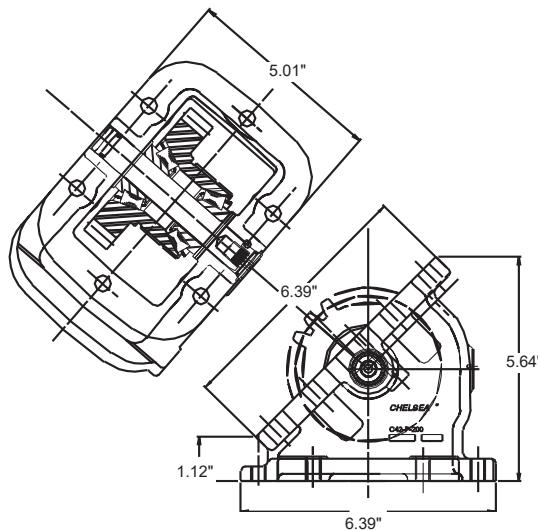


Applications
Geared Adapters**630 Series****Six Bolt to Six Bolt 30 Degrees**

- 6-Bolt PTO for a 6-Bolt Transmission Opening
- Moves the PTO down at a 30° angle, helping to eliminate interference problems
- Uses the same input gears as the 442 and 489 Series

**645 Series****Six Bolt to Six Bolt 45 Degrees**

- 6-Bolt PTO for a 6-Bolt Transmission Opening
- Moves the PTO down at a 45° angle, helping to eliminate interference problems
- Uses the same input gears as the 442 and 489 Series



626 Gear Chart

Adapter Input Gear				Mounting Information PTO to Adapter		PTO Gear (Packaged Loose w/Adapter)			
Model No.	Part No.	Helix Angle	No. Teeth	Spacer Designator	Stud Kit	PTO Pitch	Part No.	Helix Angle	No. Teeth
626*AH	5-P-1004	Spur	22	7-A-140	7170-3X	**AH	5-P-1004	Spur	22
626*AR	5-P-1008	Left Hand	21	7-A-187	7170-3X	**GY	5-P-1184	Right Hand	21
626*BG	5-P-1015	Left Hand	23	7-A-140	7170-3X	**HB	5-P-1187	Right Hand	23
626*BQ	5-P-1023	Left Hand	25	7-A-200	7170-4X	**BP	5-P-1022	Right Hand	26
626*DA	5-P-1037	Spur	23	—	—	**DA	5-P-1037	Spur	23
626*DU	5-P-1050	Left Hand	28	7-A-240	7170-4X	**HH	5-P-1193	Right Hand	28
626*ES	5-P-1059	Left Hand	22	7-A-062	—	**HL	5-P-1196	Right Hand	22
626*EV	5-P-1060	Spur	40	7-A-300	7170-4X	**EV	5-P-1060	Spur	40
626*EW	5-P-1061	Left Hand	20	7-A-125	7170-3X	**HM	5-P-1197	Right Hand	20
626*FN	5-P-1070	Left Hand	26	7-A-300	7170-4X	**HR	5-P-1201	Right Hand	26
626*HY	5-P-1237	Left Hand	26	7-A-125	328170-94X	**JB	5-P-1244	Right Hand	26
626*JK	5-P-1261	Left Hand	24	7-A-187	7170-3X	**JL	5-P-1262	Right Hand	24
626*JU	5-P-1316	Left Hand	25	7-A-200	7170-4X	**KA	5-P-1318	Right Hand	25
626*JW	5-P-1319	Left Hand	23	7-A-093	7170-3X	**KB	5-P-1321	Right Hand	23
626*IT	KIT ADAPTER	—	—	—	—	—	—	—	—

Options**628 Gear Chart**

Adapter Input Gear				Mounting Information PTO to Adapter		PTO Gear (Packaged Loose w/Adapter)			
Model No.	Part No.	Helix Angle	No. Teeth	Spacer Designator	Stud Kit	PTO Pitch	Part No.	Helix Angle	No. Teeth
628*AH	5-P-1004	Spur	22	7-A-165	7170-3X	**AH	5-P-1004	Spur	22
628*AR	5-P-1008	Left Hand	21	7-A-200	7170-3X	**GY	5-P-1184	Right Hand	21
628*BG	5-P-1015	Left Hand	23	7-A-165	7170-3X	**HB	5-P-1187	Right Hand	23
628*DA	5-P-1037	Spur	23	—	328170-76X	**DA	5-P-1037	Spur	23
628*DU	5-P-1050	Left Hand	28	7-A-270	7170-5X	**HH	5-P-1193	Right Hand	28
628*EV	5-P-1060	Spur	40	7-A-300	7170-5X	**EV	5-P-1060	Spur	40
628*IT	KIT ADAPTER	—	—	—	—	—	—	—	—

630 Gear Chart

Adapter Input Gear				Mounting Information PTO to Adapter		PTO Gear (Packaged Loose w/Adapter)				
Model No.	Part No.	Helix Angle	No. Teeth	Spacer Designator	Stud Kit	PTO Pitch	Part No.	Helix Angle	No. Teeth	
630*AH	5-P-1004	Spur	22	7-A-140	7170-3X	—**AH	5-P-1004	Spur	22	
630*AR	5-P-1008	Left Hand	21	7-A-187	7170-3X	—**GY	5-P-1184	Right Hand	21	
630*BG	5-P-1015	Left Hand	23	7-A-140	7170-3X	—**HB	5-P-1187	Right Hand	23	
630*BQ	5-P-1023	Left Hand	25	7-A-200	7170-4X	—**BP	5-P-1022	Right Hand	26	
630*DA	5-P-1037	Spur	23	—	—	—**DA	5-P-1037	Spur	23	
630*DU	5-P-1050	Left Hand	28	7-A-240	7170-4X	—**HH	5-P-1193	Right Hand	28	
630*ES	5-P-1059	Left Hand	22	7-A-062	—	—**HL	5-P-1196	Right Hand	22	
630*EV	5-P-1060	Spur	40	7-A-300	7170-4X	—**EV	5-P-1060	Spur	40	
630*EW	5-P-1061	Left Hand	20	7-A-125	7170-3X	—**HM	5-P-1197	Right Hand	20	
630*FN	5-P-1070	Left Hand	26	7-A-300	7170-4X	—**HR	5-P-1201	Right Hand	26	
630*HY	5-P-1237	Left Hand	26	7-A-125	7170-1X	—**JB	5-P-1244	Right Hand	26	
630*IT	KIT ADAPTER	—	—	—	—	—	—	—	—	
630*JK	5-P-1261	Left Hand	24	7-A-187	7170-3X	—**JL	5-P-1262	Right Hand	24	
630*JU	5-P-1316	Left Hand	25	7-A-200	7170-4X	—**KA	5-P-1318	Right Hand	25	
630*JW	5-P-1319	Left Hand	23	7-A-093	7170-3X	—**KB	5-P-1321	Right Hand	23	

645 Gear Chart

Adapter Input Gear				Mounting Information PTO to Adapter		PTO Gear (Packaged Loose w/Adapter)				
Model No.	Part No.	Helix Angle	No. Teeth	Spacer Designator	Stud Kit	PTO Pitch	Part No.	Helix Angle	No. Teeth	
645*AH	5-P-1004	Spur	22	7-A-140	7170-3X	—**AH	5-P-1004	Spur	22	
645*AR	5-P-1008	Left Hand	21	7-A-187	7170-3X	—**GY	5-P-1184	Right Hand	21	
645*BG	5-P-1015	Left Hand	23	7-A-140	7170-3X	—**HB	5-P-1187	Right Hand	23	
645*BQ	5-P-1023	Left Hand	25	7-A-200	7170-4X	—**BP	5-P-1022	Right Hand	26	
645*DA	5-P-1037	Spur	23	—	—	—**DA	5-P-1037	Spur	23	
645*DU	5-P-1050	Left Hand	28	7-A-240	7170-4X	—**HH	5-P-1193	Right Hand	28	
645*ES	5-P-1059	Left Hand	22	7-A-062	—	—**HL	5-P-1196	Right Hand	22	
645*EV	5-P-1060	Spur	40	7-A-300	7170-4X	—**EV	5-P-1060	Spur	40	
645*EW	5-P-1061	Left Hand	20	7-A-125	7170-3X	—**HM	5-P-1197	Right Hand	20	
645*FN	5-P-1070	Left Hand	26	7-A-300	7170-4X	—**HR	5-P-1201	Right Hand	26	
645*HY	5-P-1237	Left Hand	26	7-A-125	328170-94X	—**JB	5-P-1244	Right Hand	26	
645*JK	5-P-1261	Left Hand	24	7-A-187	7170-3X	—**JL	5-P-1262	Right Hand	24	
645*JU	5-P-1316	Left Hand	25	7-A-200	7170-4X	—**KA	5-P-1318	Right Hand	25	
645*JW	5-P-1319	Left Hand	23	7-A-093	7170-3X	—**KB	5-P-1321	Right Hand	23	
645*IT	KIT ADAPTER	—	—	—	—	—	—	—	—	

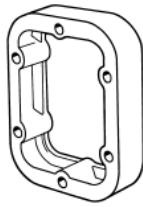
When these adapters or plates appear on a transmission application page or come with the PTO assembly, they MUST be used. There are no substitutes.

As with other Chelsea PTOs, these geared adapters will change PTO rotation, but they will not change PTO speed.

Geared Adapters and Plates for Import Transmissions		
Transmission	Adapter Gear or Plate General Description	A Body Thickness or Degree of Angularity
Mitsubishi 328997X (1)	M4, M5, M6, M5S5 Models FH100 & FK415, M6S5 Models FK455 & FM555, M6S6 Model FM555	45°
42-P-211 (2)	MO35S5 & MO38S6 (included with 447C PTO)	1.470"
Nissan 42-P-190 (2)	MLS-61A, MLS-61B UD3000SD (included with 447A PTO)	1.329"

(1) This geared adapter adapts a non-standard opening on the transmission to a standard 6-Bolt opening. It will move the PTO straight out from the transmission by approximately the amount indicated in column A.

(2) This is an adapter plate that converts the non-standard opening on the transmission to a standard 6-Bolt opening.



The lubricant in the transmission also lubricates the PTO. Therefore, one or more gaskets (as required) must always be used between the metal surfaces of the Power Take-Off, the adapter gear assembly, the adapter plate, and the filler block(s).

Options

Mounting Gasket Kits

Gasket Kit Part Number	Quantity.	Gasket Part Number	Application
328570-1X	25	35-P-15-1 35-P-15-2	Standard 8 Bolt
328570-2X	10	35-P-15-1	Standard 8 Bolt
328570-3X	100	35-P-9-1	Standard 6 Bolt
328570-4X	100	35-P-9-2	Standard 6 Bolt
328570-6X	50	35-P-9-2	Standard 6 Bolt
329062-3X	25	35-P-56 329015X	328888X, 329011X, & Adapters
329062-5X	25	35-P-63-1 35-P-63-2	328957X Adapter
329062-7X	25	35-P-65	328962X & 328993X Adapters
329062-8X	25	35-P-67	328983X Adapter
329062-9X	25	35-P-68-1 35-P-68-2	328985X Adapter
329062-10X	25	35-P-72	328997X Adapter
329062-11X	25	35-P-73	329000-1X Adapter

Special Mounting Gaskets

Gasket Part Number	Application
35-P-41	272 X AAJ
35-P-69	272M Series Adapter Plate Mounting
35-P-74	267, 269, 280, 859, 870/877, 890/897
35-P-8	435, 437
35-P-84	231/271 Series PTO Mounting
22-P-124	249 Series (All)
28-P-397	210 Series

Cable Controls Stainless Steel Vinyl Covered Wire

Assembly (Wire & Knob)	Wire Only	Knob Only
328346-10X*	378441-10 (10 Foot Length)	378502
328346-15X**	378441-15 (15 Foot Length)	378502
328346-20X	378441-20 (20 Foot Length)	378502
328346-25X	378441-25 (25 Foot Length)	378502
328346-30X	378441-30 (30 Foot Length)	378502

*This 10 foot cable and knob are standard on the following Chelsea PTOs with a W shifter type: 221, 260, 290, 352, 435, 442, 447, and 489.

** The 15 foot cable is standard on the 2442.

Gasket and Seal Kits

PTO Series Part Number	Gasket and Seal Kit	Shifter Cover Seal Kit Part Number		
		Cable Control	Lever Control	Air Control
210	330009-1X			
221	328356-13X			
249/249F	329248-1X			
249V	329248-6X			
267	329337-2X			
272/282	329071-62X			
280	329071-62X (All Except BA)			
290	328356-67X			328356-71X
442, 447, 660	328356-67X 328356-69X (A & C Ratio)	328356-15X	328356-26X	328356-17X
489, 680	328356-50X 328356-69X (A & C Ratio)	328356-15X	328356-26X	328356-17X
823 Standard Output (AB, AC & XV)			328356-2X	328356-2X
823 Direct Mount Output (XS & XU)			328356-4X	328356-4X
863	328356-39X			
870	329071-55X (XV, RS Output) 329071-55X (RZ, RY Output)			
870XL (All Outputs)	329929-1X			
877XL (All Outputs)	329929-3X			
880 Standard Output Pump Output	328356-51X 328356-52X		328356-53X 328356-53X	328356-54X 328356-54X
890	329071-46X (XS, XK, AF, AZ) 329071-47X (XY)			
901	328267X			328356-40X
912 Speedometer w/o Speedometer	328356-65X 328356-63X 328356-64X		328356-62X	
2442 Top Unit Bottom Unit	328356-15X 328356-13X	328356-15X	328356-26X	328356-17X

Options

**Applications
Kits**

The kits shown below are included for standard applications. Many applications require special stud kits. These are called out on the application pages in the Chelsea HY25-3000/US catalog. Therefore, always consult the application pages in the Chelsea HY25-3000/US before specifying stud kits.

Mounting Kits				
Series	Standard (X*)	Deep Mount (Z*)	Metric (G*)	Miscellaneous
210			8000-50X	(F*) 8000-50X (G*) 8000-50X (X*) 8000-50X
221	328170-1X	328170-26X		(R*) 328170-155X
249			8000-21X	(F) 8000-21X
249V			8000-45X	(F) 8000-45X
252			7170-102X (Allison)	7170-121X (RAM/Aisin)
267	7170-86X			(J*) 7170-87X (M*) 7170-127X
272	7170-129X	7170-131X	7170-72X	(A*, D*, R*) 7170-128X (E*) 7170-129X (N*) 7170-130X
280			7170-86X (FJ) 7170-117X (KV)	
282	328170-200X		328170-201X	(E*) 328170-200X
290	328170-76X		7170-72X	
340	328170-94X	328170-95X	7170-72X	(S*) 328170-95X
348	328170-209X	328170-209X	7170-120X	
352	328170-76X	328170-94X	7170-72X	
442	328170-76X	328170-77X	7170-72X	
447	328170-76X	328170-77X	7170-72X	
489	328170-200X	328170-200X	328170-201X	
541	328794-50X			
660	328170-76X	328170-77X	7170-72X	(D*) 7170-72X
680	328170-200X	328170-200X	7170-68X	
823	328170-8X		328170-185X	
852	328170-8X			
863	328170-8X		328170-185X	
870	7170-86X (FJ, LN), 7170-117X (KV)			
870XL			7170-86X	†
877	7170-86X (FJ, LN), 7170-117X (KV)			
877XL			7170-86X	†
880	328170-192X	328170-195X	328170-201X	
885	328170-192X			
890	7170-86X			
892	7170-86X			
897	7170-86X			
899	7170-86X			
626	328170-76X		7170-72X	7170-72X (626DJA*)
628	328170-209X	328170-209X	328170-201X	
630	328170-76X	328170-77X	7170-78X	7170-72X (630DJA*)
645	328170-76X	328170-77X	7170-78X	7170-72X (645DJA*)
329138X,-1X	328170-95X		7170-72X	
328481X	328170-128X			
328481G			8000-14X	
328564X	328170-127X			
328564G			8000-15X	

* This letter is the Mounting Type Designator found in the Model Number — Example: **442XSAHX-A3XK**

† See Model Configuration for all Mounting Option Codes

890 Family Bracket Kits

Model	Arr.	Bracket Kit and Hose Part Number	Mounting PTO Code	Bracket Kit and Hose Description	Bracket	Pressure Hose
3000 Series Side/Side Openings						
890/897	5	329897-1X	L	Left side	50-P-60	329130-5X
890/897	5	329897-2X	R	Right side w/ or w/o cooler	50-P-61	329130-11X
890/897	5	329897-24X	Y	Right side clocked right	50-P-156	329130-11X
890/897	3	329897-13X	N	Left side w/ cooler	50-P-151	329130-5X
890/897	5	329897-12X	M	Left side w/ retarder	50-P-146	329130-5X

3000 Series Side/Top Openings

890/897	5	329897-4X	E	Left side	50-P-72	329130-5X
890/897	5	329897-5X	T	Right top side w/ or w/o cooler	50-P-67	329075-2X
890/897	5	329897-14X	F	Left side w/ retarder	50-P-129	329130-5X

4000 Series 6-Speed

890/897	5	329897-3X	H	Left side	50-P-62	329130-4X
890/897	5	329897-6X	U	Right top side w/ or w/o cooler	50-P-73	329075-2X
890/897	3	329897-7X	C	Left side w/ cooler	50-P-74	329130-4X
890/897	5	329897-19X	P	Left side w/ retarder	50-P-130	329130-4X
890/897	3	329897-10X	J	Left side w/ retarder	50-P-126	329130-4X
890/897	5	329897-11X	K	Right top side w/ retarder	50-P-127	329075-2X

4700/4800 Series 7-Speed

892/899	5	329897-3X	H	Left side	50-P-62	329130-4X
892/899	5	329897-6X	U	Right top side w/ or w/o cooler	50-P-73	329075-2X
892/899	3	329897-7X	C	Left side w/ cooler	50-P-74	329130-4X
892/899	5	329897-19X	P	Left side w/ retarder	50-P-130	329130-4X
892/899	3	329897-10X	J	Left side w/ retarder	50-P-126	329130-4X
892/899	5	329897-11X	K	Right top side w/ retarder	50-P-127	329075-2X

870XL Family Bracket Kits

870XL	All	329926X	-	-	50-P-169 (UC)	-
870XL	All	329926X	-	-	50-P-170 (LC)	-

Arr. = Assembly Arrangement

UC = Upper Clamp

LC = Lower Clamp

NOTE: All kits include capscrews for mounting the bracket to the transmission and PTO.

PTO/Dump Pump Combo Valve:

This shift option is designed to make PTO/dump pump air shift applications safer and easier. The compact design features a safety interlock to prevent accidental PTO engagement, automatic PTO disengagement when in the lower position to prevent the PTO from being accidentally left in gear, and controlled lowering (feathering) for smooth dump body descent. The controls are easily operated, even when the driver is wearing gloves. It is ideal for use in systems with Chelsea dump pumps, wet line reservoirs, and PTOs.



Features								
Part Number	PTO Kick Out	Spring Return to Neutral on Dump Valve Control	Manual Return to Neutral on Dump Valve	Safety Lock on PTO	Detent Lock on Neutral	Smooth Descent	LED Light	
Air Shift PTOs								
329214X & -2X	x	x		x	x	x	x	
329316X & -2X			x	x	x	x	x	
329358X	x		x	x	x	x	x	
Hydraulic Shift PTOs								
329214-1X	x	x		x	x	x	x	
329216-1X			x	x	x	x	x	

Air Shift PTOs				
Order Code	PTO Models	Chelsea Part No.	Installation Kit	Description
S	442 & 489	329214X	328388-65X	Feathering & PTO Kick-out in Lower position Spring return to Neutral in Raise position
T	442 & 489	329316X	328388-72X	Feathering & NO PTO Kick-out in Lower position Detent in Raise position
U	442 & 489	329358X	328388-79X	Feathering & PTO Kick-out in Lower position Detent in Raise position
Hydraulic Shift PTOs				
S	280	329214-1X	328388-85X	Hoist/PTO control valve that allows a smooth descent of the body in the lower position. Features automatic disengagement of the PTO in lower. Lever on the control valve returns to neutral from the raise position when released (dead man's handle).
S	272	329214-1X	328388-87X	
T	280	329216-1X	328388-86X	Hoist/PTO control valve that allows a smooth descent of the body in the lower position. Requires manual disengagement of the PTO in lower.
T	272	329216-1X	328388-88X	

General Specifications

Pump	Gear Width	GPM US at 1000 RPM	Cubic Inch Displacement	Horsepower Input (at 2000 PSI) 1000 RPM	Maximum Pressure	Maximum Speed
C101/102-20	2.000"	22	5.1	25.6	2500	2400 RPM
C101/102-25	2.500"	27.6	6.38	31	2500	2500 RPM
G101/102-1-0.7	.750"	6.4	1.48	6.2	2500	2500 RPM
G101/102-1-1.5	1.500"	12.8	2.96	13.7	2500	2500 RPM
G101/102-1-2.0	2.000"	17	3.94	18.8	2500	2500 RPM

All data based on SAE 10W oil at 150°F. Minimum pump speed at pressure is 800 RPM. US Gallons displacements are theoretical. They will vary depending on speed, pressure, and temperature.

Three-Line Installation (for intermittent or continuous operation)

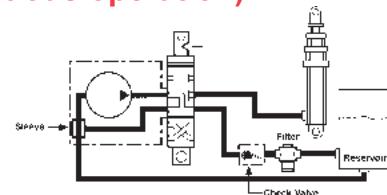
With the internal sleeve installed in the pump and three-line installation, two advantages are provided:

- A. Minimizes the possibility of overheating
- B. The filter keeps the system clean for prolonged trouble-free operation.*

*If filter is used, check valve must be added to prevent backflushing filter.

Dump Pump 3-Line System Shown in the Neutral Mode (Continuous operation)

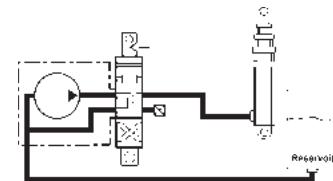
In the neutral mode, all the flow goes across the spool to the Return Port and back to tank because the internal by-pass passage is blocked by the sleeve in the inlet port. Any pressure higher than the setting of the relief valve is relieved internally through the by-pass to the Return Port.

**Two-Line Installation (for intermittent operation only)**

With the internal sleeve removed a two-line hook-up can be arranged, however the oil circulates internally (within the pump). Continuous operation may result in overheating and damage to the pump.

Dump Pump 2-Line System Shown in the Neutral Mode

In the neutral mode, the flow goes across the spool to the Return Port and the integral by-pass passages. Because the Return Port is plugged, and the pressure drop through the by-pass is less than what is required to activate the cylinder, all flow goes through the by-pass back to the inlet side of the pump. Any pressure higher than the setting of the relief valve is relieved internally through the by-pass, back to the inlet port.



These pumps are shipped with an internal sleeve for three-line (continuous duty, filtered) systems. For two-line systems for intermittent duty cycles*, discard the sleeve.

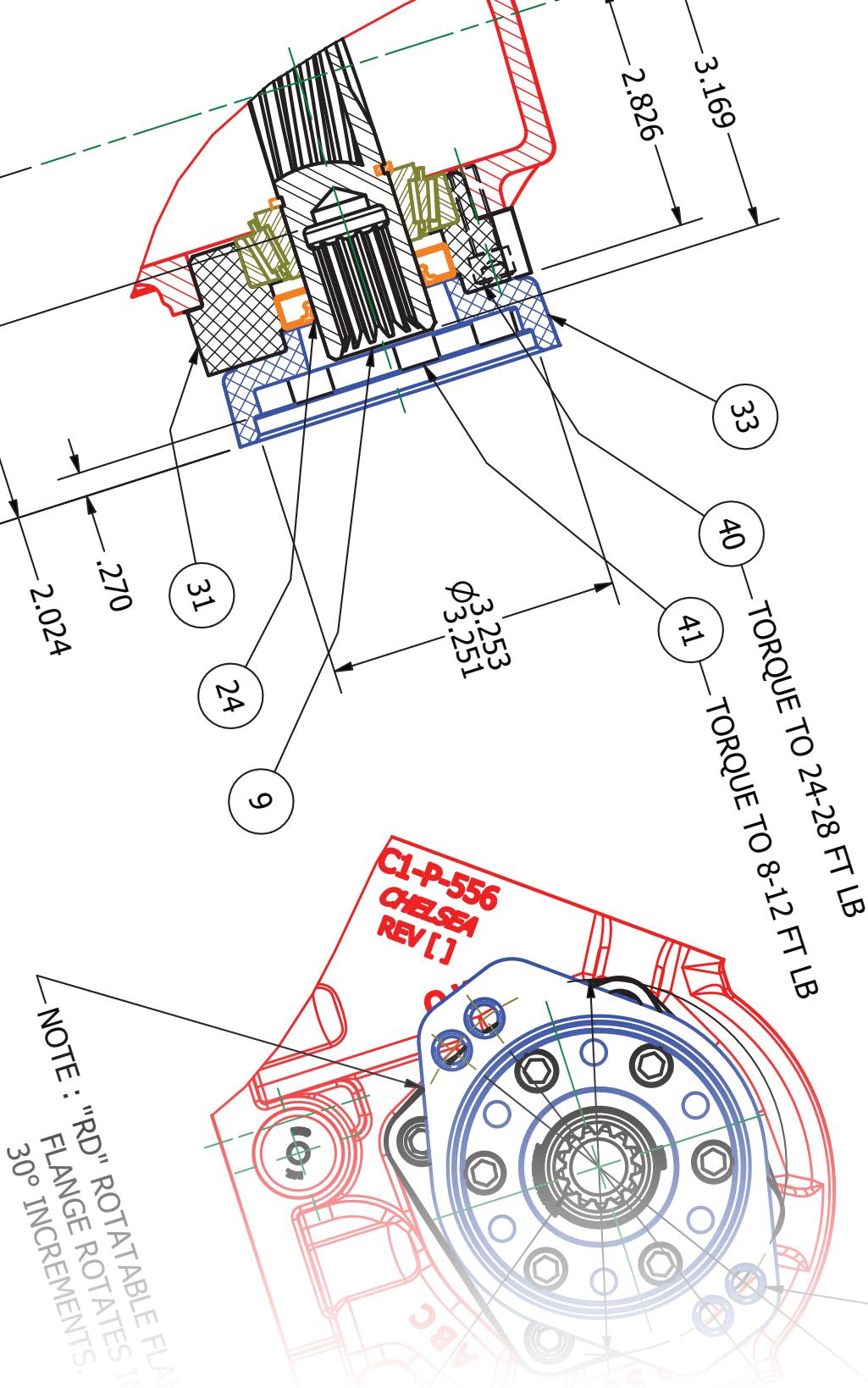
*Pump/PTO operates 5 out of every 15 minutes. Note that three-line systems are always recommended to prolong the trouble-free operation of the hydraulic system.

NOTES

Options

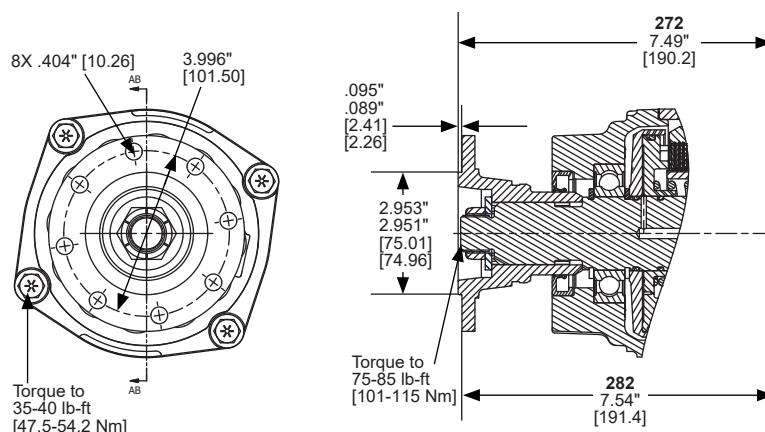


FLANGE DRAWINGS



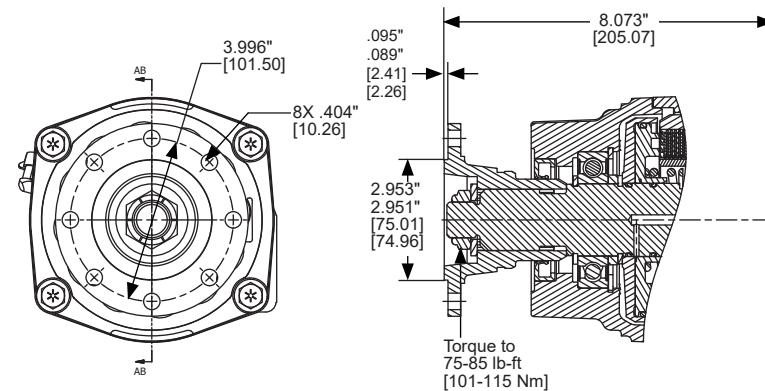
Output Option Code	.....	3.1 thru 3.47
AB	.....	3.1 thru 3.2
AC	.....	3.2 thru 3.4
AD	.....	3.4 thru 3.5
AF	.....	3.5 thru 3.6
AK	.....	3.6
AZ	.....	3.6 thru 3.7
BB	.....	3.7
BC, BD	.....	3.8
BV	.....	3.9
CF	.....	3.10
CK, CS	.....	3.10
CZ, DA	.....	3.11
G, GA	.....	3.11 thru 3.12
GB, GF	.....	3.12
GH, GK, GQ,	.....	3.13
GR, GS	.....	3.14
GU, GY, GZ	.....	3.15
RA	.....	3.16
RB	.....	3.16 thru 3.17
RC, RD	.....	3.17
RE	.....	3.18
RF	.....	3.18 thru 3.19
RJ	.....	3.20
RK	.....	3.20 thru 3.21
RS	.....	3.21 thru 3.22
RY	.....	3.22 thru 3.23
RZ	.....	3.24
SB	.....	3.25
SC	.....	3.25 thru 3.26
SD	.....	3.26 thru 3.27
SQ	.....	3.27
SV, TF	.....	3.28
TK, TS, TV	.....	3.29
TY, TZ, XB	.....	3.30
XD	.....	3.31 thru 3.32
XE	.....	3.33
XK	.....	3.33 thru 3.35
XP	.....	3.36
XQ	.....	3.36
XR	.....	3.37
XS	.....	3.38 thru 3.39
XU	.....	3.40
XV	.....	3.41 thru 3.45
XX	.....	3.45
XY	.....	3.45 thru 3.47
ZS, 21-P-525	.....	3.47

Option Code – AB	
Type	Remote Mount
Shaft	DIN 120 Flange
PTO Series: 272, t272U, 282	

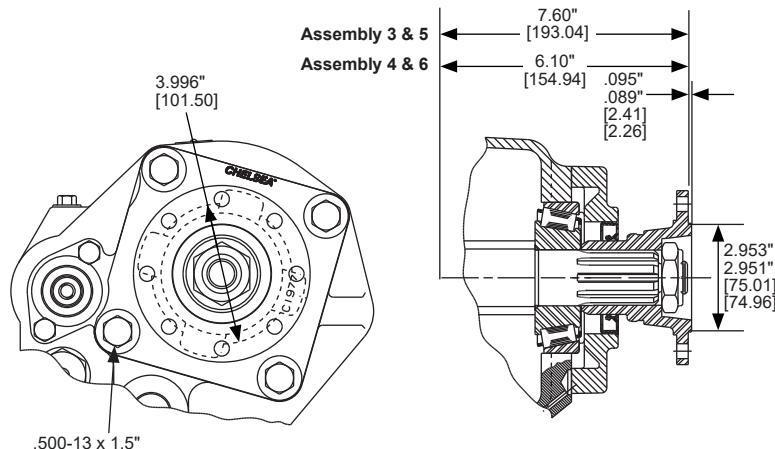


† Coming Soon

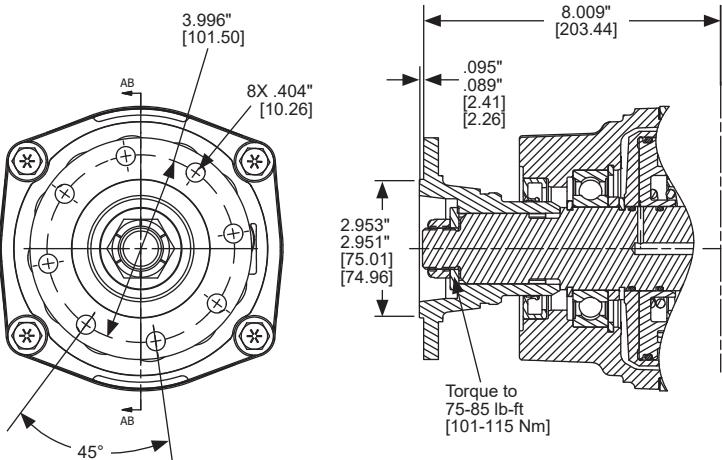
Option Code – AB	
Type	Remote Mount
Shaft	DIN 120 Flange
PTO Series: 280, 287	



Option Code – AB	
Type	Remote Mount
Shaft	DIN 120 Flange
PTO Series: 823, 823 DT12	

**NOTE: PUMP INSTALLATION PRECAUTIONS**

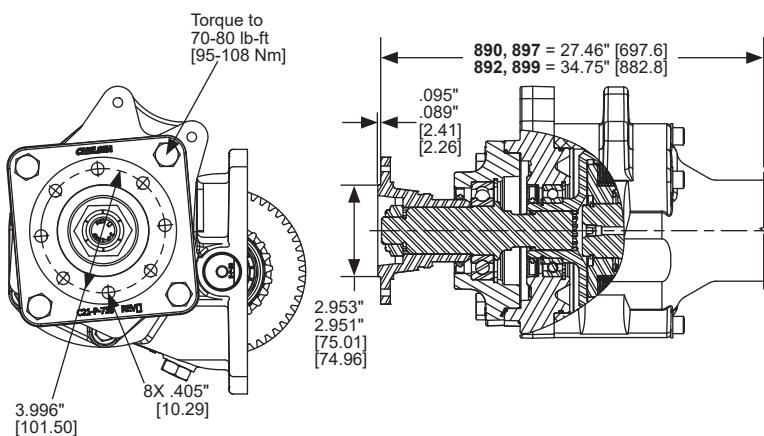
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – AB

Type	Remote Mount
Shaft	DIN 120 Flange

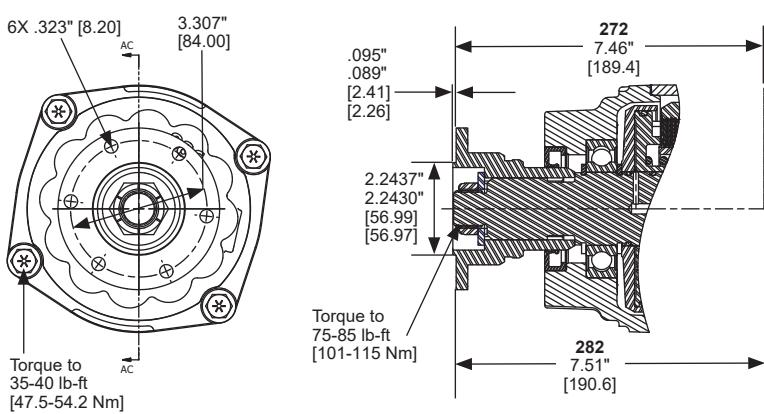
PTO Series: 870, 877



Option Code – AB

Type	Remote Mount
Shaft	DIN 120 Companion Flange

PTO Series: 890, 892, 897, 899



Option Code – AC

Type	Remote Mount
Shaft	DIN 100 Flange

PTO Series: 272, †272U, 282

† Coming Soon

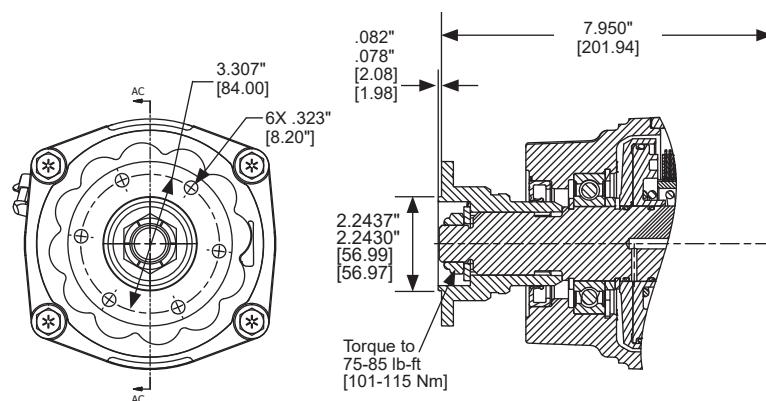
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

Option Code – AC

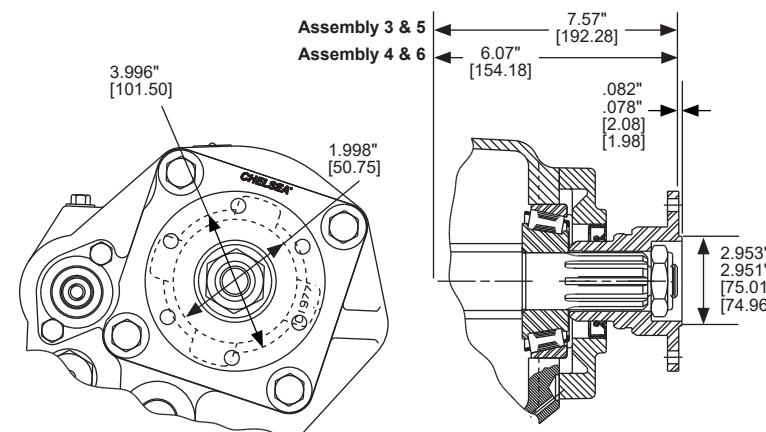
Type	Remote Mount
Shaft	DIN 100 Flange

PTO Series: 280, 287

**Option Code – AC**

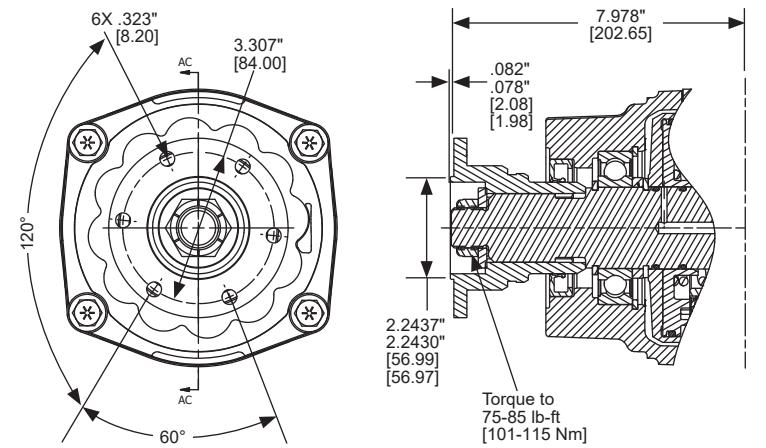
Type	Remote Mount
Shaft	DIN 100 Flange

PTO Series: 823, 823 DT12

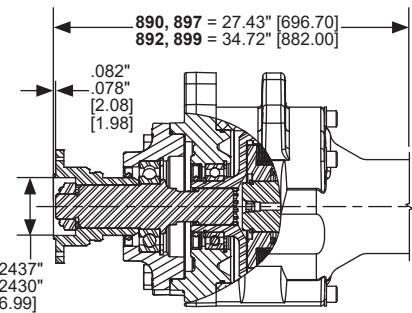
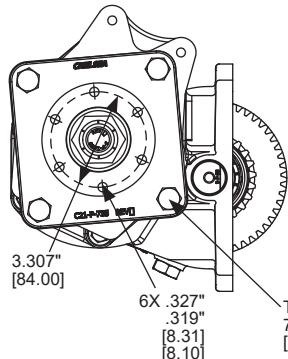
**Option Code – AC**

Type	Remote Mount
Shaft	DIN 100 Flange

PTO Series: 870, 877

**NOTE: PUMP INSTALLATION PRECAUTIONS**

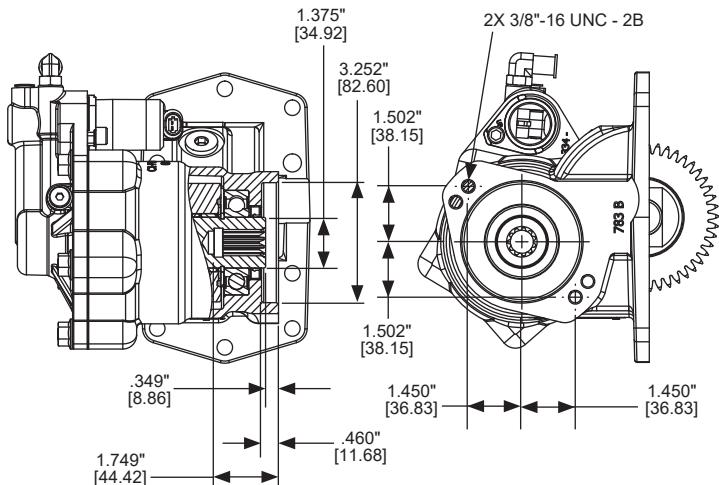
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – AC

Type	Remote Mount
Shaft	DIN 100 Flange

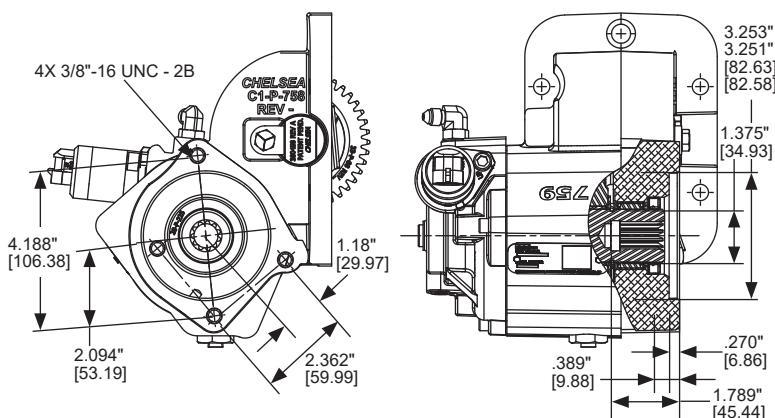
PTO Series: 890, 892, 897, 899



Option Code – AD

Type	Direct Mount
Shaft	SAE 19-4 (3/4" - 11T)
Flange	SAE A 2-Bolt

PTO Series: 210



Option Code – AD

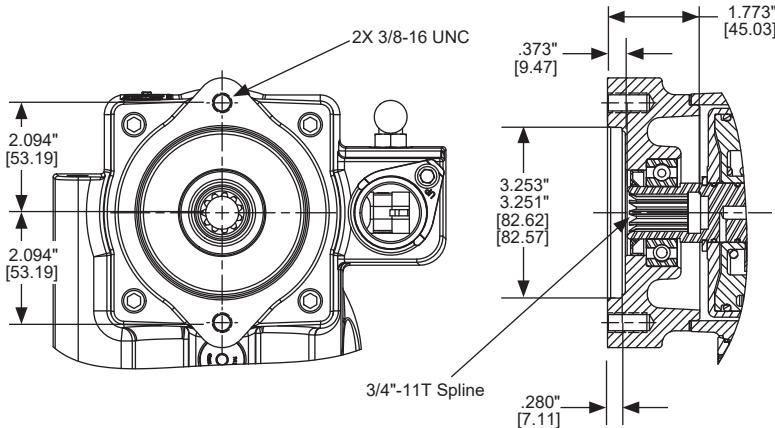
Type	Direct Mount
Shaft	SAE 19-4 (3/4" - 11T)
Flange	SAE A 2-Bolt

PTO Series: 249

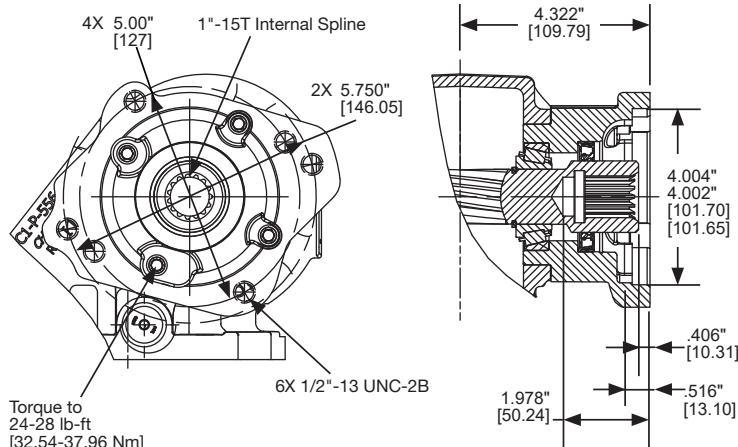
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

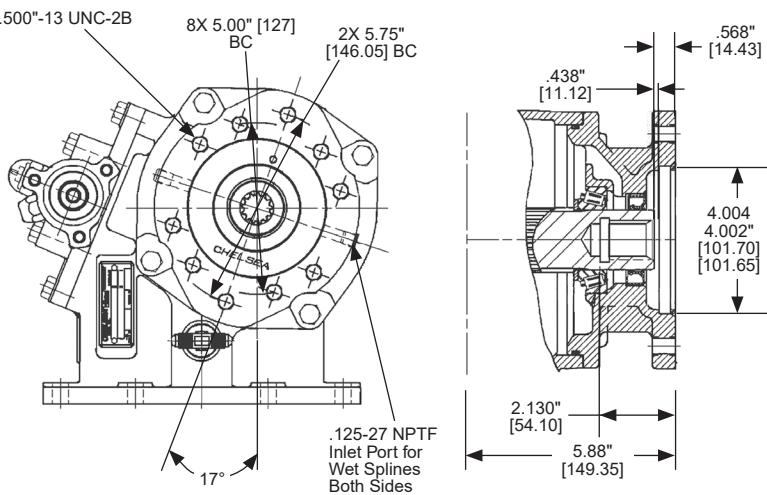
Option Code – AD	
Type	Direct Mount
Shaft	SAE AH (3/4" - 11T)
Flange	SAE A 2-Bolt
PTO Series: 252	



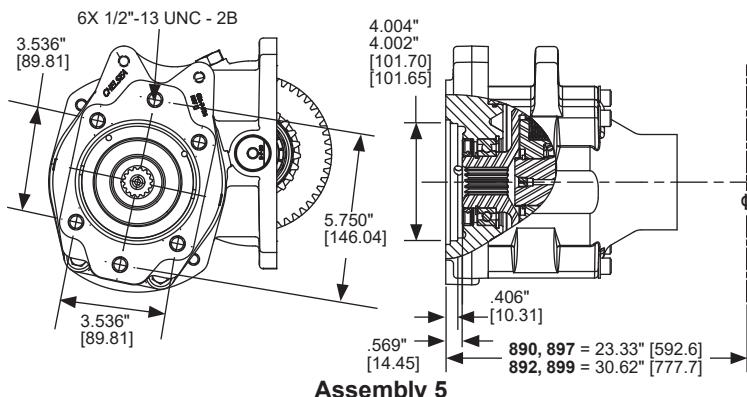
Option Code – AF	
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



Option Code – AF	
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 880, 880 DT12	

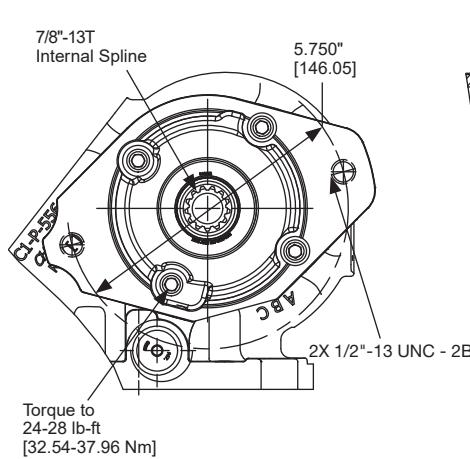
**NOTE: PUMP INSTALLATION PRECAUTIONS**

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



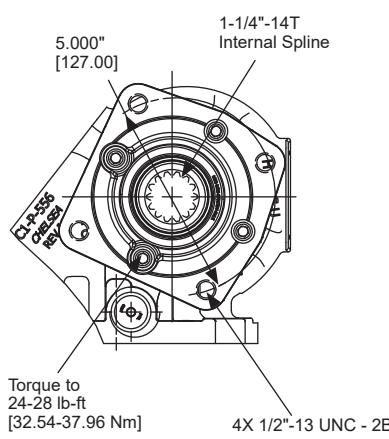
Option Code – AF

Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 890, 892, 897, 899	



Option Code – AK

Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2-Bolt
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



Option Code – AZ

Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE B 4-Bolt
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

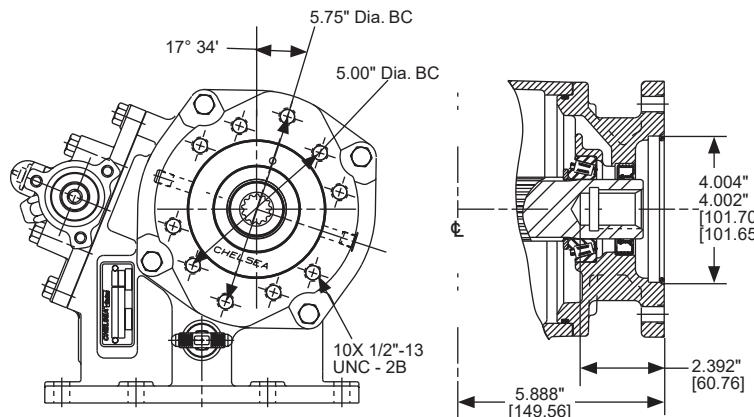
* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS

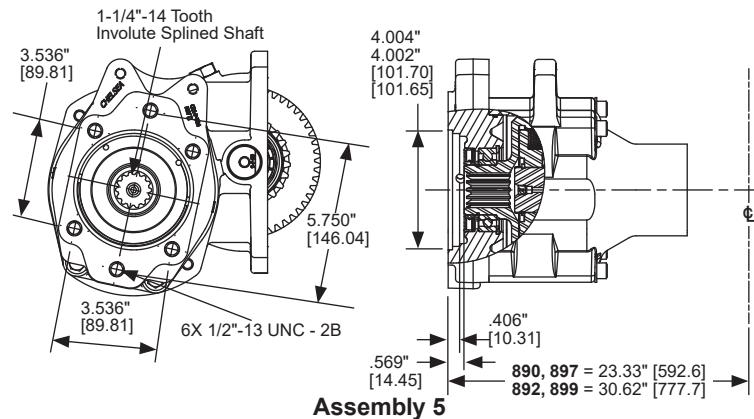
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

Option Code - AZ

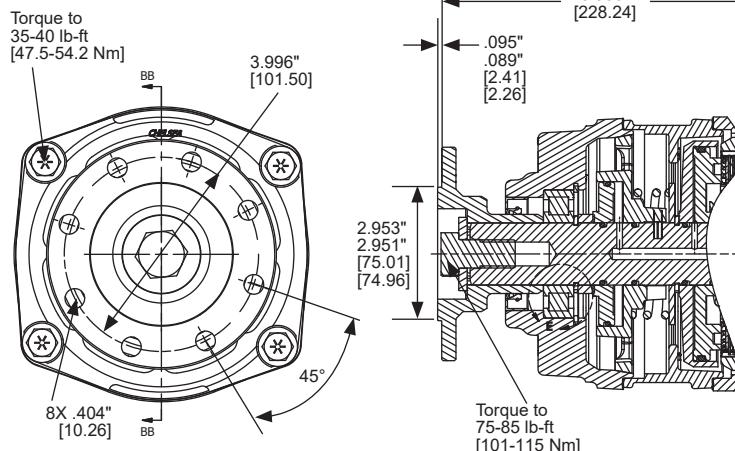
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE B 2 or 4-Bolt

PTO Series: 880, 880 DT12**Option Code - AZ**

Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE B 2 or 4-Bolt

PTO Series: 890, 892, 897, 899**Option Code - BB**

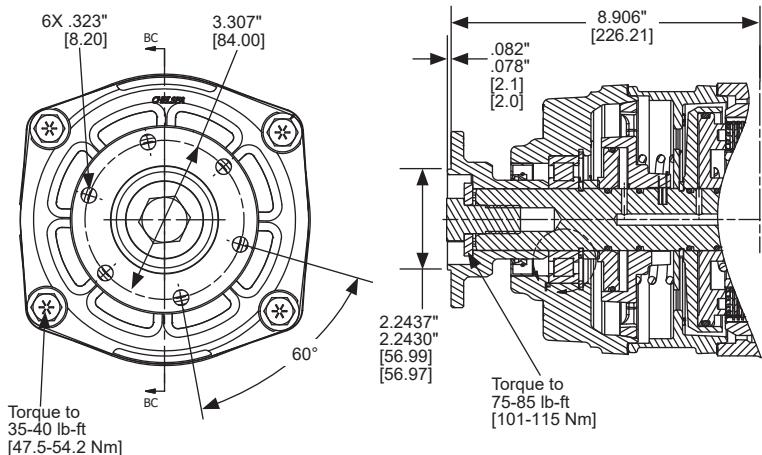
Type	Remote Mount
Shaft	DIN 120 Flange w/ Shaft Brake

PTO Series: 870

* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

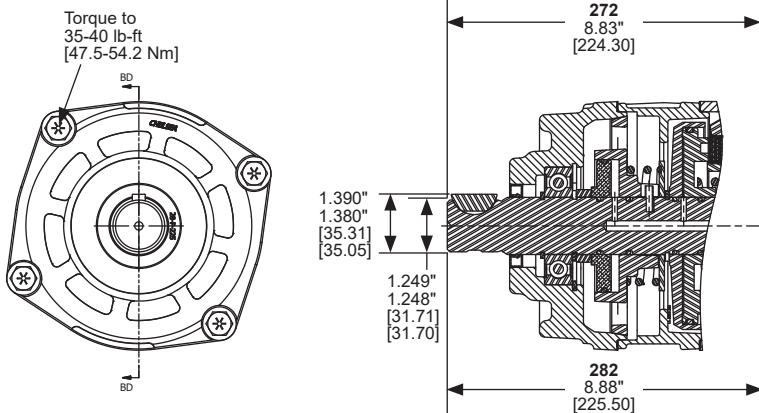
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



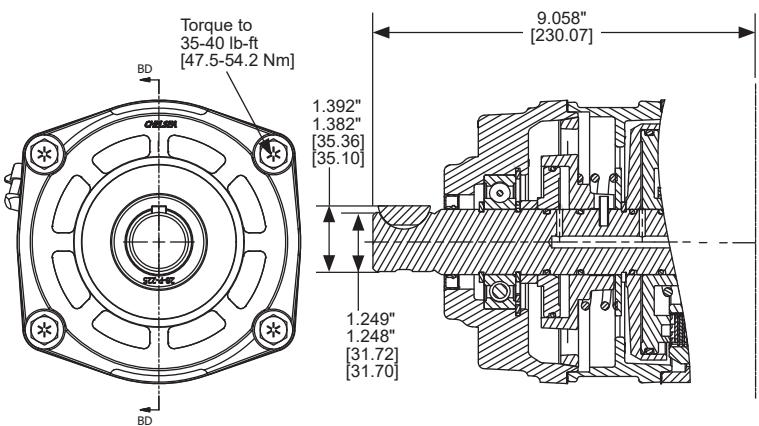
Option Code – BC

Type	Remote Mount
Shaft	DIN 100 Flange w/ Shaft Brake
PTO Series: 870	



Option Code – BD

Type	Remote Mount
Shaft	1-1/4" Keyed w/ Shaft Brake
PTO Series: 272, 282	



Option Code – BD

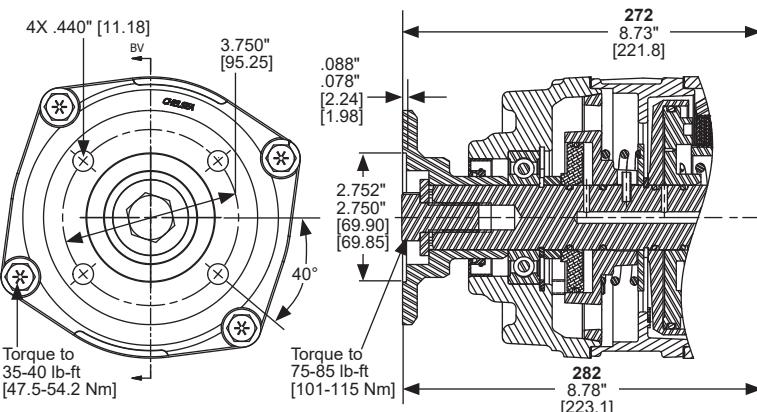
Type	Remote Mount
Shaft	1-1/4" Rd. Keyed w/ Shaft Brake
PTO Series: 280	

NOTE: PUMP INSTALLATION PRECAUTIONS

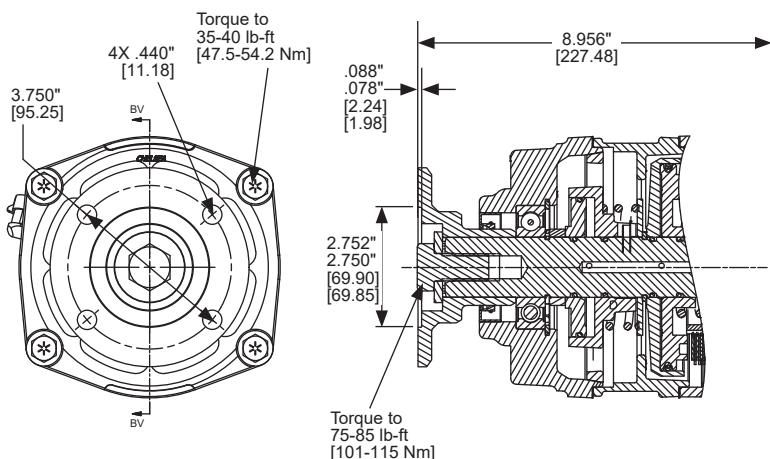
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

Option Code – BV

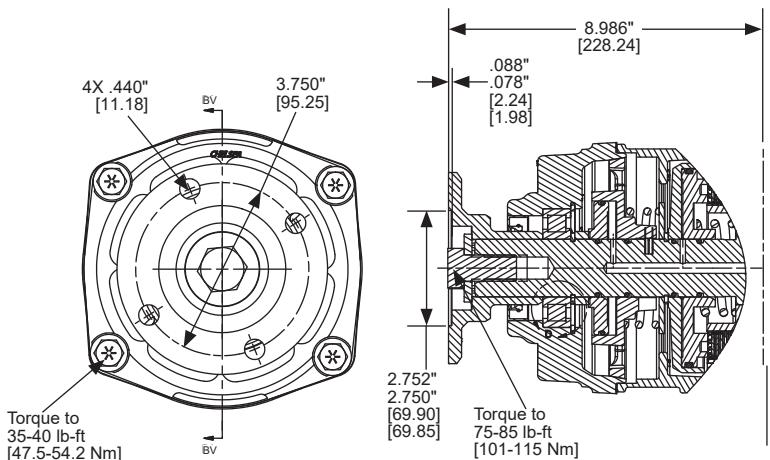
Type	Remote Mount
Shaft	1410 Companion Flange w/ Shaft Brake

PTO Series: 272, 282**Option Code – BV**

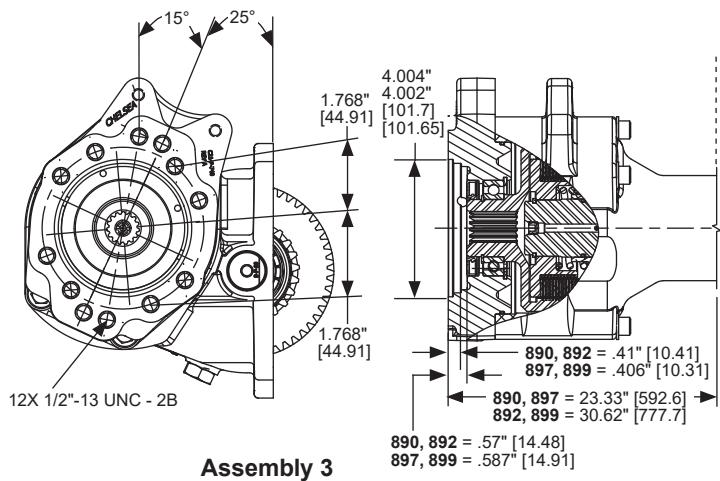
Type	Remote Mount
Shaft	1410 Companion Flange w/ Shaft Brake

PTO Series: 280**Option Code – BV**

Type	Remote Mount
Shaft	1410 Companion Flange w/ Shaft Brake

PTO Series: 870**NOTE: PUMP INSTALLATION PRECAUTIONS**

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

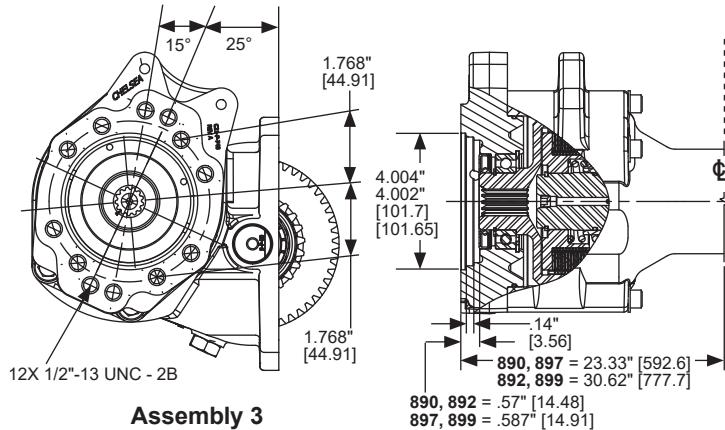


Option Code – CF

Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	SAE B 2 or 4-Bolt

PTO Series: 890, 892, 897, 899

Assembly 3

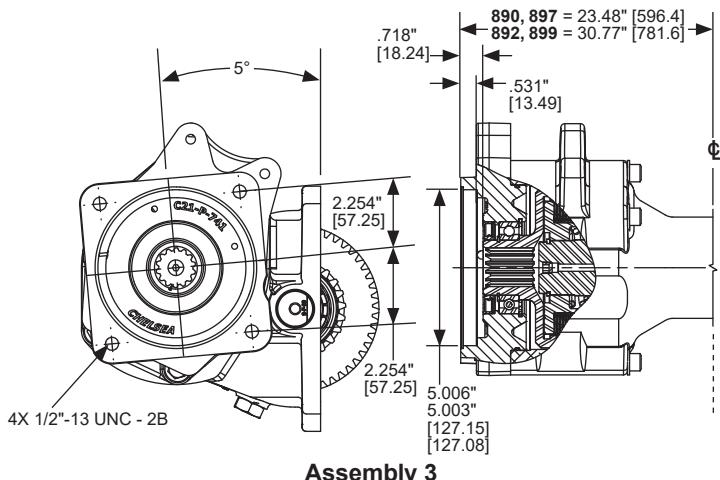


Option Code – CK

Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt

PTO Series: 890, 892, 897, 899

Assembly 3



Option Code – CS

Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 4-Bolt

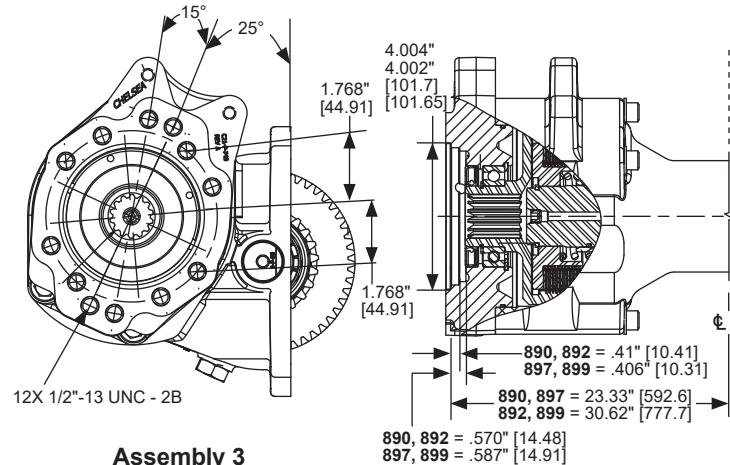
PTO Series: 890, 892, 897, 899

Assembly 3

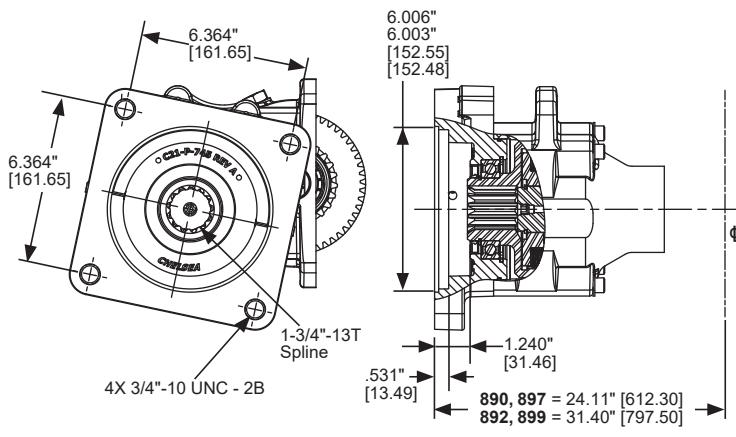
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

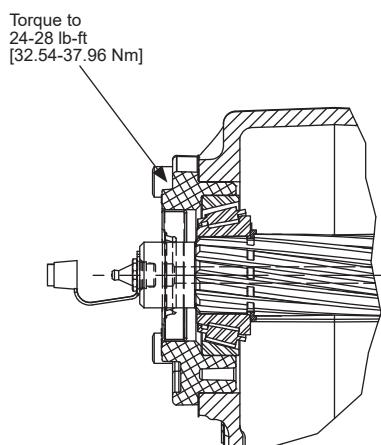
Option Code - CZ	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 890, 892, 897, 899	



Option Code - DA	
Type	Direct Mount
Shaft	SAE D (1-3/4" - 13T)
Flange	SAE D 4-Bolt
PTO Series: 890, 892, 897, 899	



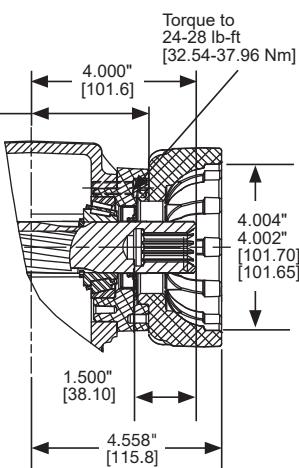
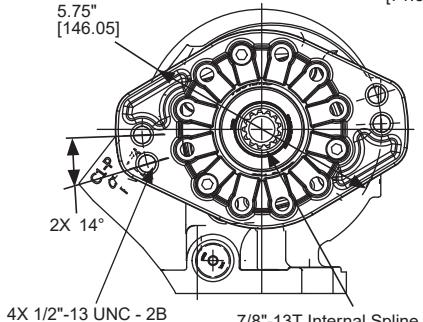
Option Code - G	
Type	Direct Mount
NOTE	All greaseable output assemblies have this closed bearing cap configuration.
PTO Series: 221, 267, 442, 447, 489, 660, 680, 823, 823 DT12, 880, 880 DT12, 2442	



* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

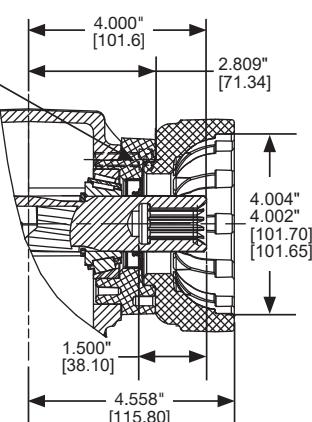
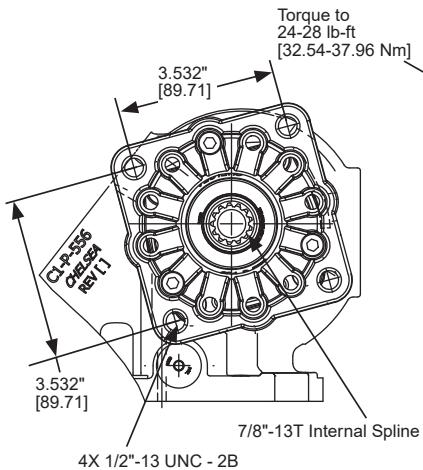
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements. Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



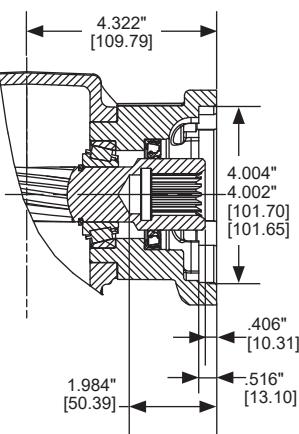
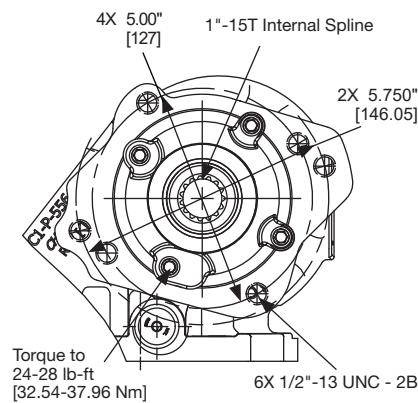
Option Code – GA

Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 2-Bolt
Rotates in 30° Increments (*Greaseable)	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



Option Code – GB

Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 4-Bolt
Rotates in 30° Increments (*Greaseable)	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



Option Code – GF

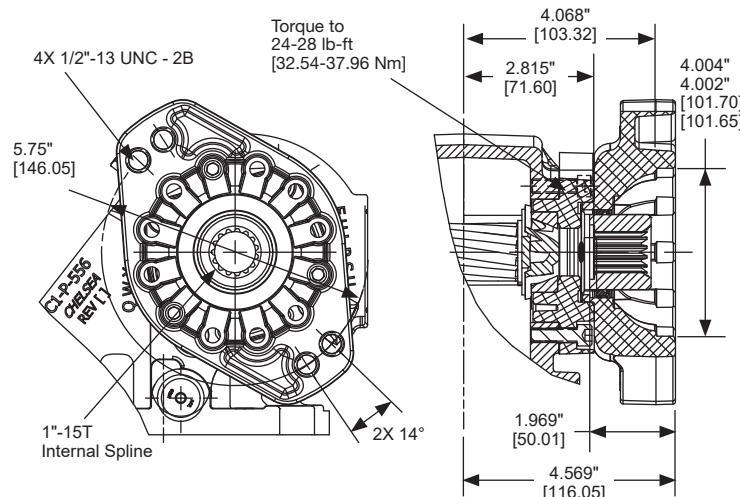
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	SAE B 2 or 4-Bolt
(*Greaseable)	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

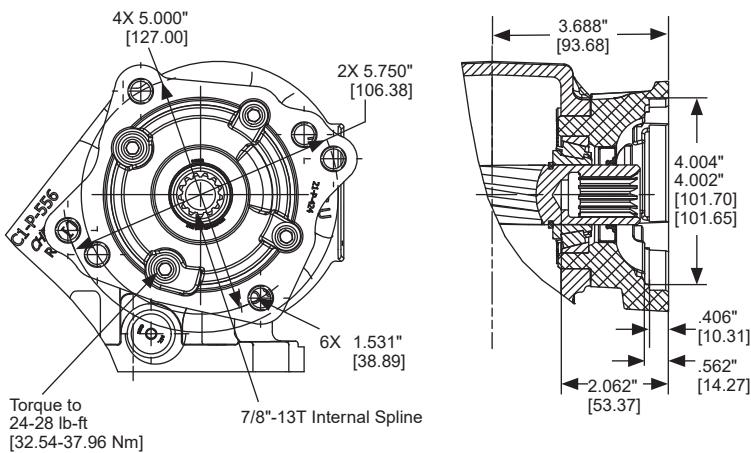
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

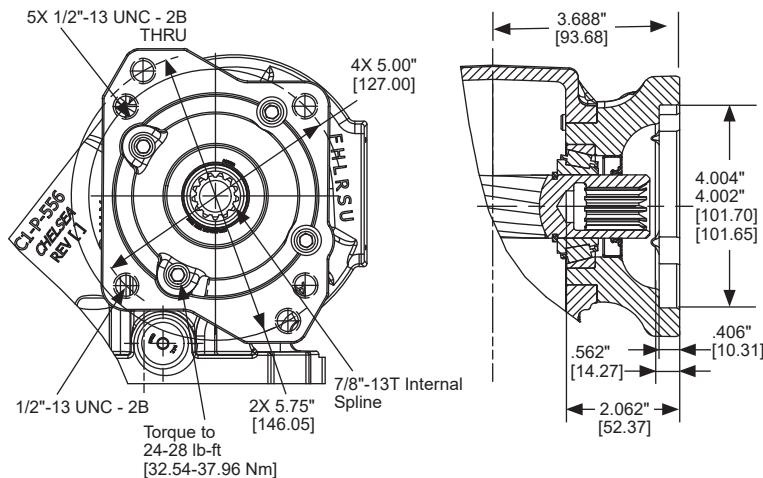
Option Code – GH	
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	Rotatable SAE B 2-Bolt
Rotates in 30° Increments (*Greaseable)	
PTO Series: 660, 680	



Option Code – GK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
(*Greaseable)	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



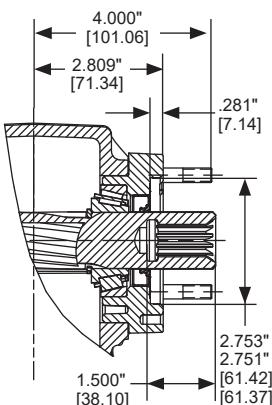
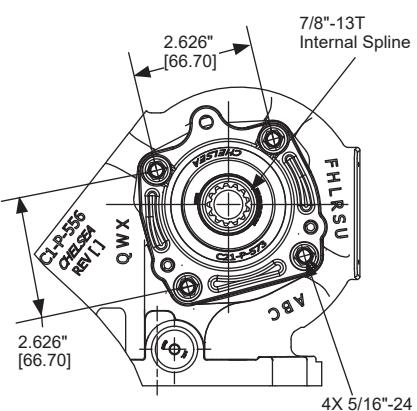
Option Code – GQ	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
(*Greaseable)	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

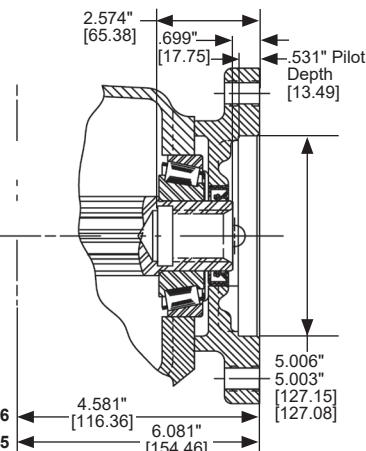
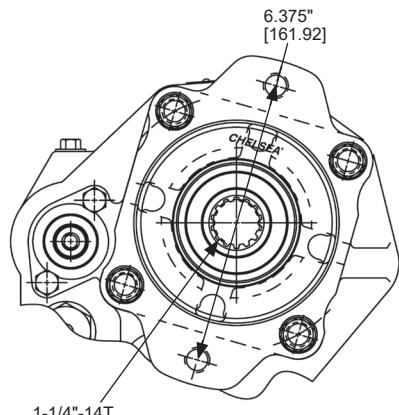
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



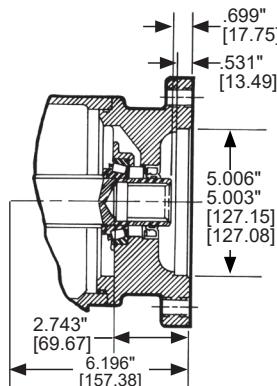
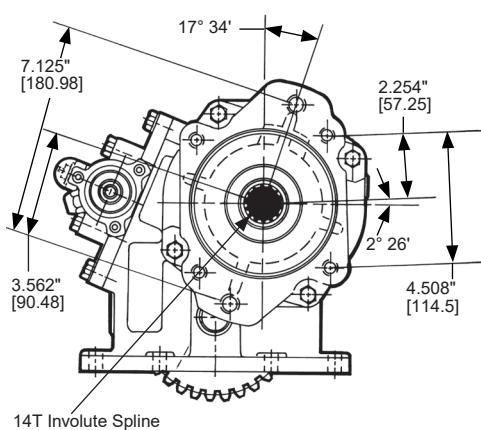
Option Code – GR

Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Chelsea Special (Cloverleaf)
(*Greaseable)	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



Option Code – GS

Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2 or 4-Bolt
(*Greaseable)	
PTO Series: 823, 823 DT12	



Option Code – GS

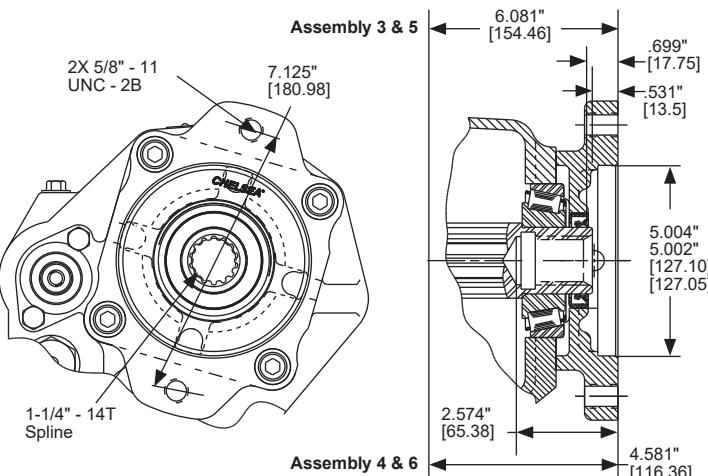
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2 or 4-Bolt
(*Greaseable)	
PTO Series: 880, 880 DT12	

* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

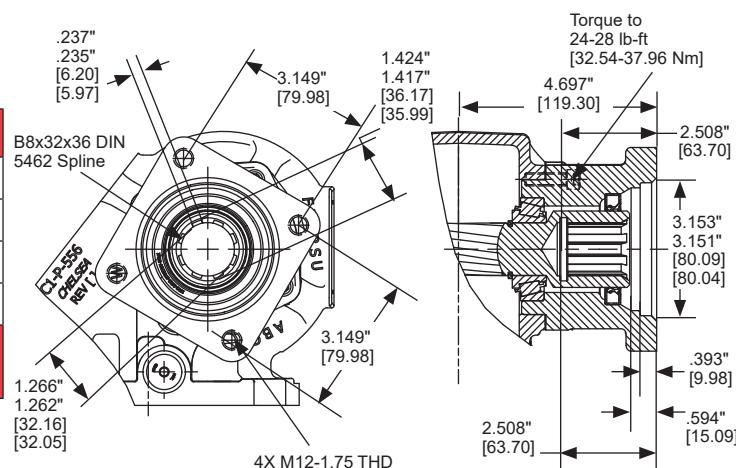
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

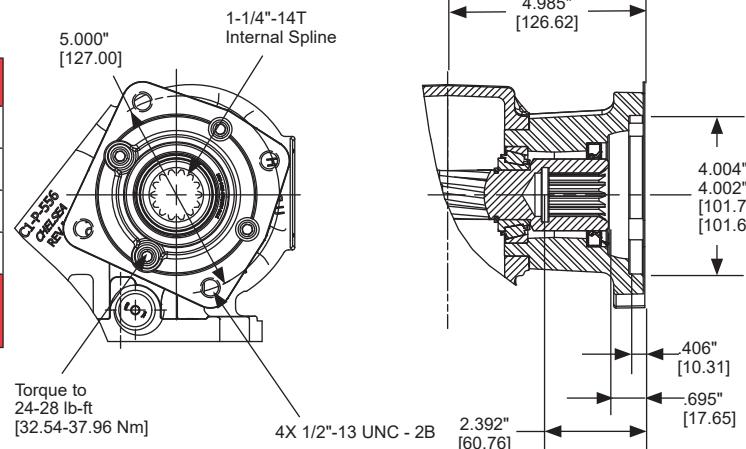
Option Code – GU	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2-Bolt
(*Greaseable)	
PTO Series:	823, 823 DT12



Option Code – GY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	ISO 7653 Pump Mounting
(*Greaseable)	
PTO Series:	660, 680



Option Code – GZ	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE B 2 or 4-Bolt
(*Greaseable)	
PTO Series:	660, 680

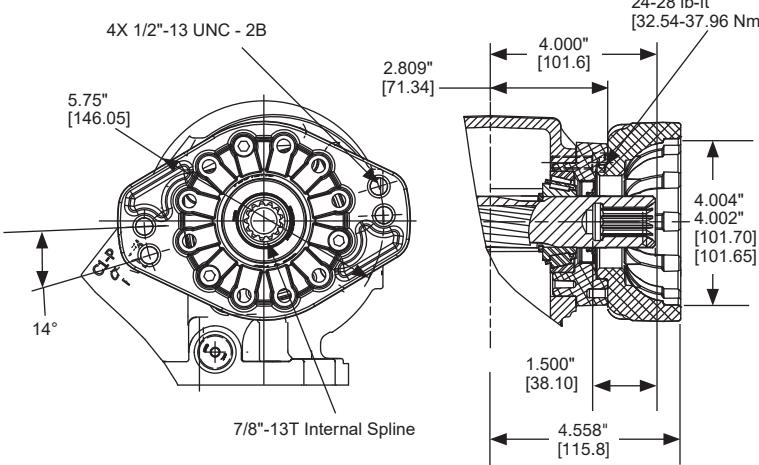


Flanges

* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

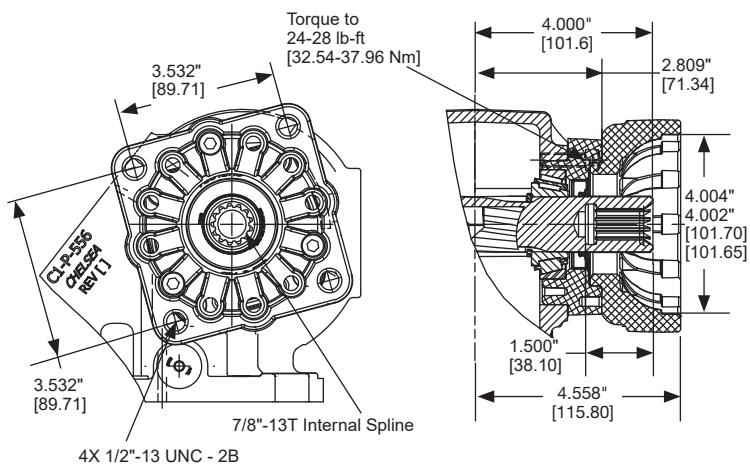
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements. Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



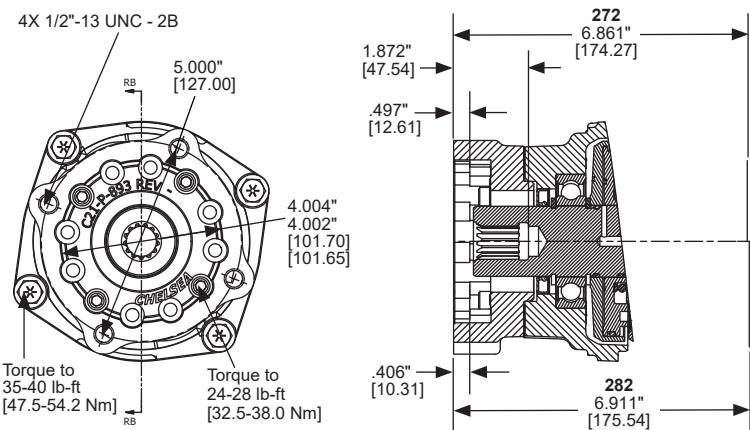
Option Code – RA

Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 2-Bolt
Rotates in 30° Increments	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



Option Code – RB

Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 4-Bolt
Rotates in 30° Increments	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



Option Code – RB

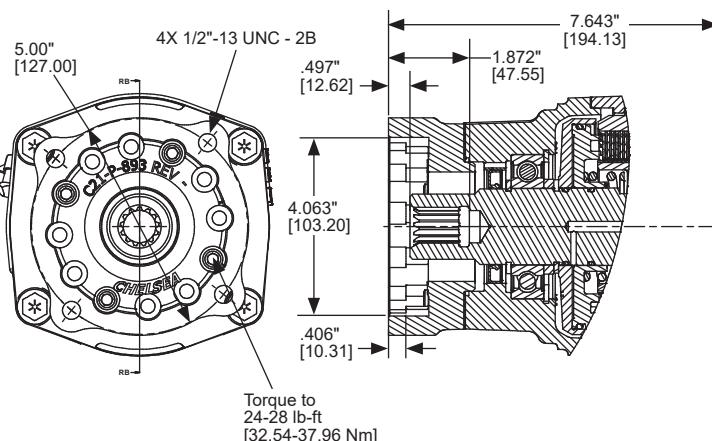
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 4-Bolt
Rotates in 30° Increments	
PTO Series: 272, 272-FORD, 272U, 282	

NOTE: PUMP INSTALLATION PRECAUTIONS

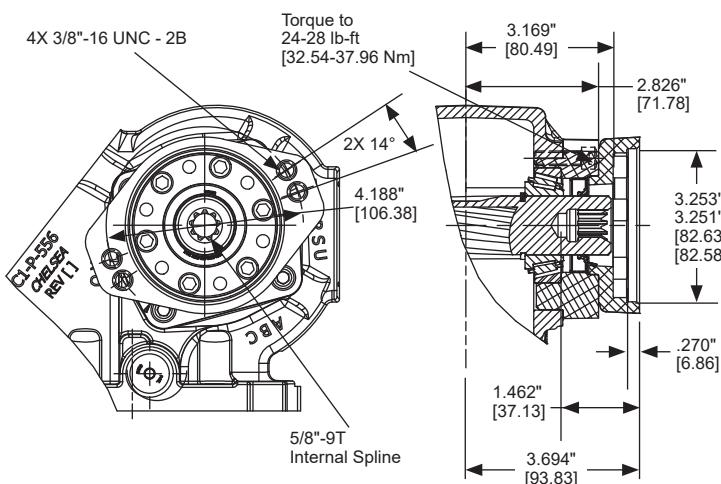
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

Option Code – RB

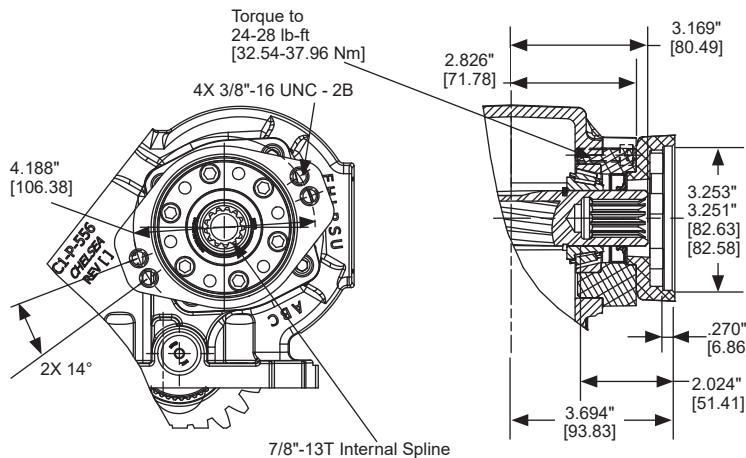
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 4-Bolt
Rotates in 30° Increments	
PTO Series: 280, 287	

**Option Code – RC**

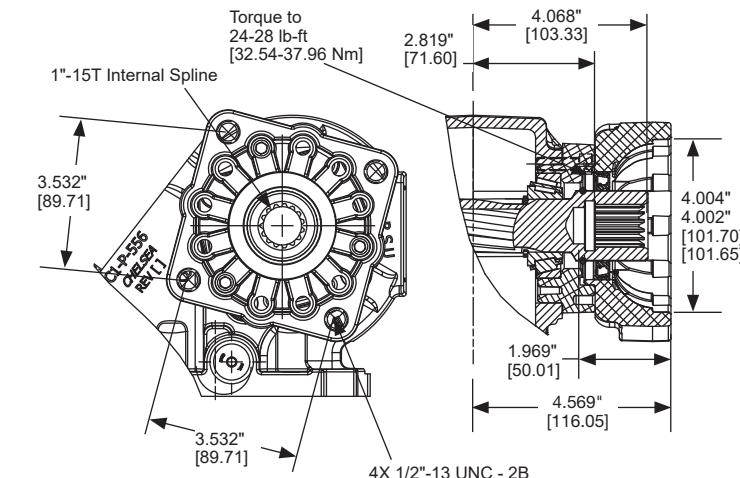
Type	Direct Mount
Shaft	SAE A (5/8" - 9T)
Flange	Rotatable SAE A 2-Bolt
Rotates in 30° Increments	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

**Option Code – RD**

Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE A 2-Bolt
Rotates in 30° Increments	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

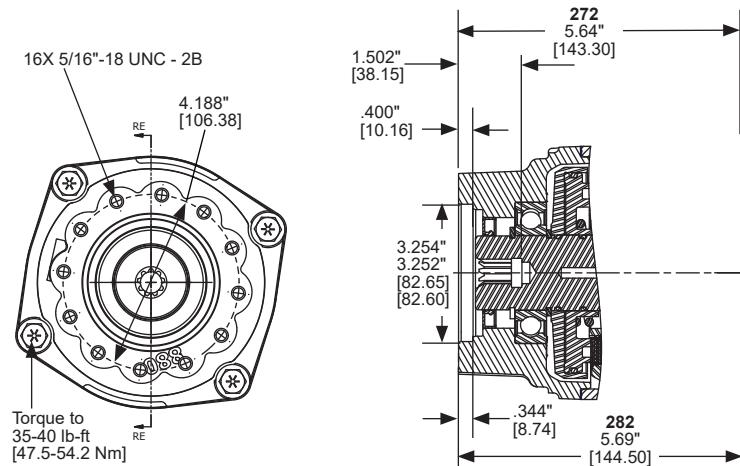
**NOTE: PUMP INSTALLATION PRECAUTIONS**

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



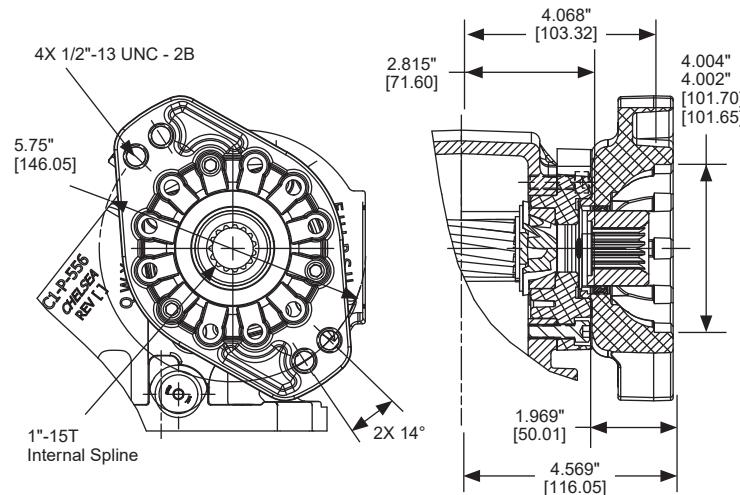
Option Code – RE

Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	Rotatable SAE B 4-Bolt
Rotates in 30° Increments	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



Option Code – RE

Type	Direct Mount
Shaft	SAE A (5/8" - 9T)
Flange	Rotatable SAE A 2-Bolt
Pump Rotates in 30° Increments	
PTO Series: 272, 272-FORD, 282	



Option Code – RF

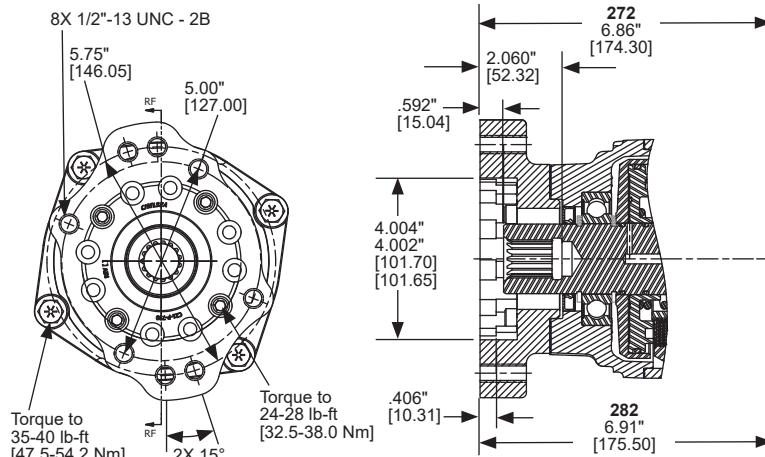
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	Rotatable SAE B 2-Bolt
Rotates in 30° Increments	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

NOTE: PUMP INSTALLATION PRECAUTIONS

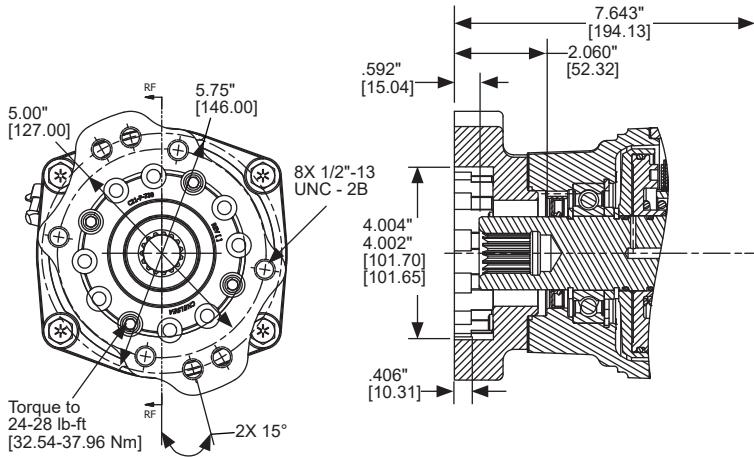
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

Option Code – RF

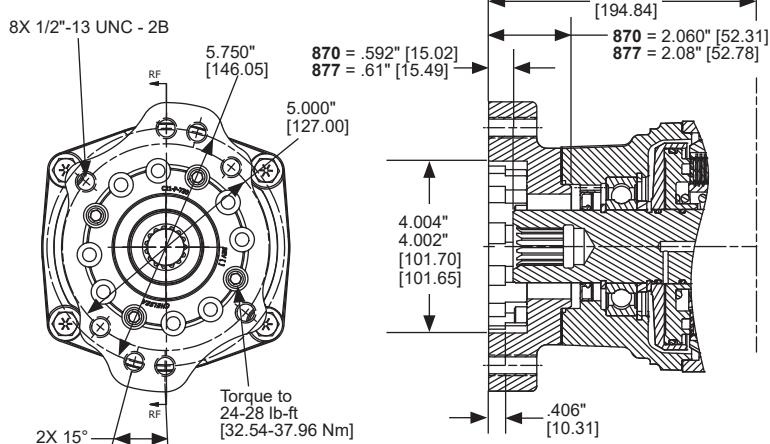
Type	Direct Mount
Shaft	SAE BB Shaft (1" - 15T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 272, 272-FORD, 272U, 282	

**Option Code – RF**

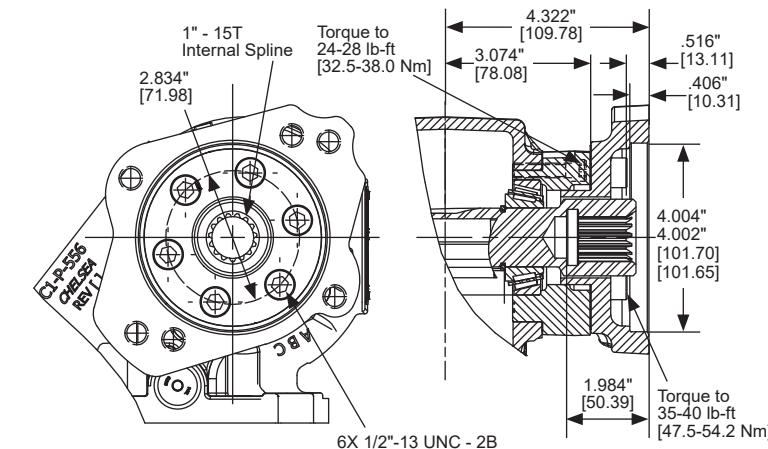
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 280, 287	

**Option Code – RF**

Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 870, 877	

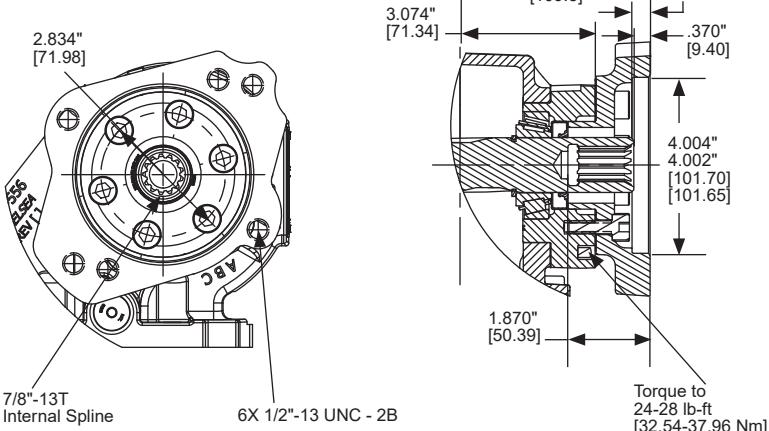
**NOTE: PUMP INSTALLATION PRECAUTIONS**

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



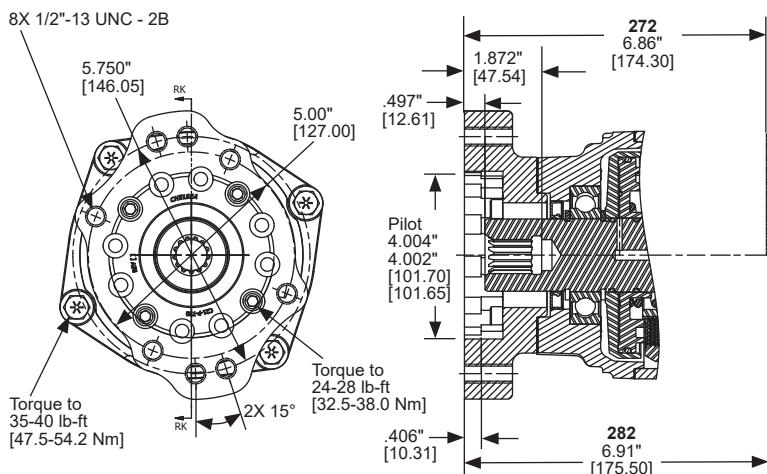
Option Code – RJ

Type	Direct Mount
Shaft	SAE BB Shaft (1" - 15T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 267, 489, 660	



Option Code – RK

Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 60° Increments	
PTO Series: 221, 267, 442, 447, 489, 489 DT12, 660, 680, 680 DT12, 2442	



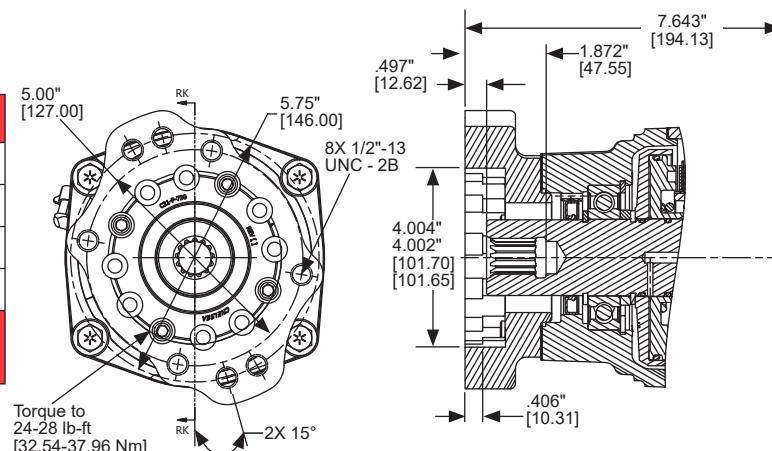
Option Code – RK

Type	Direct Mount
Shaft	SAE B Shaft (7/8" - 13T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 272, 272-FORD, 272U, 282	

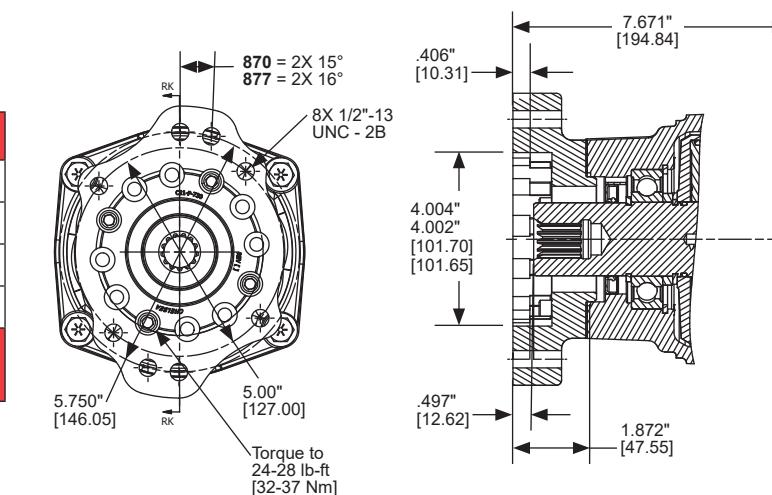
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

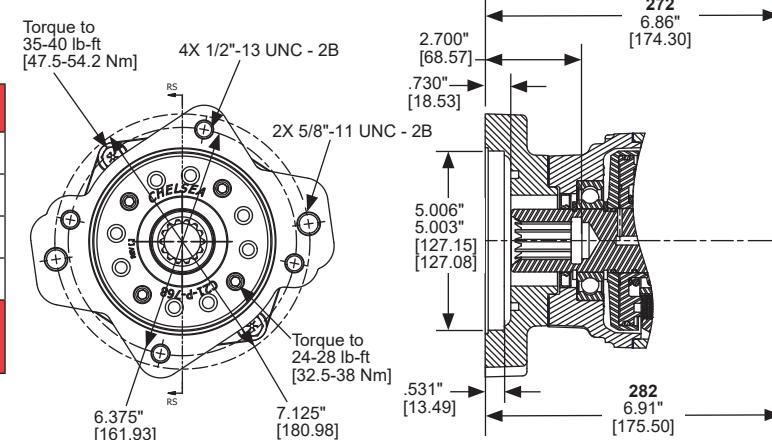
Option Code – RK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 280, 287	



Option Code – RK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 870, 877	



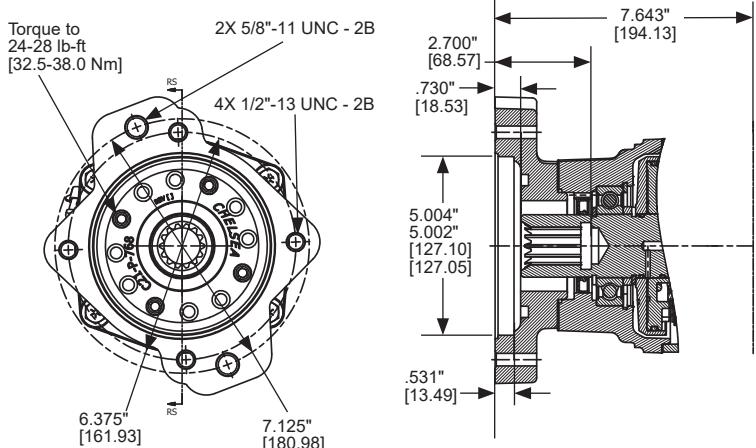
Option Code – RS	
Type	Direct Mount
Shaft	Rotatable SAE C Shaft (1-1/4" - 14T)
Flange	SAE C 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 272, 272-FORD, 272U, 282	



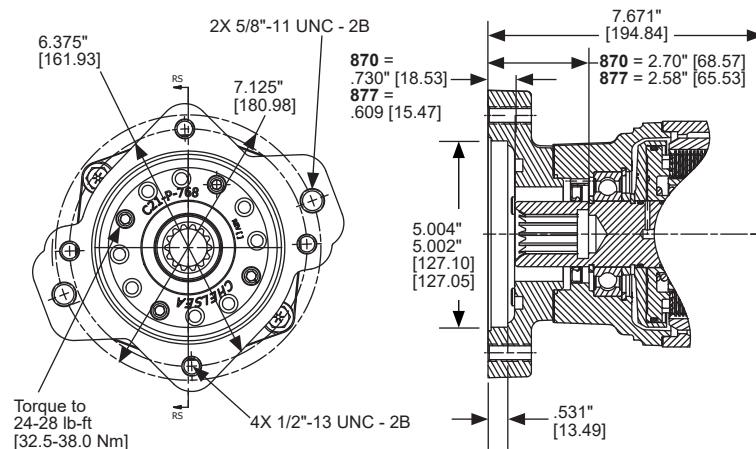
* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS

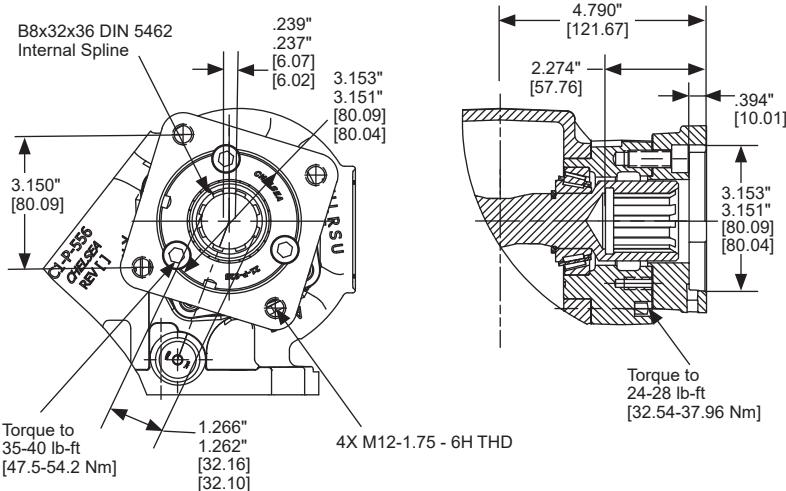
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – RS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	Rotatable SAE C 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 280, 287	



Option Code – RS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	Rotatable SAE C 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 870, 877	



Option Code – RY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	Rotatable ISO 7653 Pump Mount
Rotates in 120° Increments	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

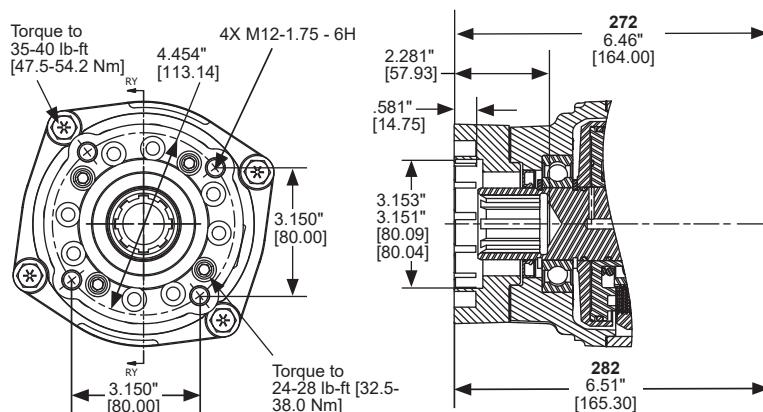
* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS

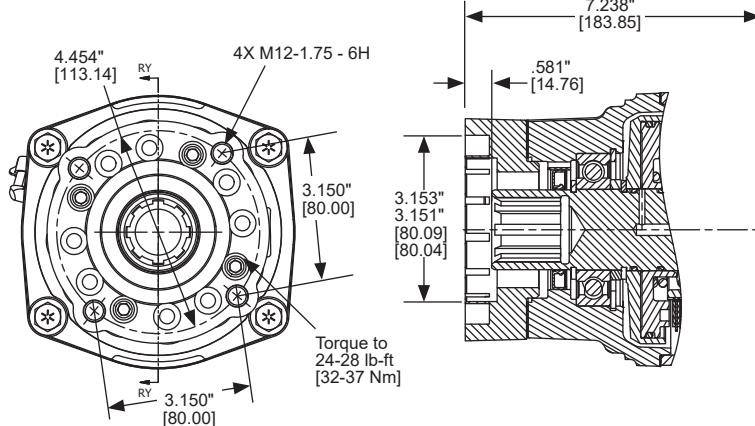
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

Option Code – RY

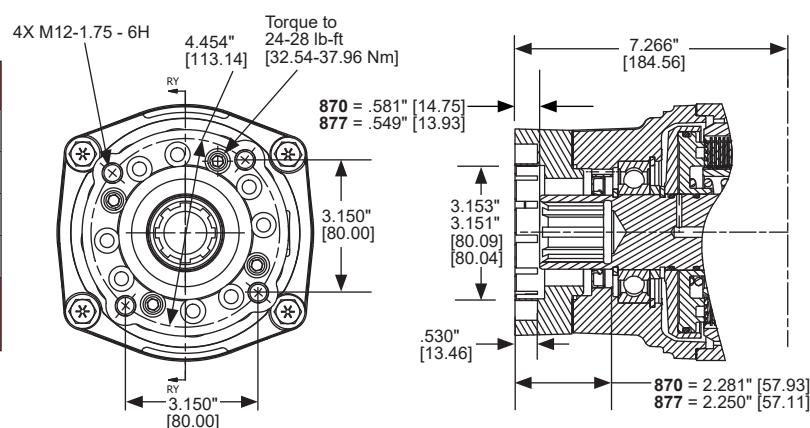
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	Rotatable ISO 7653 Pump Mount
Rotates in 30° Increments	
PTO Series: 272, 272-FORD, 272U, 282	

**Option Code – RY**

Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	Rotatable ISO 7653 Pump Mount
Rotates in 30° Increments	
PTO Series: 280, 287	

**Option Code – RY**

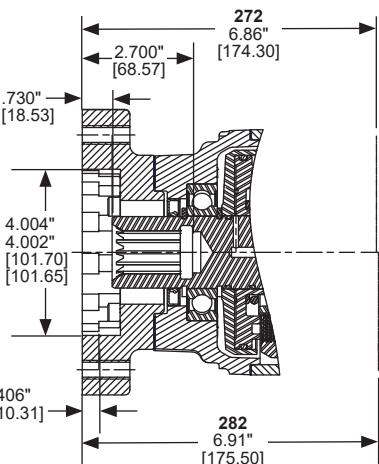
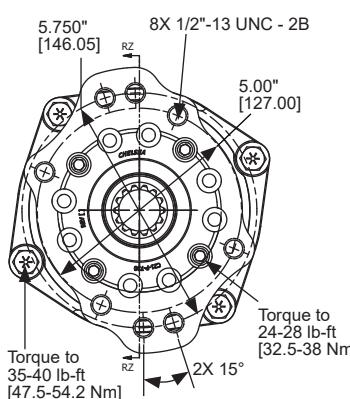
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	Rotatable ISO 7653 Pump Mount
Rotates in 30° Increments	
PTO Series: 870, 877	



* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

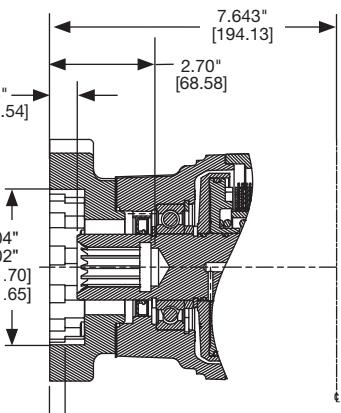
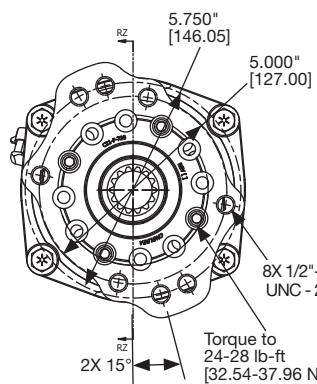
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



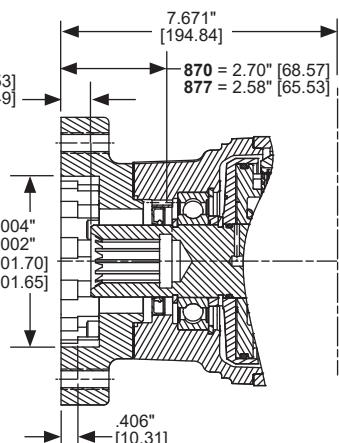
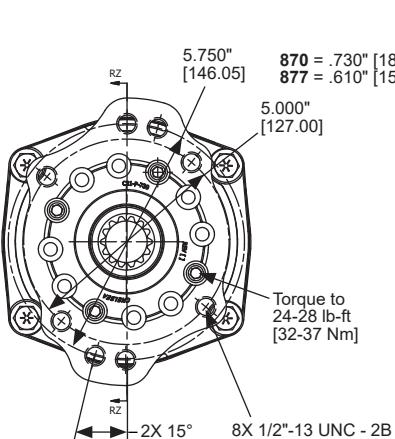
Option Code - RZ

Type	Direct Mount
Shaft	SAE C Shaft (1-1/4" 14T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 272, 272-FORD, 272U, 282	



Option Code - RZ

Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 280, 287	



Option Code - RZ

Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 870, 877	

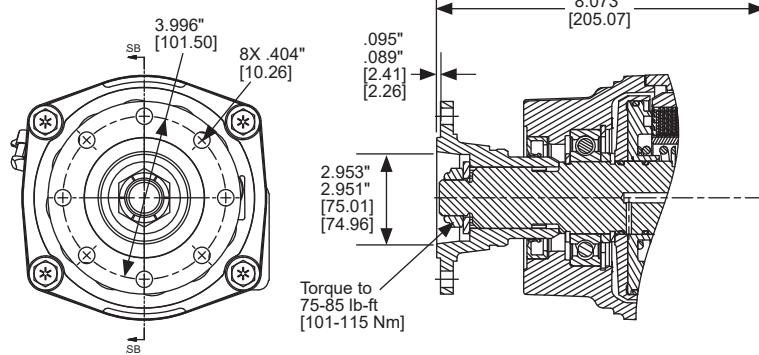
* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS

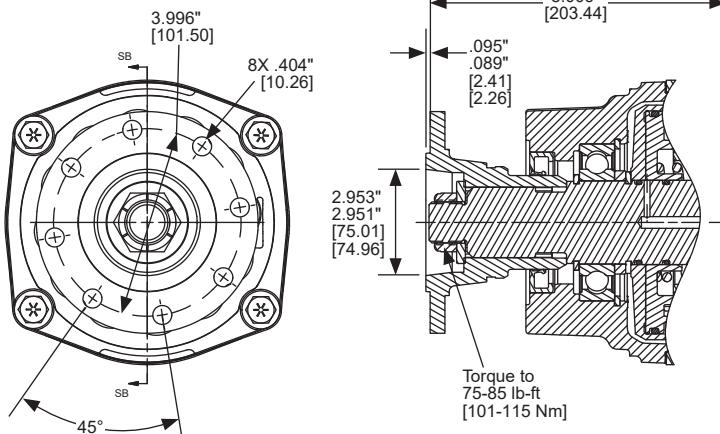
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

Option Code – SB

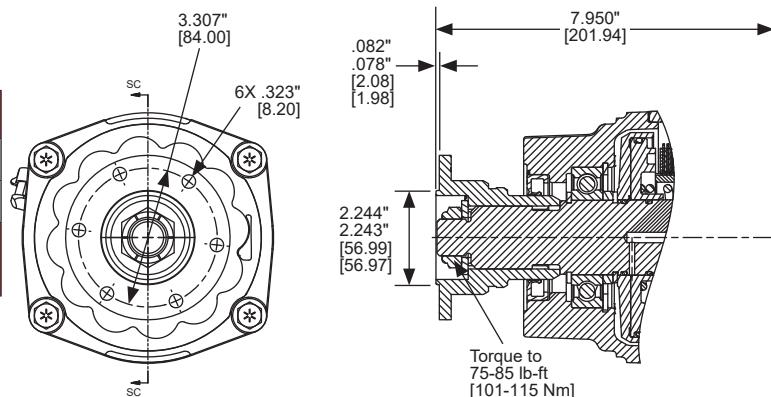
Type	Remote Mount
Shaft	Smart Start DIN 120 Flange
PTO Series: 280	

**Option Code – SB**

Type	Remote Mount
Shaft	Smart Start DIN 120 Flange
PTO Series: 870	

**Option Code – SC**

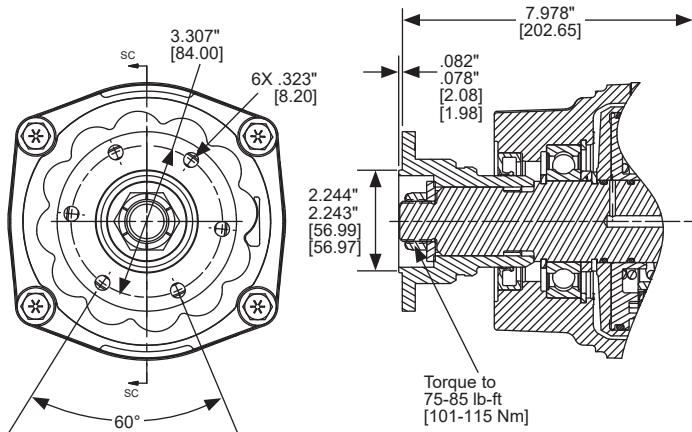
Type	Remote Mount
Shaft	Smart Start DIN 100 Flange
PTO Series: 280	



* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

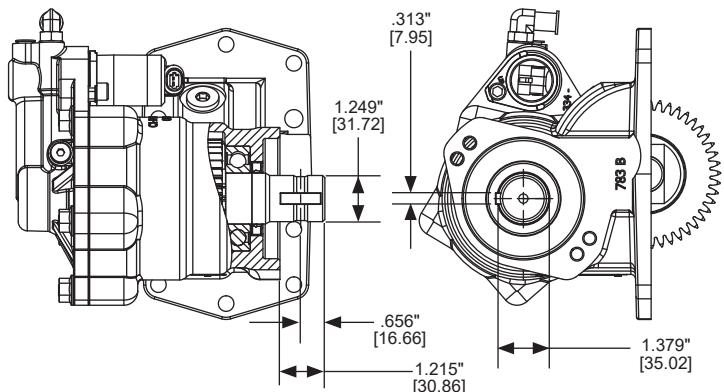
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



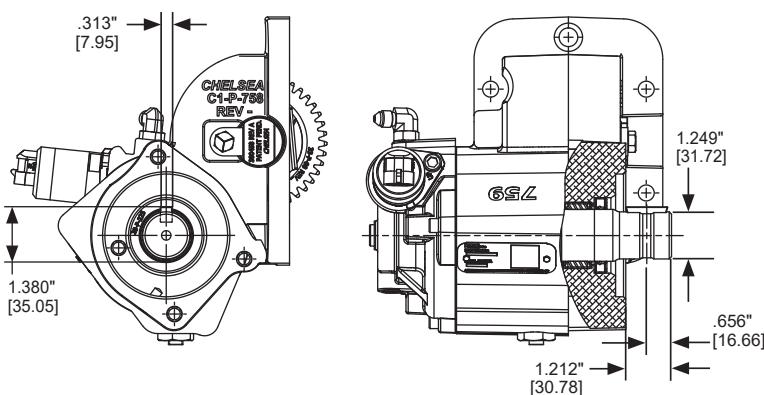
Option Code – SC

Type	Remote Mount
Shaft	Smart Start DIN 100 Flange
PTO Series: 870	



Option Code – SD

Type	Remote Mount
Shaft	Smart Start (1-1/4" Rd. - 5/16" Key)
PTO Series: 210	



Option Code – SD

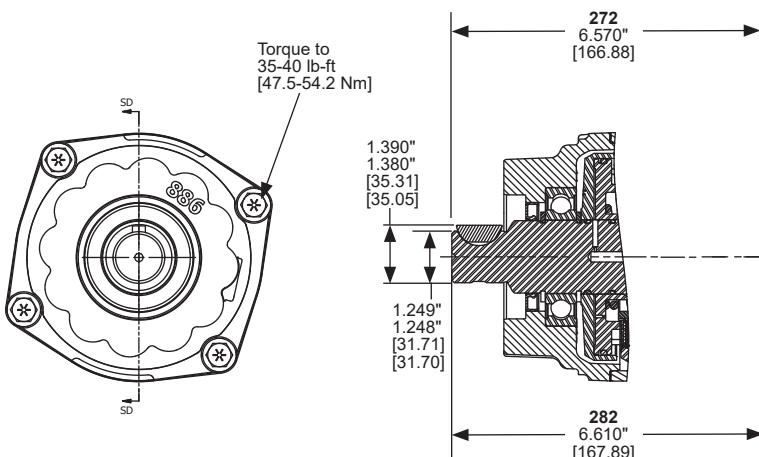
Type	Remote Mount
Shaft	Smart Start (1-1/4" Rd. - 5/16" Key)
PTO Series: 249	

* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS

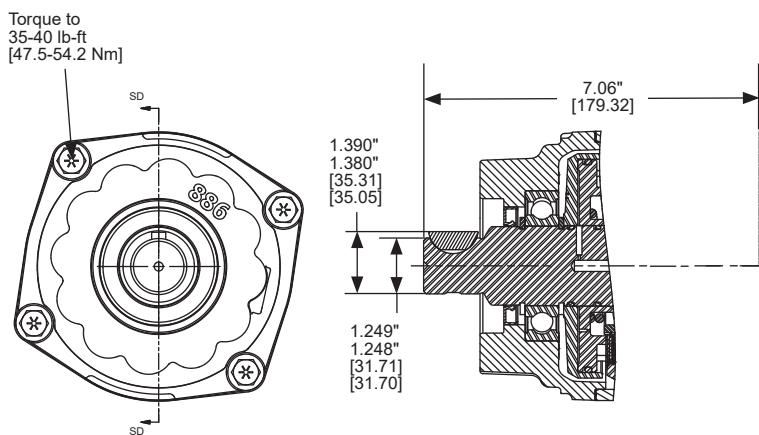
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

Option Code – SD	
Type	Remote Mount
Shaft	Smart Start (1-1/4" Rd. - 5/16" Key)
PTO Series: 272, 272-FORD, t272U, 282	

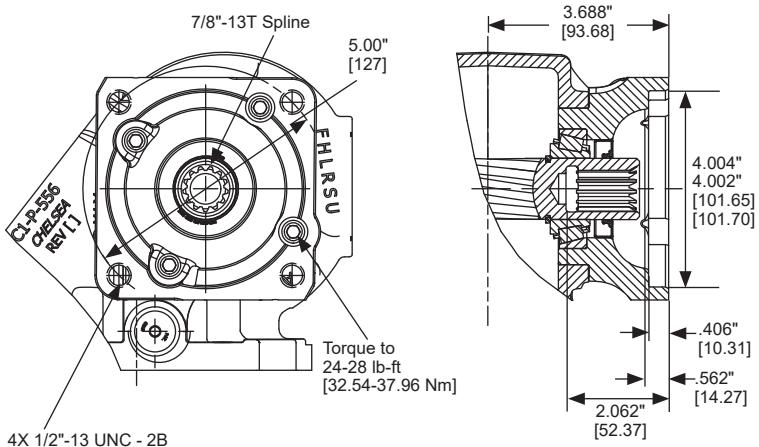


[†] Coming Soon

Option Code – SD	
Type	Remote Mount
Shaft	Smart Start (1-1/4" Rd. - 5/16" Key)
PTO Series: 280	



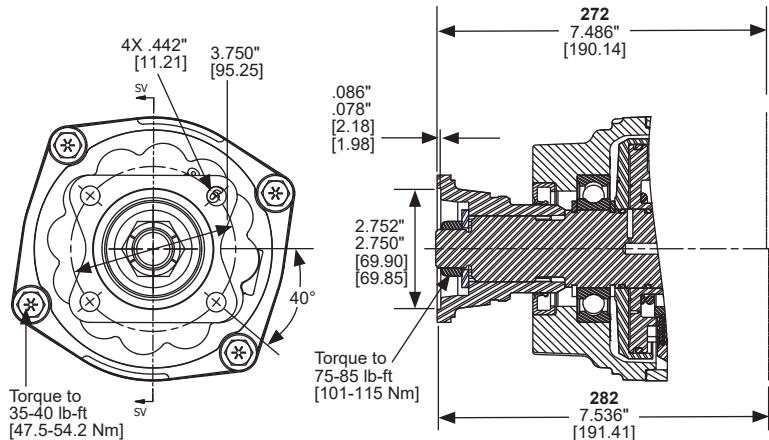
Option Code – SQ	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 4-Bolt
PTO Series: 442, 489, 2442	



* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS

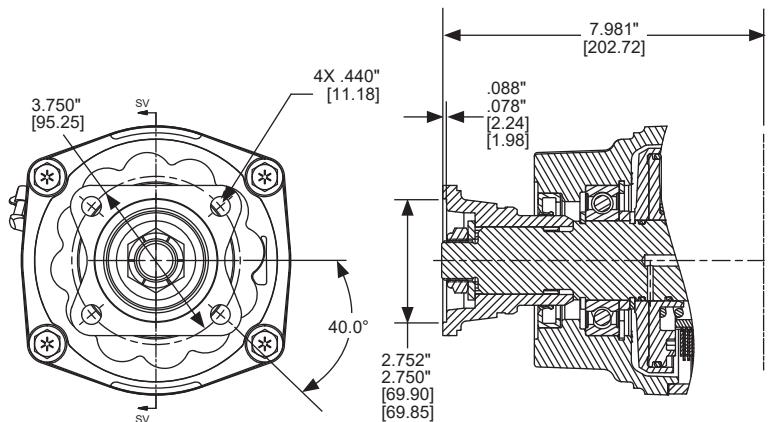
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – SV

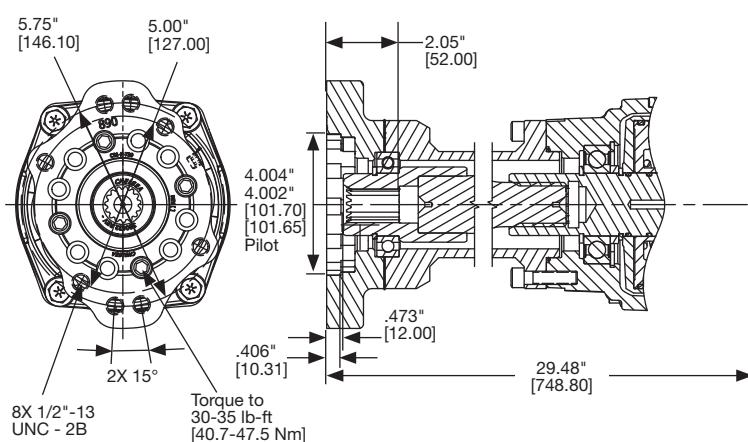
Type	Remote Mount
Shaft	Smart Start 1410 Companion Flange
PTO Series: 272, 272-FORD, †272U, 282	

† Coming Soon



Option Code – SV

Type	Remote Mount
Shaft	Smart Start 1410 Companion Flange
PTO Series: 280, 870	



Option Code – TF

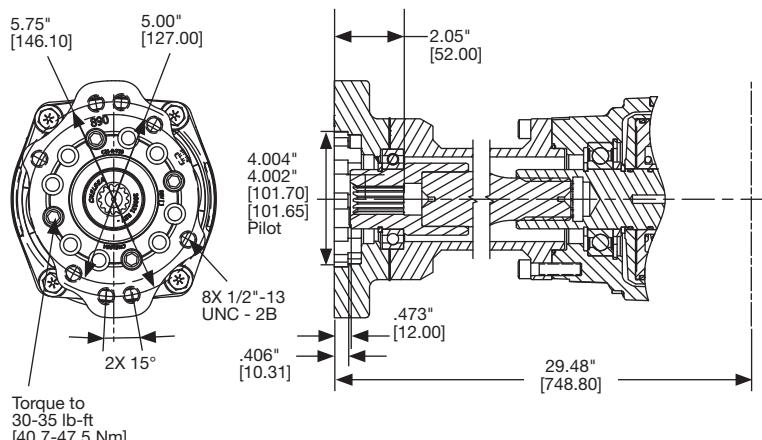
Type	Direct Mount
Shaft	SAE BB (1" - 15T 16/32 DP)
Flange	SAE B Pilot 2 or 4-Bolt
Rotates in 15° Increments	
PTO Series: 870-XL, 877-XL	

* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

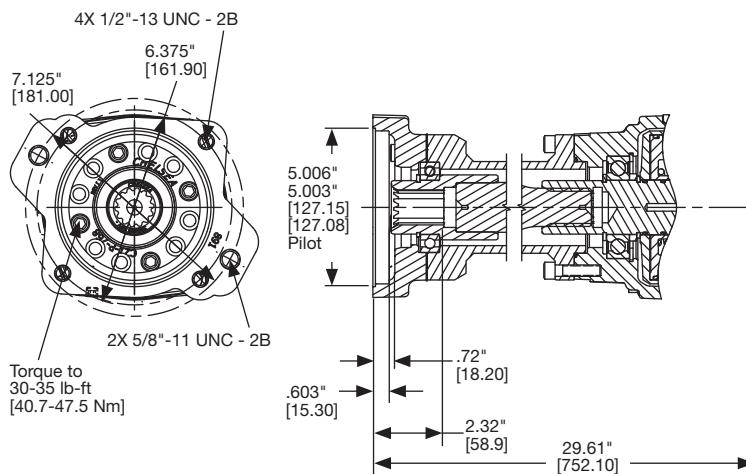
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

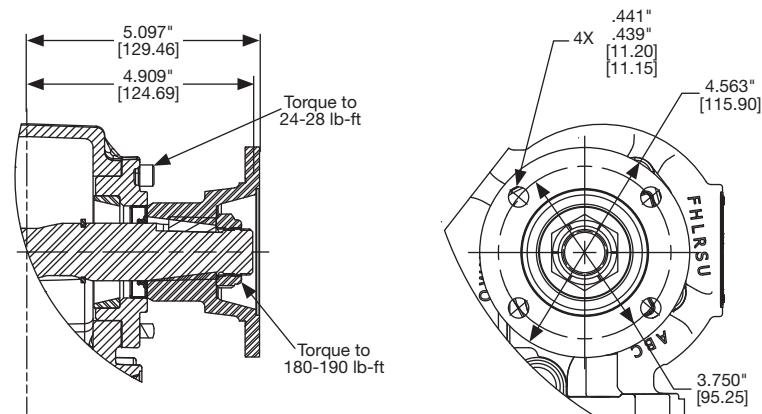
Option Code – TK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T 16/32 DP)
Flange	SAE B Pilot 2 or 4-Bolt
Rotates in 15° Increments	
PTO Series: 870-XL, 877-XL	



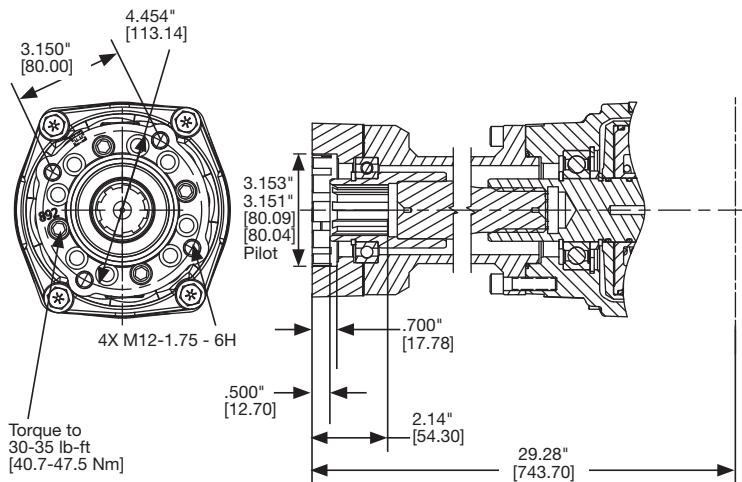
Option Code – TS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T 12/24 DP)
Flange	SAE C Pilot 2 or 4-Bolt
Rotates in 15° Increments	
PTO Series: 870-XL, 877-XL	



Option Code – TV	
Type	Remote Mount
Shaft	Tapered 1410 Companion Flange
Flange	N/A
PTO Series: 267	

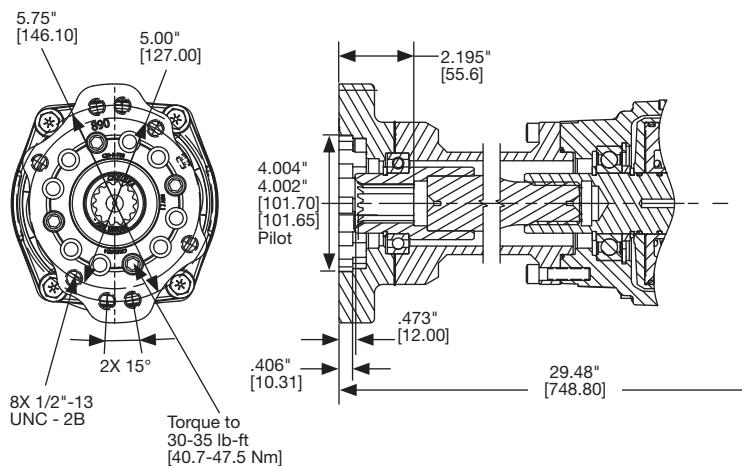
**NOTE: PUMP INSTALLATION PRECAUTIONS**

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



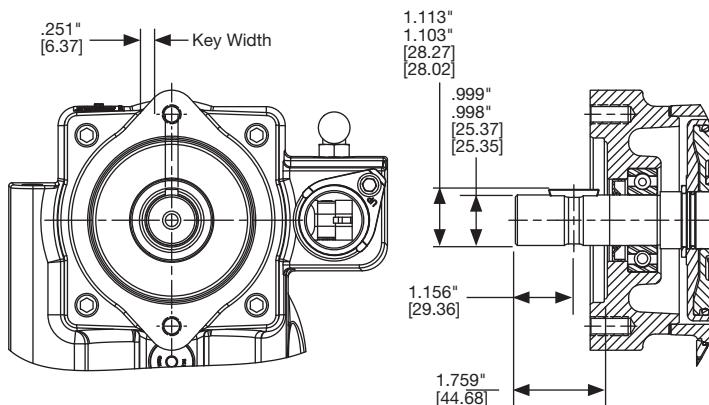
Option Code – TY

Type	Direct Mount
Shaft	DIN 5462
Flange	ISO 7653 Pilot 4-Bolt
Rotates in 15° Increments	
PTO Series: 870-XL, 877-XL	



Option Code – TZ

Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T 12/24 DP)
Flange	SAE B Pilot 2 or 4-Bolt
Rotates in 15° Increments	
PTO Series: 870-XL, 877-XL	



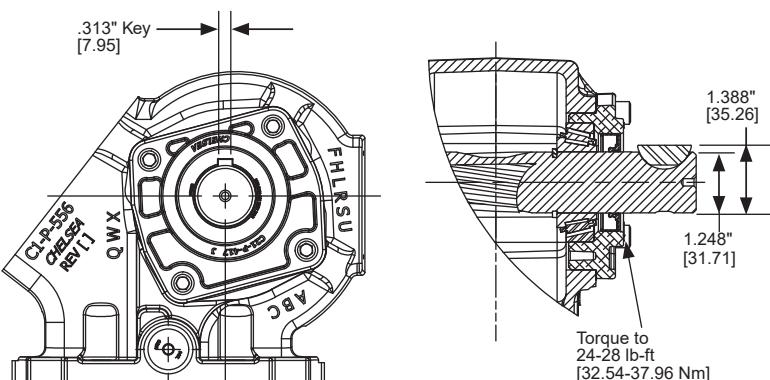
Option Code – XB

Type	Direct Mount
Shaft	1" Rd. w/ 1/4" Key
PTO Series: 252	

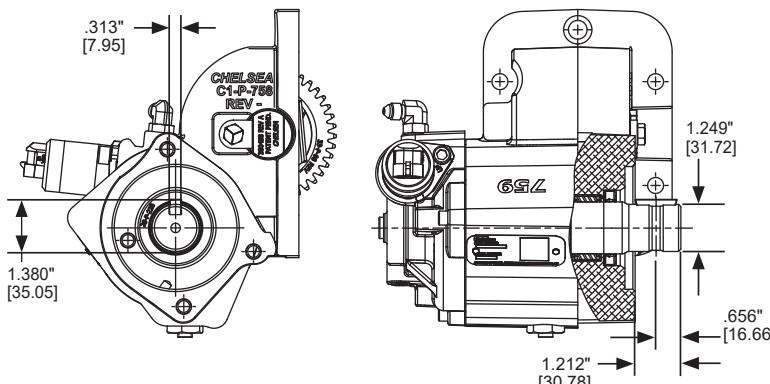
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

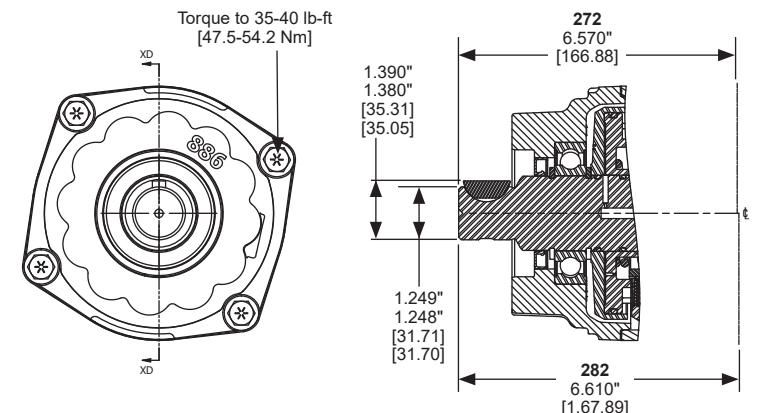
Option Code – XD	
Type	Remote Mount
Shaft	1-1/4" Rd. w/ 5/16" Key
PTO Series: 221, 267, 442, 447, 489, 489 DT12, 660, 680, 680 DT12, 2442	



Option Code – XD	
Type	Remote Mount
Shaft	1-1/4" Rd. w/ 5/16" Key
PTO Series: 249	



Option Code – XD	
Type	Direct Mount
Shaft	1" Rd. w/ 1/4" Key
PTO Series: 272, 272-FORD, t272U, 282	

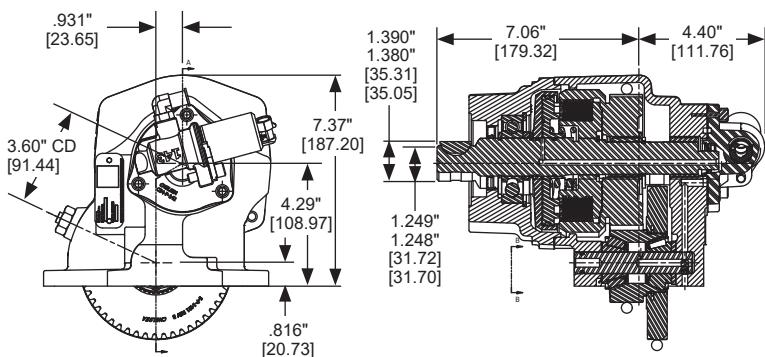


[†]Coming Soon

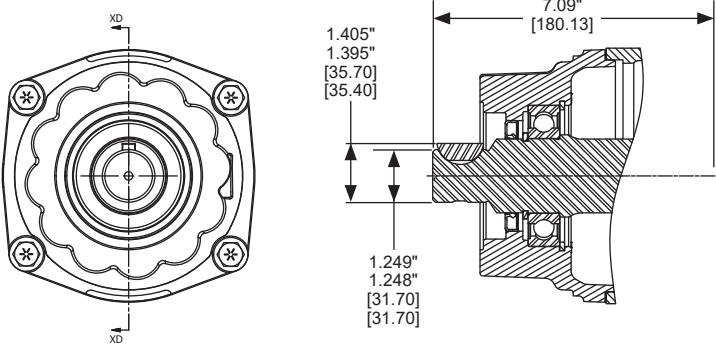
* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS

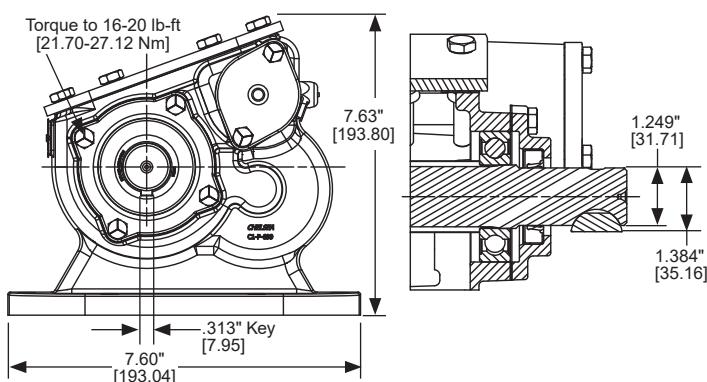
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – XD	
Type	Direct Mount
Shaft	1" Rd. w/ 1/4" Key
PTO Series: 280	



Option Code – XD	
Type	Direct Mount
Shaft	1" Rd. w/ 1/4" Key
PTO Series: 287	



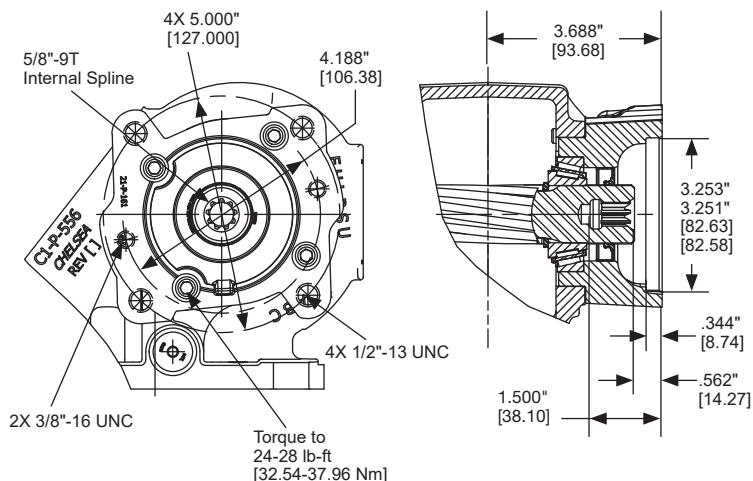
Option Code – XD	
Type	Direct Mount
Shaft	1" Rd. w/ 1/4" Key
PTO Series: 340, 348	

* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

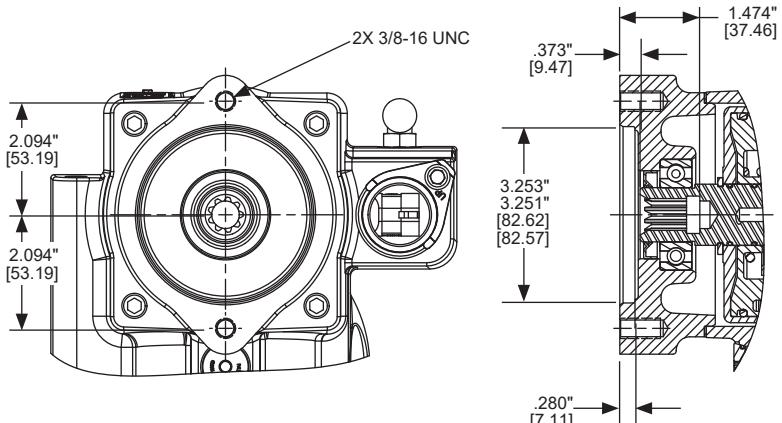
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

Option Code - XE	
Type	Direct Mount
Shaft	SAE A (5/8" - 9T)
Flange	SAE A 2 or 4-Bolt
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

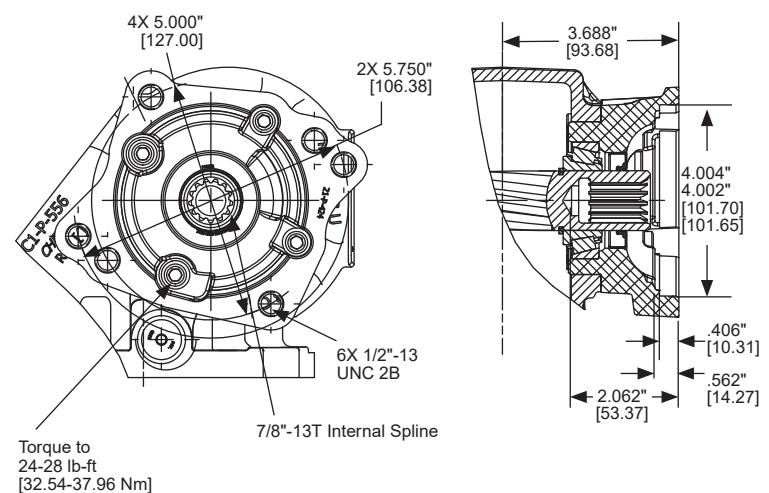


Option Code - XE	
Type	Direct Mount
Shaft	SAE A (5/8" - 9T)
Flange	SAE A 2 or 4-Bolt
PTO Series: 252	

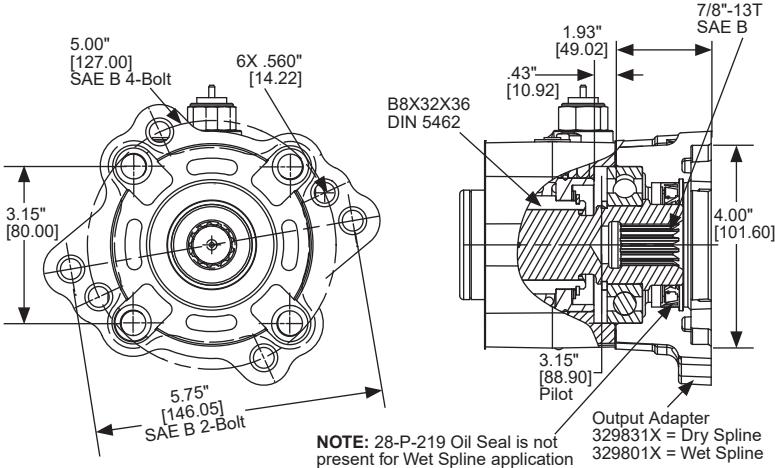


Flanges

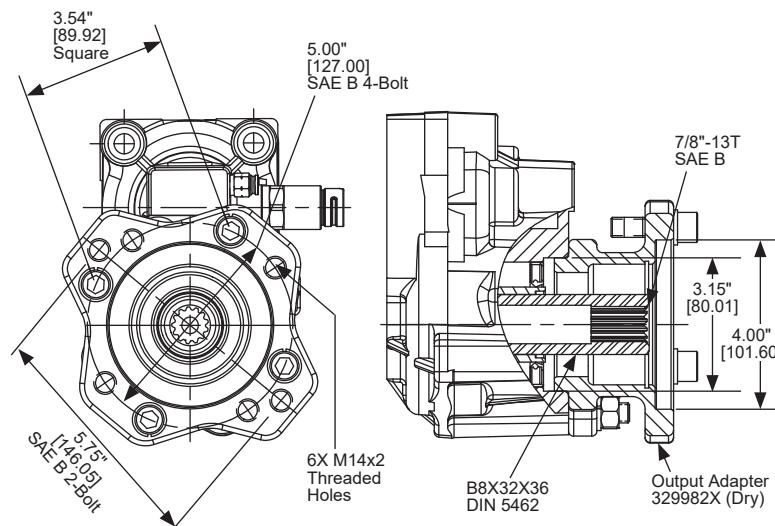
Option Code - XK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 221, 267, 442, 447, 489, 660, 680, 680 DT12, 2442	


NOTE: PUMP INSTALLATION PRECAUTIONS

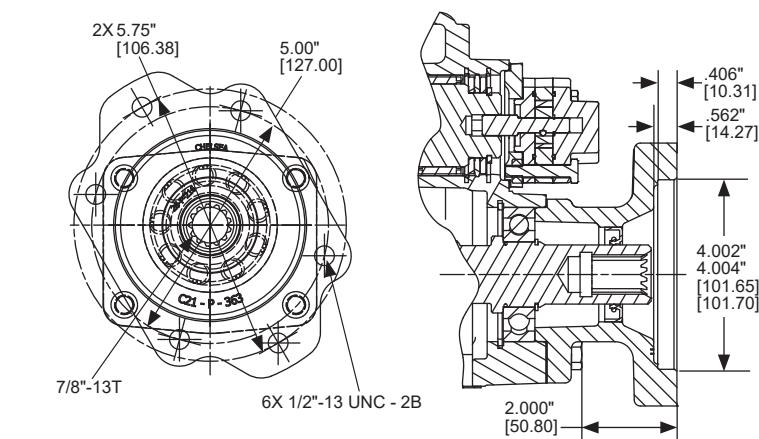
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – XK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 511	



Option Code – XK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 524	

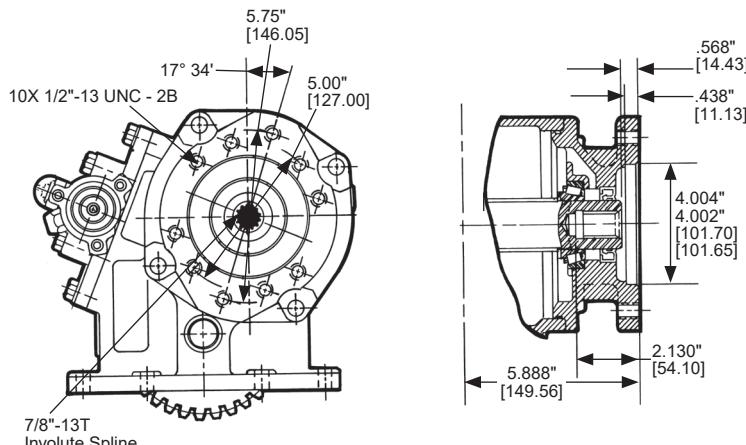


Option Code – XK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 541	

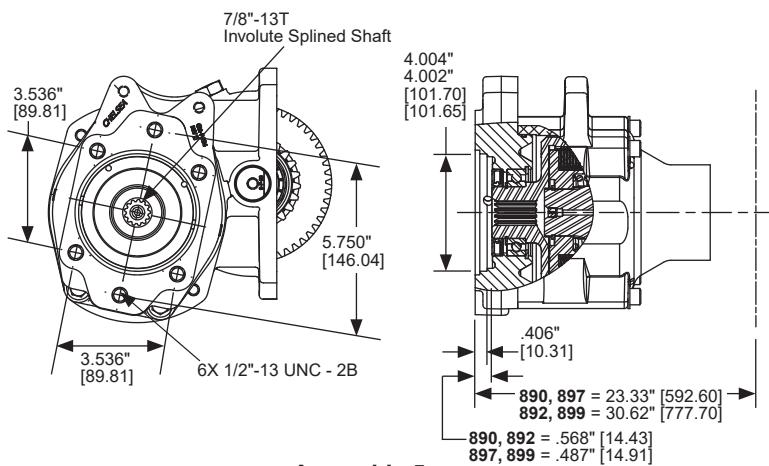
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

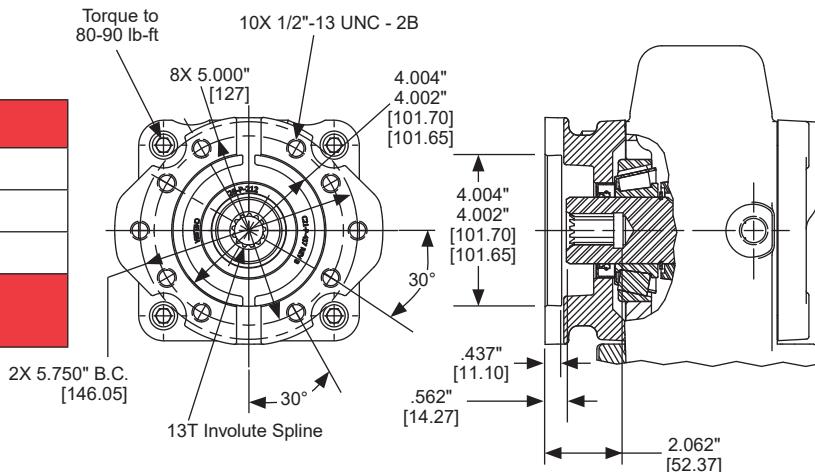
Option Code - XK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 880, 880 DT12	



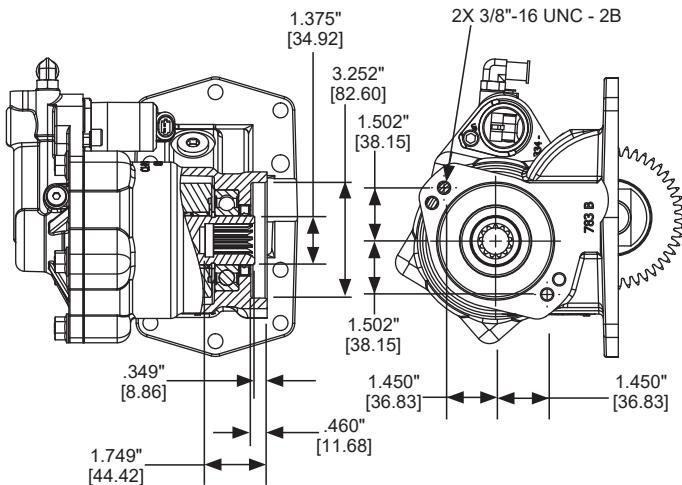
Option Code - XK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 890, 892, 897, 899	



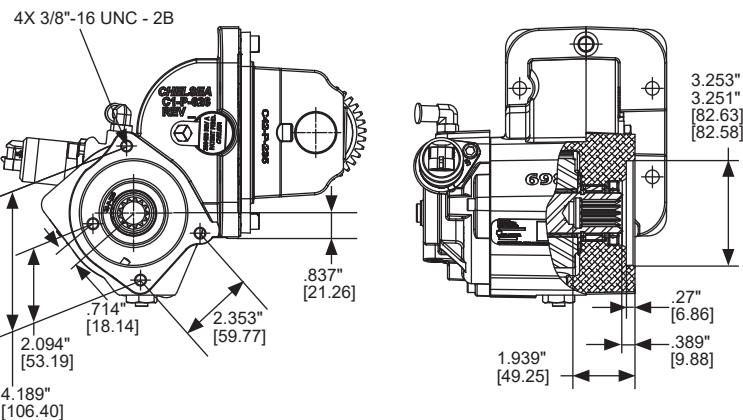
Option Code - XK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 901	

**NOTE: PUMP INSTALLATION PRECAUTIONS**

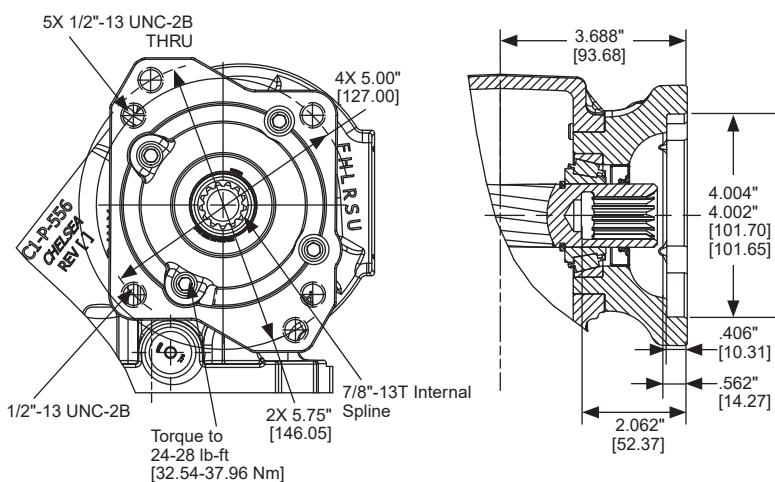
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – XP	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE A 2-Bolt
PTO Series: 210	



Option Code – XP	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE A 2-Bolt
PTO Series: 249	



Option Code – XQ	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

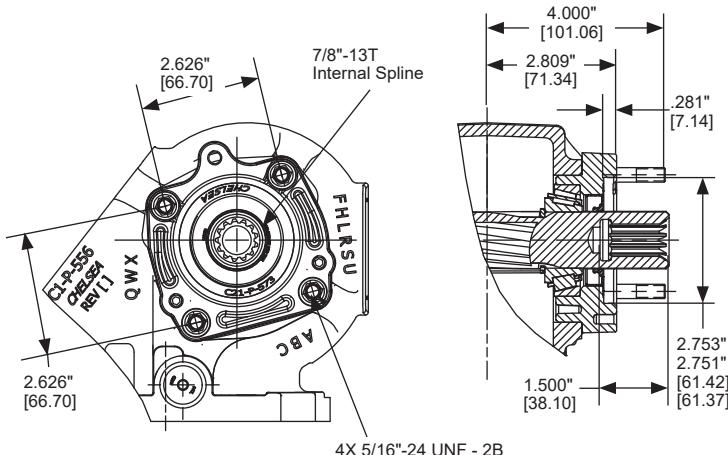
* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS

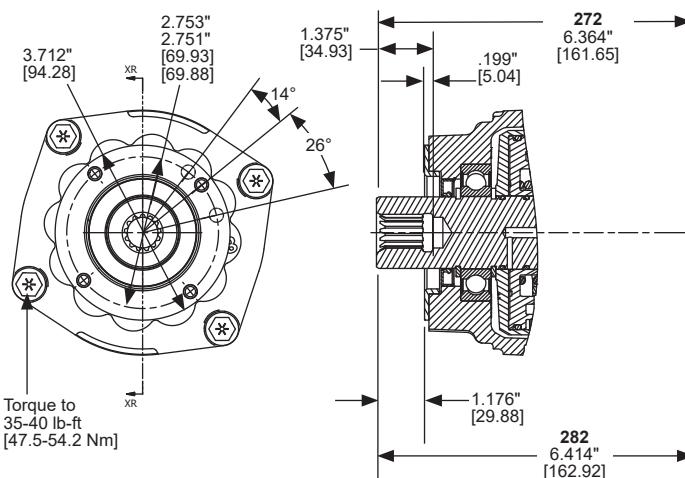
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

Option Code – XR

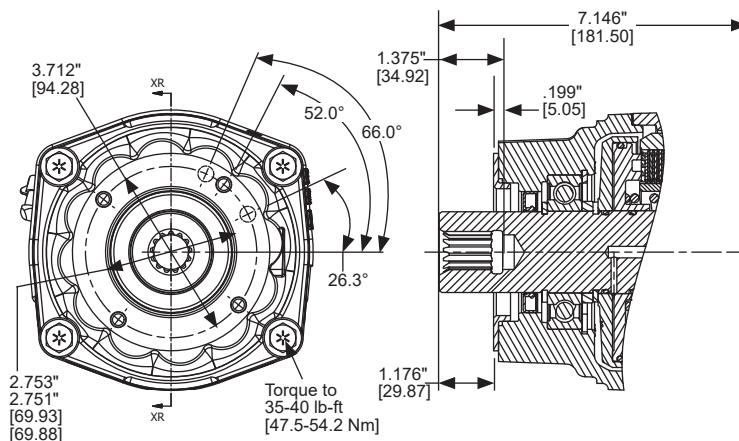
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Chelsea Special (Cloverleaf)
For Parker P16 S Flange Pumps	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

**Option Code – XR**

Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Chelsea Special (Cloverleaf)
For Parker P16 S Flange Pumps	
PTO Series: 272, 272-FORD, 282	

**Option Code – XR**

Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Chelsea Special (Cloverleaf)
For Parker P16 S Flange Pumps	
PTO Series: 280	

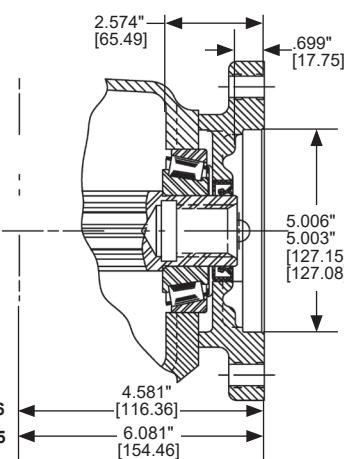
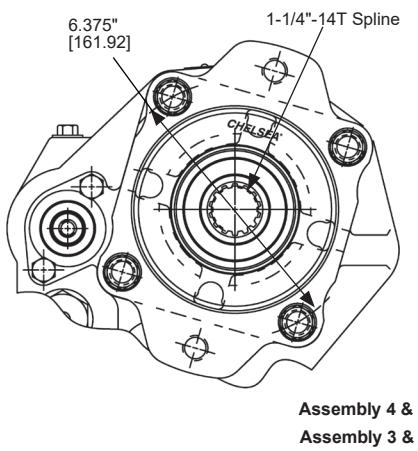
**Flanges**

* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

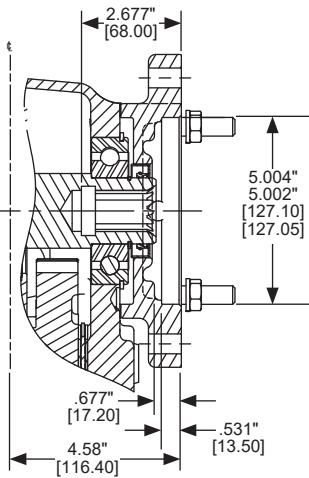
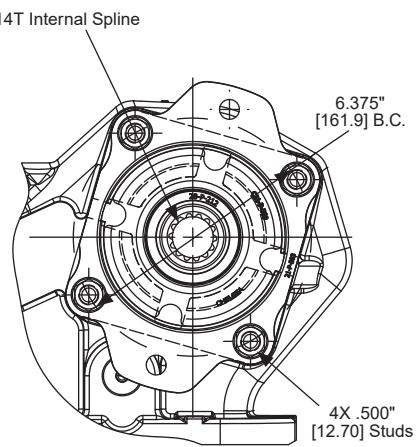
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

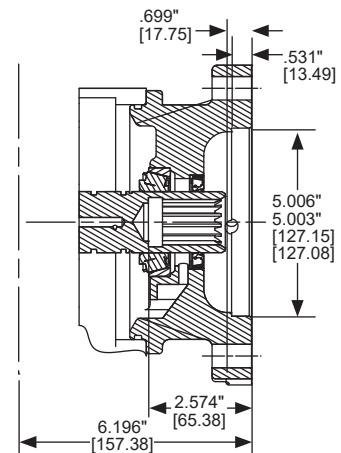
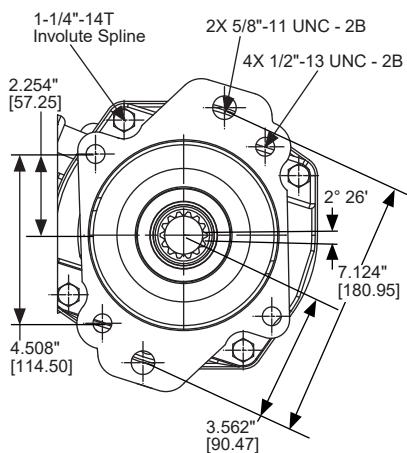
Flanges



Option Code – XS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 4-Bolt
PTO Series: 823, 823 DT12	



Option Code – XS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 4-Bolt
PTO Series: 852	



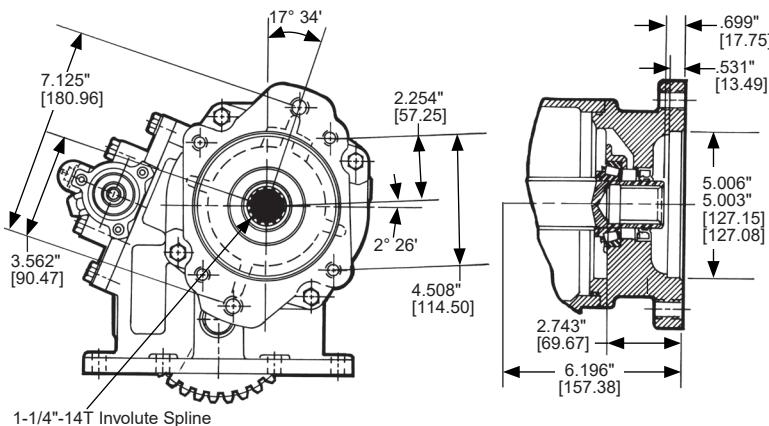
Option Code – XS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2 or 4-Bolt
PTO Series: 885	

* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

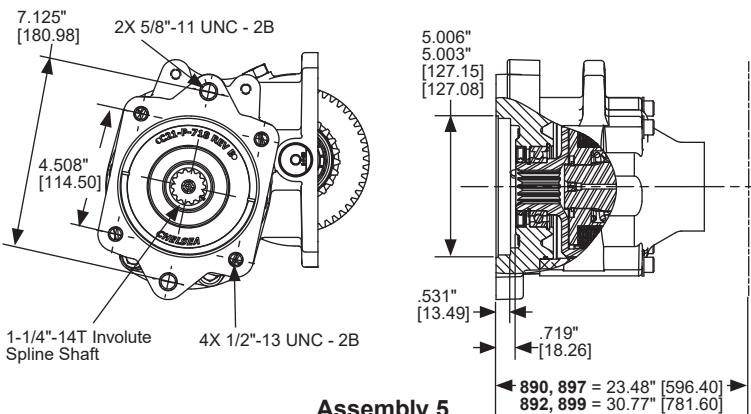
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

Option Code - XS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2 or 4-Bolt
PTO Series: 880, 880 DT12	

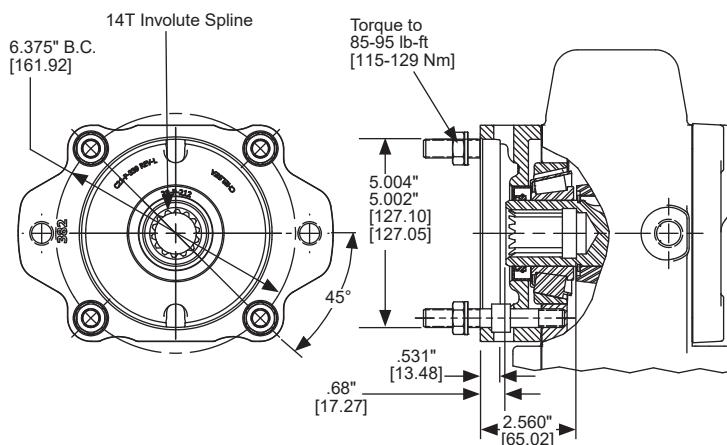


Option Code - XS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2 or 4-Bolt
PTO Series: 890, 892, 897, 899	



Flanges

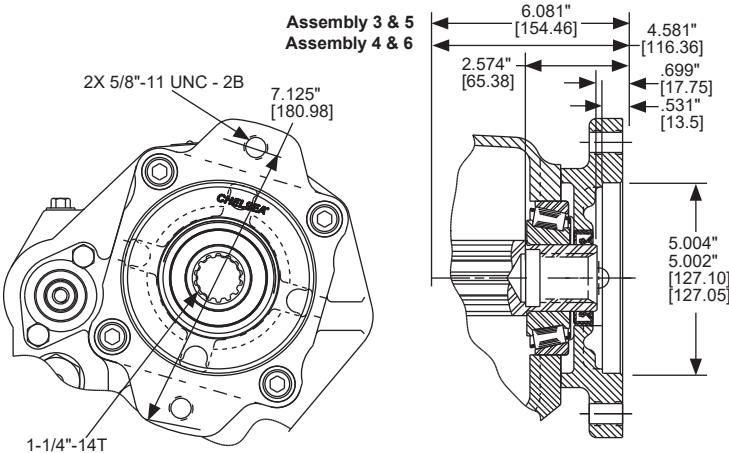
Option Code - XS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 4-Bolt
PTO Series: 901	



* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS

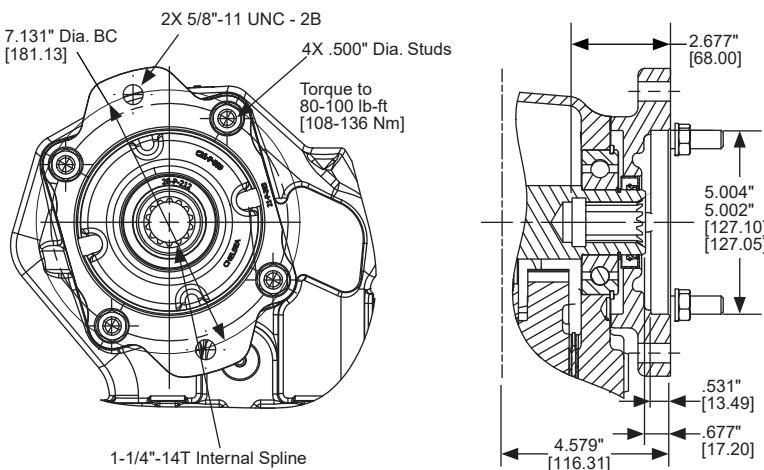
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – XU

Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2-Bolt

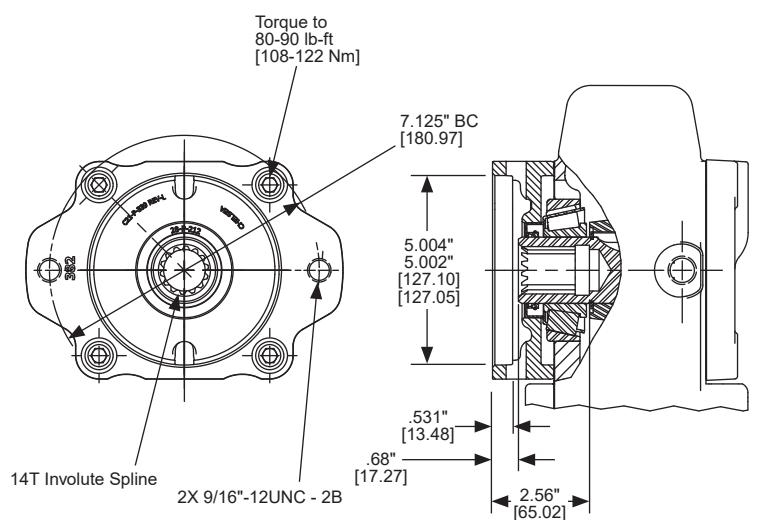
PTO Series: 823, 823 DT12



Option Code – XU

Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2-Bolt

PTO Series: 852



Option Code – XU

Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2-Bolt

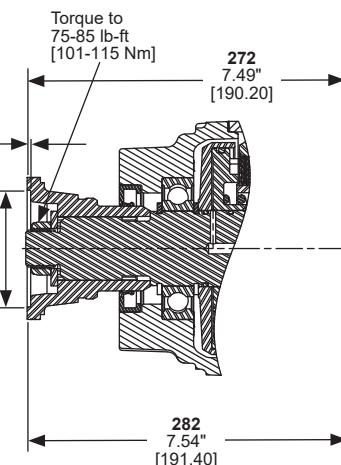
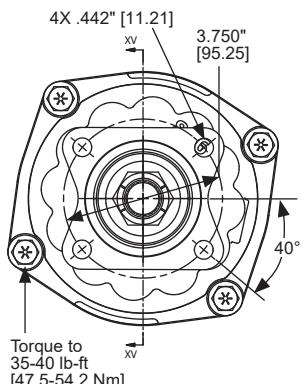
PTO Series: 901

* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS

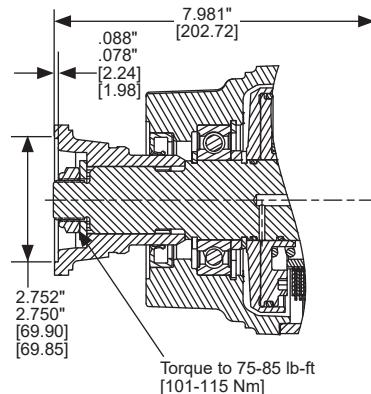
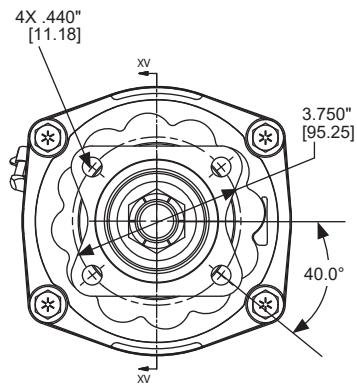
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

Option Code – XV	
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 272, 272-FORD, †272U, 282	

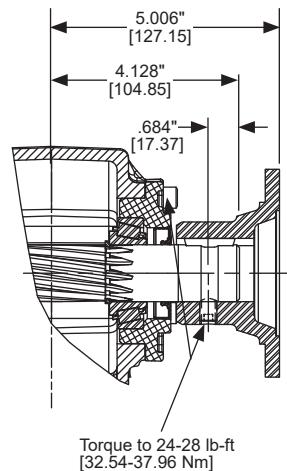
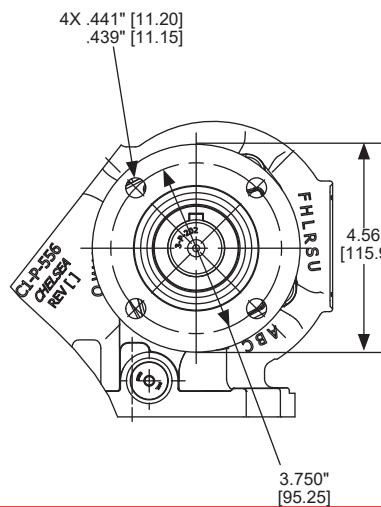


† Coming Soon

Option Code – XV	
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 280, 287	



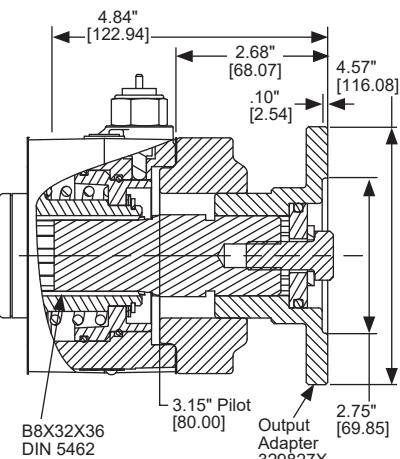
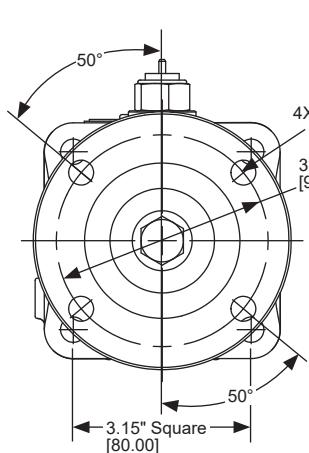
Option Code – XV	
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 489 DT12	



* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

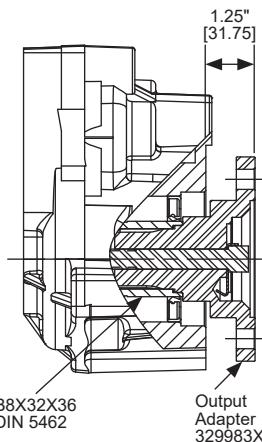
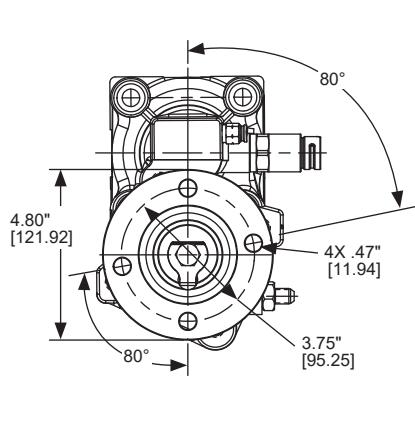
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



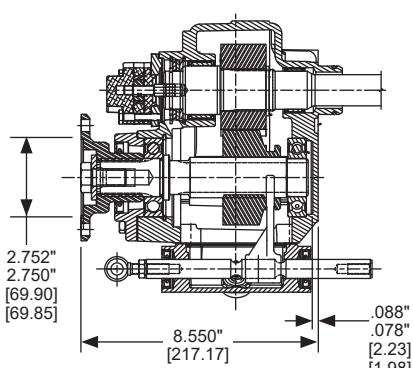
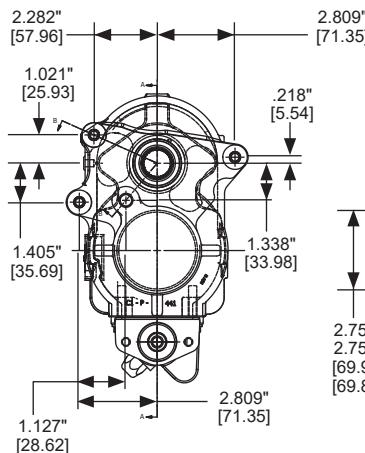
Option Code – XV

Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 511	



Option Code – XV

Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 524	



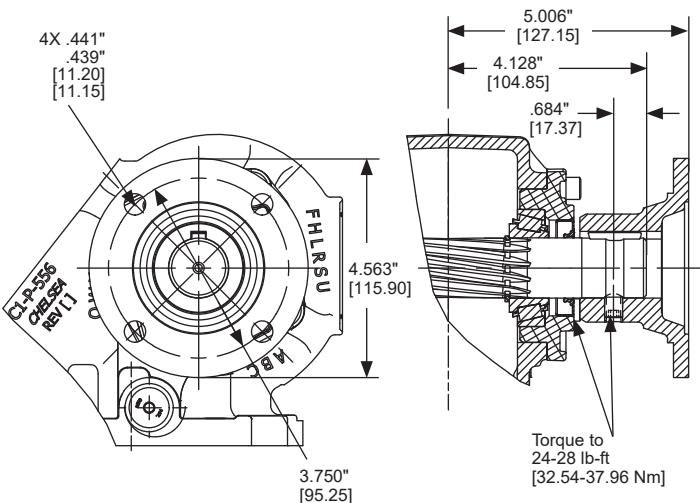
Option Code – XV

Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 541	

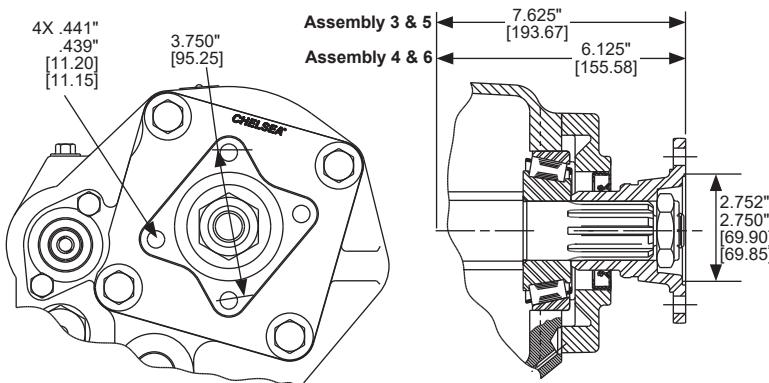
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

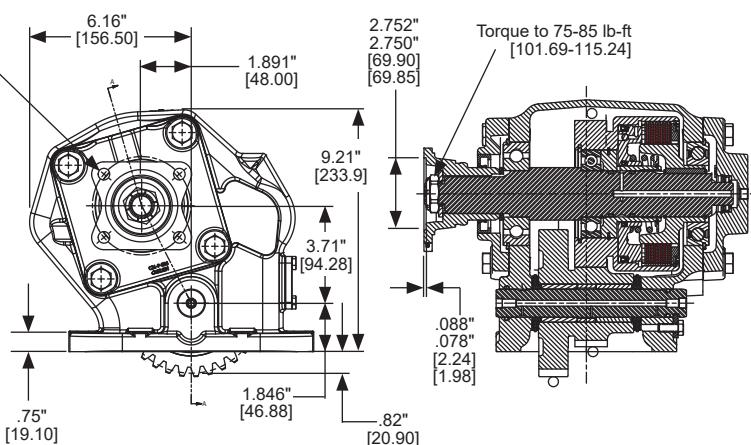
Option Code – XV	
Type	Remote Mount
Shaft	1350/1410 Companion Flange
PTO Series: 660, 680, 680 DT12	



Option Code – XV	
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 823, 823 DT12, 863, 880, 880 DT12	



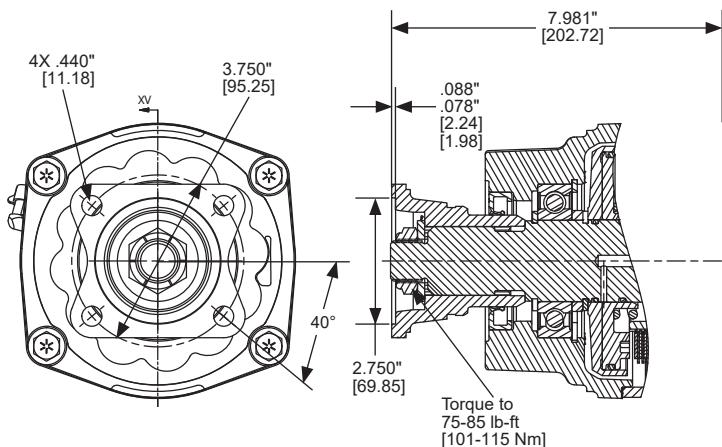
Option Code – XV	
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 852	



Flanges

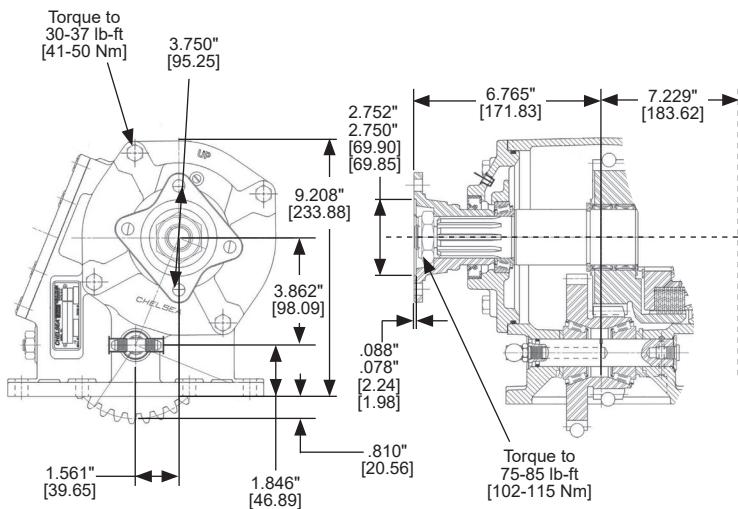
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



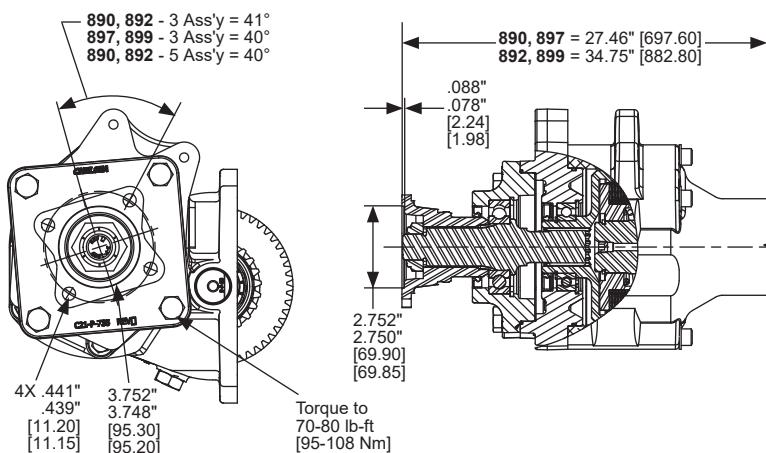
Option Code – XV

Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 870, 877	



Option Code – XV

Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 885	



Option Code – XV

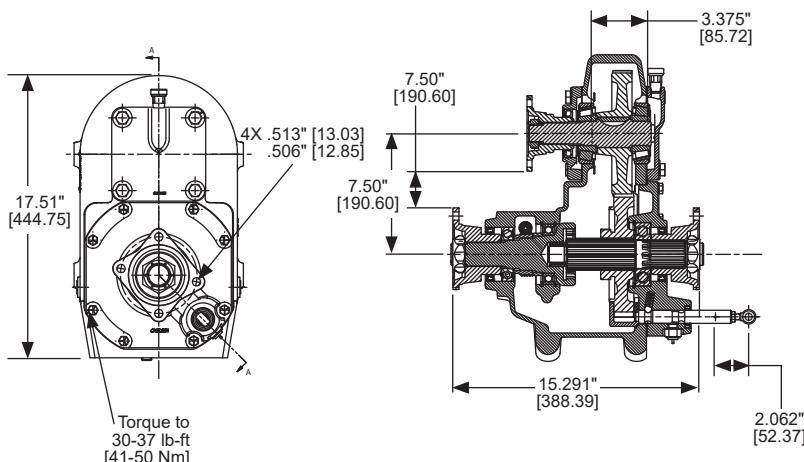
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 890, 892, 897, 899	

* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

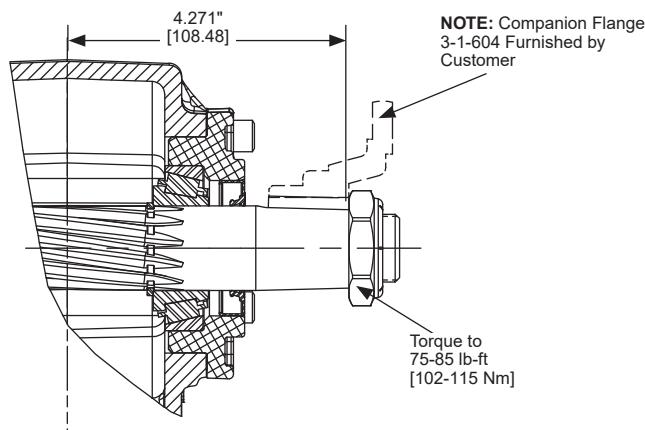
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

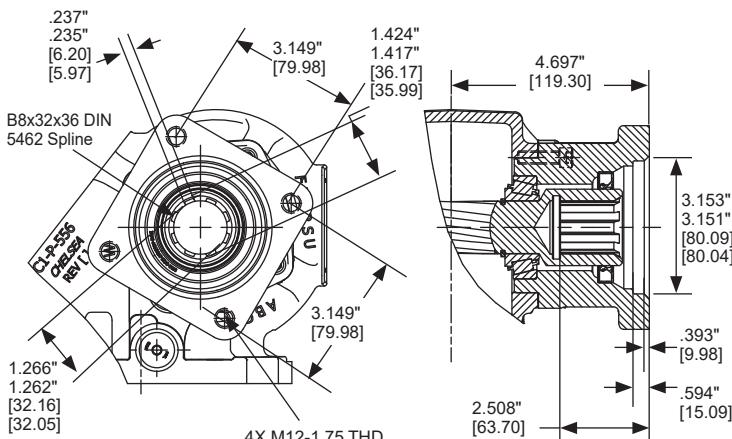
Option Code – XV	
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 901	



Option Code – XX	
Type	Remote Mount
Shaft	1-1/4" SAE Taper Shaft
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



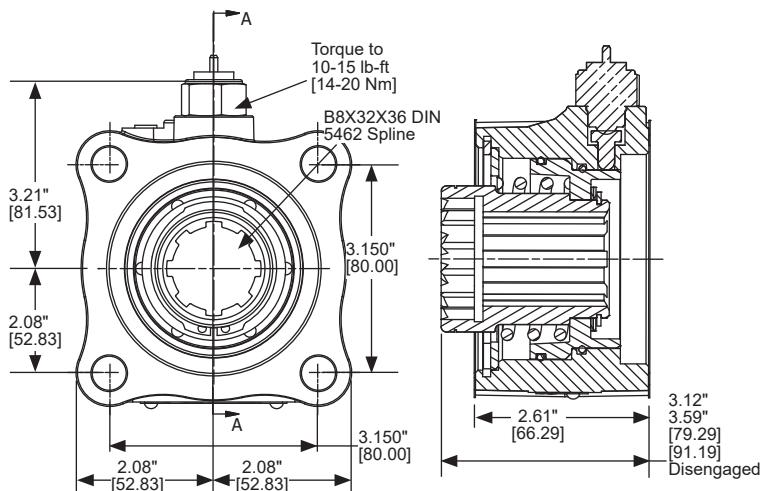
Option Code – XY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36 - 8T)
Flange	ISO 7653 Pump Mount
PTO Series: 221, 267, 442, 447, 489, 489 DT12, 660, 680, 680 DT12, 2442	



* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

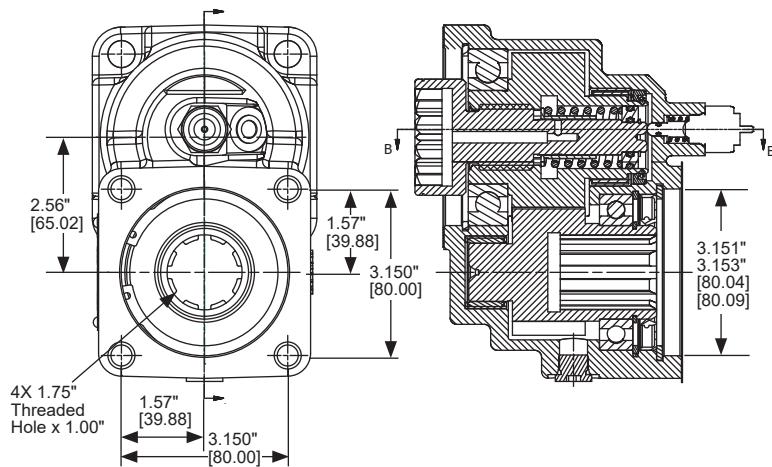
NOTE: PUMP INSTALLATION PRECAUTIONS

Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



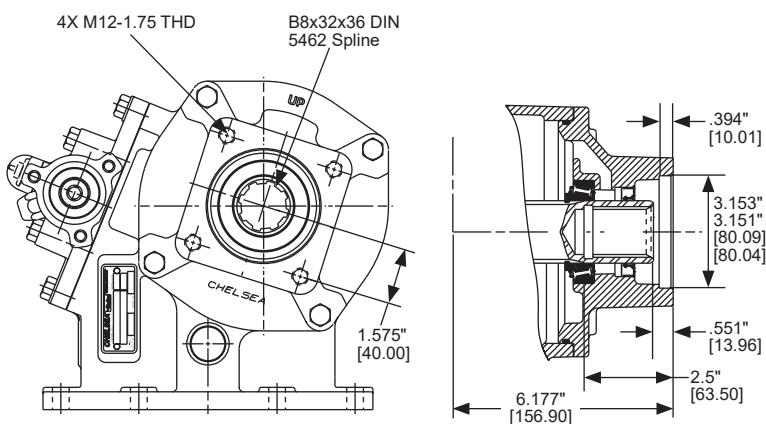
Option Code – XY

Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	ISO 7653 Pump Mount
PTO Series: 511	



Option Code – XY

Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	ISO 7653 Pump Mount
PTO Series: 524	



Option Code – XY

Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	ISO 7653 Pump Mount
PTO Series: 880, 880 DT12	

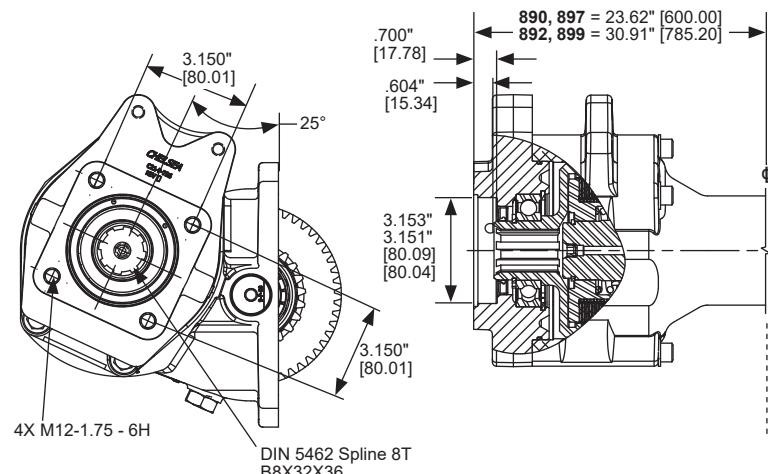
* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS

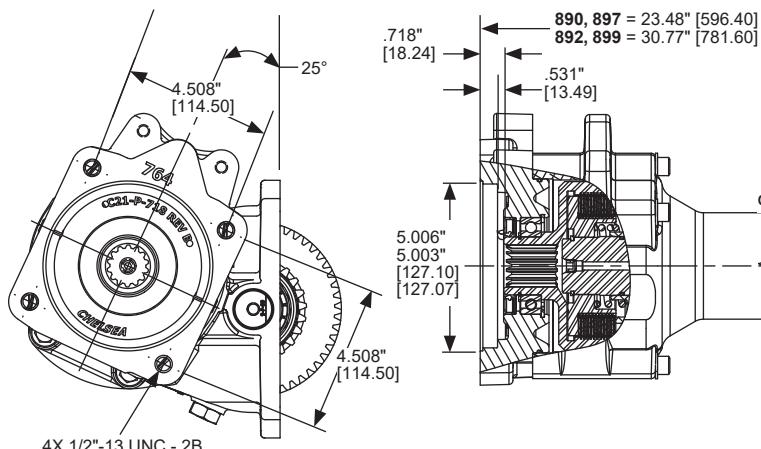
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

Option Code – XY

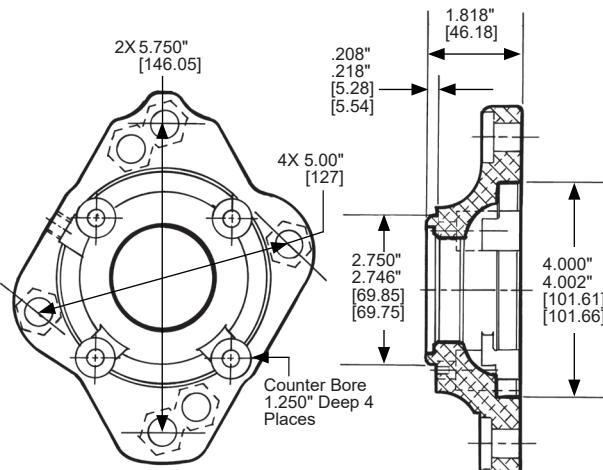
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	ISO 7653 Pump Mount

PTO Series: 890, 892, 897, 899**Option Code – ZS**

Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 4-Bolt

PTO Series: 890, 892, 897, 899**Option Code – 21-P-525**

Flange	SAE B 2 or 4-Bolt (XR to XK Conversion Flange)
--------	---



* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS

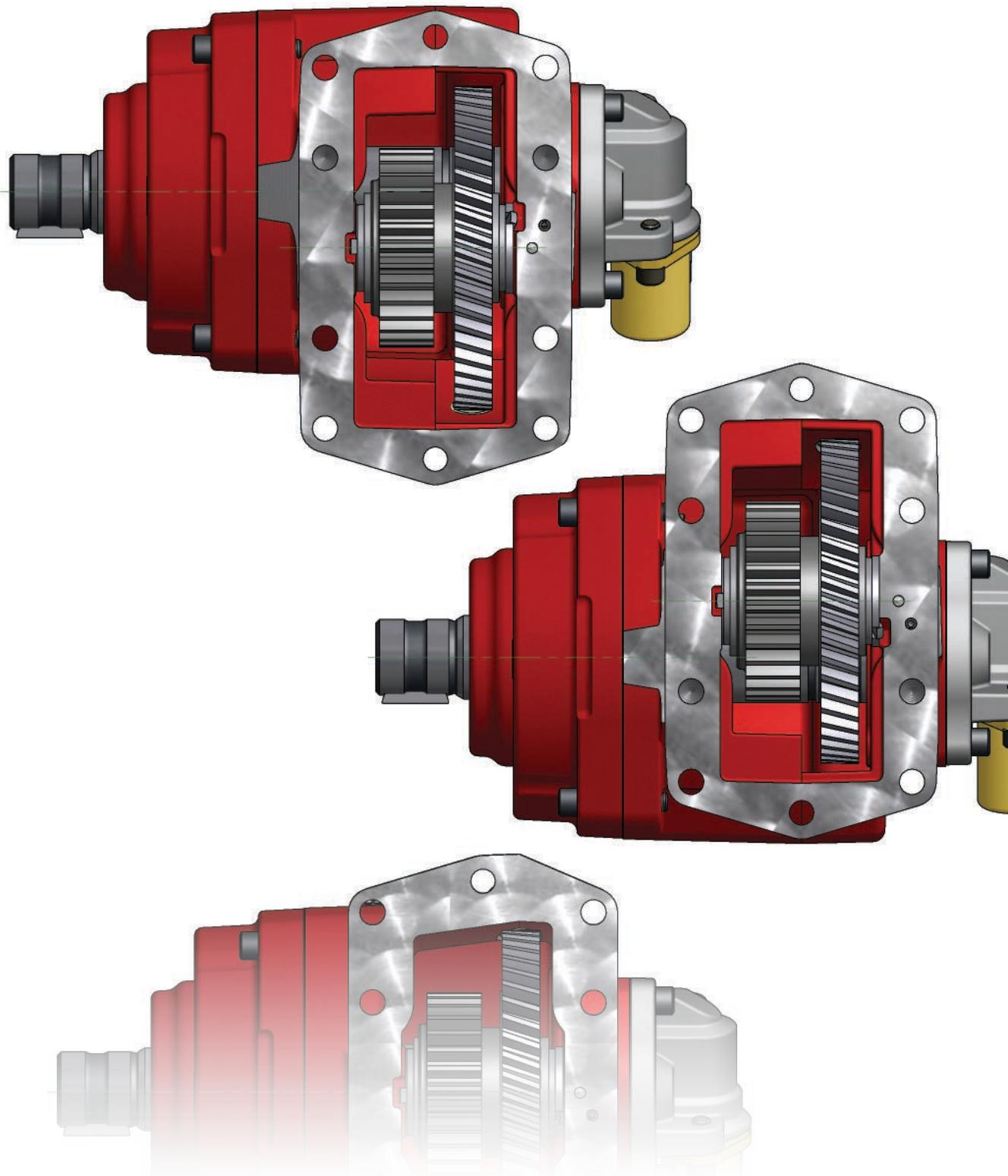
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

NOTES

Flanges



ASSEMBLY OPTIONS



Parker | Chelsea

ENGINEERING YOUR SUCCESS.

Service / Legacy PTO Assemblies	4.IV
210 Series	4.1
221 Series	4.2
249 Series	4.3
249V Series	4.4
252 Series	4.5
267 Series	4.6
272 Series	4.7
272-FORD Series	4.8
272U Series	4.9
280 Series	4.10
282 Series	4.11
287 Series	4.12
340 Series	4.13
348 Series	4.14
442 Series	4.15
447 Series	4.16
489 Series	4.17
489 Series For Detroit DT12™	4.18
511 Series	4.19
524 Series	4.20
541 Series	4.21
660 Series	4.22
680 Series	4.23
680 Series For Detroit DT12™	4.24
823 Series	4.25
823 Series For Detroit DT12™	4.26
852 Series	4.27
863 Series	4.28
870 Series	4.29
870-XL Series	4.30
877 Series	4.31
877-XL Series	4.32
880 Series	4.33
880 Series For Detroit DT12™	4.34
885 Series	4.35
890 Series	4.36
892 Series	4.37
897 Series	4.38
899 Series	4.39
901 Series	4.40
912 Series	4.41
2442 Series	4.42
626, 628, 630 and 645 Series	4.43

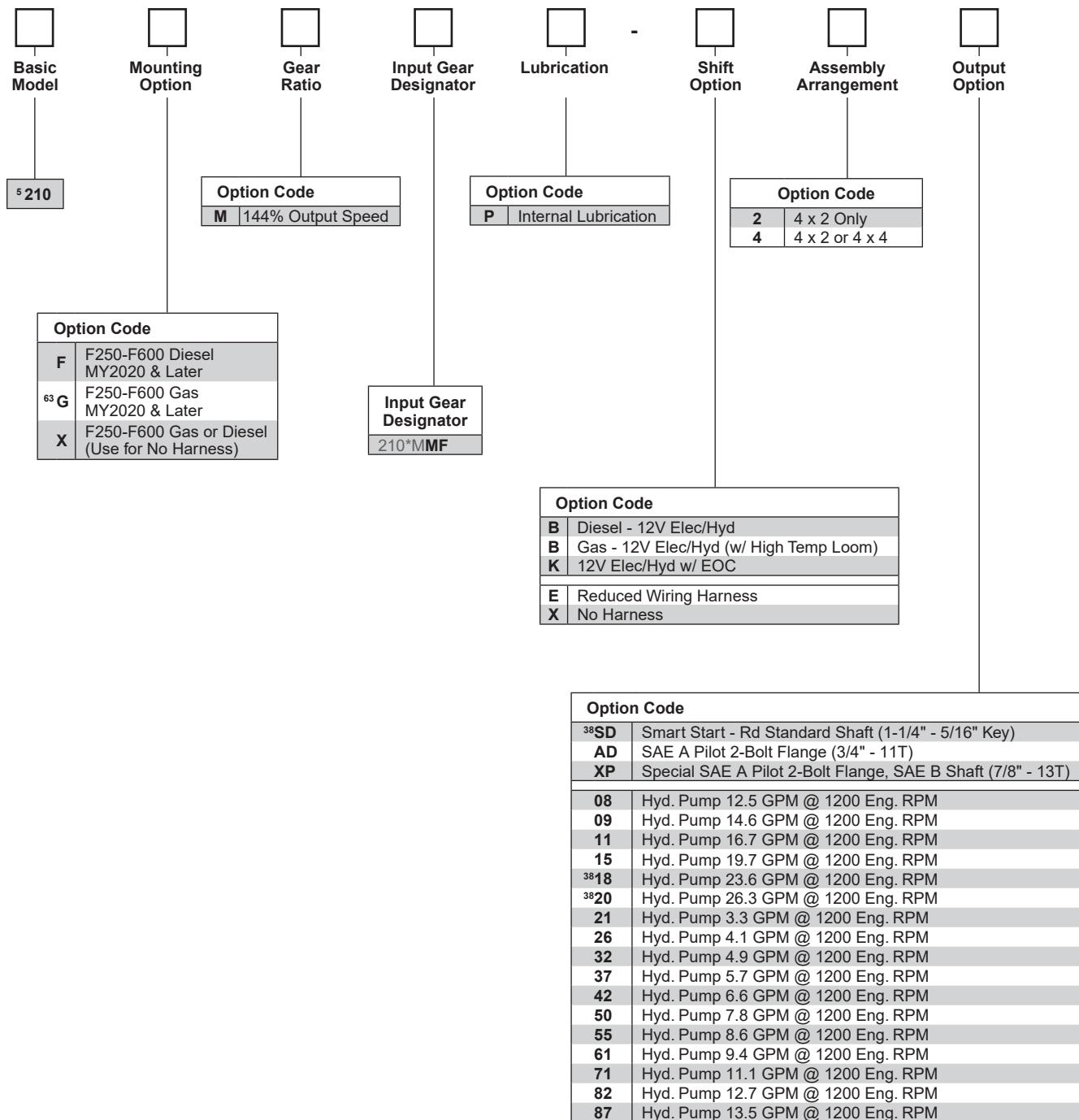
Assembly

Assembly Options**Service / Legacy PTO Assemblies**

The following PTO Series are still available thru a limited period to meet service requirements.

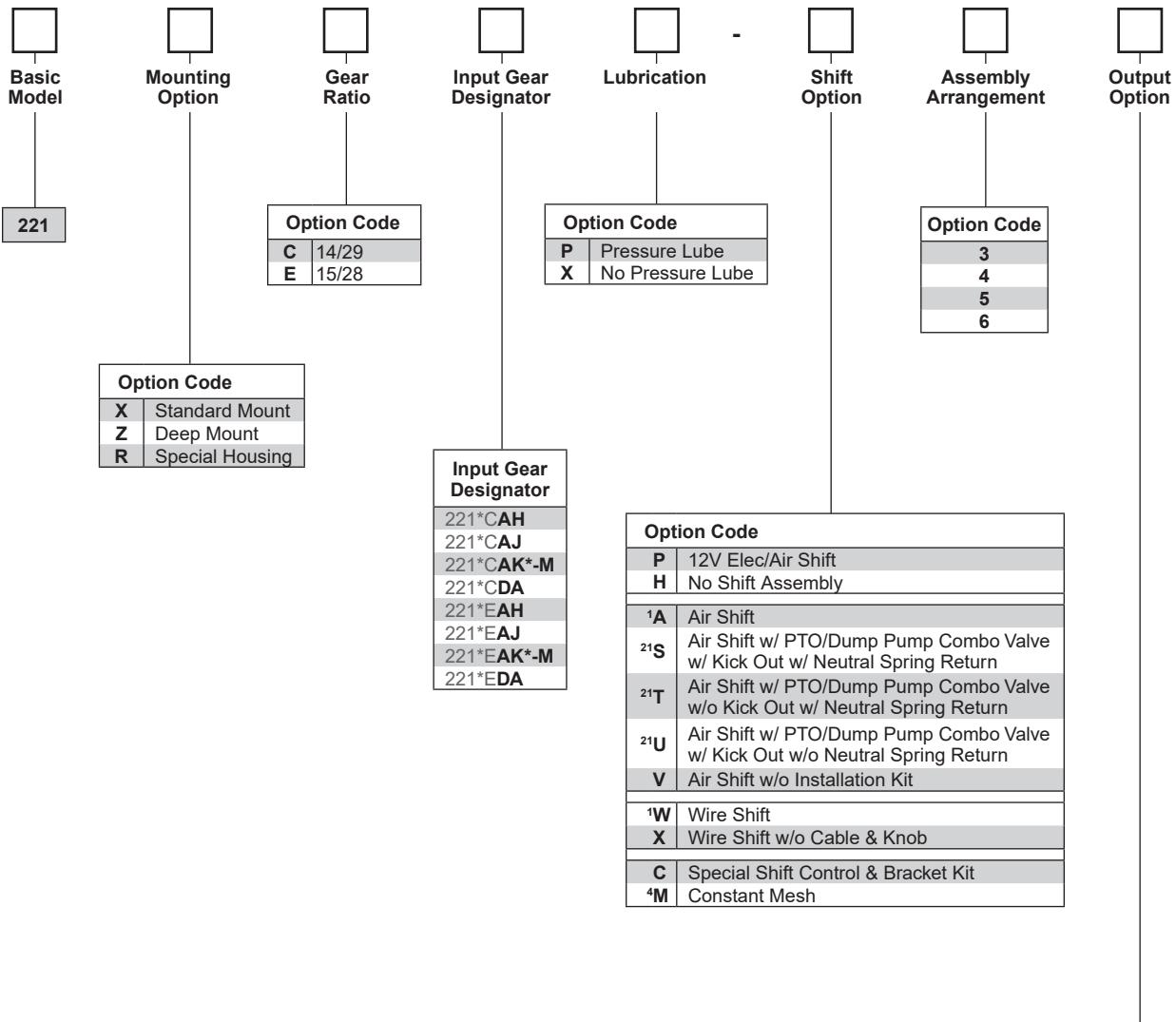
Please contact factory for price and lead times.

Product Series	Service
429 Series	2022
435 Series	2022
522 Series	2023
812 Series	2023
859 Series	2023
867 Series	2023
221*L Series	2026
230 Series	2026
231 Series	2026
236 Series	2026
238 Series	2026
270 Series	2026
271 Series	2026
277 Series	2026
278 Series	2026
CAT-D Series	2026
CAT-H Series	2026
247 Series	2028
352 Series	2028
560 Series	2028
941 Series	2028
290 Series	2029
590 Series	2030



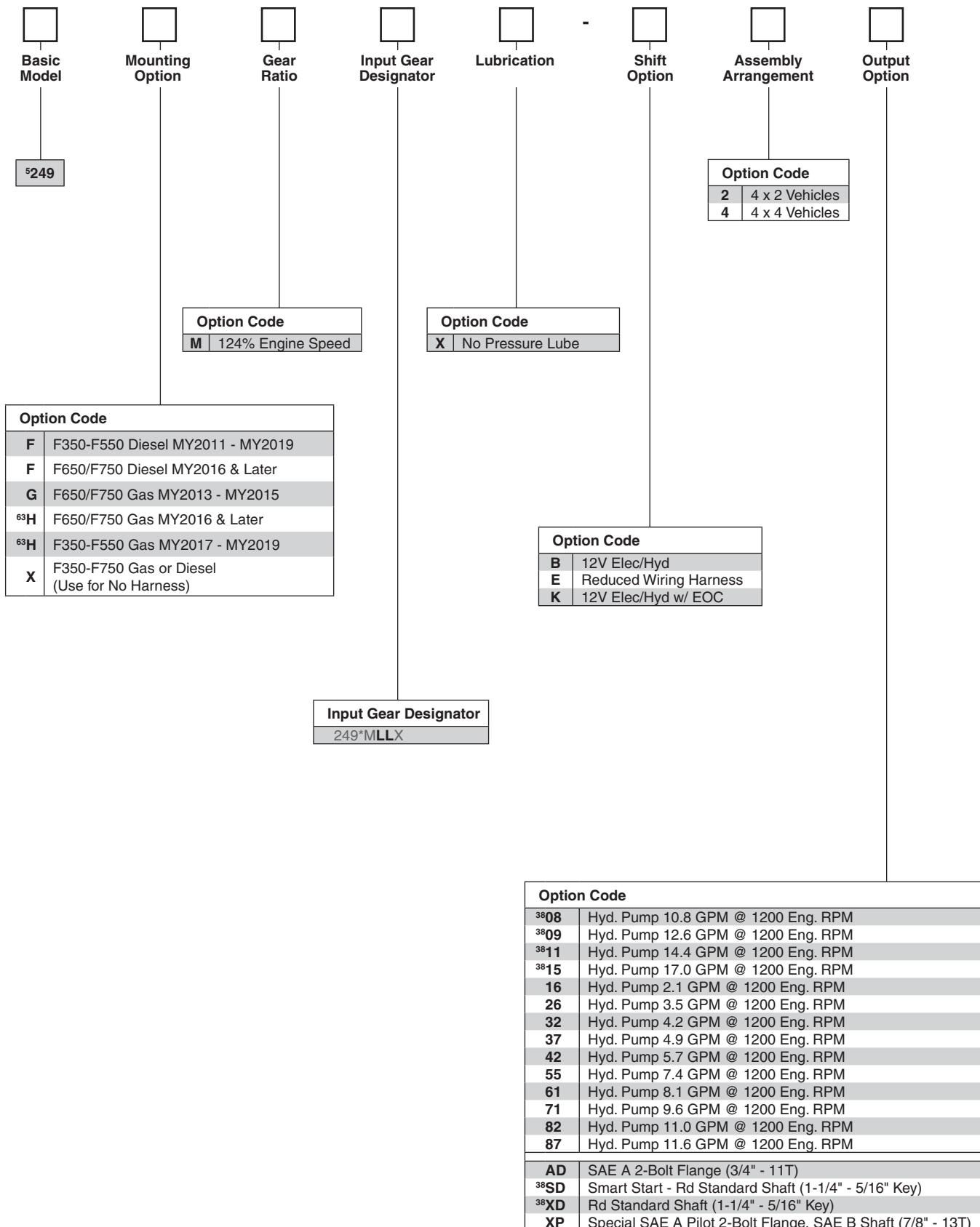
Assembly

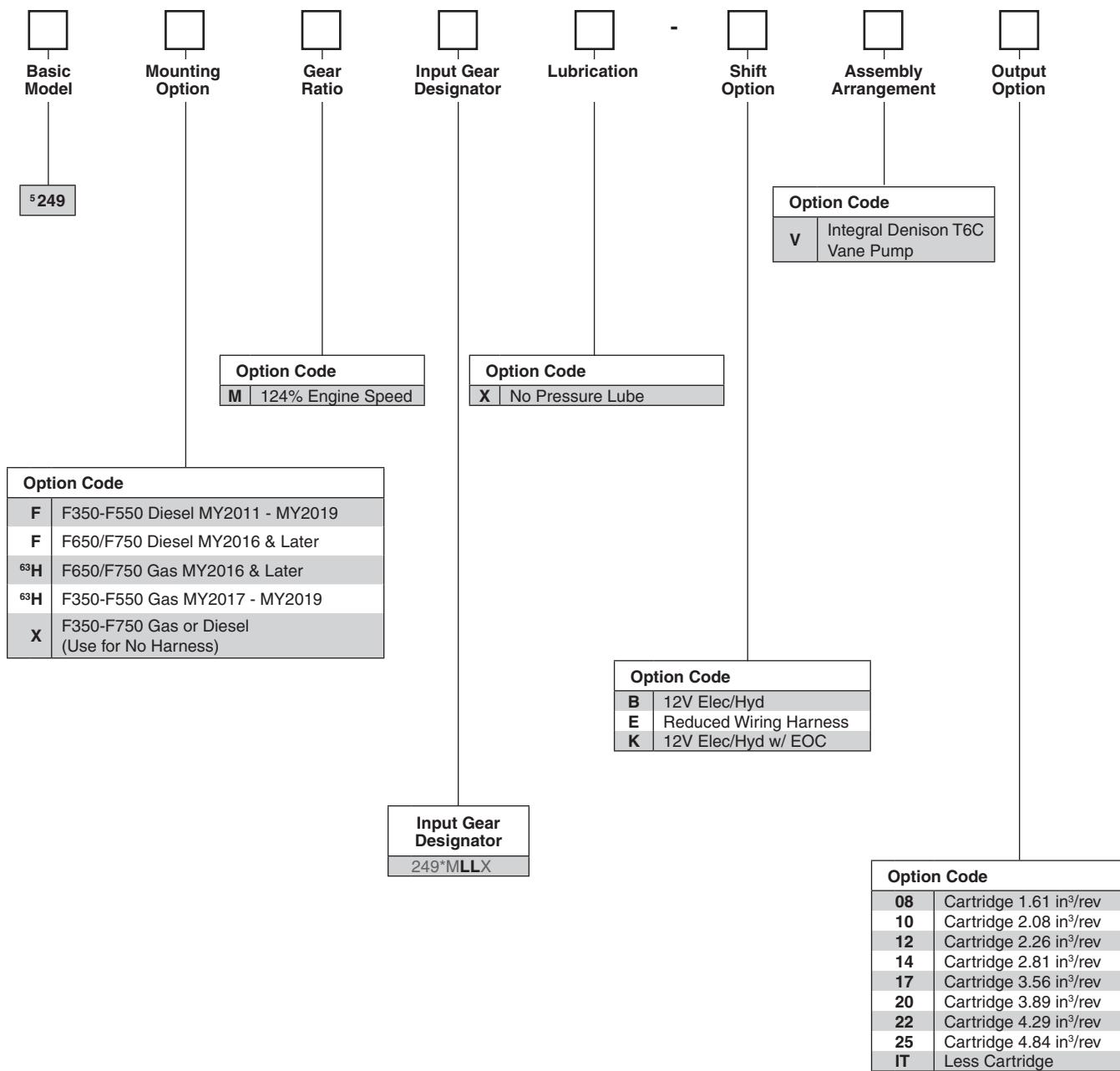
⁵ Automatically pressure lubed³⁸ 4 x 2 Vehicles only⁶³ Includes wiring harness with high temperature loom and heat shield

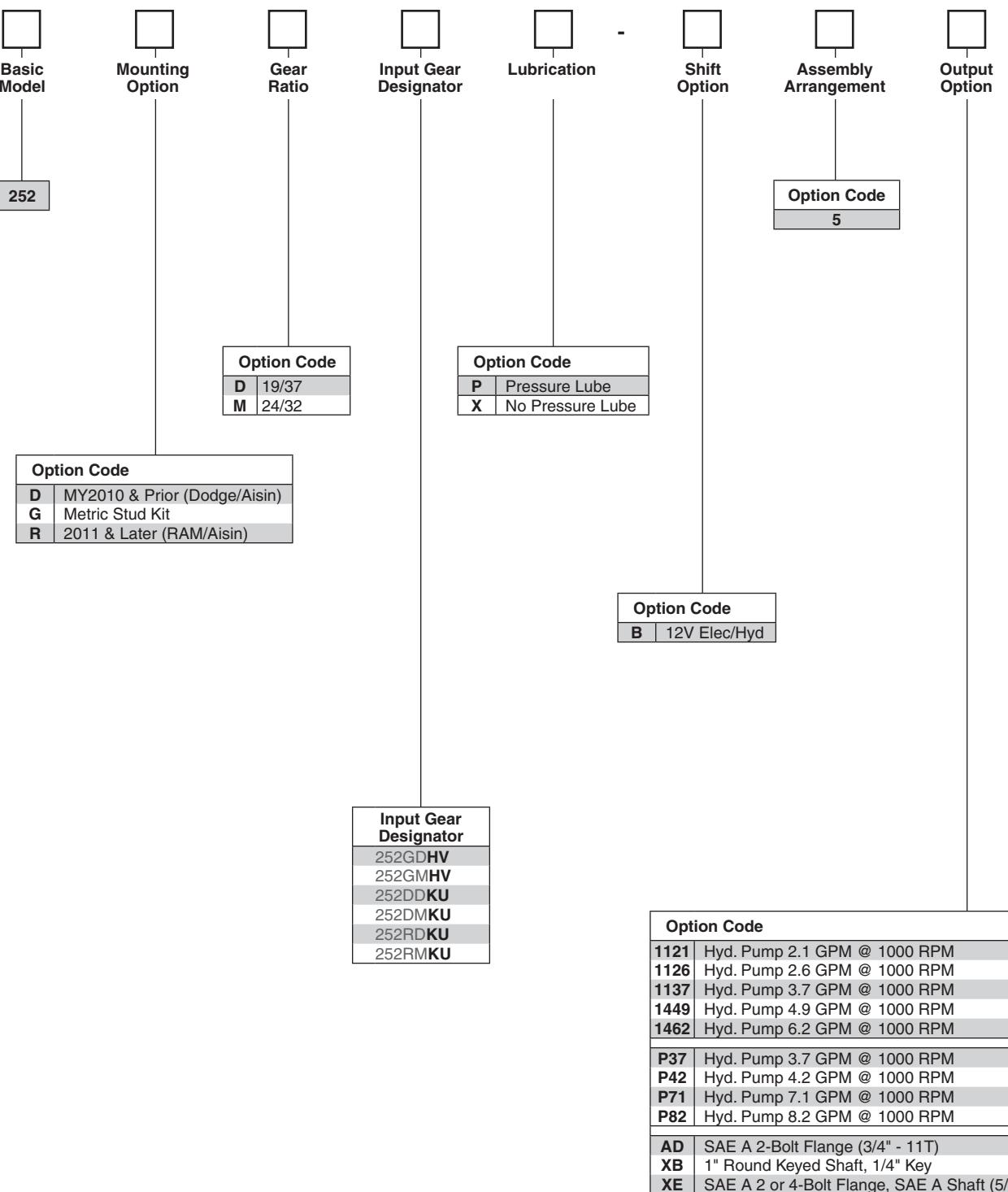


Option Code	
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
AZ	SAE B 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
KD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
⁵⁹ XQ	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XX	1-1/4" Tapered Output Shaft w/ Keyway
XY	ISO 7653 Pump Mount DIN 5462 Shaft
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RK	Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
⁵⁹ GQ	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)

¹ Includes mounting parts⁴ Available only on 221*CAK and 221*EAK²¹ Includes installation kit, console sold separately⁵⁹ Same as XK except rotated 90°

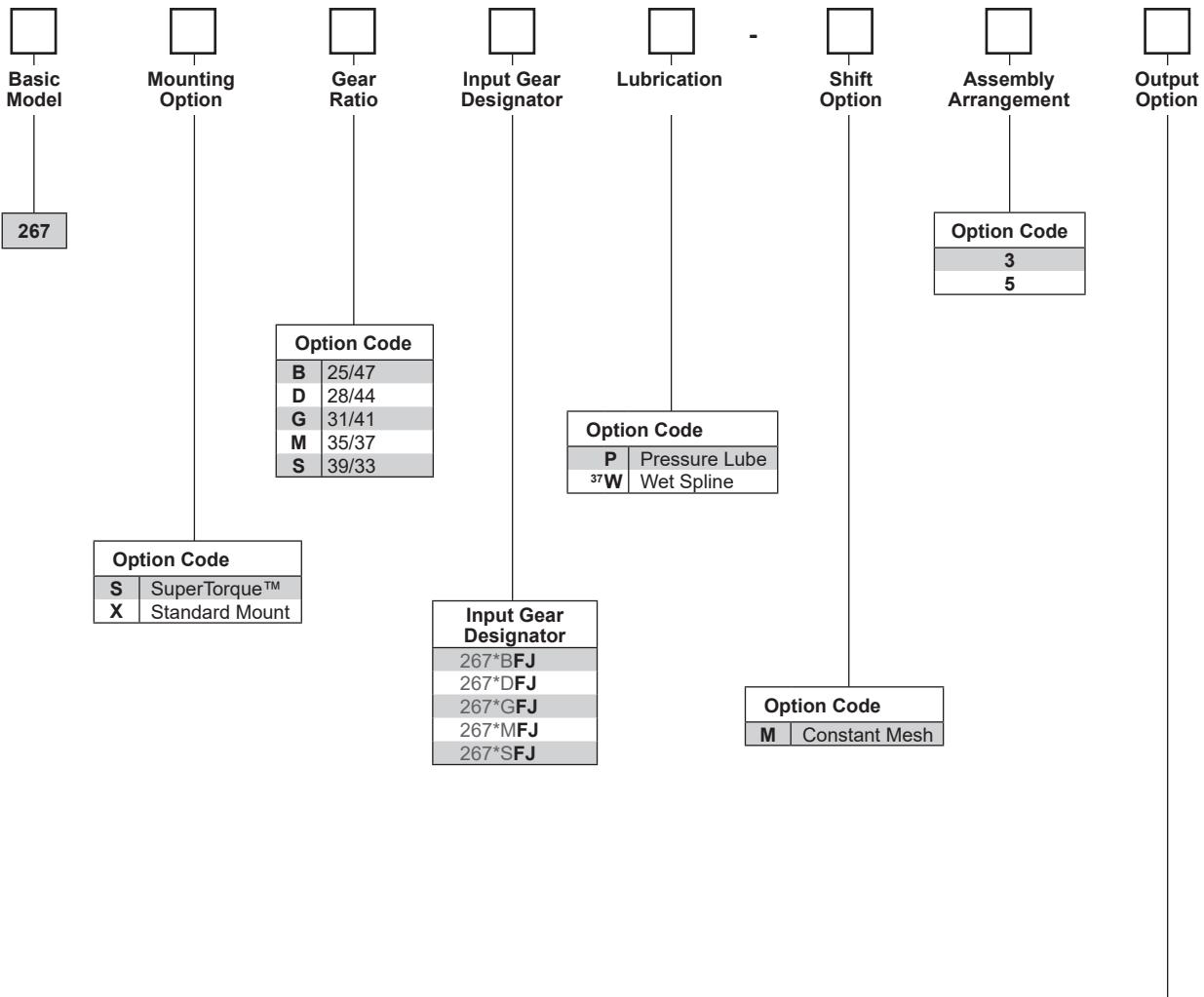
⁵ Automatically pressure lubed³⁸ 4 x 2 vehicles only⁶³ Includes Wiring Harness with high temperature loom and Heat Shield**NOTE:** Pump displacement is theoretical.**Assembly**

⁵ Automatically pressure lubed⁶³ Includes Wiring Harness with high temperature loom and Heat Shield



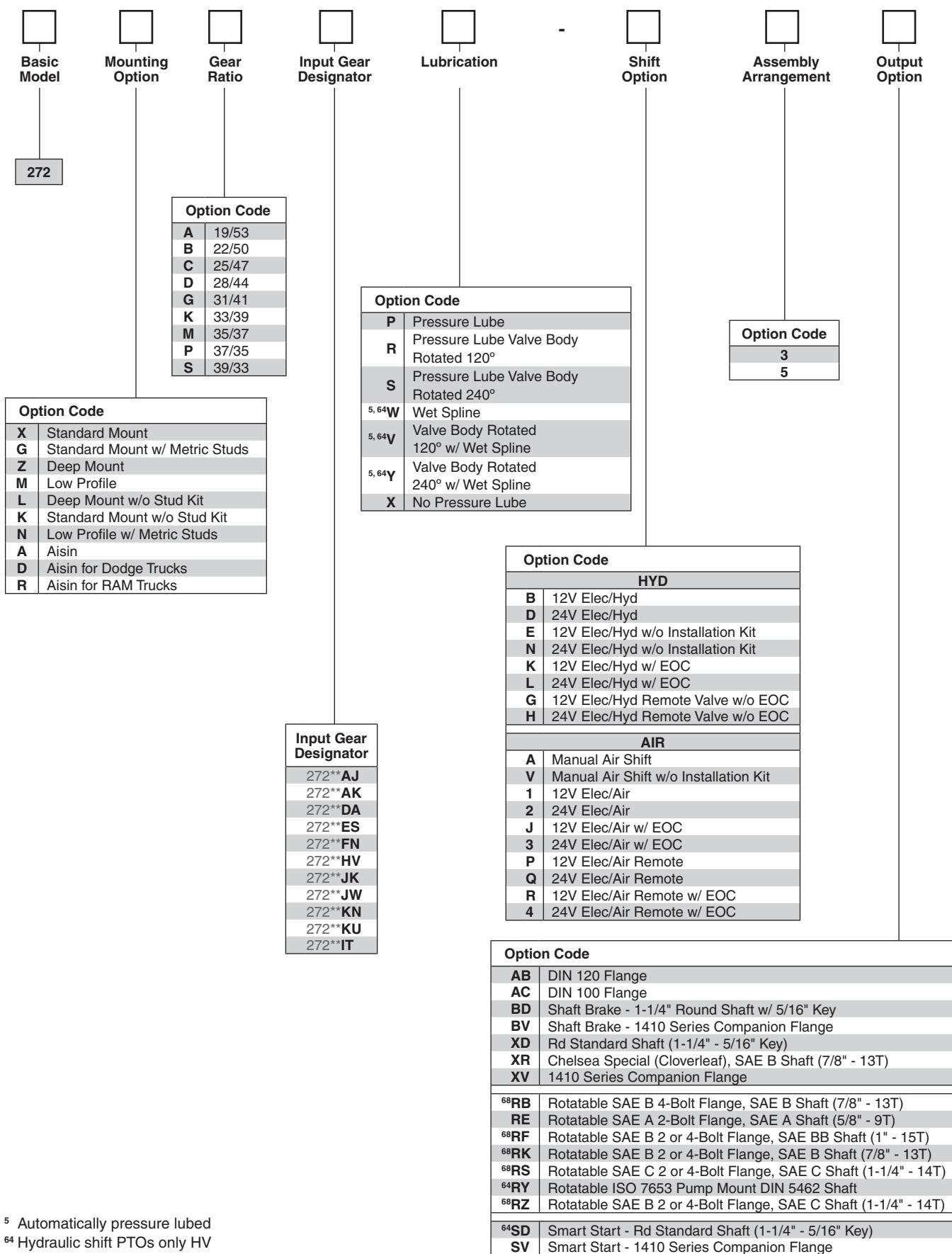
Assembly

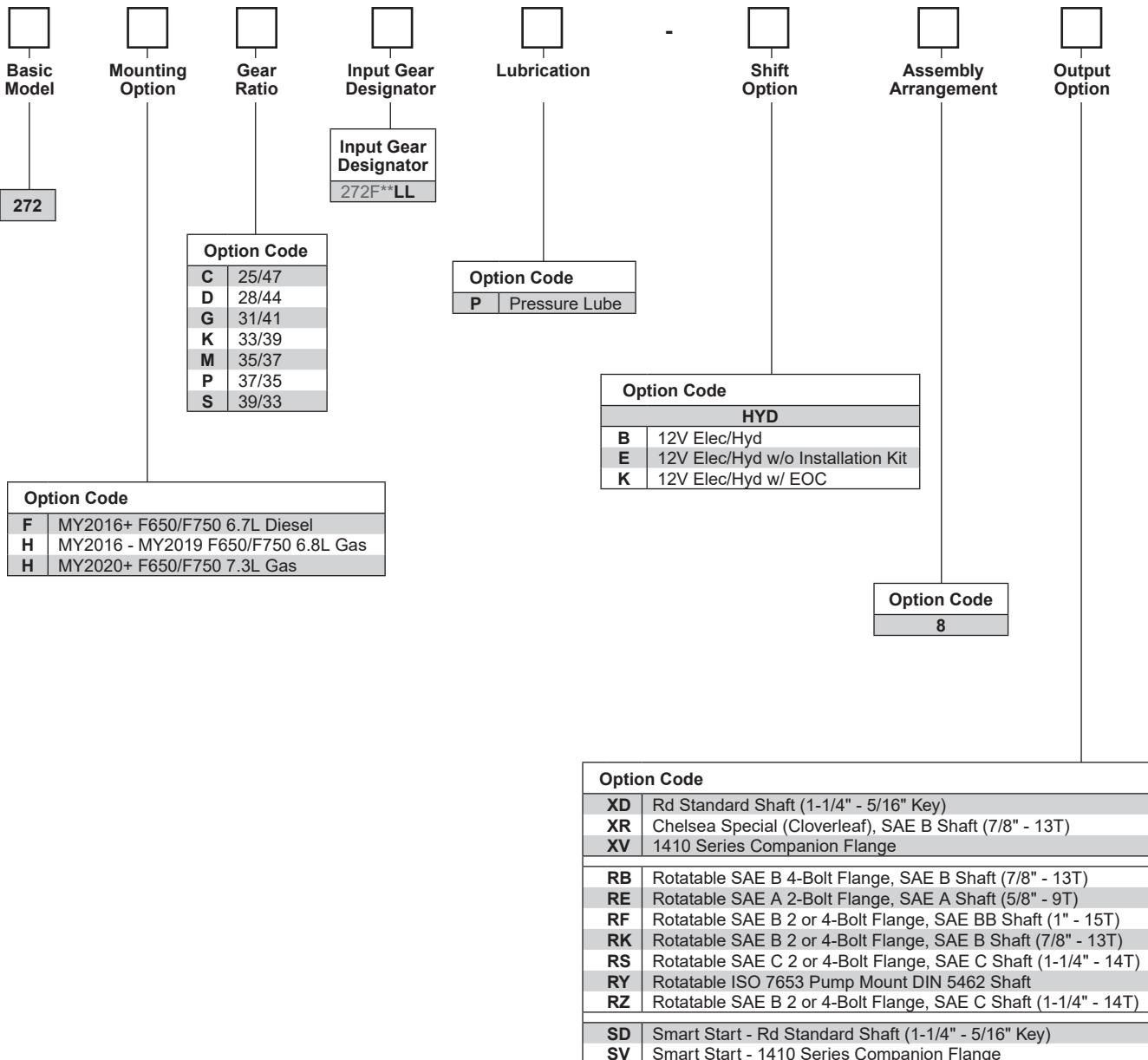
NOTE: Pump displacement is theoretical.

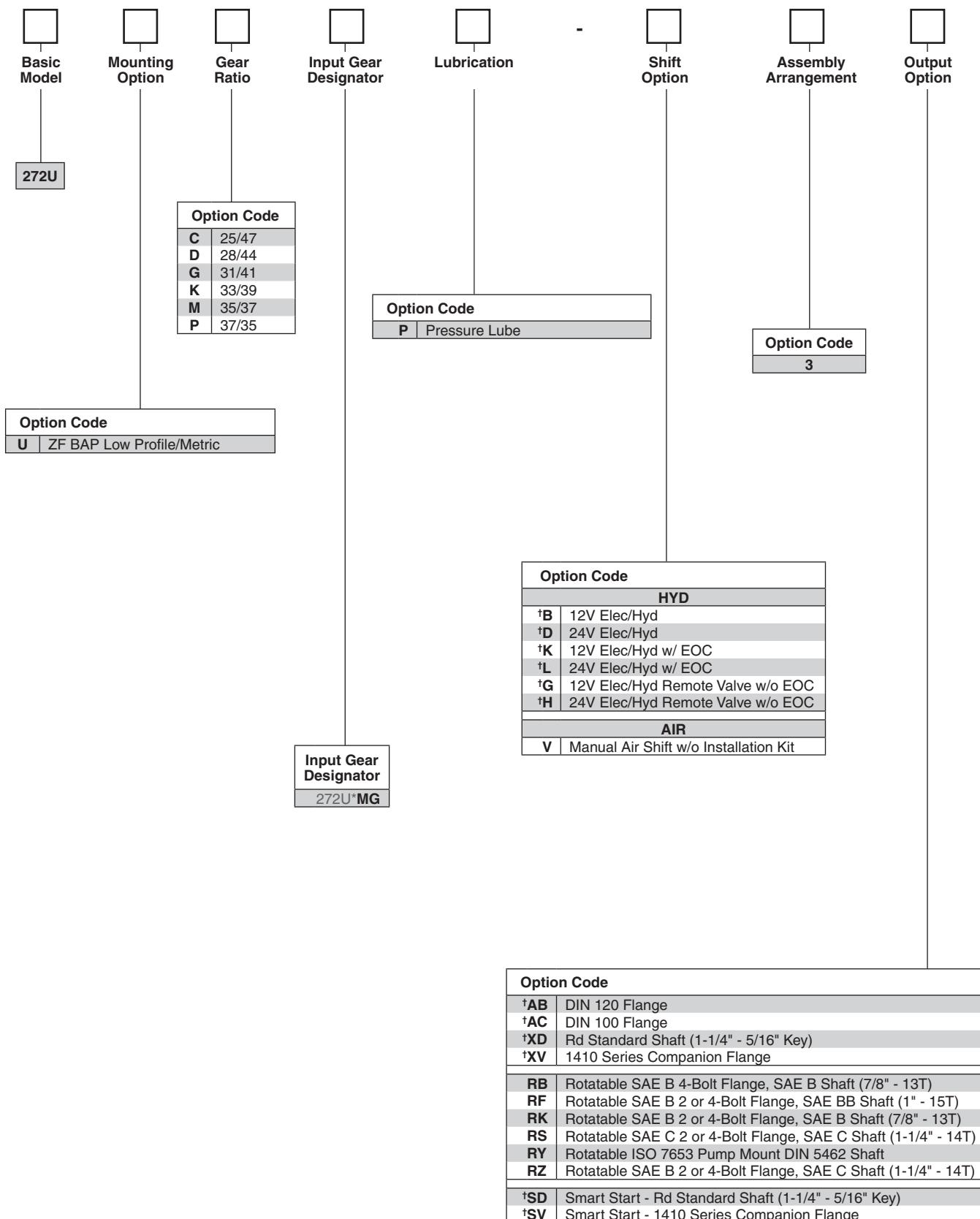


Option Code	
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
AZ	SAE B 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)
²³ XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
⁵⁹ XQ	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
¹³ XX	1-1/4" Tapered Output Shaft w/ Keyway
XY	ISO 7653 Pump Mount DIN 5462 Shaft
TV	Tapered Shaft 1410 Series Companion Flange
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RJ	Rotatable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
RK	Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
²³ RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
⁵⁹ GQ	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)

¹³ Available assembly 5 only²³ Must be purchased with Wet Spline³⁷ Automatically pressure lubed with Wet Spline⁵⁹ Same as XK except rotated 90°

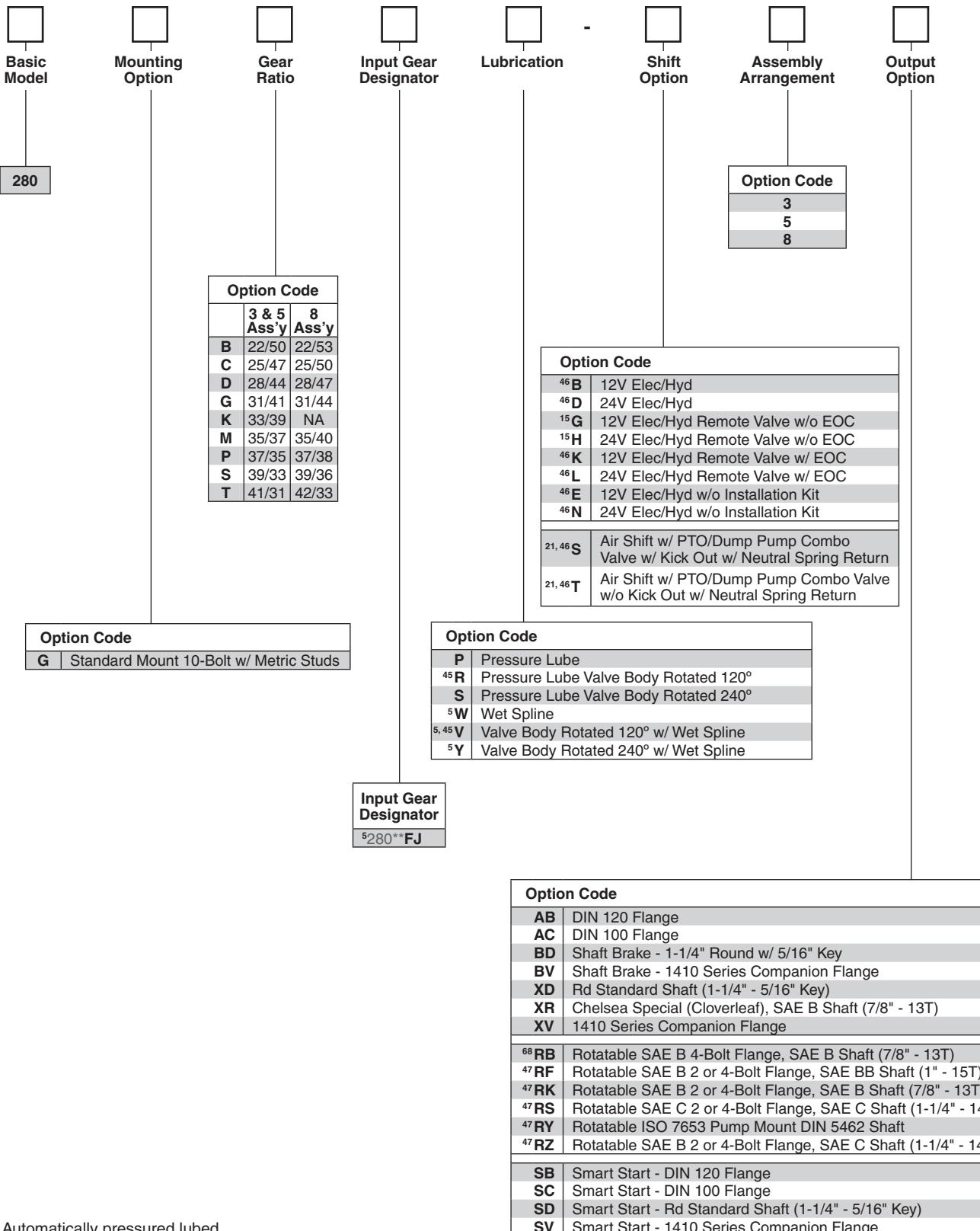
⁵ Automatically pressure lubed⁶⁴ Hydraulic shift PTOs only HV⁶⁸ Check for Wet Spline availability**Assembly**

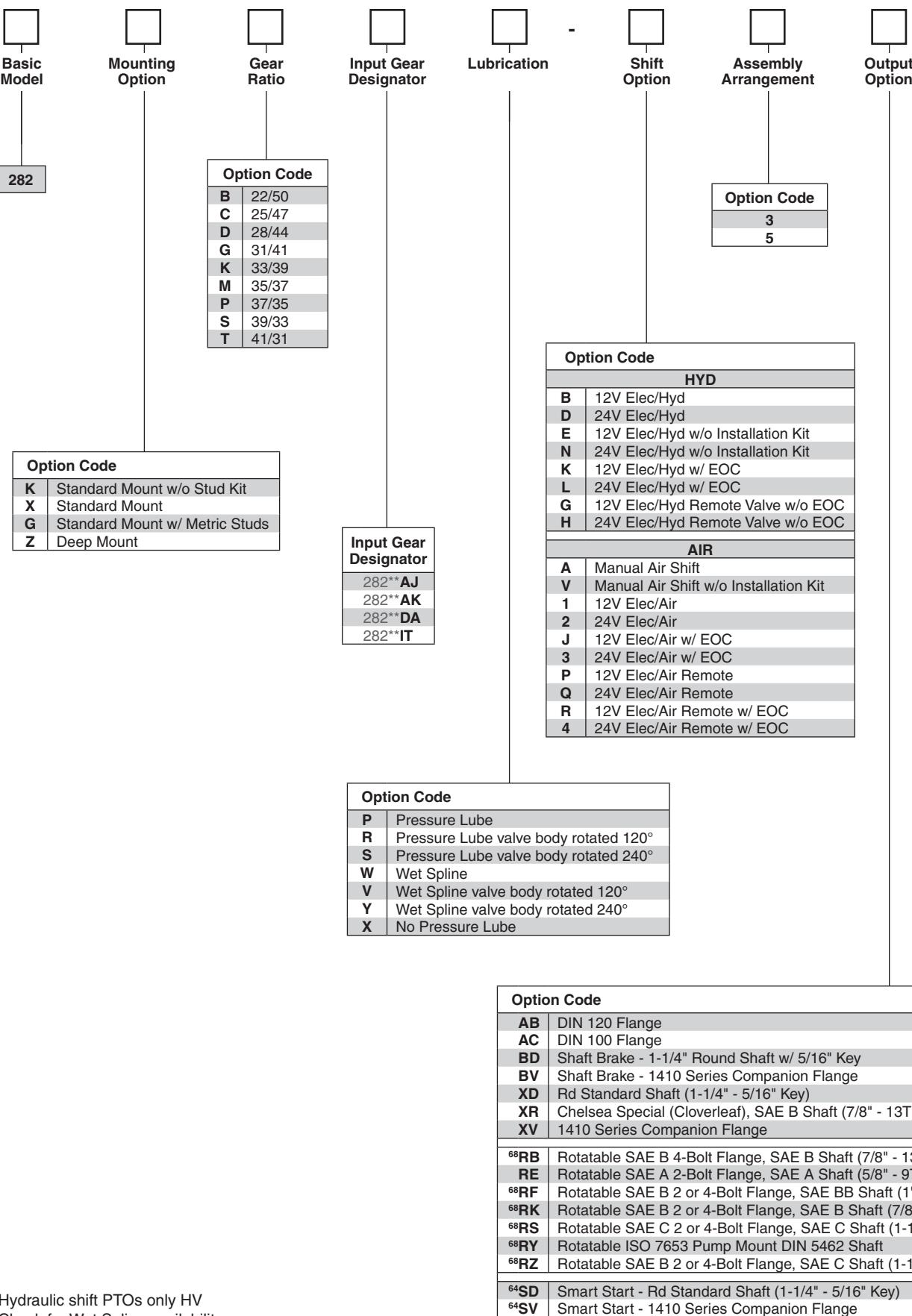


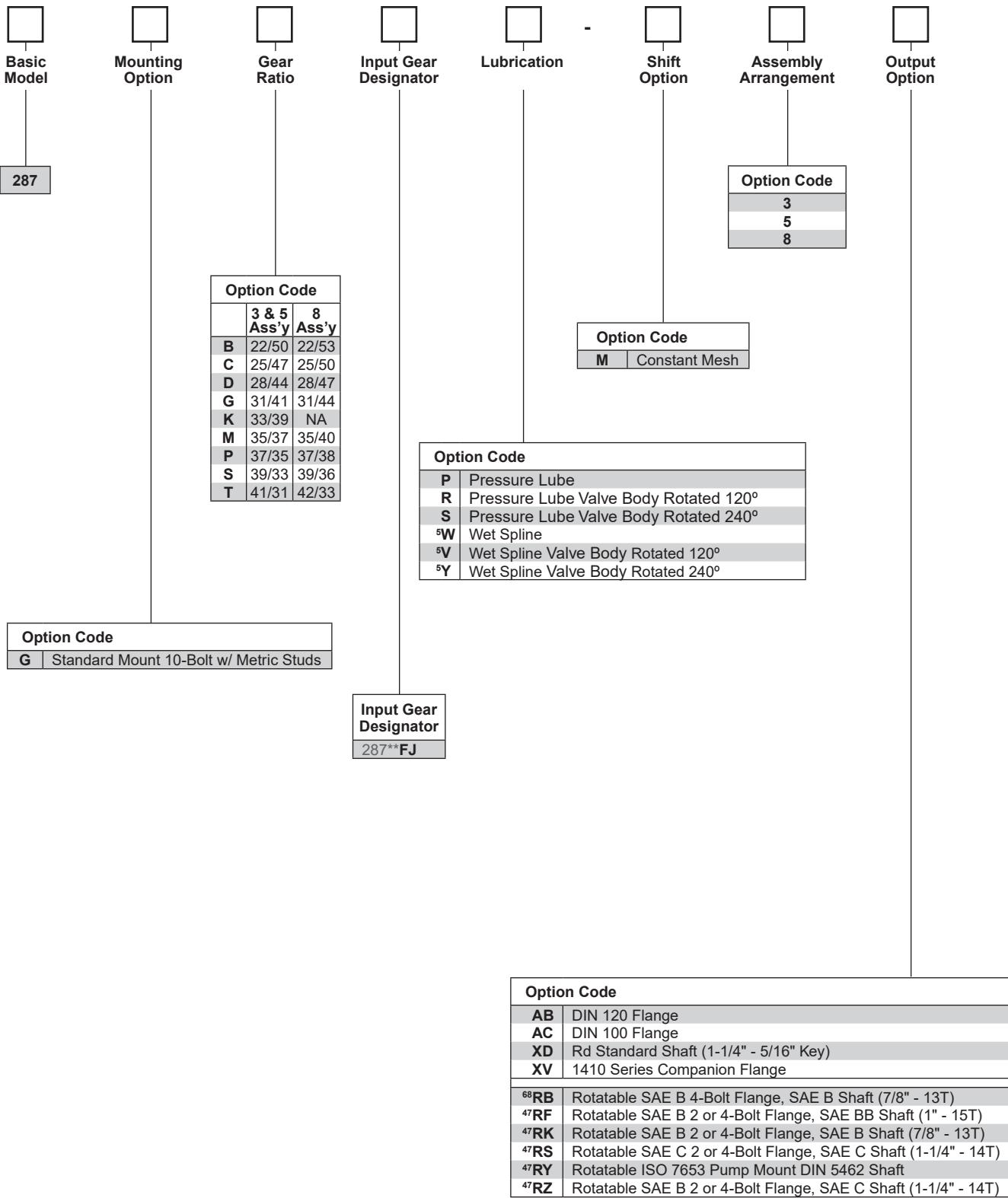


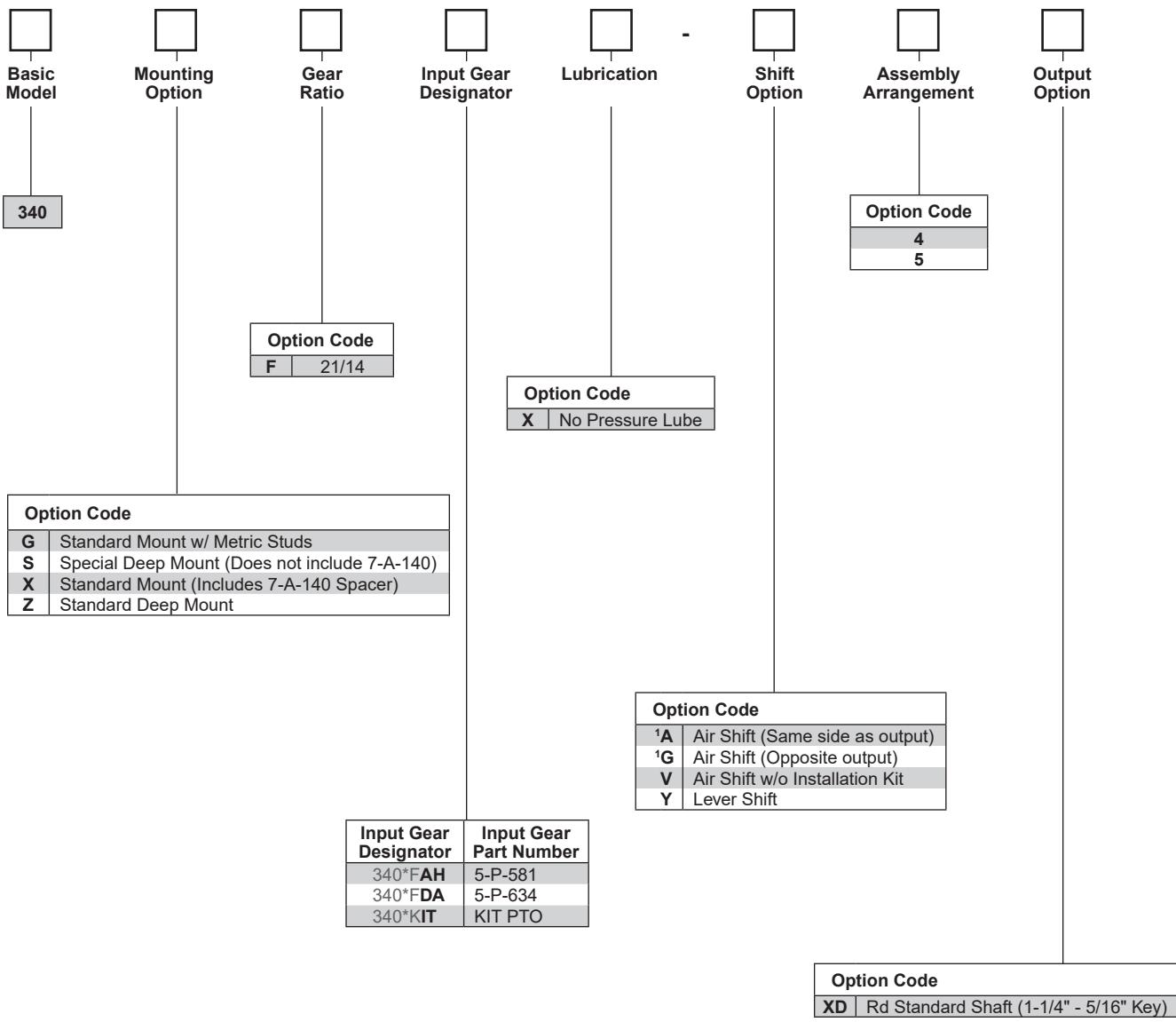
† Coming Soon

Assembly

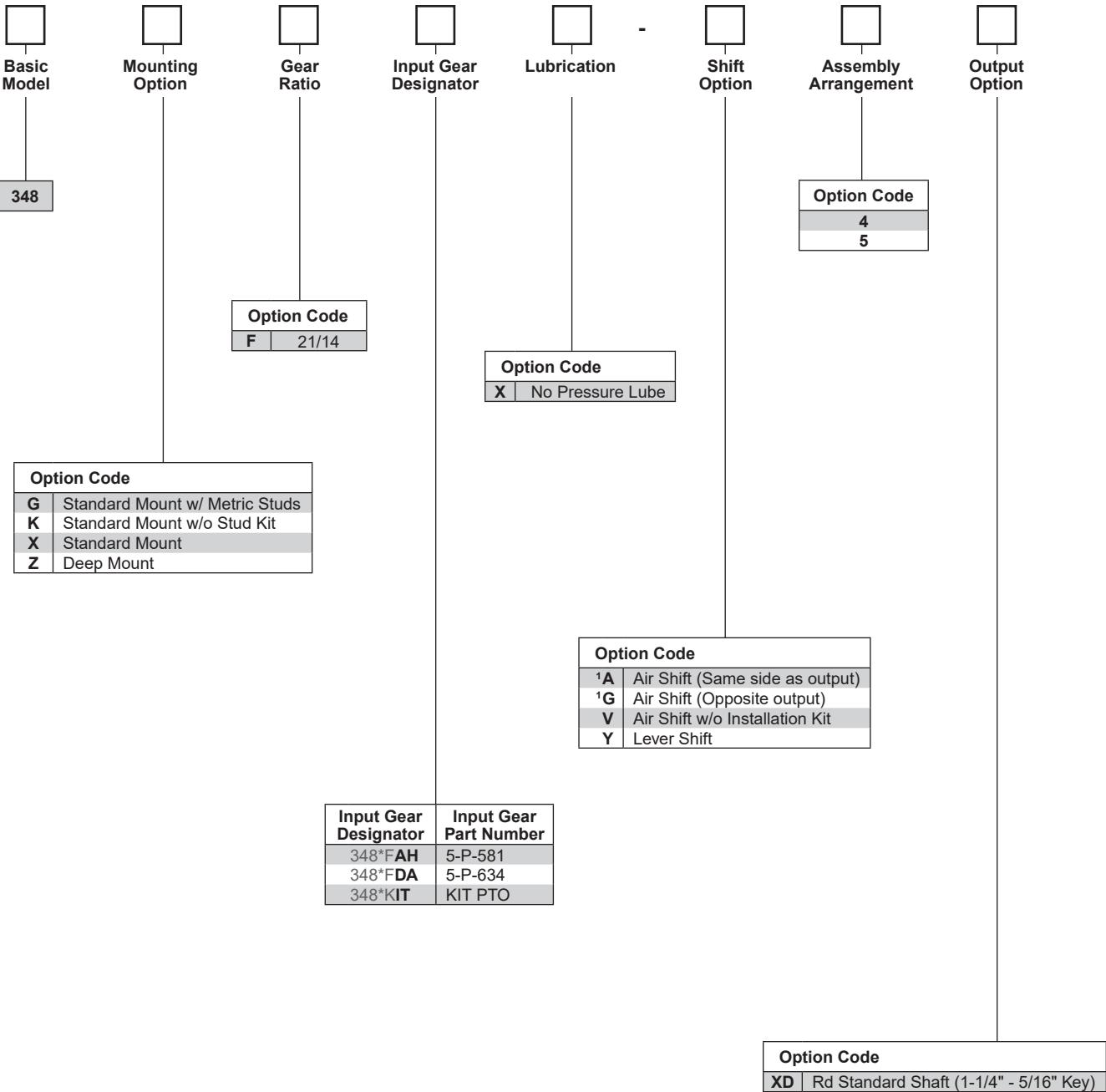
⁵ Automatically pressurized lubed¹⁵ The remote mount solenoid option cannot utilize the EOC option²¹ Includes installation kit, console sold separately⁴⁵ Available on shift option B, D, K, L, M, N, S & T⁴⁶ Available with Rotated Valve⁴⁷ Available with Wet Spline⁶⁸ Check for Wet Spline availability

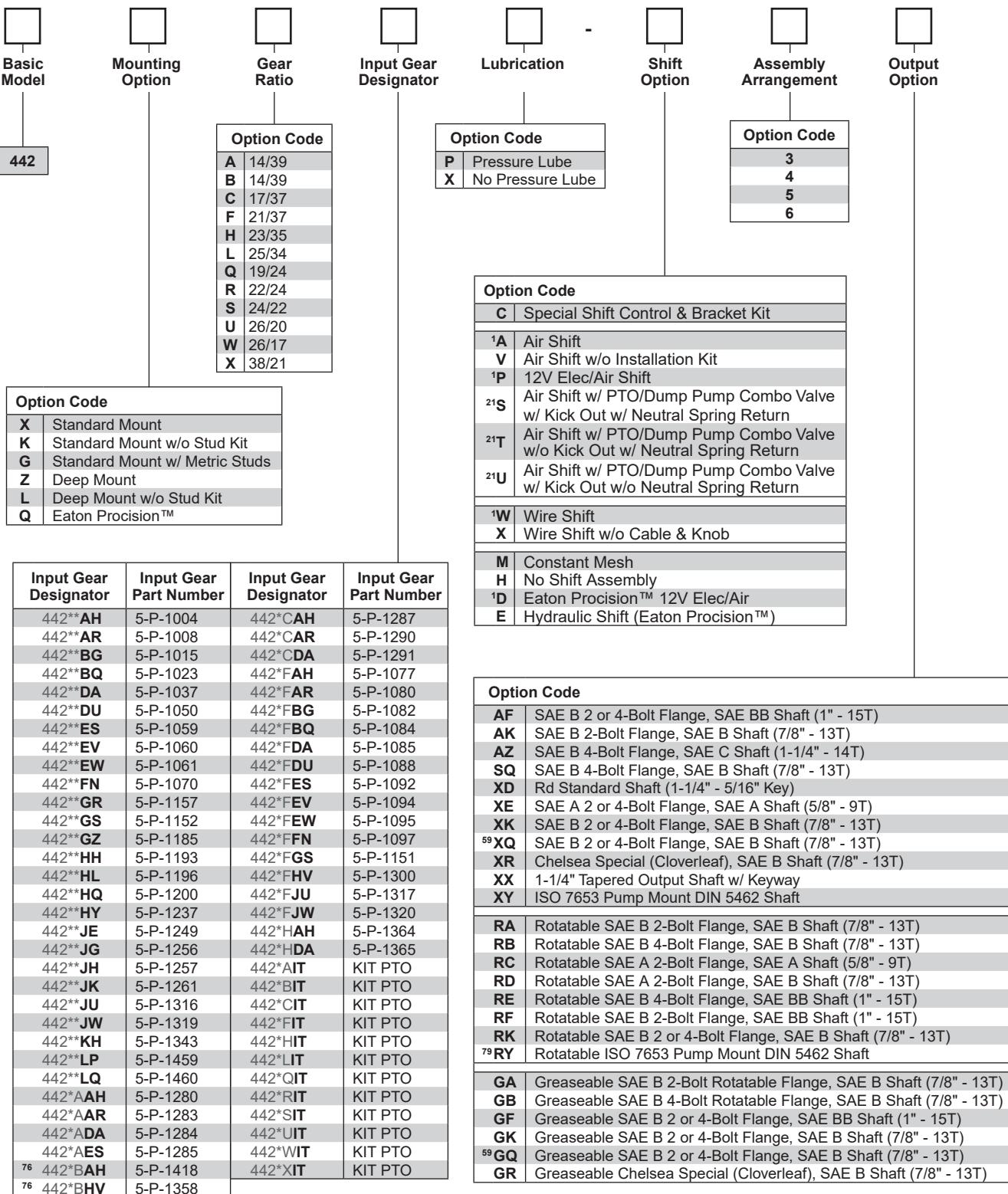
⁶⁴ Hydraulic shift PTOs only HV⁶⁸ Check for Wet Spline availability

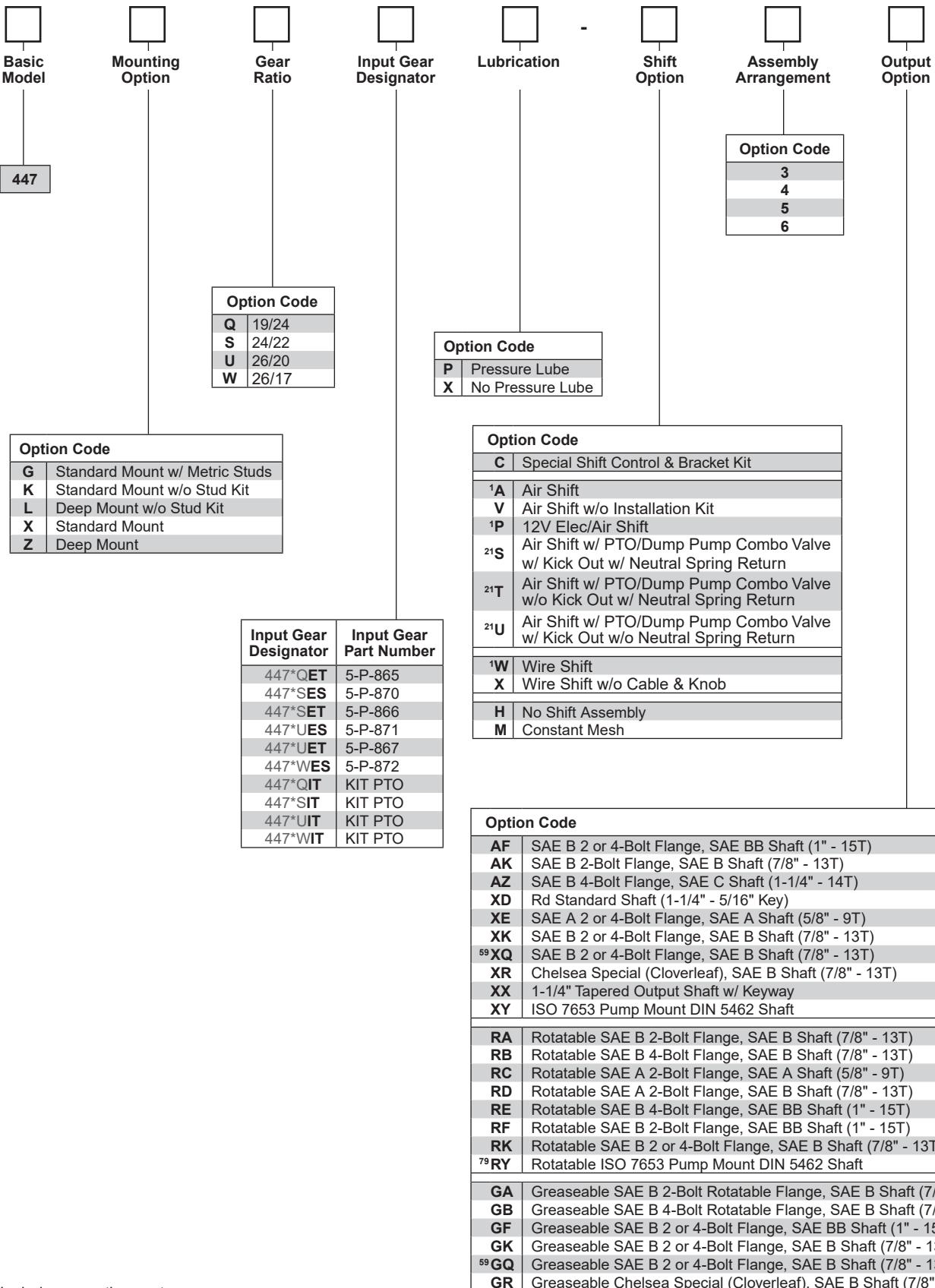
⁵ Automatically pressurized lubed⁴⁷ Available with Wet Spline⁶⁸ Check for Wet Spline availability

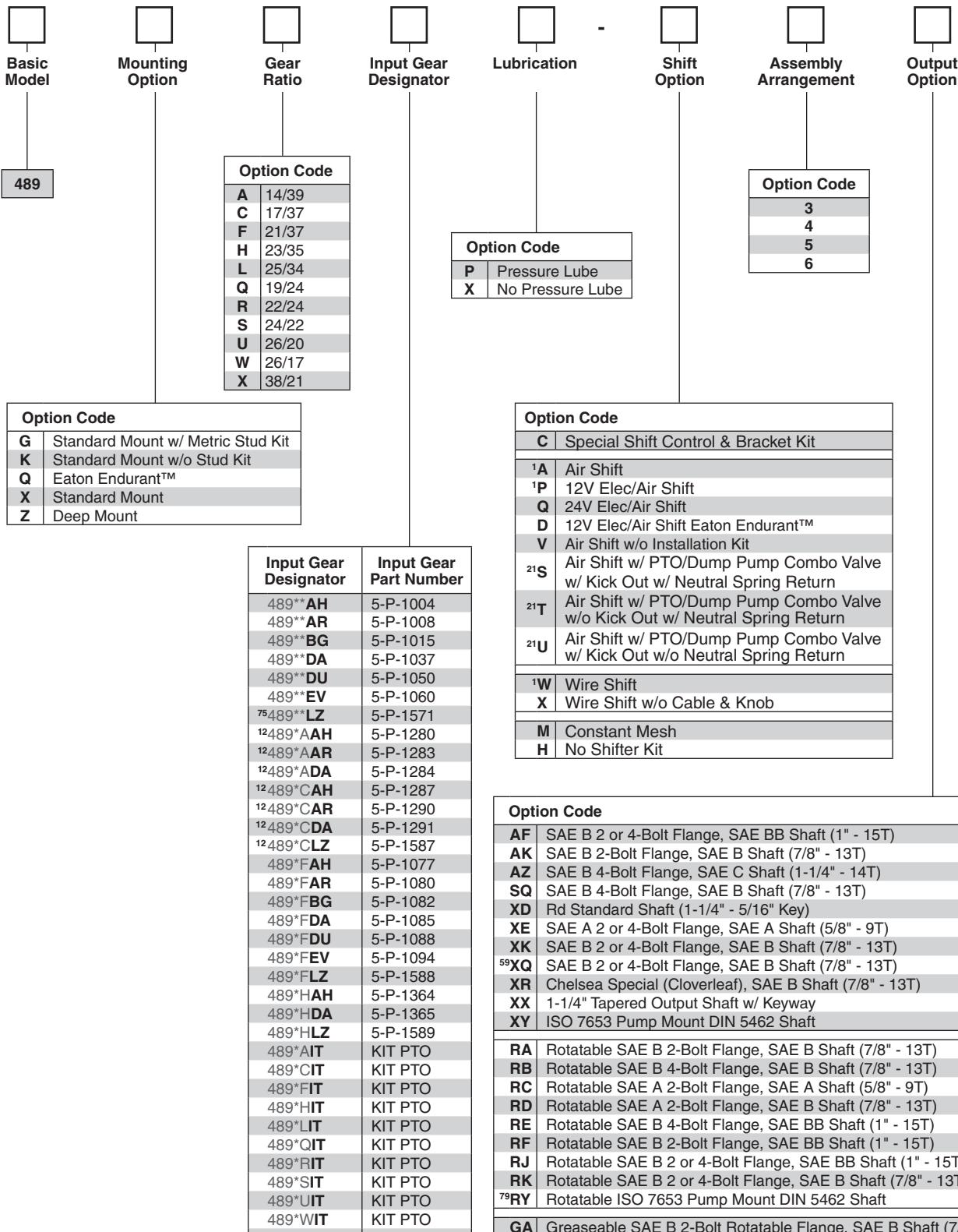
¹ Includes mounting parts

Assembly

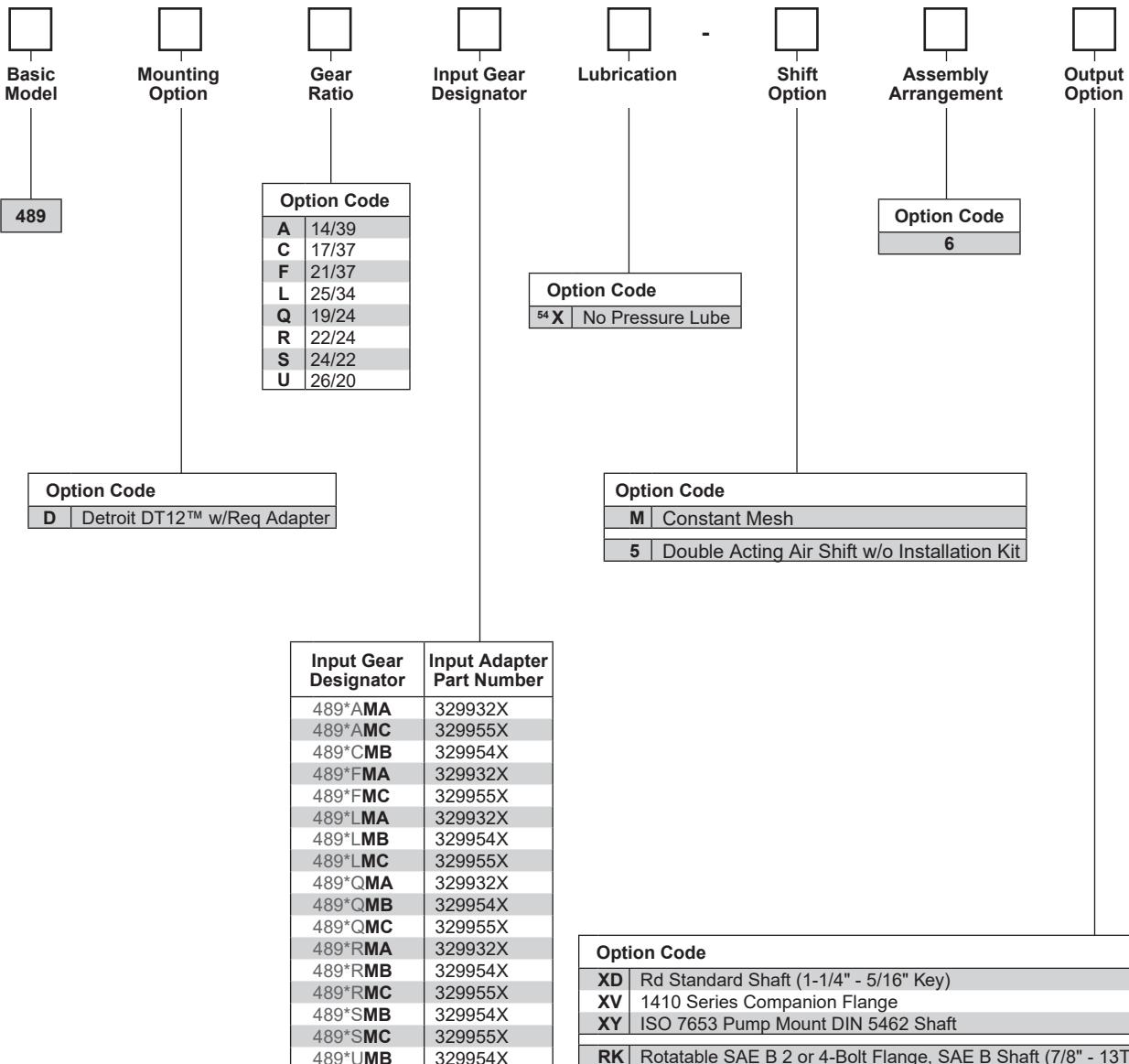
¹ Includes mounting parts

Assembly Options**442 Series****Assembly**¹ Includes mounting parts²¹ Includes installation kit, console sold separately⁵⁹ Same as XK except rotated 90°⁷⁶ B ratio NOT available with AF, AZ, GA, GB, GF, GK, GQ, GR, RC, RE, RF, XE or XX output options⁷⁹ Flooded cavity

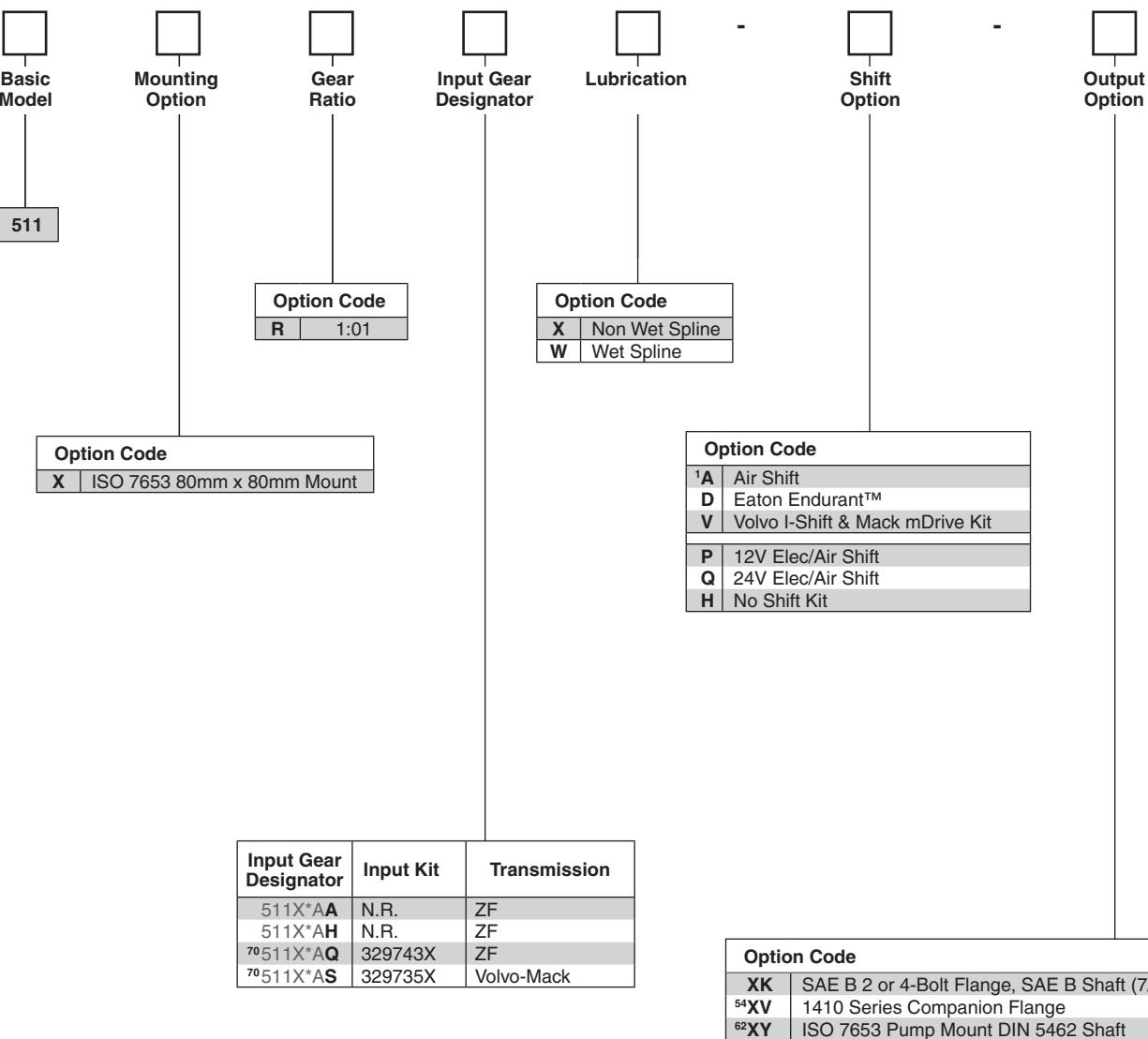
¹ Includes mounting parts²¹ Includes installation kit, console sold separately⁵⁹ Same as XK except rotated 90°⁷⁹ Flooded cavity

Assembly Options¹ Includes mounting parts¹² A and C ratio NOT available with XK and AK output options²¹ Includes installation kit, console sold separately⁵⁹ Same as XK except rotated 90°⁷⁵ Must use D or V shift options only⁷⁹ Flooded cavity

Assembly



¹ Includes mounting parts
⁵⁴X Lube option only

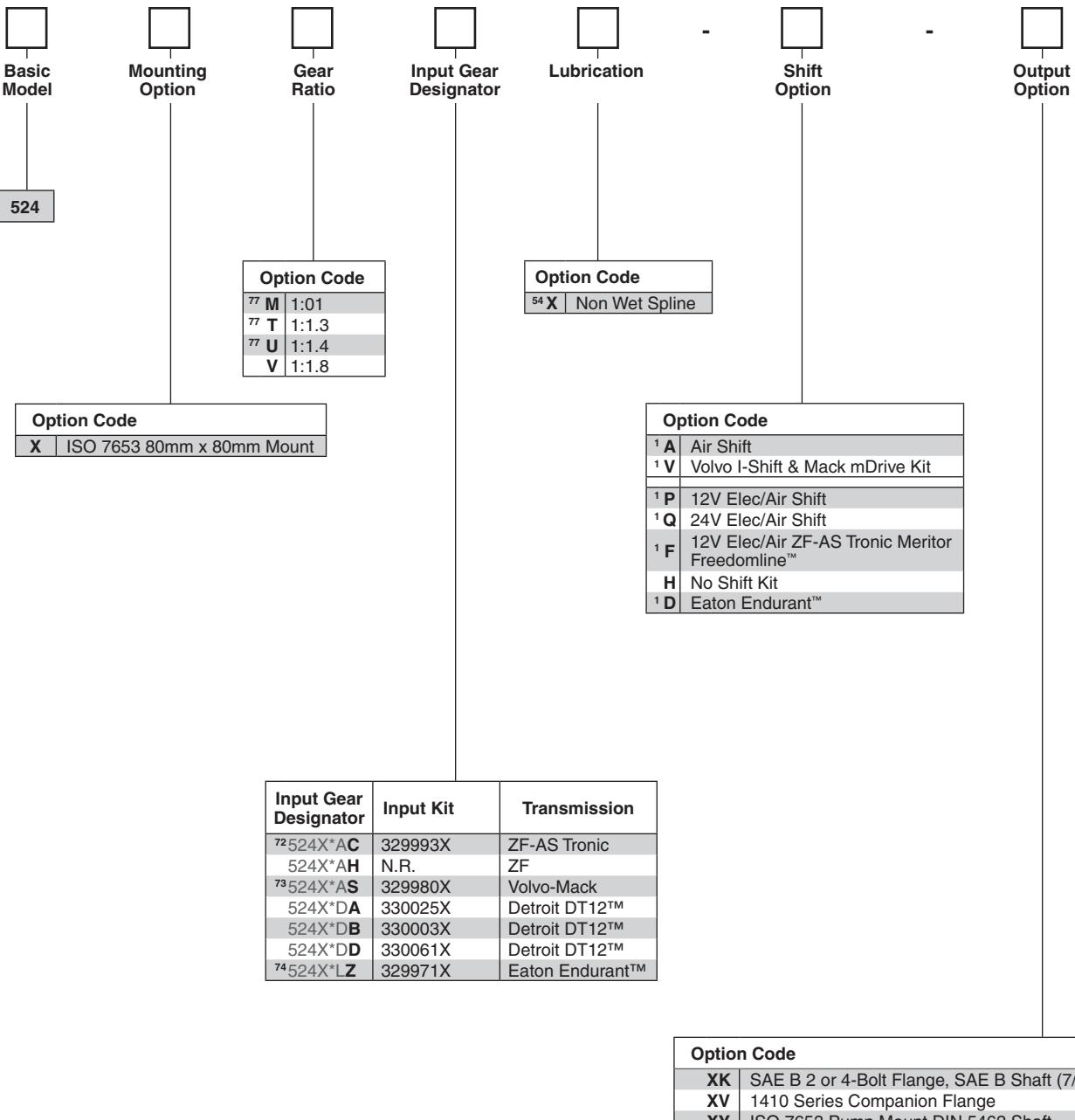

Assembly
¹ Includes mounting parts

⁵⁴X Lube option only

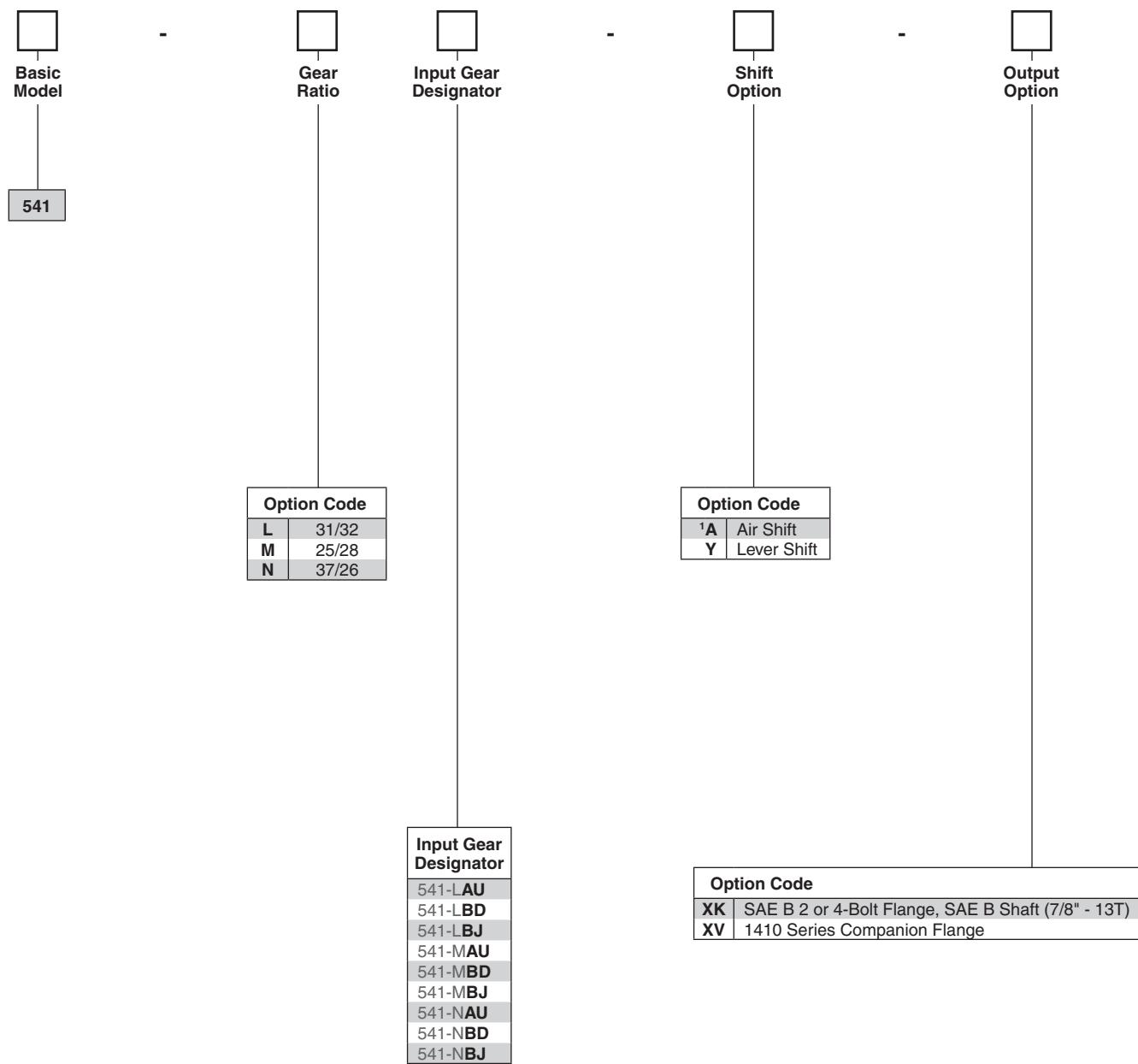
⁶² Wet Spline only

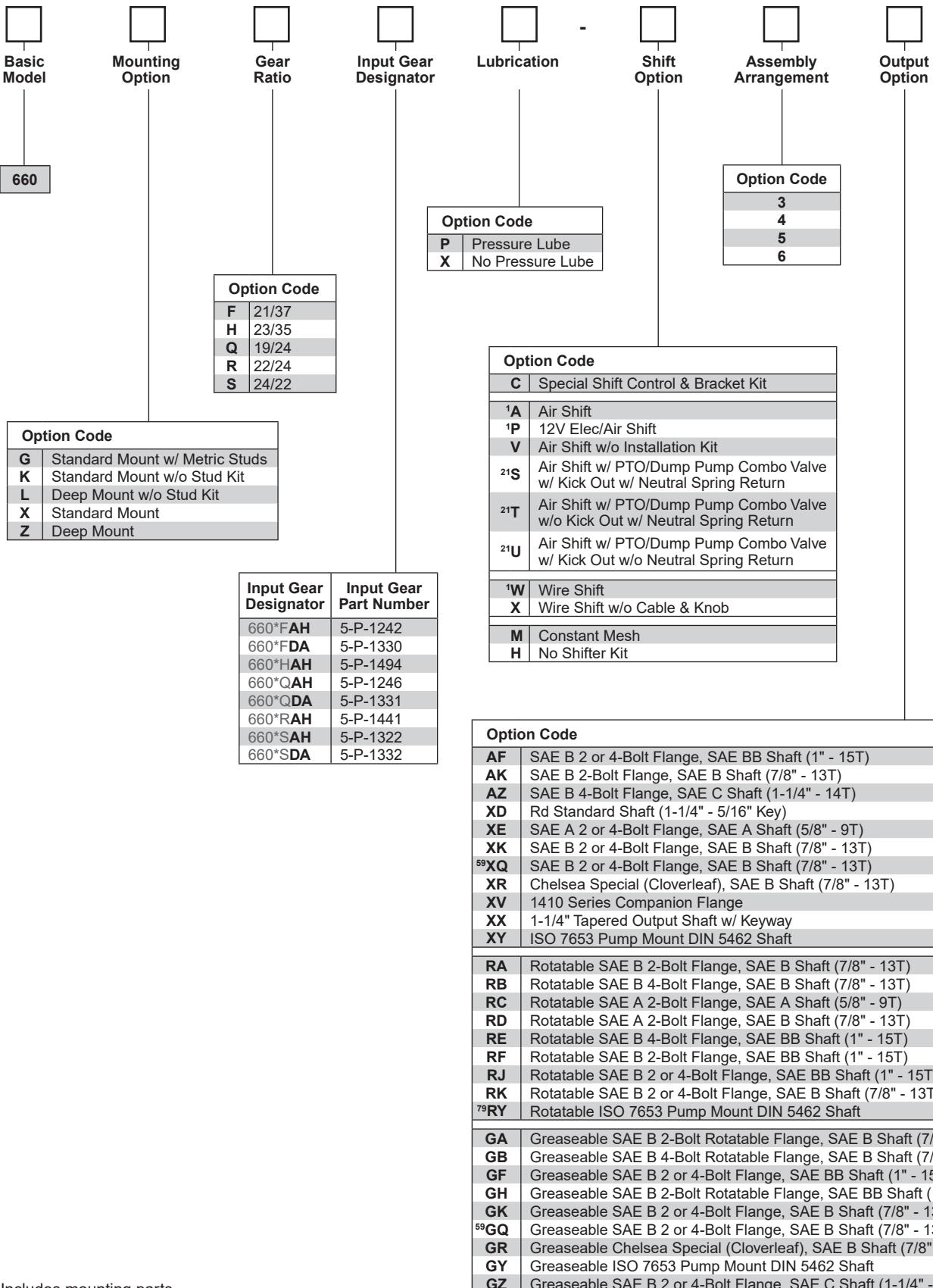
⁷⁰ Input kits are included with PTO assembly

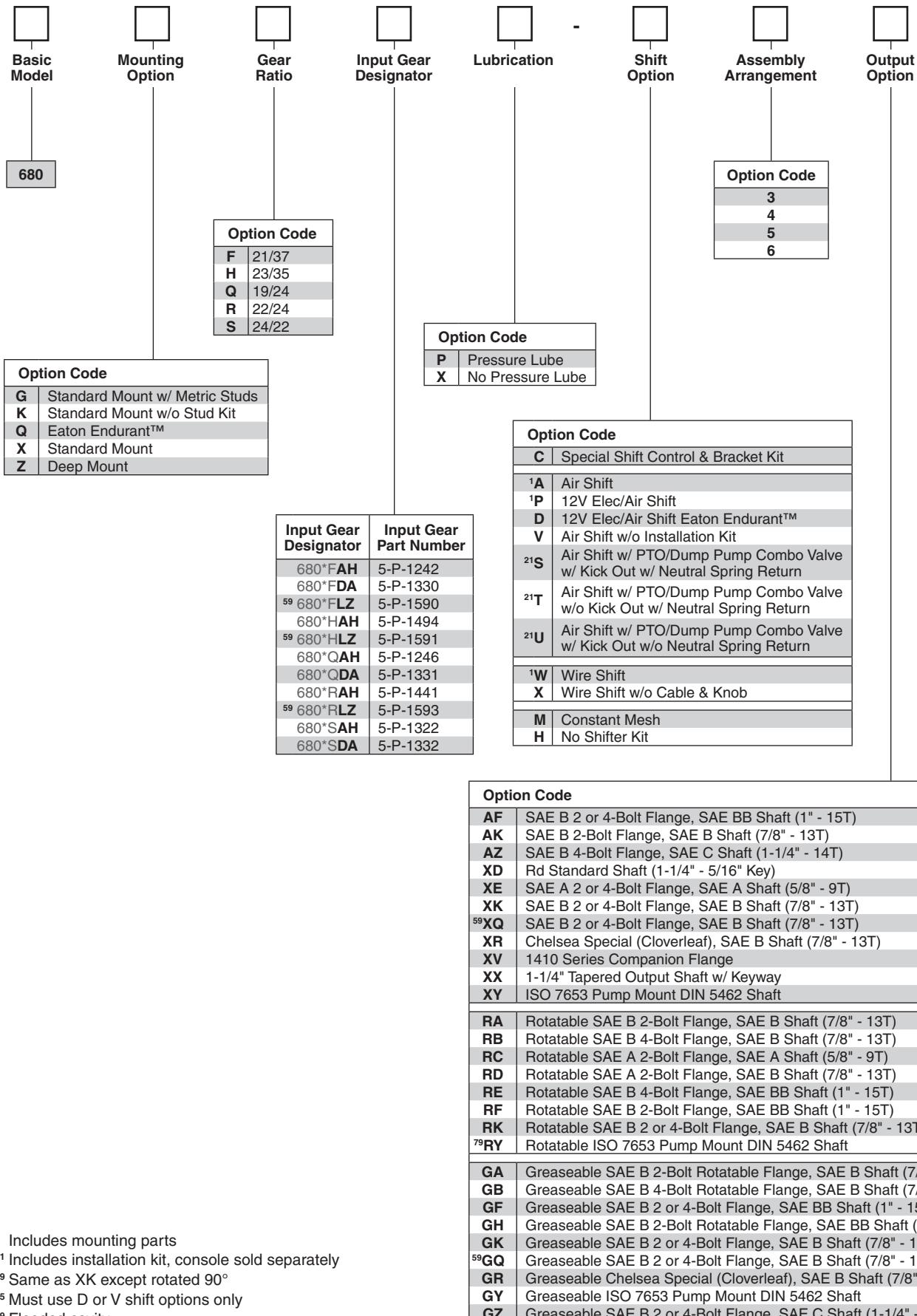
N.R. = Not Required

¹ Includes mounting parts⁵⁴ X Lube option only⁷² AC Input Gear can use H or F Shift Options Only⁷³ AS Input Gear can use H or V Shift Options Only⁷⁴ LZ Input Gear can use H or D Shift Options Only⁷⁷ Ships with sculpted housing for DT12 applications
(DA and DB Input Kits)

N.R. = Not Required


Assembly
¹ Includes mounting parts

¹ Includes mounting parts²¹ Includes installation kit, console sold separately⁵⁹ Same as XK except rotated 90°⁷⁹ Flooded cavity

Assembly Options
¹ Includes mounting parts

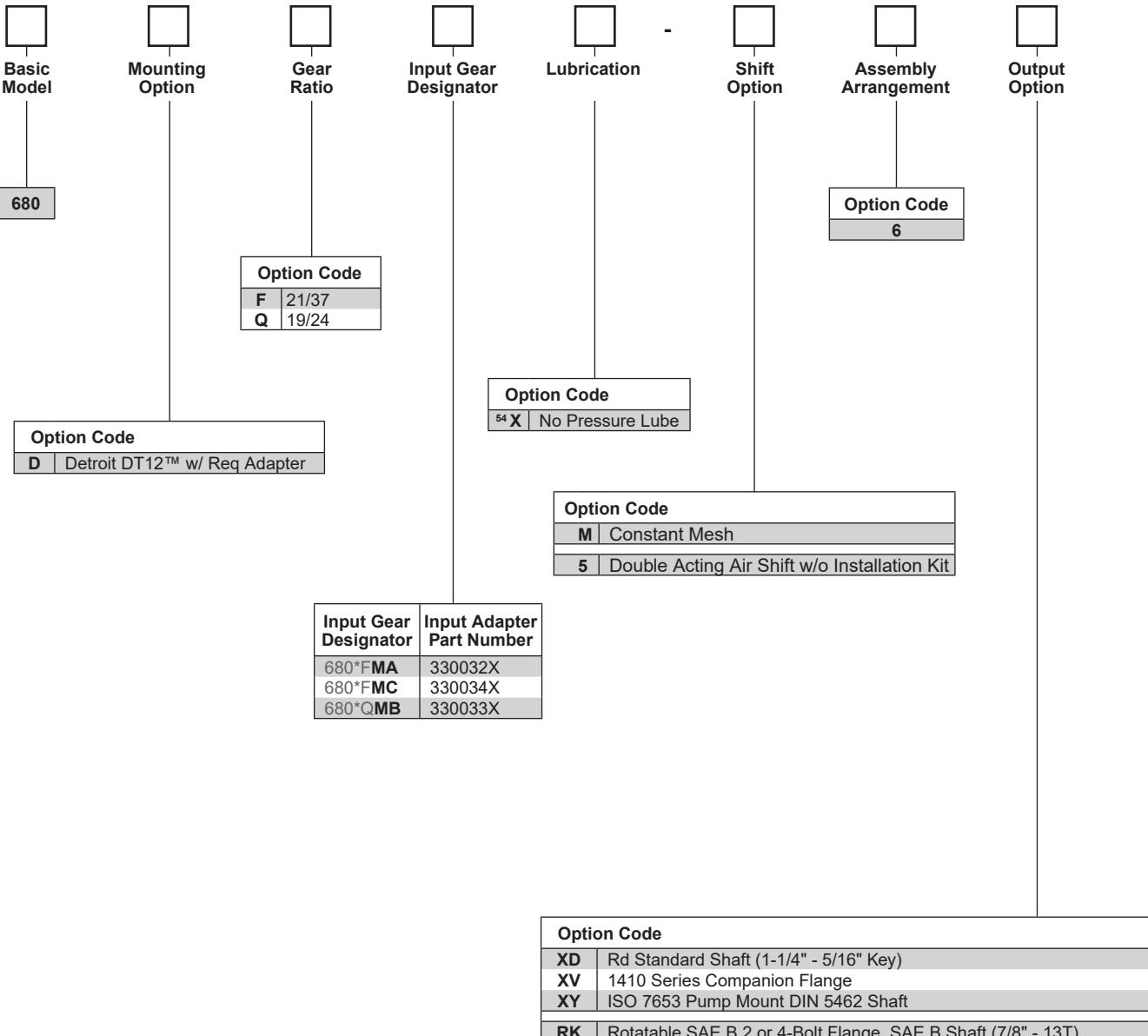
²¹ Includes installation kit, console sold separately

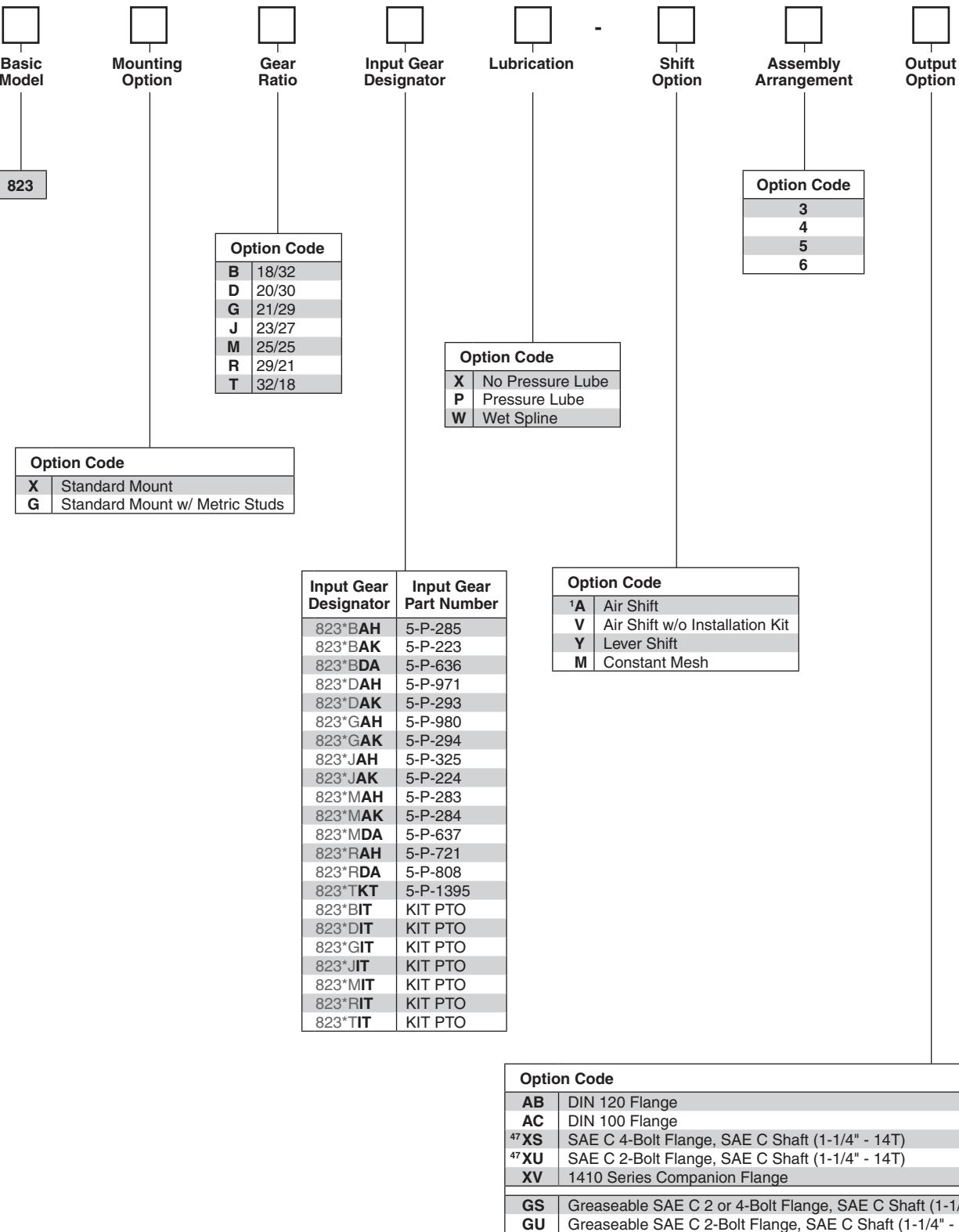
⁵⁹ Same as XK except rotated 90°

⁷⁵ Must use D or V shift options only

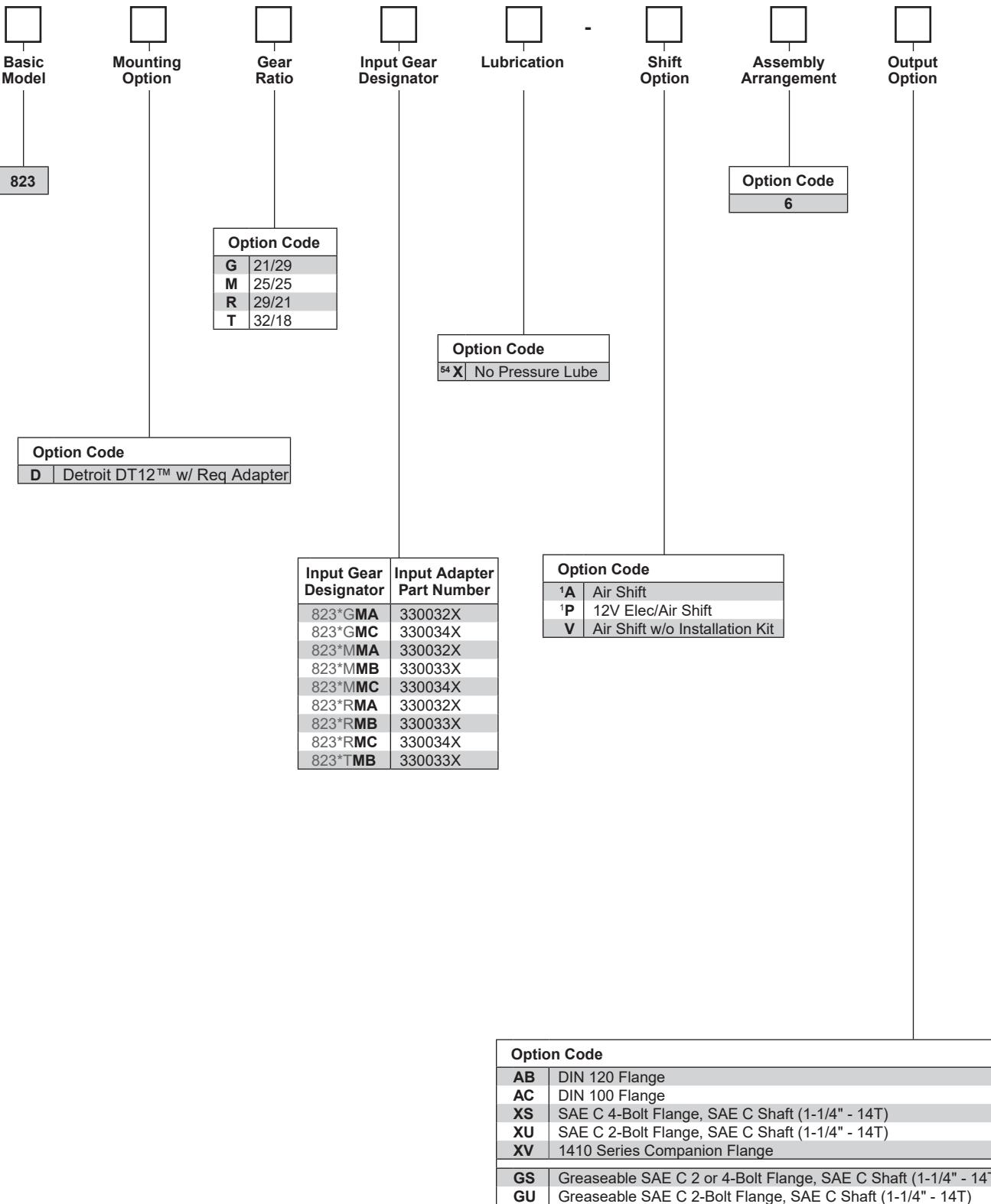
⁷⁹ Flooded cavity

Assembly

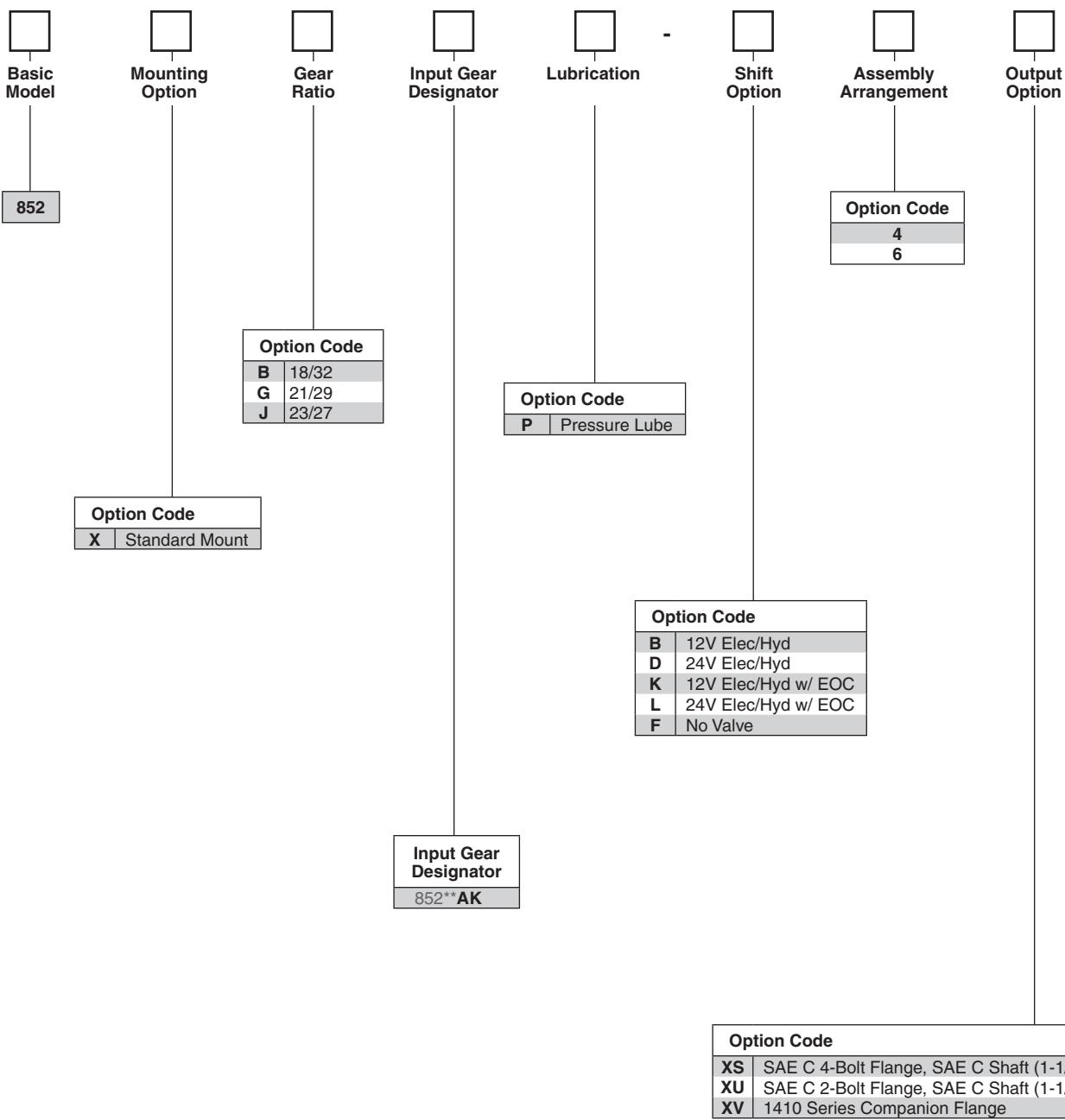
¹ Includes mounting parts⁵⁴ X Lube option only

¹ Includes mounting parts⁴⁷ Available with Wet Spline

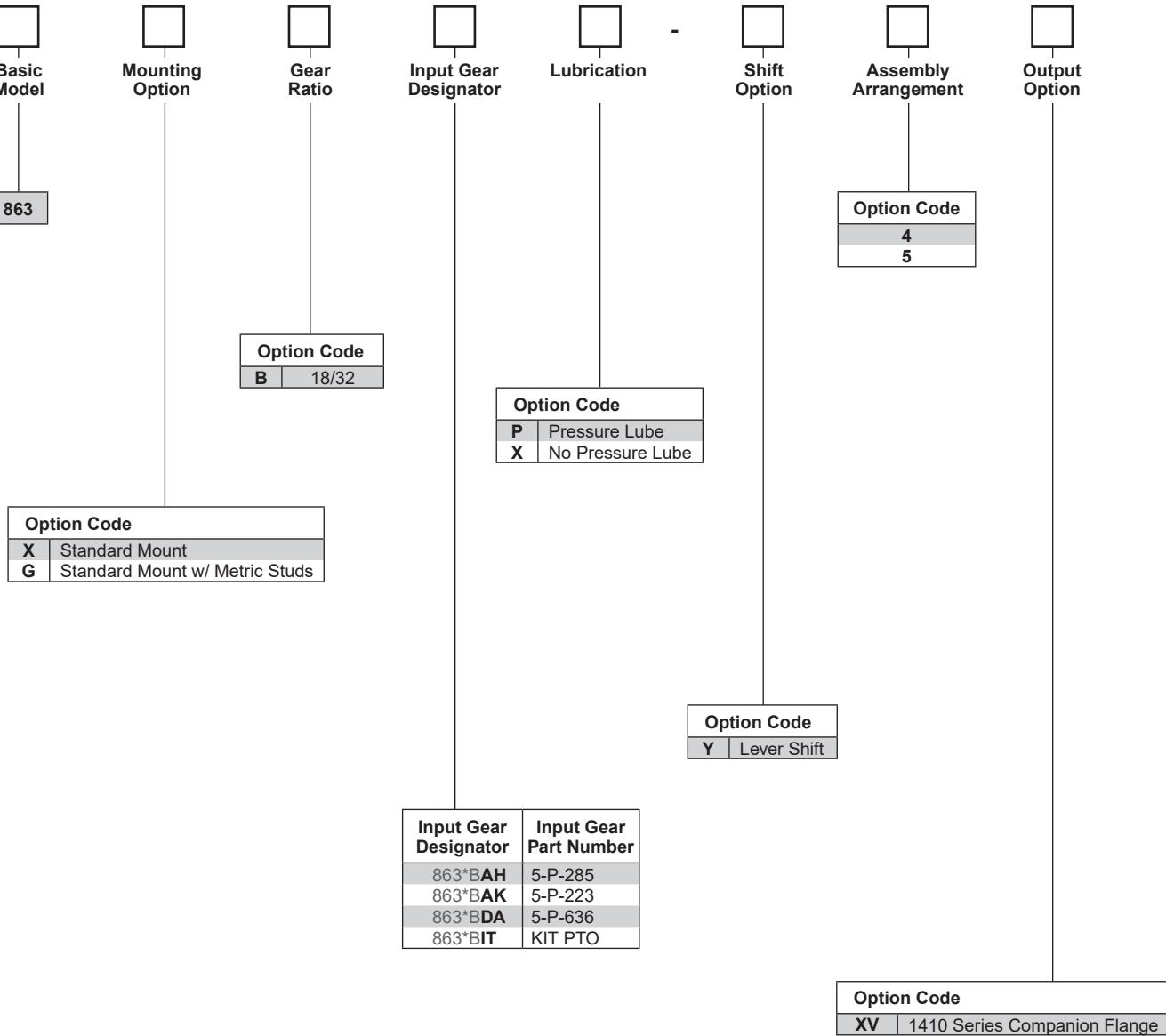
Assembly

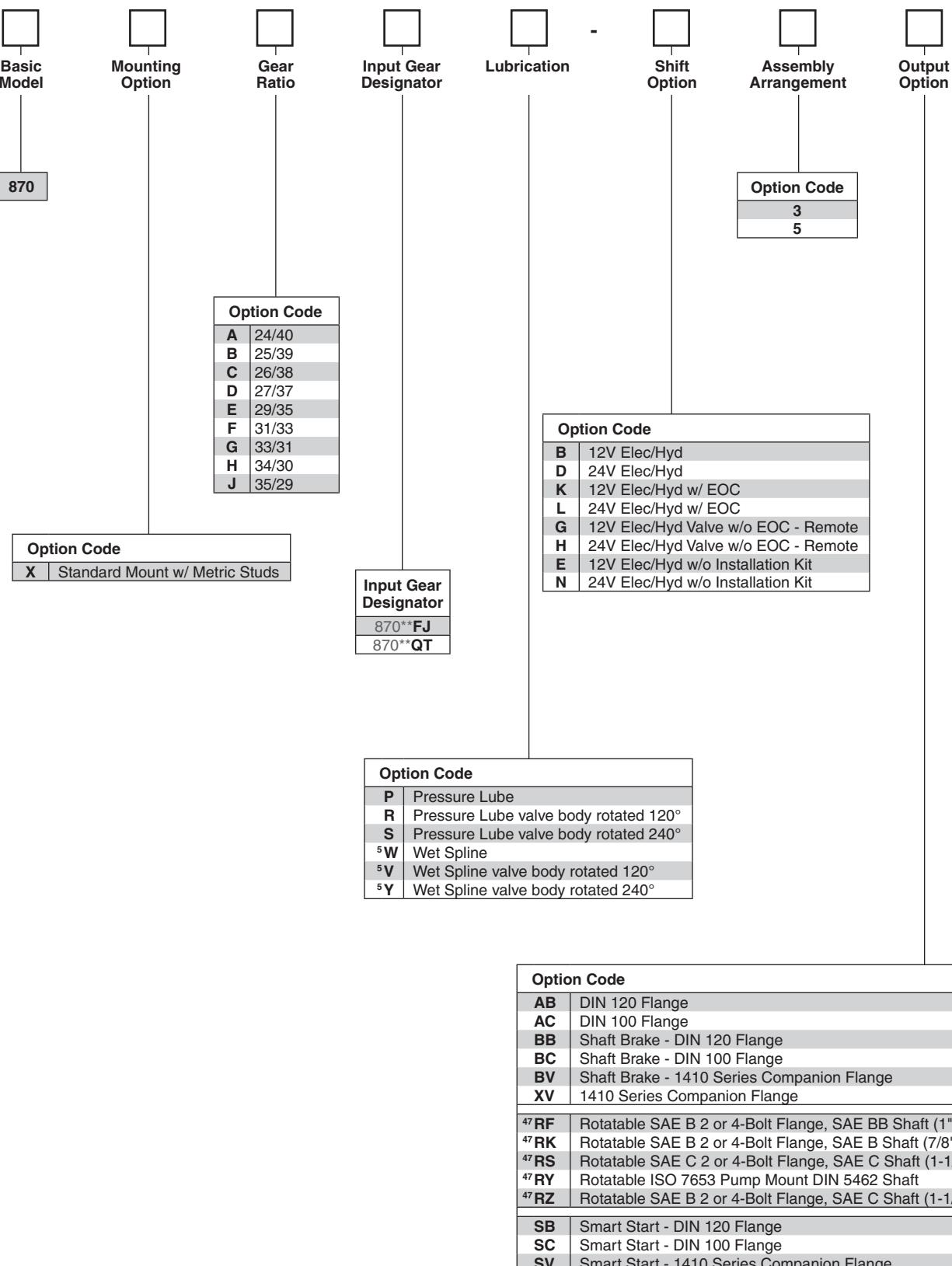


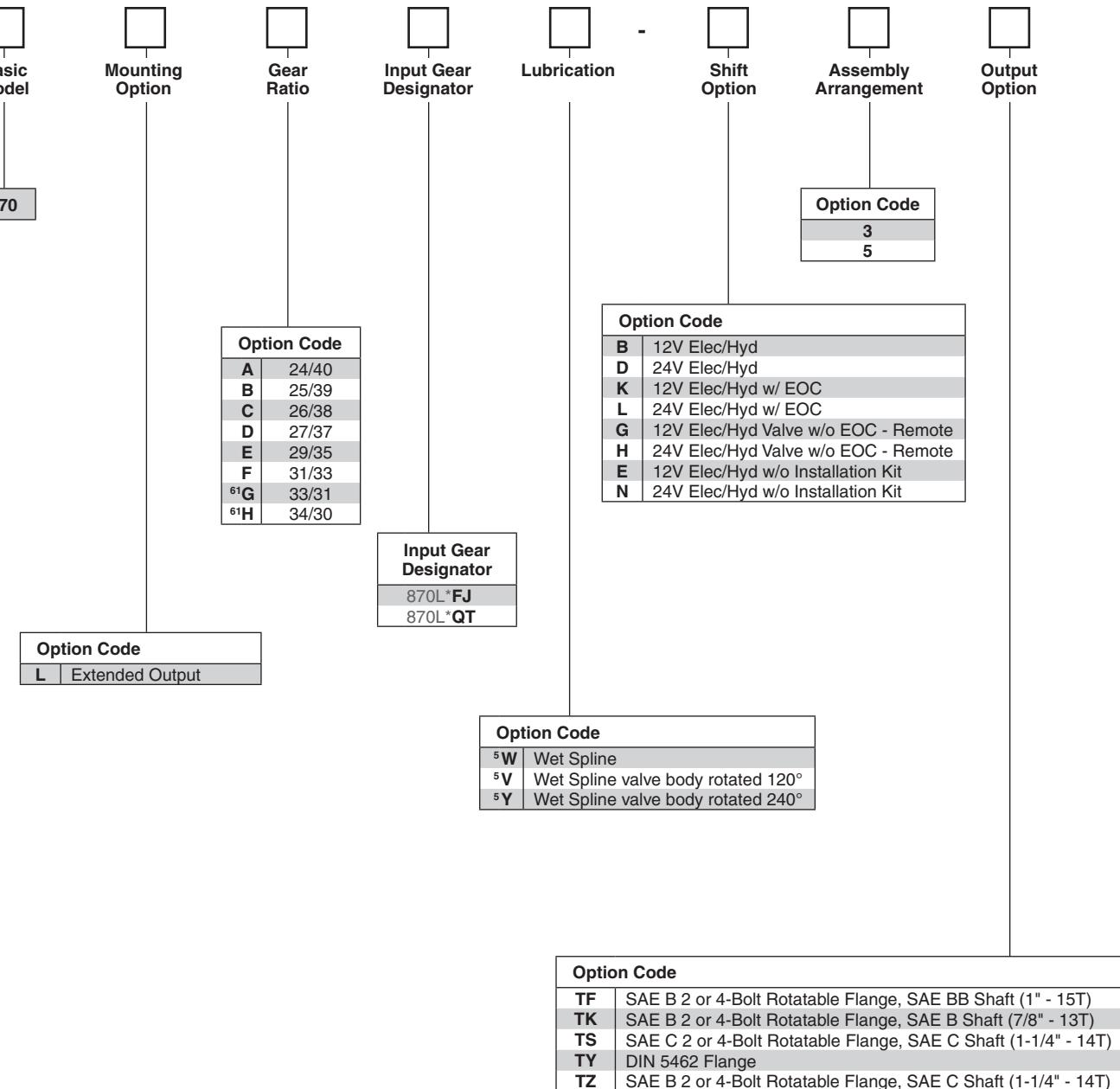
¹ Includes mounting parts
⁵⁴ X Lube option only



Assembly



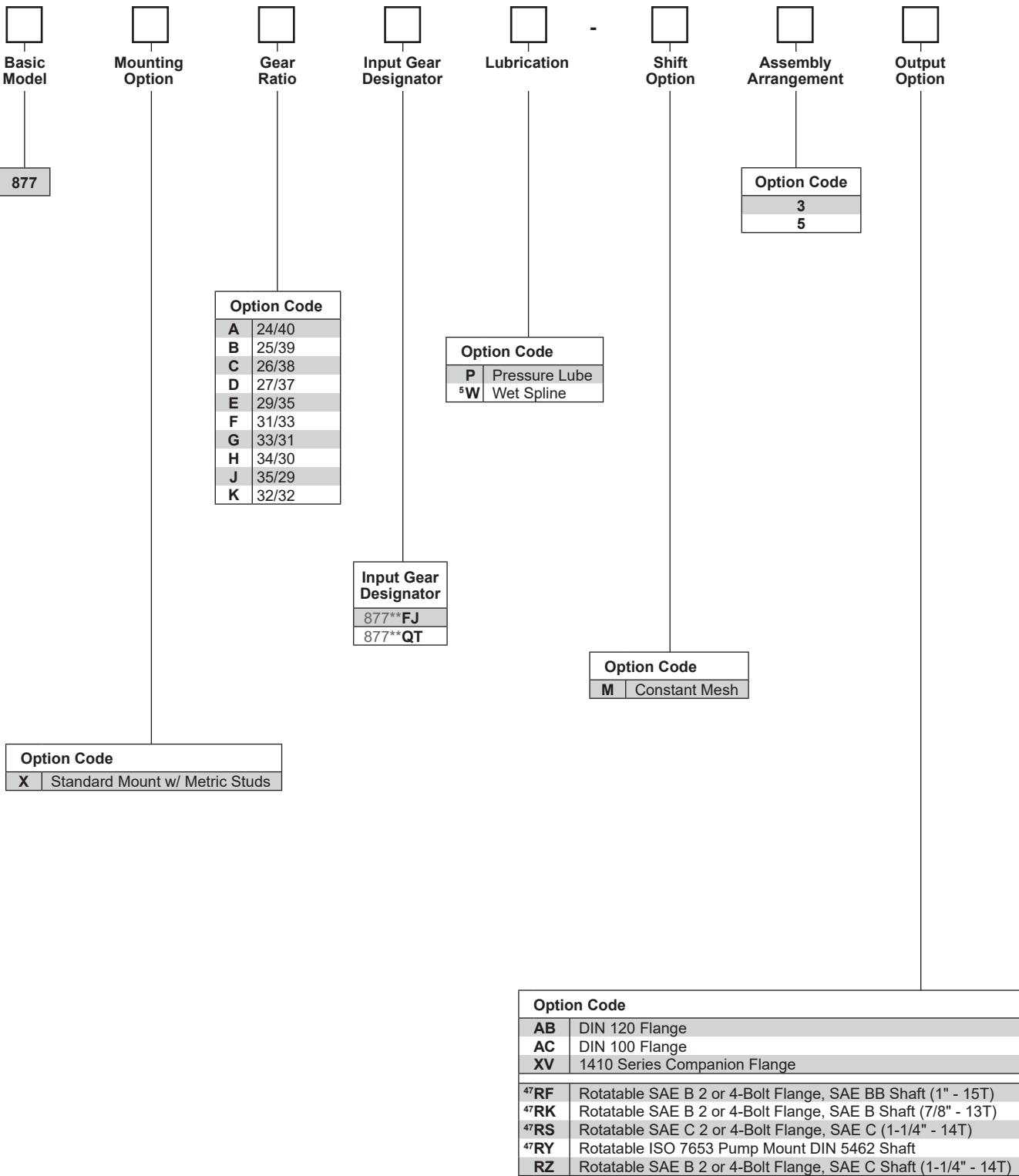
⁵ Automatically pressure lubed⁴⁷ Available with Wet Spline

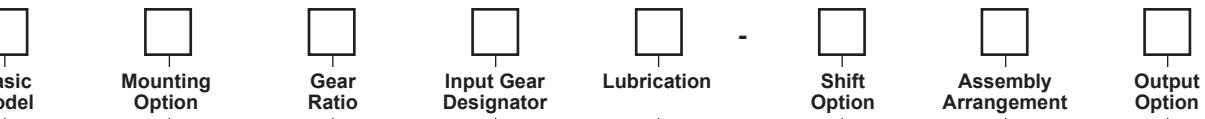


Assembly

⁵ Automatically pressure lubed

⁶¹ For the Allison 4000 Series Engineering Approval required

**Assembly**⁵ Automatically pressure lubed⁴⁷ Available with Wet Spline



877

Option Code	
A	24/40
B	25/39
C	26/38
D	27/37
E	29/35
F	31/33
G	33/31
H	34/30

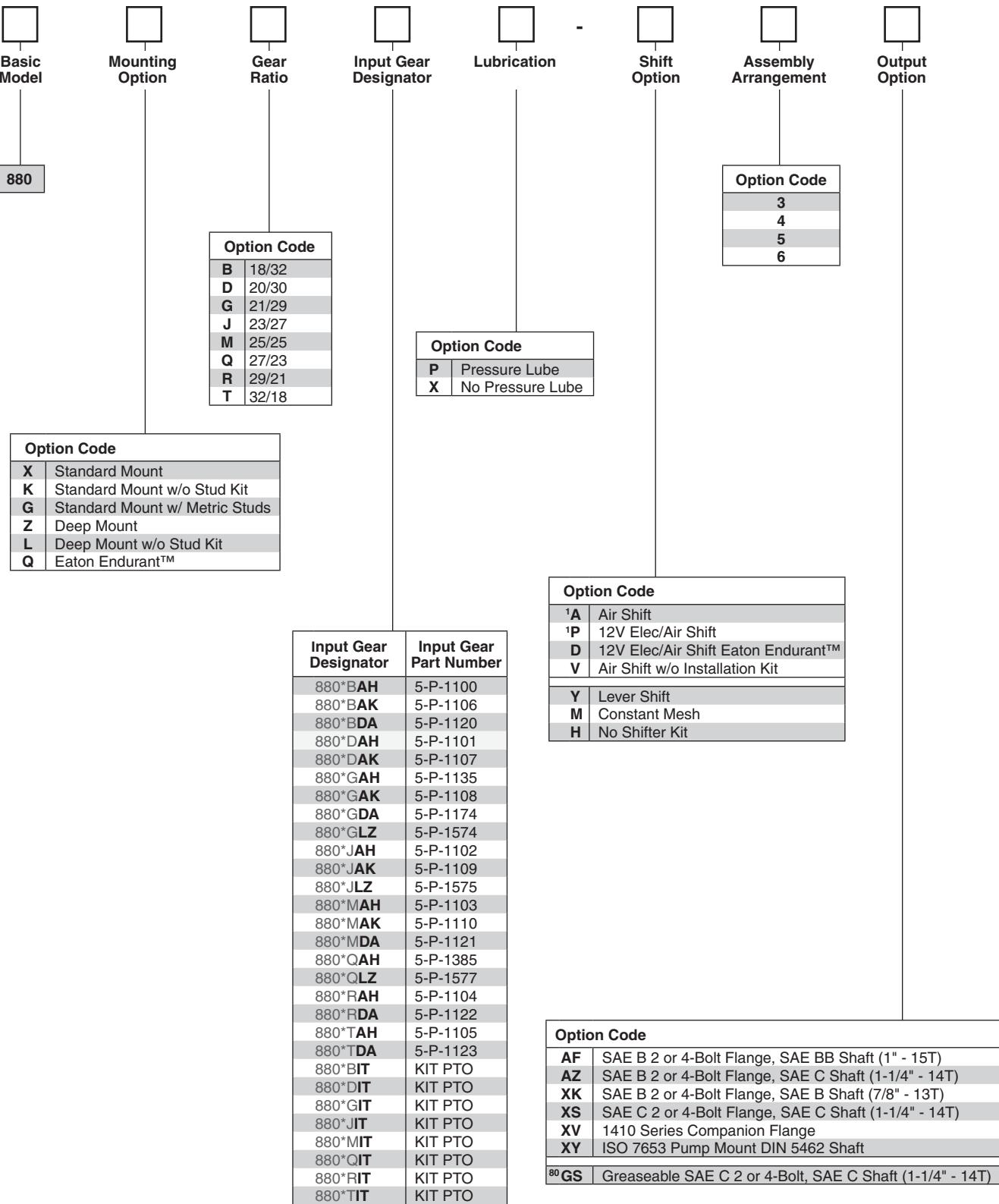
Option Code	
L	Extended Output

Input Gear Designator	
877L*FJ	
877L*QT	

Option Code	
W	Wet Spline

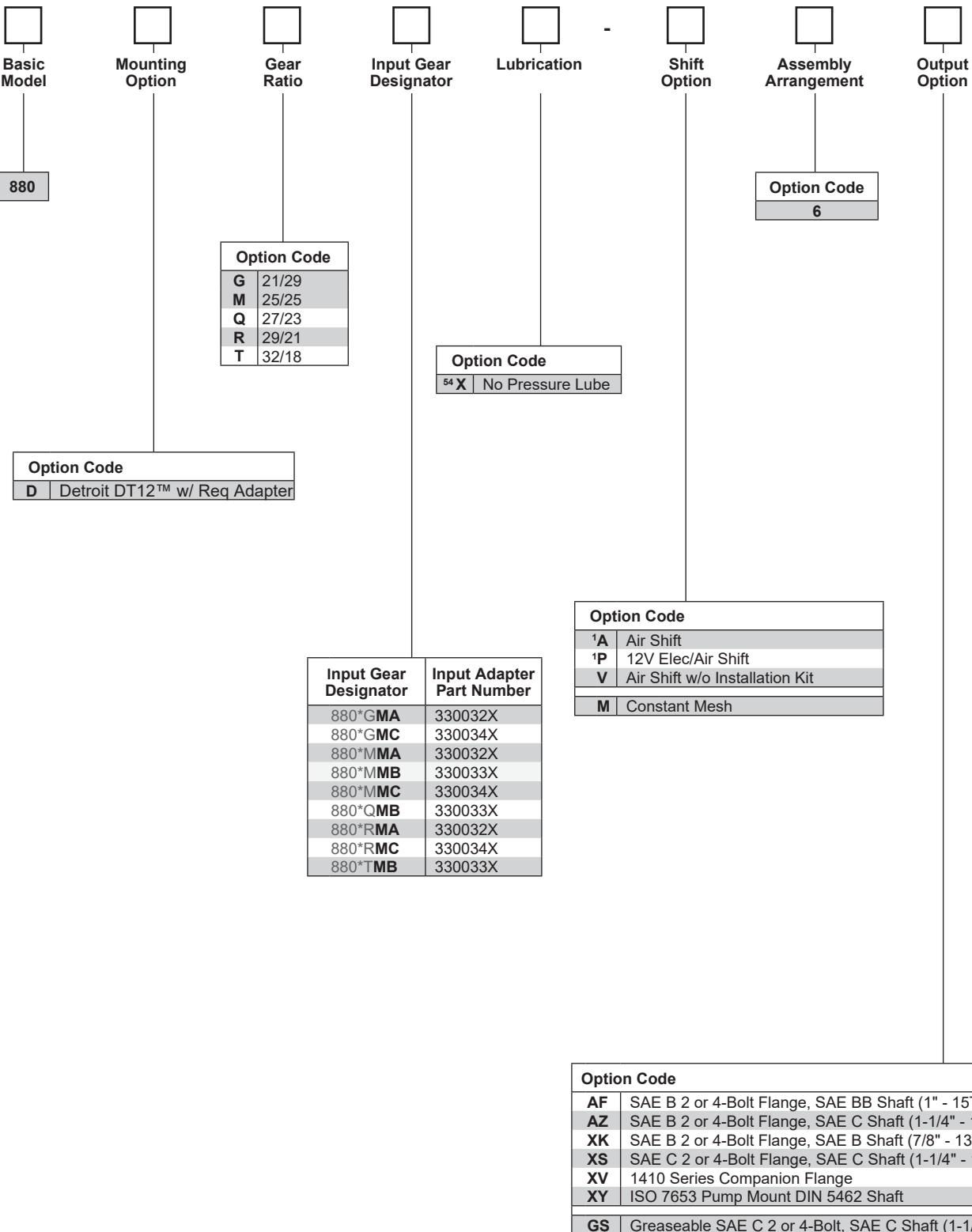
Option Code	
TF	SAE B 2 or 4-Bolt Rotatable Flange, SAE BB Shaft (1" - 15T)
TK	SAE B 2 or 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
TS	SAE C 2 or 4-Bolt Rotatable Flange, SAE C Shaft (1-1/4" - 14T)
TY	DIN 5462 Flange
TZ	SAE B 2 or 4-Bolt Rotatable Flange, SAE C Shaft (1-1/4" - 14T)

⁵ Automatically pressure lubed⁶¹ For the Allison 4000 Series Engineering Approval required

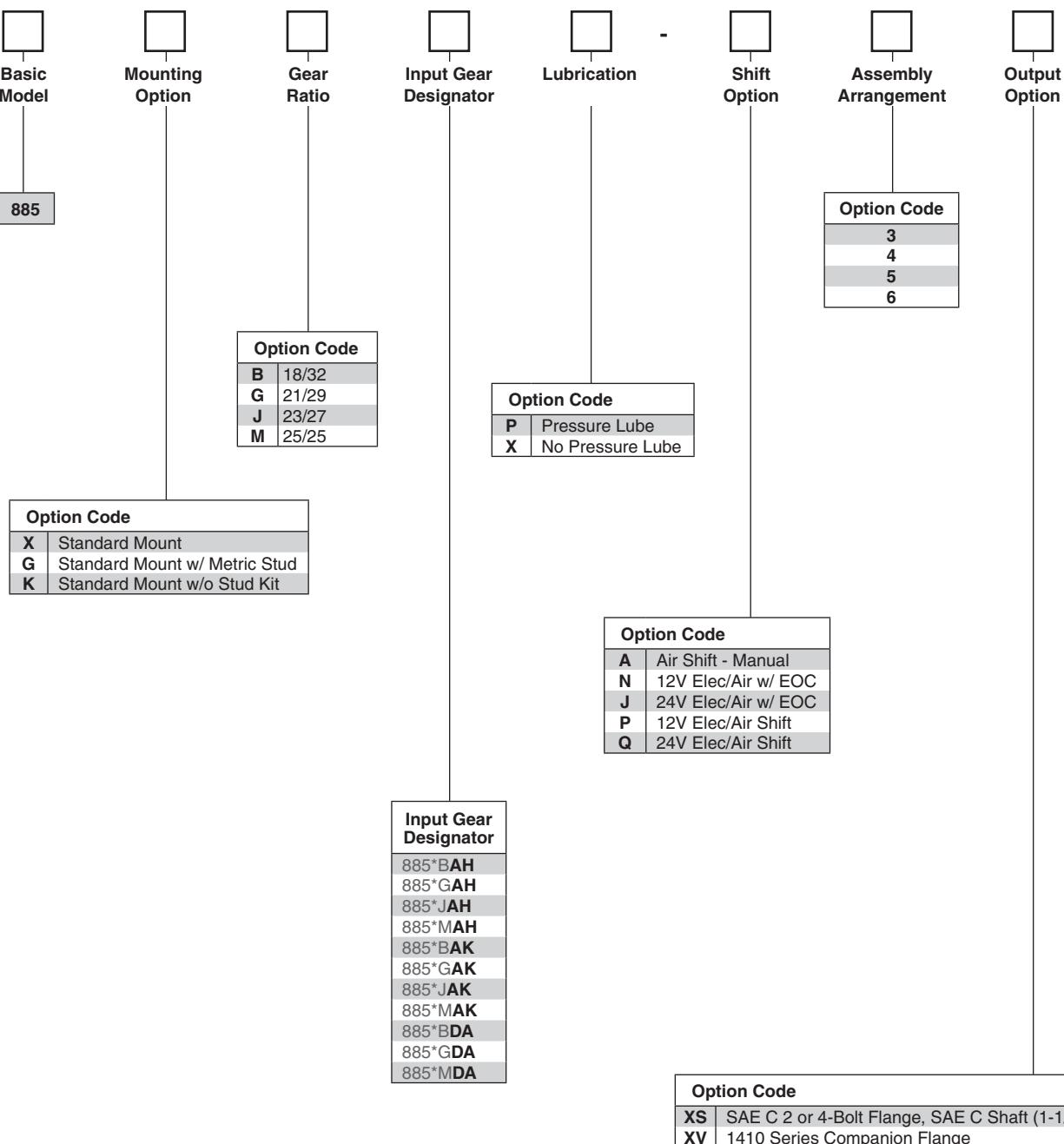


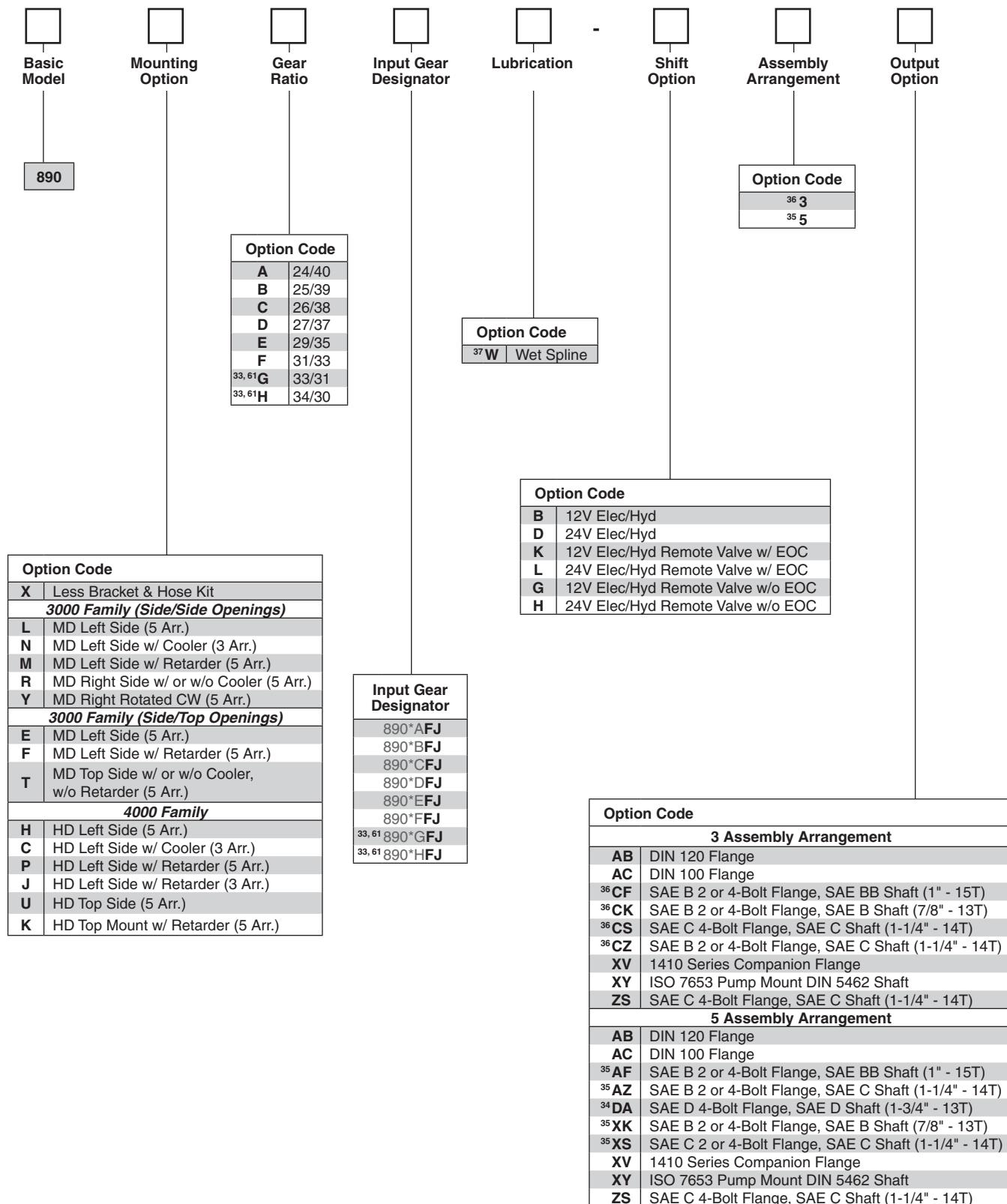
Assembly

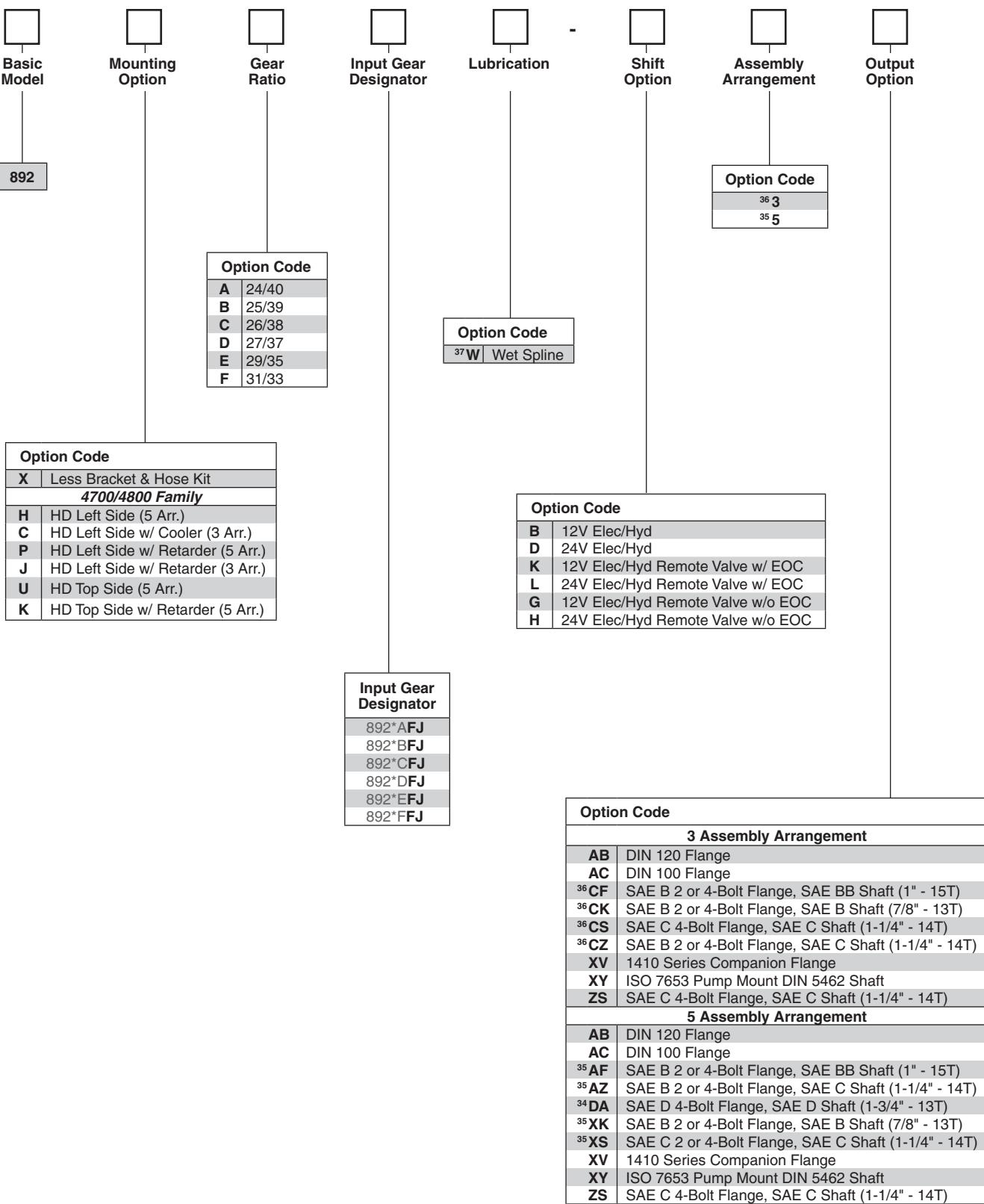
¹ Includes mounting parts⁸⁸⁰ No Pressure Lube Only



¹ Includes mounting parts
⁵⁴ X Lube option only


Assembly

³³ G & H ratio for Allison 3000 Series only³⁴ DA output is not available for transmission with a retarder or cooler³⁵ XS, XK, AF, AZ outputs available with 5 ass'y arrangement³⁶ CS, CK, CF, CZ outputs only available with 3 ass'y arrangement³⁷ Automatically pressure lubed with Wet Spline⁶¹ For the Allison 4000 Series Engineering Approval required



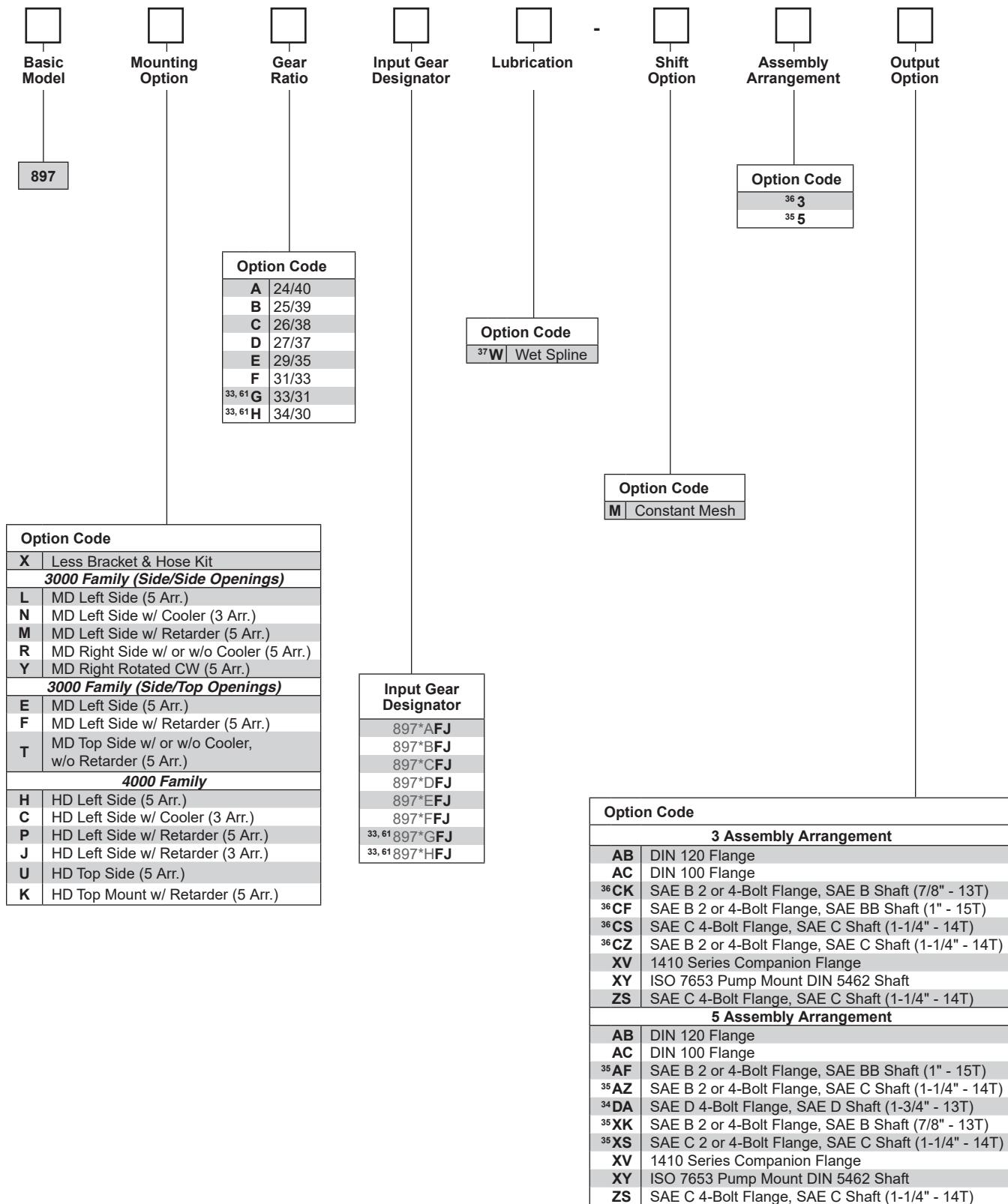
Assembly

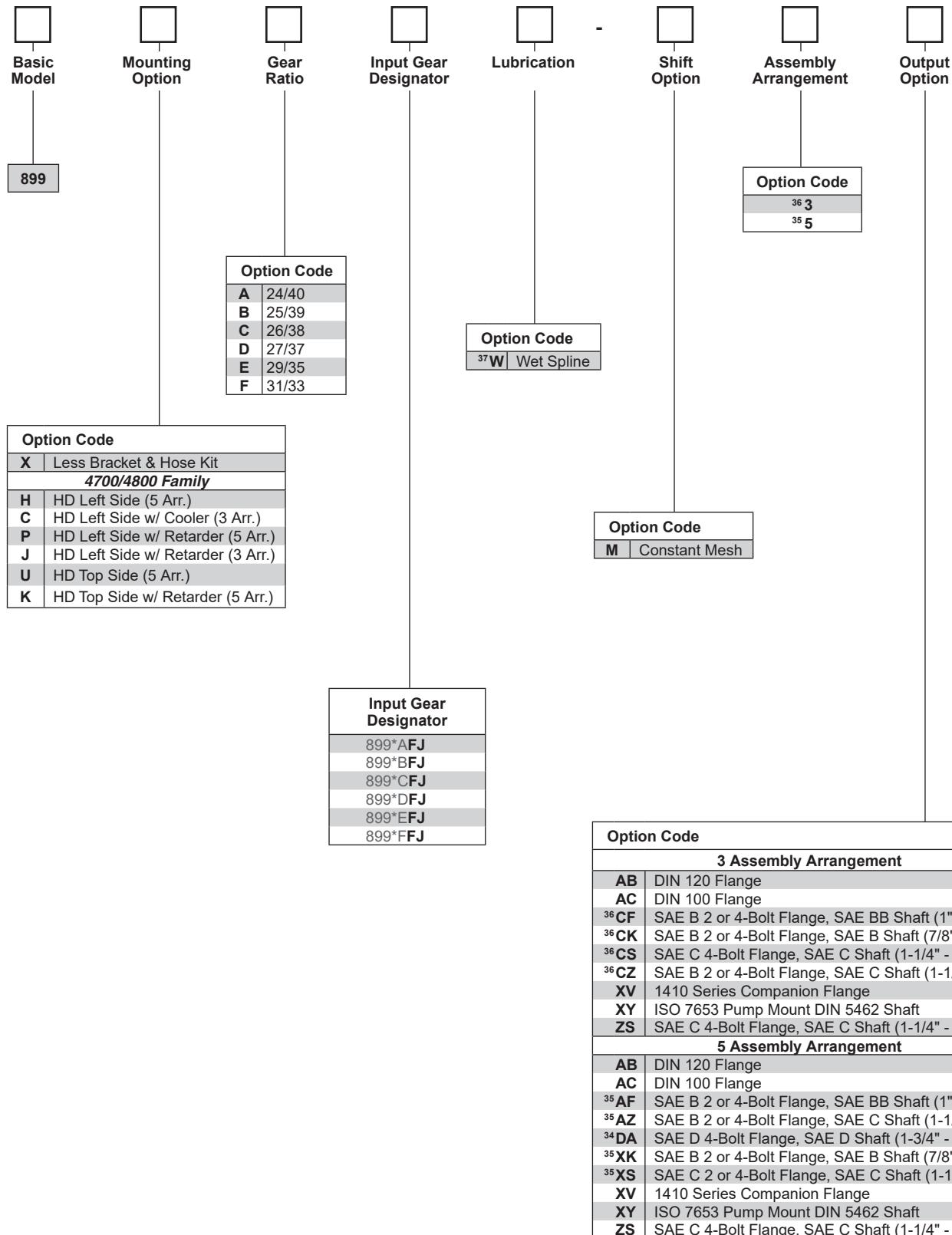
³⁴ DA output is not available for transmission with a retarder or cooler

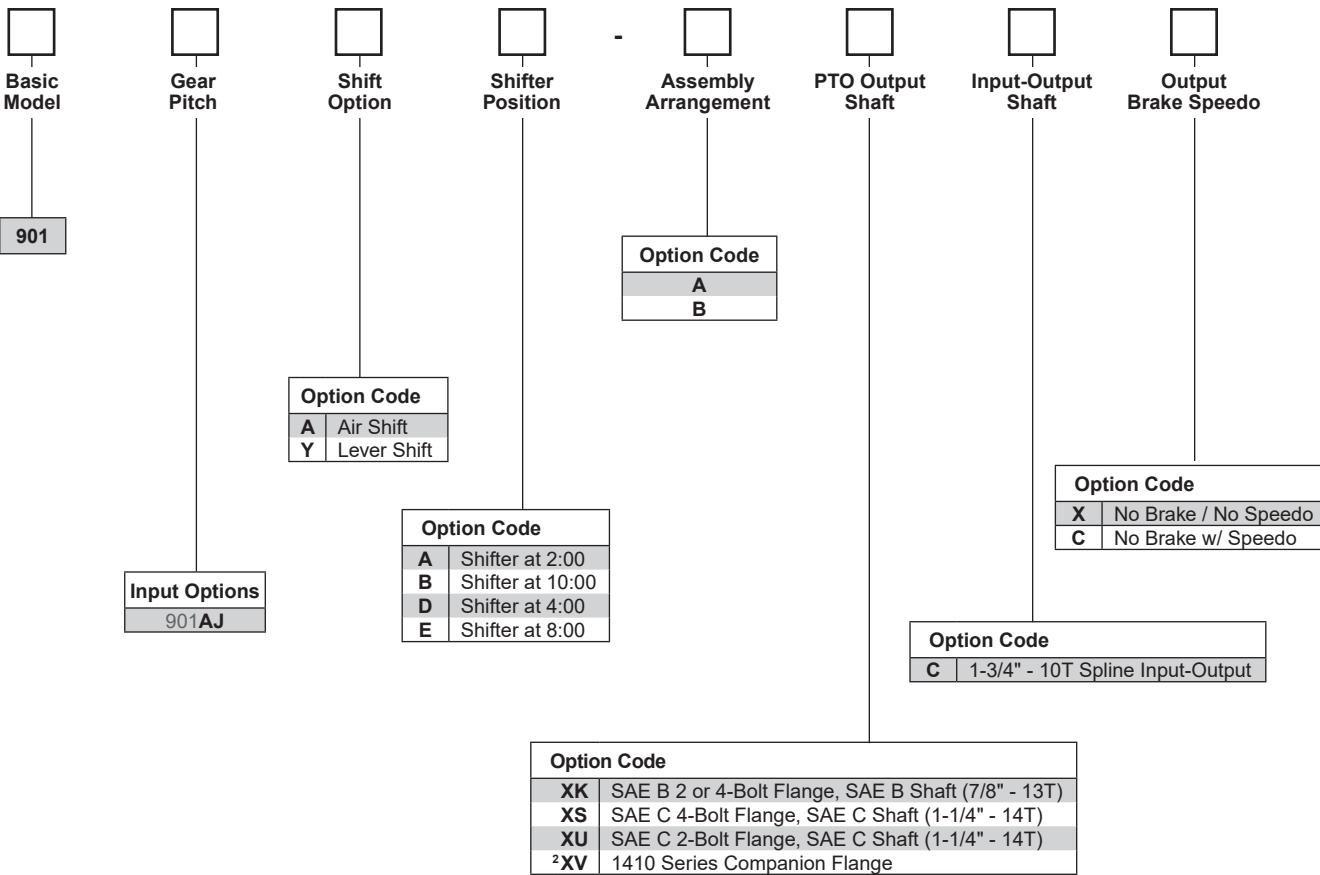
³⁵ XS, XK, AF, AZ outputs available with 5 ass'y arrangement

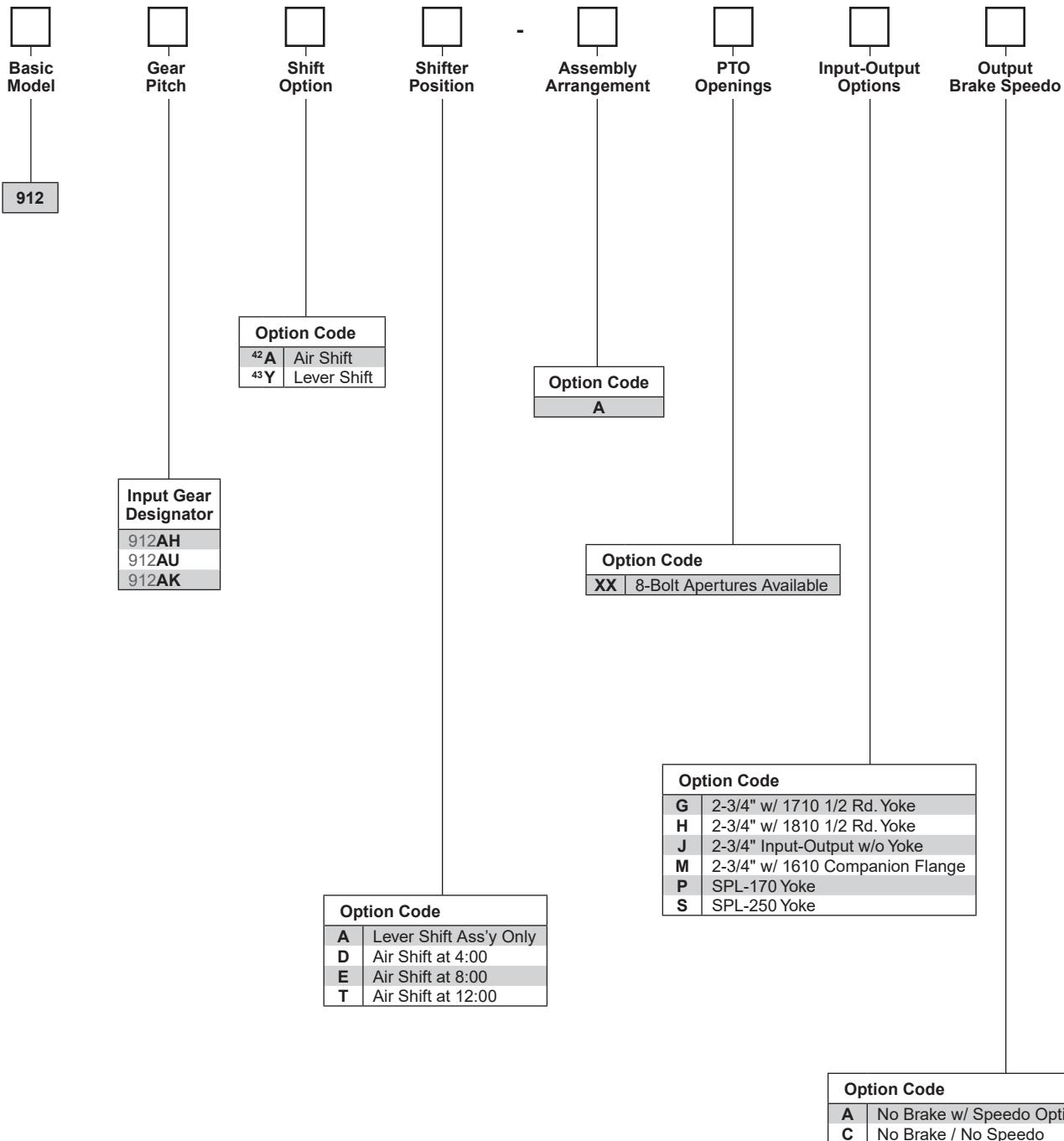
³⁶ CS, CK, CF, CZ outputs only available with 3 ass'y arrangement

³⁷ Automatically pressure lubed with Wet Spline

³³ G & H ratio for Allison 3000 Series only³⁴ DA output is not available for transmission with a retarder or cooler³⁵ XS, XK, AF, AZ outputs available with 5 ass'y arrangement³⁶ CS, CK, CF, CZ outputs only available with 3 ass'y arrangement³⁷ Automatically pressure lubed with Wet Spline⁶¹ For the Allison 4000 Series Engineering Approval required

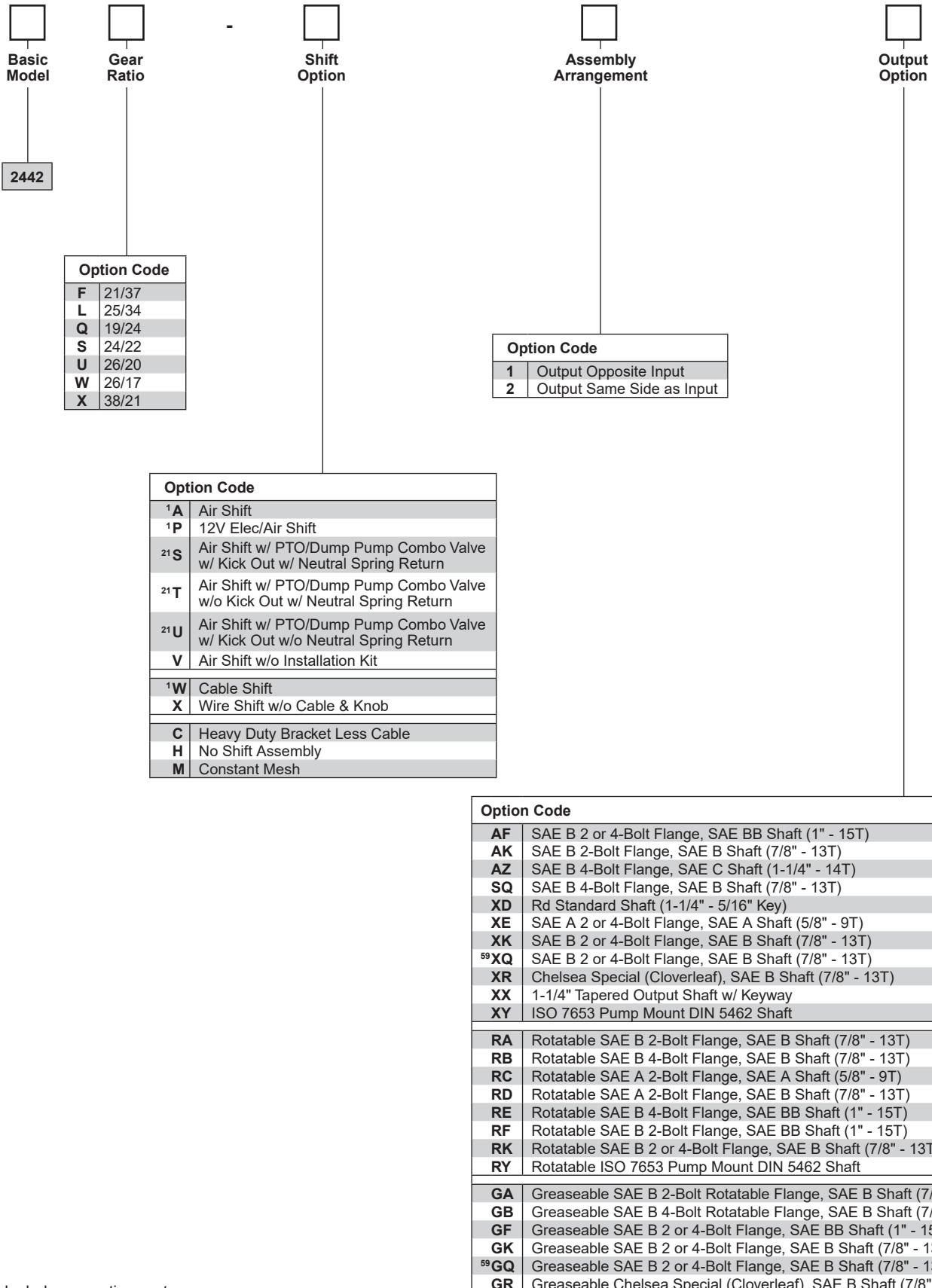
³⁴ DA output is not available for transmission with a retarder or cooler³⁵ XS, XK, AF, AZ outputs available with 5 ass'y arrangement³⁶ CS, CF, CZ outputs only available with 3 ass'y arrangement³⁷ Automatically pressure lubed with Wet Spline**Assembly**

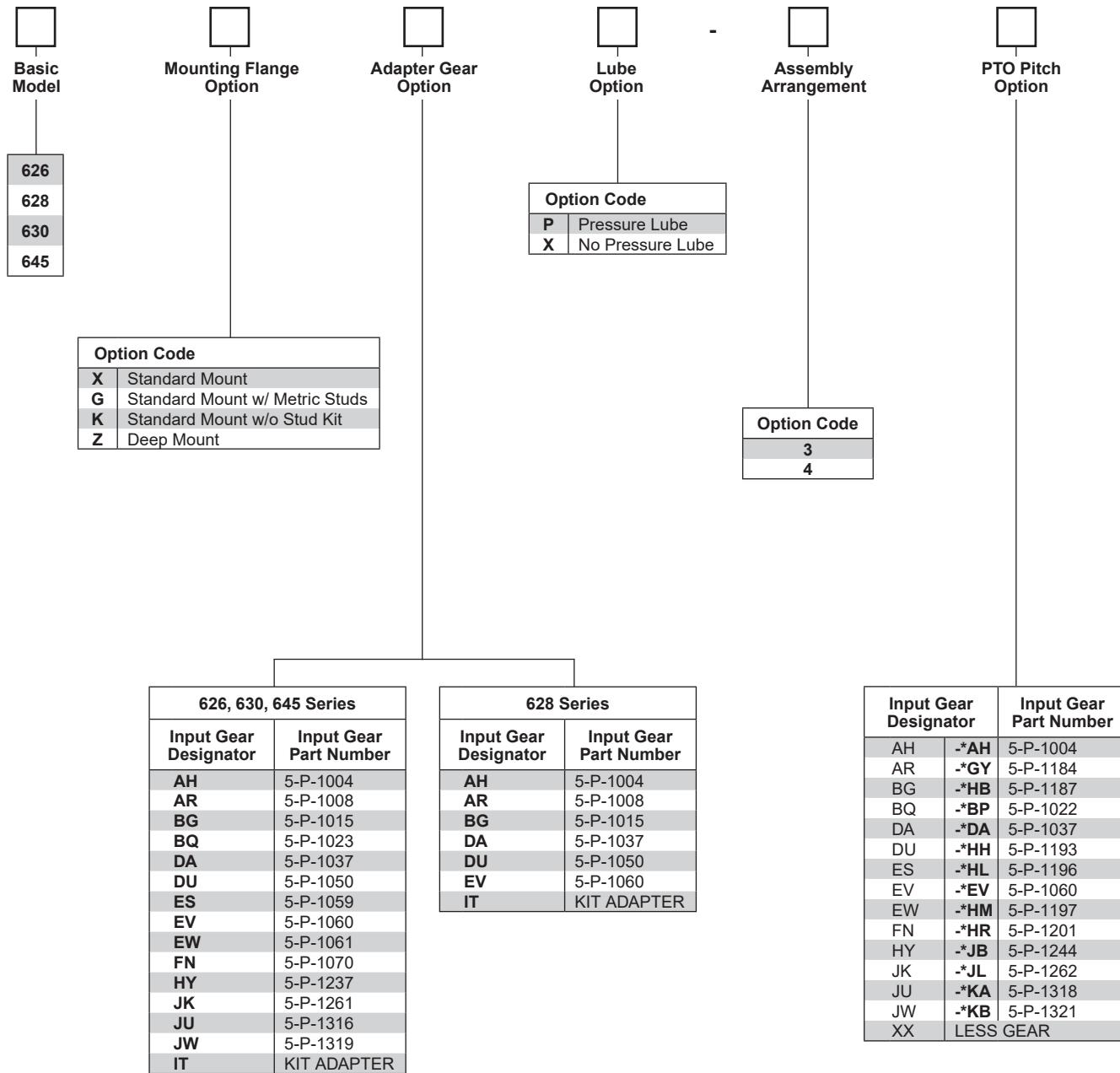




Assembly

⁴² Air Shift, two 8-Bolt opening available⁴³ Lever Shift, three 8-Bolt opening available

¹ Includes mounting parts²¹ Includes installation kit, console sold separately⁵⁹ Same as XK except rotated 90°



Assembly

NOTES

Assembly



APPLICATIONS



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

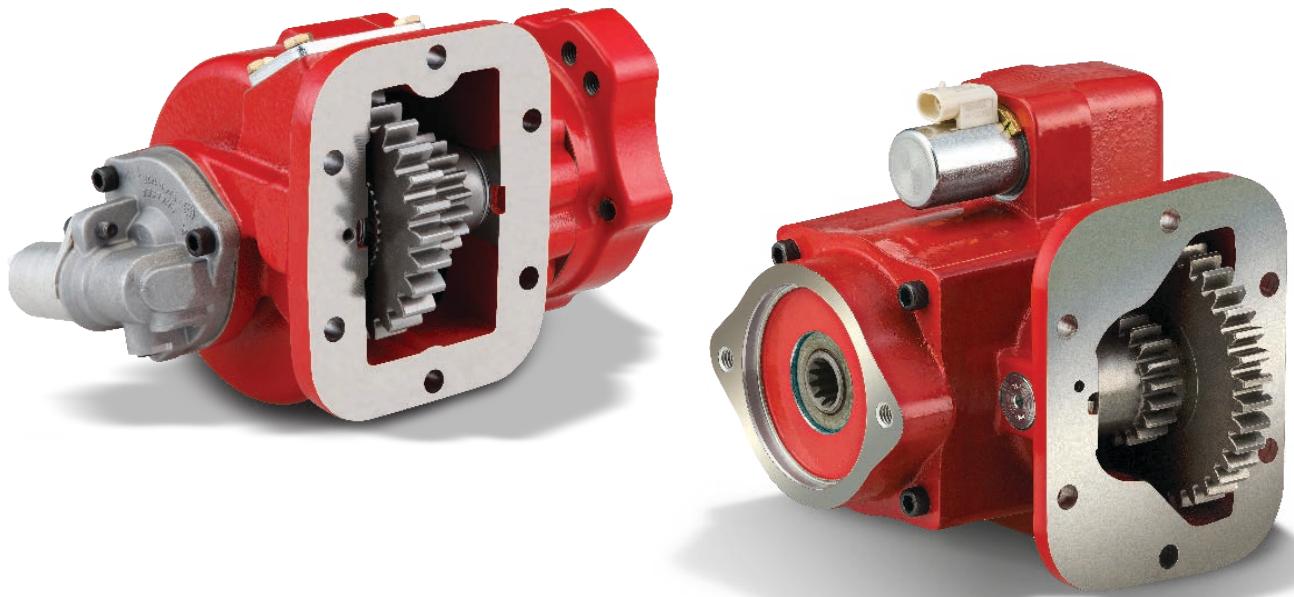
The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

 **WARNING:** This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

Aisin	5.1.1 thru 5.1.6
Allison	5.2.1 thru 5.2.74
Chelsea	5.3.1 thru 5.3.6
Dodge/RAM	5.4.1 thru 5.4.10
Eaton Fuller	5.5.1 thru 5.5.94
Ford	5.6.1 thru 5.6.18
GM	5.7.1 thru 5.7.6
Hino	5.8.1 thru 5.8.8
Isuzu	5.9.1 thru 5.9.6
Mack	5.10.1 thru 5.10.48
Mercedes/Daimler/Detroit	5.11.1 thru 5.11.14
Meritor/Rockwell	5.12.1 thru 5.12.26
Paccar	5.13.1 thru 5.13.4
Tremec/TTC/Spicer	5.14.1 thru 5.14.18
Volvo	5.15.1 thru 5.15.8
ZF	5.16.1 thru 5.16.36

AISIN



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
A443E	AIS-1	4	L58
A445	AIS-1	4	L58
A460 (Isuzu Number for MY400)	AIS-4	6	L63
A465 (Isuzu Number for MY600)	AIS-2	6	L69
A465HD	AIS-5	6	L69
A465ID	AIS-5	6	L69
A860E (Hino Number for MY400)	AIS-4	6	L63
A860F (Hino Number for MY400)	AIS-4	6	L63
MO35A4 (Mitsubishi/Fuso)	AIS-1	4	L58
MO36A6 (Mitsubishi/Fuso Number for MY600)	AIS-2	6	L69
MY400	AIS-4	6	L63
MY600	AIS-2	6	L69

Aisin



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

AIS-1

AISIN

CHELSEA®

A443E
A445
MO35A4 (Mitsubishi/Fuso)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
58 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272AAKUP-*5 (1)	199	C	Eng	58	Furnished
272ABKUP-*5 (2)	162	C	Eng	71	Furnished
272ACKUP-*5 (3)	134	C	Eng	86	Furnished
272ADKUP-*5 (4)	112	C	Eng	103	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1515-1X
- (2) Input Gear Part No. 5-P-1515-2X
- (3) Input Gear Part No. 5-P-1515-3X
- (4) Input Gear Part No. 5-P-1515-4X

CHELSEA®**AISIN****AIS-2**

A465 (Isuzu Number for MY600)
MO36A6 (Mitsubishi/Fuso Number for MY600)
MY600

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272AAKUP-*5 (1)	158 C	Eng	69	Furnished
272ABKUP-*5 (2)	129 C	Eng	84	Furnished
272ACKUP-*5 (3)	106 C	Eng	102	Furnished
272ADKUP-*5 (4)	89 C	Eng	122	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1515-1X
- (2) Input Gear Part No. 5-P-1515-2X
- (3) Input Gear Part No. 5-P-1515-3X
- (4) Input Gear Part No. 5-P-1515-4X

Aisin

AIS-4

AISIN

CHELSEA®

A460 (Isuzu Number for MY400)
 A860E (Hino Number for MY400)
 A860F (Hino Number for MY400)
 MY400

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear FORWARD of Centerline
 63 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.1" (27.6MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272AAKUP-*5 (1)	173 C	Eng	63	Furnished
272ABKUP-*5 (2)	141 C	Eng	77	Furnished
272ACKUP-*5 (3)	117 C	Eng	93	Furnished
272ADKUP-*5 (4)	97 C	Eng	111	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1515-1X
- (2) Input Gear Part No. 5-P-1515-2X
- (3) Input Gear Part No. 5-P-1515-3X
- (4) Input Gear Part No. 5-P-1515-4X

A465HD
A465ID**LEFT SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd	Rev					I / C ↑	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272AAKUP-*5 (1)	196 C	Eng	69	Furnished
272ABKUP-*5 (2)	160 C	Eng	84	Furnished
272ACKUP-*5 (3)	132 C	Eng	102	Furnished
272ADKUP-*5 (4)	111 C	Eng	122	Furnished
272AGKUP-*5 (5)	93 C	Eng	145	Furnished
272AKKUP-*5 (6)	83 C	Eng	162	Furnished
272AMKUP-*5 (7)	74 C	Eng	181	Furnished
272APKUP-*5 (8)	67 C	Eng	203	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1515-1X (6) Input Gear Part No. 5-P-1515-6X
- (2) Input Gear Part No. 5-P-1515-2X (7) Input Gear Part No. 5-P-1515-7X
- (3) Input Gear Part No. 5-P-1515-3X (8) Input Gear Part No. 5-P-1515-8X
- (4) Input Gear Part No. 5-P-1515-4X
- (5) Input Gear Part No. 5-P-1515-5X

Aisin

Aisin Notes

AIS-1

1. The torque ratings shown are based on the maximum allowable torque capacity of the PTO drive gear in the transmission.

AIS-2

1. The A465 (MY600) transmissions in Isuzu trucks started TCC Lock-up in PTO Mode in MY2010. The transmission build start dates were June 2010. The vehicle code for MY2010 is "VN60."
2. The A460 (MY400) and A465 (MY600) share the same transmission housing and both have a "shelf" in the aperture that interferes with the ratio gear of the 272, starting with the K ratio. The older 270 series fit with higher ratios because the input ratio gear was not as wide.

AIS-4

1. The A460 (MY400) and A465 (MY600) share the same transmission housing and both have a "shelf" in the aperture that interferes with the ratio gear of the 272, starting with the K ratio. The older 270 series fit with higher ratios because the input ratio gear was not as wide.

AIS-5

1. The A465D (Isuzu Diesel) and A465HD (Hino Diesel) transmissions are available for MY20+

ALLISON



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

Allison Transmission Identification

In July 2005 Allison Transmission redesigned the transmission nameplates for all 1000/2000 and 3000/4000 Product Family transmissions. The new nameplate design contains only the information essential to the identification of the transmission. The transmission model number will no longer appear on the nameplate, it has been replaced by the serial number.

The transmission product family is identified by the first two digits of the transmission serial number:

Serial Number	Product Family
63xxxxxxxx	1000 and 2000 Product Family
65xxxxxxxx	3000 Product Family
66xxxxxxxx	4000 Product Family

"SP" models will contain additional information to accommodate military applications. The transmission E-number is embossed on the "SP" models and when required for other models sold to the military. The transmission model number is embossed on the nameplate for "SP" model and "MD" and "HD" models sold to the military. The model number will not be embossed for any other model. (Ref: Allison Watch #335 Rev. A)

For further assistance contact Allison Technical Assistance at (800) 252-5283.

The Allison transmission serial number can be used to verify transmissions options. Use the link below to determine the options. Contact Allison Transmission for any questions regarding their options.
<https://www.allisontransmission.com/parts-service/my-transmission>

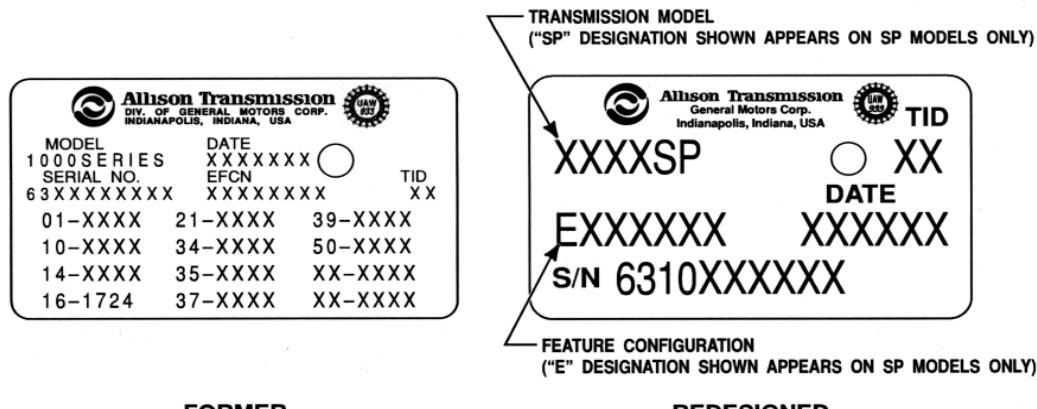


Figure 1. 1000 and 2000 Product Families Nameplates

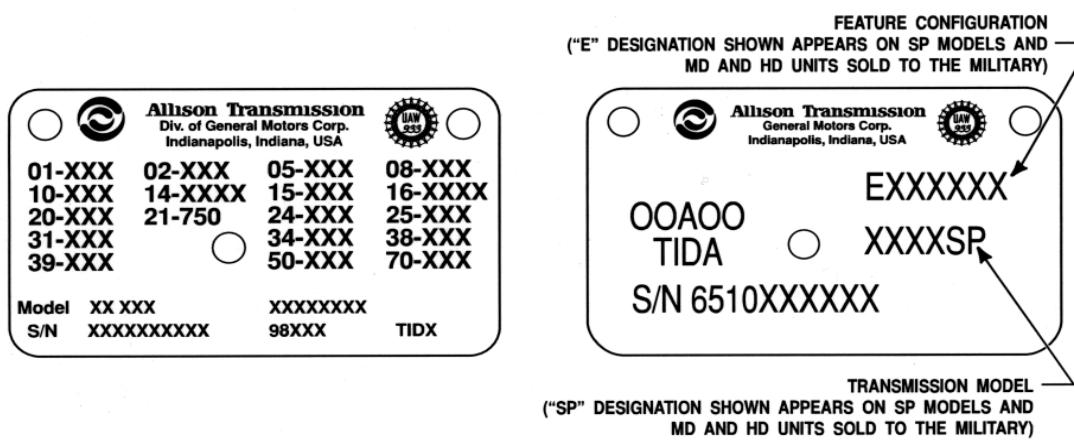


Figure 2. 3000 and 4000 Product Families Nameplates

Allison

ALLISON TRANSMISSION INDEX

890 Family Fitment to Transmission								
Application Page	Arr.	Mounting PTO Code	Transmission Location	Flange Options				
				XS	XK/AF/AZ	XY	DA	ZS/TS
3000 Series Side/Side								
All-13	5	L	Left side	L	L	L	L	
All-13	5	R	Right side	R	R	R	R	R
All-13C	3	N	Left side w/ Cooler			N		N
All-13C	5	R	Right side w/ Cooler	R	R	R		R
All-13R	5	M	Left side w/ Retarder	M	M	M		
All-13R	3	A	Left side w/ Retarder, and Cooler					
All-13R		N/A	Right side w/ Retarder					
3000 Series Side/Top								
All-16	5	E	Left side	E	E	E	E	
All-16	5	T	Right Top side	T	T	T	T	
All-16EV	5	E	Left side (w/o cooler or retarder)	E	E	E	E	
All-16EV	5	T	Right Top side (w/o cooler or retarder)	T	T	T	T	
All-16C	3	D	Left side w/ Cooler			D		D
All-16C	5	T	Right Top side w/ Cooler	T	T	T	T	
All-16R	5	F	Left side w/ Retarder	F	F	F		
All-16R	3	B	Left side w/ Retarder, and Cooler					
All-16R	5	G	Right Top side w/ Retarder					
4000 Series 6-Speed								
All-14	5	H	Left side	H	H	H	H	
All-14	5	U	Right Top side	U	U	U	U	
All-14C	3	C	Left side w/ Cooler			C		C
All-14C	5	U	Right Top side w/ Cooler	U	U	U	U	
All-14R	5	P	Left side w/ Retarder		P	P	P	
All-14R	3	J	Left side w/ Retarder			J		J
All-14R	5	K	Right Top side w/ Retarder	K	K	K		
4000 Series 7-Speed								
All-19	5	H	Left side	H	H	H	H	
All-19	5	U	Right Top side	U	U	U	U	
All-19C	3	C	Left side w/ Cooler			C		C
All-19C	5	U	Right Top side w/ Cooler	U	U	U	U	
All-19R	5	P	Left side w/ Retarder		P	P	P	
All-19R	3	J	Left side w/ Retarder			J		J
All-19R	5	K	Right Top side w/ Retarder	K	K	K		

N/A = No Application

Arr. = Assembly Arrangement

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
1000	ALL-15	5	L64-R64
1000 (GM 3600 Cab-Chassis)	ALL-17	5	R64
1000 EVS (Emergency Vehicles Only)	ALL-15	5	L64-R64
1000 MH (Motorhome)	ALL-15	5	L64-R64
1000 RDS (Rugged Duty Service)	ALL-15	5	L64-R64
1350 (Available in 4,5 & 6 Speed)	ALL-15	6	L64-R64
1350 EVS (Emergency Vehicles Only Available in 4,5 & 6 Speed)	ALL-15	6	L64-R64
1350 MH (Motorhome) (Available in 4,5 & 6 Speed)	ALL-15	6	L64-R64
1350 RDS (Rugged Duty Service Available in 4,5 & 6 Speed)	ALL-15	6	L64-R64
1350 SP (Specialty Series) (Available in 4,5 & 6 Speed)	ALL-15	6	L64-R64
1700	ALL-21	6	L64-R64
1750	ALL-21	6	L64-R64
2000	ALL-15	5	L64-R64
2100 EVS (Emergency Vehicles Only)	ALL-15	5	L64-R64
2100 MH (Motorhome)	ALL-15	5	L64-R64
2100 RDS (Rugged Duty Service)	ALL-15	5	L64-R64
2200 EVS (Emergency Vehicles Only)	ALL-15	5	L64-R64
2200 MH (Motorhome)	ALL-15	5	L64-R64
2200 RDS (Rugged Duty Service)	ALL-15	5	L64-R64
2300 RDS (Rugged Duty Service)	ALL-15	6	L64-R64
2400	ALL-15	5	L64-R64
2500 EVS (Emergency Vehicles Only)	ALL-15	5	L64-R64
2500 MH (Motorhome)	ALL-15	5	L64-R64
2500 RDS (Rugged Duty Service)	ALL-15	5	L64-R64
2700	ALL-21	6	L64-R64
2750	ALL-21	6	L64-R64
3000 (3000 Family - Side/Top PTO Provision w/ Retarder)	ALL-16R	6	L83-T83
3000 (3000 Family- Side/Side PTO Provision w/ Retarder)	ALL-13R	6	L68-R68
3000 (3000 Family Side/Top PTO Provision w/ Integral Cooler)	ALL-16C	6	L83-T83
3000 (3000 Family-Side/Side PTO Provision w/ Integral Cooler)	ALL-13C	6	L68-R68
3000 (Econic) (3000 Family-Side/Side PTO Provision w/ Integral Cooler Daimler Econic)	ALL-13EC	6	L68
3000 (International - Side/Side PTO Provision)	ALL-13	6	L68-R68
3000 (International - Side/Top PTO Provision)	ALL-16	6	L83-T83
3000 EVS (Emergency Vehicles Only Top/Side PTO Provisions)	ALL-16EV	6	L83-T83
3000 EVS (Emergency Vehicles Only Side/Side Power Take-Off Provisions)	ALL-13	6	L68-R68
3000 MH (Motorhome)	ALL-13	6	L68-R68



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Allison

ALLISON TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
3000 ORS (Off Road Service Side/Side Power Take Off - Provisions)	ALL-13	6	L68-R68
3000 ORS (Off Road Service Side/Top PTO Provision)	ALL-16	6	L83-T83
3000 RDS (Rugged Duty Service)	ALL-13	6	L68-R68
3000 RDS (Rugged Duty Service Side/Top PTO Provision)	ALL-16	5	L83-T83
3000 SP (Specialty Series) (Side/Side PTO Option)	ALL-13	6	L68-R68
3000 SP (Specialty Series) (Side/Top PTO Provision)	ALL-16	6	L83-T83
3000 TRV (Truck RV)	ALL-13	6	L68-R68
3200 (International - Side/Side PTO Provision)	ALL-13	6	L68-R68
3200 (International - Side/Top PTO Provision)	ALL-16	6	L83-T83
3200 ORS (Off Road Service Side/Side PTO Provision)	ALL-13	6	L68-R68
3200 ORS (Off Road Service Side/Top PTO Provision)	ALL-16	6	L83-T83
3200 SP (Specialty Series) (Side/Side PTO Provision)	ALL-13	6	L68-R68
3200 SP (Specialty Series) (Side/Top PTO Provision)	ALL-16	6	L83-T83
3200 TRV (Truck RV)	ALL-13	6	L68-R68
3414	ALL-13	6	L68-R68
3500 (International - Side/Side PTO Provision)	ALL-13	6	L68-R68
3500 (International - Side/Top PTO Provision)	ALL-16	6	L83-T83
3500 EVS (Emergency Vehicles Only Top/Side PTO Provisions)	ALL-16EV	6	L83-T83
3500 EVS (Emergency Vehicles Only Side/Side Power Take-Off Provisions)	ALL-13	6	L68-R68
3500 OFS (Oil Field Service)	ALL-13	6	L68-R68
3500 ORS (Off Road Service Side/Side PTO Provision)	ALL-13	6	L68-R68
3500 ORS (Off Road Service Side/Top PTO Provision)	ALL-16	6	L83-T83
3500 RDS (Rugged Duty Service)	ALL-13	6	L68-R68
3500 RDS (Rugged Duty Service Side/Top PTO Provision)	ALL-16	6	L83-T83
3500 SP (Specialty Series) (Side/Side PTO Provision)	ALL-13	6	L68-R68
3500 SP (Specialty Series) (Side/Top PTO Provision)	ALL-16	6	L83-T83
3700	ALL-18	7	L68-R68
3700 SP (Specialty Series)	ALL-18	7	L68-R68
4000 (4000 Family w/ Integral Cooler)	ALL-14C	6	L97-T97
4000 (4000 Family w/ Retarder)	ALL-14R	6	L97-T97
4000 EVS (Emergency Vehicles Only)	ALL-14	6	L97-T97
4000 MH (Motorhome)	ALL-14	6	L97-T97
4000 RDS (Rugged Duty Service)	ALL-14	6	L97-T97
4000 TRV (Truck RV)	ALL-14	6	L97-T97
4430	ALL-14	6	L97-T97
4430 ORS (Off Road Service)	ALL-14	6	L97-T97
4430 SP (Specialty Series)	ALL-14	6	L97-T97

Allison



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
4440	ALL-14	6	L97-T97
4500 EVS (Emergency Vehicles Only)	ALL-14	6	L97-T97
4500 RDS (Rugged Duty Service)	ALL-14	6	L97-T97
4700	ALL-19	7	L97-T97
4700 (4700 Family w/ Integral Cooler)	ALL-19C	7	L97-T97
4700 (4700 Family w/ Retarder)	ALL-19R	7	L97-T97
4700 EVS (Emergency Vehicles Only)	ALL-19	7	L97-T97
4700 OFS (Oil Field Service)	ALL-19	7	L97-T97
4700 RDS (Rugged Duty Service)	ALL-19	7	L97-T97
4700 SP (Specialty Series)	ALL-19	7	L97-T97
4800	ALL-19	7	L97-T97
4800 (4800 Family w/ Integral Cooler)	ALL-19C	7	L97-T97
4800 (4800 Family w/ Retarder)	ALL-19R	7	L97-T97
4800 EVS (Emergency Vehicles Only)	ALL-19	7	L97-T97
4800 SP (Specialty Series)	ALL-19	7	L97-T97
4850 EVS (Emergency Vehicles Only)	ALL-19	7	L97-T97
5620 OFS (Oil Field Service)	ALL-8	6	R46-T46
6620 OFS (Oil Field Service)	ALL-8	6	R46-T46
6625 ORS (Off Road Service)	ALL-8	6	R46-T46
8610 OFS (Oil Field Service)	ALL-11	6	R59-T59
8610 ORS (Off Road Service)	ALL-11	6	R59-T59
8610 SP (Specialty Series)	ALL-11	6	R59-T59
9610 OFS (Oil Field Service)	ALL-11	6	R59-T59
9610 ORS (Off Road Service)	ALL-11	6	R59-T59
9610 SP (Specialty Series)	ALL-11	6	R59-T59
9800 OFS (Oil Field Service)	ALL-11	8	R59-T59
9817 OFS (Oil Field Service)	ALL-11	8	R59-T59
9823 OFS (Oil Field Service)	ALL-11	8	R59-T59
9826 OFS (Oil Field Service)	ALL-11	8	R59-T59
9832 OFS (Oil Field Service)	ALL-11	8	R59-T59
9832 OFSD (Oil Field Service)	ALL-11	8	R59-T59
9832 OFSI (Oil Field Service)	ALL-11	8	R59-T59
AT-1542	ALL-4	4	R55
AT-1545	ALL-4	4	R55
AT-540	ALL-4	4	R55
AT-542	ALL-4	4	R55



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Allison

ALLISON TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
AT-543	ALL-4	4	R55
AT-545	ALL-4	4	R55
B 300	ALL-13	6	L68-R68
B 400	ALL-13	6	L68-R68
B 500	ALL-14	6	L97-T97
CLBT-750	ALL-6	5	L78
CLBT-750 (With Optional 8-Bolt Opening Ahead of Torque Converter)	ALL-12	5	L64-T40
CLBT-754	ALL-6	5	L78
CLBT-754 (With Optional 8-Bolt Opening Ahead of Torque Converter)	ALL-12	5	L64-T40
CLT-750	ALL-6	5	L78
CLT-750 (With Optional 8-Bolt Opening Ahead of Torque Converter)	ALL-12	5	L64-T40
CLT-754	ALL-6	5	L78
CLT-754 (With Optional 8-Bolt Opening Ahead of Torque Converter)	ALL-12	5	L64-T40
H8610 (H = Hauling Mode)	ALL-11	8	R59-T59
HD-4060P (Close Ratio)	ALL-14	6	L97-T97
HD-4070P	ALL-14	7	L97-T97
HD-4560P (Wide Ratio)	ALL-14	6	L97-T97
HT-740CRD	ALL-6	4	L78
HT-740D	ALL-6	4	L78
HT-740DRD	ALL-6	4	L78
HT-740T	ALL-6	4	L78
HT-750CRD	ALL-6	5	L78
HT-750CRD (W/Optional 8-Bolt Opening Ahead of Torque Converter)	ALL-12	5	L64-T40
HT-750D	ALL-6	5	L78
HT-750DP	ALL-6	5	L78
HT-750DRD	ALL-6	5	L78
HT-750DT	ALL-6	5	L78
HT-750HT	ALL-6	5	L78
HT-750T	ALL-6	5	L78
HT-754CR	ALL-6	5	L78
M5600 (M = Mobile Mode)	ALL-8	6	R46-T46
M5610 (M = Mobile Mode)	ALL-8	6	R46-T46
M5620 (M = Mobile Mode)	ALL-8	6	R46-T46
M6510 (M = Mobile Mode)	ALL-8	6	R46-T46
M6520 (M = Mobile Mode)	ALL-8	6	R46-T46
M6600 (M = Mobile Mode)	ALL-8	6	R46-T46

Allison



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
M8610 (M = Mobile Mode)	ALL-11	8	R59-T59
M9600 (M = Mobile Mode)	ALL-11	6	R59-T59
M9800 (M = Mobile Mode)	ALL-11	8	R59-T59
MD3050CR-P	ALL-13	5	L68-R68
MD-3060P (Close Ratio)	ALL-13	6	L68-R68
MD-3060PR (Close Ratio)	ALL-13	6	L68-R68
MD-3066P (Europe Only)	ALL-16	6	L83-T83
MD-3070P (Close Ratio)	ALL-18	7	L68-R68
MD-3560P (Wide Ratio)	ALL-13	6	L68-R68
MD-3560PR (Wide Ratio)	ALL-13	6	L68-R68
MT-640	ALL-5	4	R64
MT-643	ALL-5	4	R64
MT-644	ALL-5	4	R64
MT-650	ALL-5	5	R64
MT-653	ALL-5	5	R64
MT-654	ALL-5	5	R64
S5600 (S = Stationary Mode)	ALL-8	6	R46-T46
S5610 (S = Stationary Mode)	ALL-8	6	R46-T46
S5620 (S= Stationary Mode)	ALL-8	6	R46-T46
S6510 (S = Stationary Mode)	ALL-8	6	R46-T46
S6520 (S = Stationary Mode)	ALL-8	6	R46-T46
S6600 (S = Stationary Mode)	ALL-8	6	R46-T46
TC-10	ALL-20	10	CS



*IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US*

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Allison

ALL-4

ALLISON

CHELSEA®

AT-1542
AT-1545
AT-540
AT-542
AT-543
AT-545

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
55 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221XCAJP-*3 (8)	235 I	Eng	106	Furnished
221XEAJP-*3 (8)	212 I	Eng	118	Furnished
442XBAPH-*3 (1)	250 I	Eng	90	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJP-*3 (2)	300 C	Eng	79	Furnished
272XBAJP-*3 (3)	258 C	Eng	97	Furnished
272XCAJP-*3 (4)	214 C	Eng	117	Furnished
272XDAJP-*3 (5)	179 C	Eng	140	Furnished
272XGAJP-*3 (6)	150 C	Eng	166	Furnished
272XKAJP-*3 (7)	134 C	Eng	186	Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MAAJP-*5 (2)	300 C	Eng	79	Furnished
272MBAJP-*5 (3)	258 C	Eng	97	Furnished
272MCAJP-*5 (4)	214 C	Eng	117	Furnished
272MDAJP-*5 (5)	179 C	Eng	140	Furnished
272MGAJP-*5 (6)	150 C	Eng	166	Furnished
272MKAJP-*5 (7)	134 C	Eng	186	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: PTO output shaft torque ratings are based on the maximum intermittent torque rating of 250 lb-ft torque for the 55 tooth gear in the AT-540 series transmission.

(1) Input Gear Part No. 5-P-1418
(2) Input Gear Part No. 5-P-1510-1X
(3) Input Gear Part No. 5-P-1510-2X
(4) Input Gear Part No. 5-P-1510-3X
(5) Input Gear Part No. 5-P-1510-4X
(6) Input Gear Part No. 5-P-1510-5X

(7) Input Gear Part No. 5-P-1510-6X
(8) Input Gear Part No. 5-P-569

CHELSEA®**ALLISON****ALL-5**

MT-640
MT-643
MT-644
MT-650
MT-653
MT-654

RIGHT SIDE ONLY**TRANSMISSION GEAR DATA:**

R.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221XCAJP-*3	250 I	Eng	124	Furnished
221XEAJP-*3	250 I	Eng	137	Furnished
442XBAHP-*5 (1)	250 I	Eng	104	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJP-*3 (2)	300 C	Eng	92	Furnished
272XBAJP-*3 (3)	266 C	Eng	113	Furnished
272XCAJP-*3 (4)	220 C	Eng	136	Furnished
272XDAJP-*3 (5)	184 C	Eng	164	Furnished
272XGAJP-*3 (6)	155 C	Eng	194	Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MAAJP-*5 (2)	300 C	Eng	92	Furnished
272MBAJP-*5 (3)	266 C	Eng	113	Furnished
272MCAJP-*5 (4)	220 C	Eng	136	Furnished
272MDAJP-*5 (5)	184 C	Eng	164	Furnished
272MGAJP-*5 (6)	155 C	Eng	194	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1418
- (2) Input Gear Part No. 5-P-1510-1X
- (3) Input Gear Part No. 5-P-1510-2X
- (4) Input Gear Part No. 5-P-1510-3X
- (5) Input Gear Part No. 5-P-1510-4X
- (6) Input Gear Part No. 5-P-1510-5X

Allison

ALL-6

ALLISON

CHELSEA®

CLBT-750	HT-750D
CLT-750	HT-750DP
CLT-754	HT-750DRD
HT-740CRD	HT-750DT
HT-740D	HT-750HT
HT-740DRD	HT-750T
HT-740T	HT-754CR
HT-750CRD	CLBT-754

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline

78 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221XCAJP-*5	250 I	Eng	151	Furnished
221XEAJP-*5	250 I	Eng	167	Furnished
442XBAHP-*5 (1)	250 I	Eng	127	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJP-*5 (2)	300 C	Eng	112	Furnished
272XBAJP-*5 (3)	300 C	Eng	137	Furnished
272XCAJP-*5 (4)	300 C	Eng	166	Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MAAJP-*5 (2)	300 C	Eng	112	Furnished
272MBAJP-*5 (3)	300 C	Eng	137	Furnished
272MCAJP-*5 (4)	300 C	Eng	166	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1418
- (2) Input Gear Part No. 5-P-1510-1X
- (3) Input Gear Part No. 5-P-1510-2X
- (4) Input Gear Part No. 5-P-1510-3X

CHELSEA®**ALLISON****ALL-8**

5620 OFS	M6600 (M = Mobile Mode)
6620 OFS	S6600 (S = Stationary Mode)
6625 ORS	S6610 (S = Stationary Mode)
M5600 (M = Mobile Mode)	S5620 (S = Stationary Mode)
M5610 (M = Mobile Mode)	S6510 (S = Stationary Mode)
M5620 (M = Mobile Mode)	S6520 (S = Stationary Mode)
M6510 (M = Mobile Mode)	S6600 (S = Stationary Mode)
M6520 (M = Mobile Mode)	

TOP SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**TOP 08-BOLT Opening Gear REAR of Centerline
46 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**
0.8020" (20.3708MM)**TRANSMISSION GEAR DATA:**R.S. 08-BOLT Opening Gear REAR of Centerline
46 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**
0.8020" (20.3708MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAKP-*6	250 I	Opp	89	328564X	Furnished	221ZCAKP-*4	250 I	Eng	89	328564X	Furnished
221ZEAKP-*6	250 I	Opp	99	328564X	Furnished	221ZEAKP-*4	250 I	Eng	99	328564X	Furnished
823XBAKP-*6 (6)	500 I	Opp	81	Furnished	823XBAKP-*4 (6)	500 I	Eng	81	Furnished	Furnished	Furnished
823XDAKP-*6 (9)	500 I	Opp	96	Furnished	823XDAKP-*4 (9)	500 I	Eng	96	Furnished	Furnished	Furnished
823XGAKP-*6 (10)	500 I	Opp	104	Furnished	823XGAKP-*4 (10)	500 I	Eng	104	Furnished	Furnished	Furnished
823XJAKP-*6 (7)	500 I	Opp	122	Furnished	880XBAKP-*4 (1)	500 I	Eng	81	Furnished	Furnished	Furnished
823XMAKP-*6 (8)	500 I	Opp	144	Furnished	880XDAKP-*4 (2)	500 I	Eng	96	Furnished	Furnished	Furnished
880XBAKP-*6 (1)	500 I	Opp	81	Furnished	880XGAKP-*4 (3)	500 I	Eng	104	Furnished	Furnished	Furnished
880XDAKP-*6 (2)	500 I	Opp	96	Furnished							
880XGAKP-*6 (3)	500 I	Opp	104	Furnished							
880XJAKP-*6 (4)	500 I	Opp	122	Furnished							
880XMAKP-*6 (5)	500 I	Opp	144	Furnished							

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAKP-*6 (1)	500 I	Opp	81	Furnished	885XBAKP-*4 (1)	500 I	Eng	81	Furnished	
885XGAKP-*6 (3)	500 I	Opp	104	Furnished	885XGAKP-*4 (3)	500 I	Eng	104	Furnished	
885XJAKP-*6 (4)	500 I	Opp	122	Furnished						
885XMAKP-*6 (5)	500 I	Opp	144	Furnished						

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

852XBAKP-*6	500 I	Opp	81	Furnished	852XBAKP-*4	500 I	Eng	81	Furnished	
852XGAKP-*6	500 I	Opp	104	Furnished	852XGAKP-*4	500 I	Eng	104	Furnished	
852XJAKP-*6	500 I	Opp	122	Furnished	852XJAKP-*4	500 I	Eng	122	Furnished	

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Maximum PTO Continuous torque allowed is 313 lb-ft [424 Nm] due to the transmission manufacturer PTO driver gear limit.

- (1) Input Gear Part No. 5-P-1106
- (2) Input Gear Part No. 5-P-1107
- (3) Input Gear Part No. 5-P-1108
- (4) Input Gear Part No. 5-P-1109
- (5) Input Gear Part No. 5-P-1110
- (6) Input Gear Part No. 5-P-223
- (7) Input Gear Part No. 5-P-224
- (8) Input Gear Part No. 5-P-284
- (9) Input Gear Part No. 5-P-293
- (10) Input Gear Part No. 5-P-294

ALL-11

ALLISON

CHELSEA®

8610 OFS (Oil Field Service)	9823 OFS (Oil Field Service)	M9800 (M = Mobile Mode)
8610 ORS (Off Road Service)	9826 OFS (Oil Field Service)	
8610 SP (Specialty Series)	9832 OFS (Oil Field Service)	
9610 OFS (Oil Field Service)	9832 OFSD (Oil Field Service)	
9610 ORS (Off Road Service)	9832 OFSI (Oil Field Service)	
9610 SP (Specialty Series)	H8610 (H = Hauling Mode)	
9800 OFS (Oil Field Service)	M8610 (M = Mobile Mode)	
9817 OFS (Oil Field Service)	M9600 (M = Mobile Mode)	

TOP SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

TOP 08-BOLT Opening Gear REAR of Centerline
59 Teeth - SPURPITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

TRANSMISSION GEAR DATA:

R.S. 08-BOLT Opening Gear REAR of Centerline
59 Teeth - SPURPITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot	Fwd					I / C †	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

823XBAKP-*6 (6)	500 I	Opp	104	Furnished	823XBAKP-*4 (6)	500 I	Eng	104					Furnished
823XDAKP-*6 (9)	500 I	Opp	123	Furnished	823XDAKP-*4 (9)	500 I	Eng	123					Furnished
823XGAKP-*6 (10)	500 I	Opp	134	Furnished	880XBAKP-*4 (1)	500 I	Eng	104					Furnished
823XJAKP-*6 (7)	500 I	Opp	157	Furnished	880XDAKP-*4 (2)	500 I	Eng	123					Furnished
823XMAKP-*6 (8)	500 I	Opp	185	Furnished	880XGAKP-*4 (3)	500 I	Eng	134					Furnished
880XBAKP-*6 (1)	500 I	Opp	104	Furnished	880XJAKP-*4 (4)	500 I	Eng	157					Furnished
880XDAKP-*6 (2)	500 I	Opp	123	Furnished									
880XGAKP-*6 (3)	500 I	Opp	134	Furnished									
880XJAKP-*6 (4)	500 I	Opp	157	Furnished									
880XMAKP-*6 (5)	500 I	Opp	185	Furnished									

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

852XBAKP-*6	500 I	Opp	104	Furnished	852XBAKP-*4	500 I	Eng	104					Furnished
852XGAKP-*6	500 I	Opp	134	Furnished	852XGAKP-*4	500 I	Eng	134					Furnished
852XJAKP-*6	500 I	Opp	157	Furnished	852XJAKP-*4	500 I	Eng	157					Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

Allison

- (1) Input Gear Part No. 5-P-1106
- (2) Input Gear Part No. 5-P-1107
- (3) Input Gear Part No. 5-P-1108
- (4) Input Gear Part No. 5-P-1109
- (5) Input Gear Part No. 5-P-1110
- (6) Input Gear Part No. 5-P-223
- (7) Input Gear Part No. 5-P-224
- (8) Input Gear Part No. 5-P-284
- (9) Input Gear Part No. 5-P-293
- (10) Input Gear Part No. 5-P-294

CHELSEA®**ALLISON****ALL-12**

CLT-750 (With Optional 8-Bolt Opening Ahead of Torque Converter)
 CLT-754 (With Optional 8-Bolt Opening Ahead of Torque Converter)
 HT-750CRD (W/Optional 8-Bolt Opening Ahead of Torque Converter)
 CLBT-750 (With Optional 8-Bolt Opening Ahead of Torque Converter)
 CLBT-754 (With Optional 8-Bolt Opening Ahead of Torque Converter)

LEFT SIDE ONLY**TOP SIDE ONLY****TRANSMISSION GEAR DATA:**

L.S. 08-BOLT Opening Gear REAR of Centerline
 64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
 0.8100" (20.5740MM)

TRANSMISSION GEAR DATA:

TOP 08-BOLT Opening Gear REAR of Centerline
 40 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
 0.8100" (20.5740MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAKX-*6	250 I	Opp	104	328564X	Furnished	221ZCAKP-*4	250 I	Opp	104	328564X	Furnished
221ZEAKX-*6	250 I	Opp	116	328564X	Furnished	221ZEAKP-*4	250 I	Opp	116	328564X	Furnished
823XBAKX-*6 (6)	500 I	Opp	95	Furnished	823XBAKP-*4 (6)	500 I	Opp	95	Furnished	Furnished	Furnished
823XDAKX-*6 (9)	500 I	Opp	113	Furnished	823XDAKP-*4 (9)	500 I	Opp	112	Furnished	Furnished	Furnished
823XGAKX-*6 (10)	500 I	Opp	122	Furnished	823XGAKP-*4 (10)	500 I	Opp	122	Furnished	Furnished	Furnished
823XJAKX-*6 (7)	500 I	Opp	144	Furnished	823XJAKP-*4 (7)	500 I	Opp	144	Furnished	Furnished	Furnished
823XMAKX-*6 (8)	500 I	Opp	169	Furnished	823XMAKP-*4 (8)	500 I	Opp	169	Furnished	Furnished	Furnished
880XBAKX-*6 (1)	500 I	Opp	95	Furnished	880XBAKP-*4 (1)	500 I	Opp	95	Furnished	Furnished	Furnished
880XDAKX-*6 (2)	500 I	Opp	113	Furnished	880XDAKP-*4 (2)	500 I	Opp	112	Furnished	Furnished	Furnished
880XGAKX-*6 (3)	500 I	Opp	122	Furnished	880XGAKP-*4 (3)	500 I	Opp	122	Furnished	Furnished	Furnished
880XJAKX-*6 (4)	500 I	Opp	144	Furnished	880XJAKP-*4 (4)	500 I	Opp	144	Furnished	Furnished	Furnished
880XMAKX-*6 (5)	500 I	Opp	169	Furnished	880XMAKP-*4 (5)	500 I	Opp	169	Furnished	Furnished	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAKX-*6 (1)	500 I	Opp	95	Furnished	885XBAKP-*4 (1)	500 I	Opp	95	Furnished	Furnished
885XGAKX-*6 (3)	500 I	Opp	122	Furnished	885XGAKP-*4 (3)	500 I	Opp	122	Furnished	Furnished
885XJAKX-*6 (4)	500 I	Opp	144	Furnished	885XJAKP-*4 (4)	500 I	Opp	144	Furnished	Furnished
885XMAKX-*6 (5)	500 I	Opp	169	Furnished	885XMAKP-*4 (5)	500 I	Opp	169	Furnished	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

852XBAKP-*6	500 I	Opp	95	Furnished	852XBAKP-*4	500 I	Opp	95	Furnished
852XGAKP-*6	500 I	Opp	122	Furnished	852XGAKP-*4	500 I	Opp	122	Furnished
852XJAKP-*6	500 I	Opp	144	Furnished	852XJAKP-*4	500 I	Opp	144	Furnished

ONE SPEED - FORWARD & REVERSE

863XBAKX-*4	500 I	Opp	95	118	Furnished
-------------	-------	-----	----	-----	-----------

[†] **I = Intermittent Torque Only** - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1106
- (2) Input Gear Part No. 5-P-1107
- (3) Input Gear Part No. 5-P-1108
- (4) Input Gear Part No. 5-P-1109
- (5) Input Gear Part No. 5-P-1110
- (6) Input Gear Part No. 5-P-223
- (7) Input Gear Part No. 5-P-224
- (8) Input Gear Part No. 5-P-284
- (9) Input Gear Part No. 5-P-293
- (10) Input Gear Part No. 5-P-294

ALL-13

ALLISON

CHELSEA®

3000 (International - Side/Side PTO Provision)	3200 ORS (Side/Side PTO Provision)	3500 RDS
3000 EVS (Side/Side Power Take-Off Provisions)	3200 SP (Side/Side PTO Provision)	3500 SP (Side/Side PTO Provision)
3000 MH	3200 TRV	B 300
3000 ORS (Side/Side Power Take Off - Provisions)	3414	B 400
3000 RDS	3500 (International - Side/Side PTO Provision)	MD-3060P (Close Ratio)
3000 SP (Side/Side PTO Option)	3500 EVS (Side/Side Power Take-Off Provisions)	MD-3560P (Wide Ratio)
3000 TRV	3500 OFS	MD3050CR-P
3200 (International - Side/Side PTO Provision)	3500 ORS (Side/Side PTO Provision)	

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 68 Teeth - L.H. HELIX	TRANSMISSION GEAR DATA: R.S. 10-BOLT Opening Gear FORWARD of Centerline 68 Teeth - L.H. HELIX
PITCH LINE TO APERTURE FACE: 1.7800" (45.2100MM)	PITCH LINE TO APERTURE FACE: 1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	72	Furnished	267SBFJP-*3 (4)	402 I	Eng	72	Furnished
267SDFJP-*5 (3)	390 I	Eng	87	Furnished	267SDFJP-*3 (3)	390 I	Eng	87	Furnished
267SGFJP-*5 (2)	360 I	Eng	103	Furnished	267SGFJP-*3 (2)	360 I	Eng	103	Furnished
267SMFJP-*5 (5)	318 I	Eng	129	Furnished	267SMFJP-*3 (5)	318 I	Eng	129	Furnished
267SSFJP-*5 (1)	265 I	Eng	161	Furnished	267SSFJP-*3 (1)	265 I	Eng	161	Furnished
267XBFJP-*5 (26)	335 I	Eng	72	Furnished	267XBFJP-*3 (26)	335 I	Eng	72	Furnished
267XDFJP-*5 (27)	325 I	Eng	87	Furnished	267XDFJP-*3 (27)	325 I	Eng	87	Furnished
267XGFJP-*5 (28)	300 I	Eng	103	Furnished	267XGFJP-*3 (28)	300 I	Eng	103	Furnished
267XMFJP-*5 (29)	265 I	Eng	129	Furnished	267XMFJP-*3 (29)	265 I	Eng	129	Furnished
267XSFJP-*5 (1)	250 I	Eng	161	Furnished	267XSFJP-*3 (1)	250 I	Eng	161	Furnished
287GBFJP-*5 (17)	300 C	Eng	60	Furnished	287GBFJP-*3 (17)	300 C	Eng	60	Furnished
287GBFJP-*8 (17)	300 C	Eng	56	Furnished	287GBFJP-*8 (17)	300 C	Eng	56	Furnished
287GCFJP-*5 (18)	390 C	Eng	72	Furnished	287GCFJP-*3 (18)	390 C	Eng	72	Furnished
287GCFJP-*8 (18)	390 C	Eng	68	Furnished	287GCFJP-*8 (18)	390 C	Eng	68	Furnished
287GDFJP-*5 (19)	390 C	Eng	87	Furnished	287GDFJP-*3 (19)	390 C	Eng	87	Furnished
287GDFJP-*8 (19)	390 C	Eng	81	Furnished	287GDFJP-*8 (19)	390 C	Eng	81	Furnished
287GGFJP-*5 (20)	360 C	Eng	103	Furnished	287GGFJP-*3 (20)	360 C	Eng	103	Furnished
287GGFJP-*8 (20)	360 C	Eng	96	Furnished	287GGFJP-*8 (20)	360 C	Eng	96	Furnished
287GKFJP-*5 (21)	340 C	Eng	115	Furnished	287GKFJP-*3 (21)	340 C	Eng	115	Furnished
287GMFJP-*5 (22)	318 C	Eng	129	Furnished	287GMFJP-*3 (22)	318 C	Eng	129	Furnished
287GMFJP-*8 (22)	318 C	Eng	119	Furnished	287GMFJP-*8 (22)	318 C	Eng	119	Furnished
287GPFJP-*5 (23)	290 C	Eng	144	Furnished	287GPFJP-*3 (23)	290 C	Eng	144	Furnished
287GPFJP-*8 (23)	290 C	Eng	132	Furnished	287GPFJP-*8 (23)	290 C	Eng	132	Furnished
287GSFJP-*5 (24)	265 C	Eng	161	Furnished	287GSFJP-*3 (24)	265 C	Eng	161	Furnished
287GSFJP-*8 (24)	265 C	Eng	147	Furnished	287GSFJP-*8 (24)	265 C	Eng	147	Furnished
287GTFJP-*5 (25)	240 C	Eng	180	Furnished	287GTFJP-*3 (25)	240 C	Eng	180	Furnished
287GTFJP-*8 (16)	240 C	Eng	173	Furnished	287GTFJP-*8 (16)	240 C	Eng	173	Furnished
877XAFJP-*5 (7)	591 C	Eng	82	Furnished	877XAFJP-*3 (7)	591 C	Eng	82	Furnished
877XBFJP-*5 (8)	557 C	Eng	87	Furnished	877XBFJP-*3 (8)	557 C	Eng	87	Furnished
877XCFJP-*5 (9)	522 C	Eng	93	Furnished	877XCFJP-*3 (9)	522 C	Eng	93	Furnished
877XDFJP-*5 (10)	490 C	Eng	99	Furnished	877XDFJP-*3 (10)	490 C	Eng	99	Furnished
877XEFP-*5 (11)	429 C	Eng	113	Furnished	877XEFP-*3 (11)	429 C	Eng	113	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

- 1) Input Gear Part No. 5-P-1173
- (8) Input Gear Part No. 5-P-1428-12X
- (18) Input Gear Part No. 5-P-1491-2X
- (24) Input Gear Part No. 5-P-1491-8X
- (2) Input Gear Part No. 5-P-1225
- (9) Input Gear Part No. 5-P-1428-3X
- (19) Input Gear Part No. 5-P-1491-3X
- (25) Input Gear Part No. 5-P-1491-9X
- (3) Input Gear Part No. 5-P-1293
- (10) Input Gear Part No. 5-P-1428-4X
- (20) Input Gear Part No. 5-P-1491-4X
- (26) Input Gear Part No. 5-P-912
- (4) Input Gear Part No. 5-P-1350
- (11) Input Gear Part No. 5-P-1428-5X
- (21) Input Gear Part No. 5-P-1491-5X
- (27) Input Gear Part No. 5-P-913
- (5) Input Gear Part No. 5-P-1351
- (16) Input Gear Part No. 5-P-1491-10X
- (22) Input Gear Part No. 5-P-1491-6X
- (28) Input Gear Part No. 5-P-914
- (7) Input Gear Part No. 5-P-1428-11X
- (17) Input Gear Part No. 5-P-1491-1X
- (23) Input Gear Part No. 5-P-1491-7X
- (29) Input Gear Part No. 5-P-915

October 2022

5.2.14

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

CHELSEA®**ALLISON****ALL-13**

3000 (International - Side/Side PTO Provision)	3200 ORS (Side/Side PTO Provision)	3500 SP (Side/Side PTO Provision)
3000 EVS (Side/Side Power Take-Off Provisions)	3200 SP (Side/Side PTO Provision)	B 300
3000 MH	3200 TRV	B 400
3000 ORS (Side/Side Power Take Off - Provisions)	3500 (International - Side/Side PTO Provision)	MD-3060P (Close Ratio)
3000 RDS	3500 EVS (Side/Side Power Take-Off Provisions)	MD-3560P (Wide Ratio)
3000 SP (Side/Side PTO Option)	3500 OFS	MD3050CR-P
3000 TRV	3500 ORS (Side/Side PTO Provision)	
3200 (International - Side/Side PTO Provision)	3500 RDS	

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

877XFFJP-*5 (12)	379 C	Eng	128	Furnished	877XFFJP-*3 (12)	379 C	Eng	128	Furnished
877XGFJP-*5 (13)	334 C	Eng	145	Furnished	877XGFJP-*3 (13)	334 C	Eng	145	Furnished
877XHFJP-*5 (14)	315 C	Eng	154	Furnished	877XHFJP-*3 (14)	315 C	Eng	154	Furnished
877XJFJP-*5 (15)	295 C	Eng	164	Furnished	877XJFJP-*3 (15)	295 C	Eng	164	Furnished
877XKFPJ-*5 (6)	357 C	Eng	136	Furnished	877XKFPJ-*3 (6)	357 C	Eng	136	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFPJ-*5 (17)	300 C	Eng	60	Furnished	280GBFPJ-*3 (17)	300 C	Eng	60	Furnished
280GBFPJ-*8 (17)	300 C	Eng	56	Furnished	280GBFPJ-*8 (17)	300 C	Eng	56	Furnished
280GCFJP-*5 (18)	390 C	Eng	72	Furnished	280GCFJP-*3 (18)	390 C	Eng	72	Furnished
280GCFJP-*8 (18)	390 C	Eng	68	Furnished	280GCFJP-*8 (18)	390 C	Eng	68	Furnished
280GDFJP-*5 (19)	390 C	Eng	87	Furnished	280GDFJP-*3 (19)	390 C	Eng	87	Furnished
280GDFJP-*8 (19)	390 C	Eng	81	Furnished	280GDFJP-*8 (19)	390 C	Eng	81	Furnished
280GGFPJ-*5 (20)	360 C	Eng	103	Furnished	280GGFPJ-*3 (20)	360 C	Eng	103	Furnished
280GGFPJ-*8 (20)	360 C	Eng	96	Furnished	280GGFPJ-*8 (20)	360 C	Eng	96	Furnished
280GKFPJ-*5 (21)	340 C	Eng	115	Furnished	280GKFPJ-*3 (21)	340 C	Eng	115	Furnished
280GMFPJ-*5 (22)	318 C	Eng	129	Furnished	280GMFPJ-*3 (22)	318 C	Eng	129	Furnished
280GMFPJ-*8 (22)	318 C	Eng	119	Furnished	280GMFPJ-*8 (22)	318 C	Eng	119	Furnished
280GPFPJ-*5 (23)	290 C	Eng	144	Furnished	280GPFPJ-*3 (23)	290 C	Eng	144	Furnished
280GPFPJ-*8 (23)	290 C	Eng	132	Furnished	280GPFPJ-*8 (23)	290 C	Eng	132	Furnished
280GSFPJ-*5 (24)	265 C	Eng	161	Furnished	280GSFPJ-*3 (24)	265 C	Eng	161	Furnished
280GSFPJ-*8 (24)	265 C	Eng	147	Furnished	280GSFPJ-*8 (24)	265 C	Eng	147	Furnished
280GTFJP-*5 (25)	240 C	Eng	180	Furnished	280GTFJP-*3 (25)	240 C	Eng	180	Furnished
280GTFJP-*8 (16)	240 C	Eng	173	Furnished	280GTFJP-*8 (16)	240 C	Eng	173	Furnished
870XAJP-*5 (7)	591 C	Eng	82	Furnished	870XAJP-*3 (7)	591 C	Eng	82	Furnished
870XBFPJ-*5 (8)	557 C	Eng	87	Furnished	870XBFPJ-*3 (8)	557 C	Eng	87	Furnished
870XCFJP-*5 (9)	522 C	Eng	93	Furnished	870XCFJP-*3 (9)	522 C	Eng	93	Furnished
870XDFJP-*5 (10)	490 C	Eng	99	Furnished	870XDFJP-*3 (10)	490 C	Eng	99	Furnished
870XEFJP-*5 (11)	429 C	Eng	113	Furnished	870XEFJP-*3 (11)	429 C	Eng	113	Furnished
870XFFJP-*5 (12)	379 C	Eng	128	Furnished	870XFFJP-*3 (12)	379 C	Eng	128	Furnished
870XGFJP-*5 (13)	334 C	Eng	145	Furnished	870XGFJP-*3 (13)	334 C	Eng	145	Furnished

Continued on Next Page

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

- (6) Input Gear Part No. 5-P-1428-10X
- (12) Input Gear Part No. 5-P-1428-6X
- (18) Input Gear Part No. 5-P-1491-2X
- (24) Input Gear Part No. 5-P-1491-8X
- (7) Input Gear Part No. 5-P-1428-11X
- (13) Input Gear Part No. 5-P-1428-7X
- (19) Input Gear Part No. 5-P-1491-3X
- (25) Input Gear Part No. 5-P-1491-9X
- (8) Input Gear Part No. 5-P-1428-12X
- (14) Input Gear Part No. 5-P-1428-8X
- (20) Input Gear Part No. 5-P-1491-4X
- (9) Input Gear Part No. 5-P-1428-3X
- (15) Input Gear Part No. 5-P-1428-9X
- (21) Input Gear Part No. 5-P-1491-5X
- (10) Input Gear Part No. 5-P-1428-4X
- (16) Input Gear Part No. 5-P-1491-10X
- (22) Input Gear Part No. 5-P-1491-6X
- (11) Input Gear Part No. 5-P-1428-5X
- (17) Input Gear Part No. 5-P-1491-1X
- (23) Input Gear Part No. 5-P-1491-7X

Allison

ALL-13

ALLISON

CHELSEA®

3000 (International - Side/Side PTO Provision)	3200 ORS (Side/Side PTO Provision)	3500 SP (Side/Side PTO Provision)
3000 EVS (Side/Side Power Take-Off Provisions)	3200 SP (Side/Side PTO Provision)	B 300
3000 MH	3200 TRV	B 400
3000 ORS (Side/Side Power Take Off - Provisions)	3500 (International - Side/Side PTO Provision)	MD-3060P (Close Ratio)
3000 RDS	3500 EVS (Side/Side Power Take-Off Provisions)	MD-3560P (Wide Ratio)
3000 PTO (Side/Side PTO Option)	3500 OFS	MD3050CR-P
3000 TRV	3500 ORS (Side/Side PTO Provision)	
3200 (International - Side/Side PTO Provision)	3500 RDS	

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

870XHFJP-*5 (14)	315 C	Eng	154	Furnished	870XHFJP-*3 (14)	315 C	Eng	154	Furnished				
870XJFJP-*5 (15)	295 C	Eng	164	Furnished	870XJFJP-*3 (15)	295 C	Eng	164	Furnished				

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LAFJW-*5 (7)	591 C	Eng	82	Furnished	870LAFJW-*3 (7)	591 C	Eng	82	Furnished				
870LBFJW-*5 (8)	557 C	Eng	87	Furnished	870LBFJW-*3 (8)	557 C	Eng	87	Furnished				
870LCFJW-*5 (9)	522 C	Eng	93	Furnished	870LCFJW-*3 (9)	522 C	Eng	93	Furnished				
870LDFJW-*5 (10)	490 C	Eng	99	Furnished	870LDFJW-*3 (10)	490 C	Eng	99	Furnished				
870LEFJW-*5 (11)	429 C	Eng	113	Furnished	870LEFJW-*3 (11)	429 C	Eng	113	Furnished				
870LFFJW-*5 (12)	379 C	Eng	128	Furnished	870LFFJW-*3 (12)	379 C	Eng	128	Furnished				
870LGFJW-*5 (13)	334 C	Eng	145	Furnished	870LGFJW-*3 (13)	334 C	Eng	145	Furnished				
870LHFJW-*5 (14)	315 C	Eng	154	Furnished	870LHFJW-*3 (14)	315 C	Eng	154	Furnished				
890LAFJW-*5 (7)	591 C	Eng	82	Furnished	890RAFJW-*5 (7)	591 C	Eng	82	Furnished				
890LBFJW-*5 (8)	557 C	Eng	87	Furnished	890RBFJW-*5 (8)	557 C	Eng	87	Furnished				
890LCFJW-*5 (9)	522 C	Eng	93	Furnished	890RCFJW-*5 (9)	522 C	Eng	93	Furnished				
890LDFJW-*5 (10)	490 C	Eng	99	Furnished	890RDFJW-*5 (10)	490 C	Eng	99	Furnished				
890LEFJW-*5 (11)	429 C	Eng	113	Furnished	890REFJW-*5 (11)	429 C	Eng	113	Furnished				
890LFFJW-*5 (12)	379 C	Eng	128	Furnished	890RFFJW-*5 (12)	379 C	Eng	128	Furnished				
890LGFJW-*5 (13)	334 C	Eng	145	Furnished	890RGFJW-*5 (13)	334 C	Eng	145	Furnished				
890LHFJW-*5 (14)	315 C	Eng	154	Furnished	890RHFJW-*5 (14)	315 C	Eng	154	Furnished				

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

877LAFJW-*5 (7)	591 C	Eng	82	Furnished	877LAFJW-*3 (7)	591 C	Eng	82	Furnished				
877LBFJW-*5 (8)	557 C	Eng	87	Furnished	877LBFJW-*3 (8)	557 C	Eng	87	Furnished				
877LCFJW-*5 (9)	522 C	Eng	93	Furnished	877LCFJW-*3 (9)	522 C	Eng	93	Furnished				
877LDFJW-*5 (10)	490 C	Eng	99	Furnished	877LDFJW-*3 (10)	490 C	Eng	99	Furnished				
877LEFJW-*5 (11)	429 C	Eng	113	Furnished	877LEFJW-*3 (11)	429 C	Eng	113	Furnished				
877LFFJW-*5 (12)	379 C	Eng	128	Furnished	877LFFJW-*3 (12)	379 C	Eng	128	Furnished				
877LGFJW-*5 (13)	334 C	Eng	145	Furnished	877LGFJW-*3 (13)	334 C	Eng	145	Furnished				
877LHFJW-*5 (14)	315 C	Eng	154	Furnished	877LHFJW-*3 (14)	315 C	Eng	154	Furnished				
897LAFJW-*5 (7)	591 C	Eng	82	Furnished	897RAFJW-*5 (7)	591 C	Eng	82	Furnished				
897LBFJW-*5 (8)	557 C	Eng	87	Furnished	897RBFJW-*5 (8)	557 C	Eng	87	Furnished				

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

- (7) Input Gear Part No. 5-P-1428-11X (13) Input Gear Part No. 5-P-1428-7X
- (8) Input Gear Part No. 5-P-1428-12X (14) Input Gear Part No. 5-P-1428-8X
- (9) Input Gear Part No. 5-P-1428-3X (15) Input Gear Part No. 5-P-1428-9X
- (10) Input Gear Part No. 5-P-1428-4X
- (11) Input Gear Part No. 5-P-1428-5X
- (12) Input Gear Part No. 5-P-1428-6X

CHELSEA®**ALLISON****ALL-13**

3000 (International - Side/Side PTO Provision)	3200 ORS (Side/Side PTO Provision)	3500 SP (Side/Side PTO Provision)
3000 EVS (Side/Side Power Take-Off Provisions)	3200 SP (Side/Side PTO Provision)	B 300
3000 MH	3200 TRV	B 400
3000 ORS (Side/Side Power Take Off - Provisions)	3500 (International - Side/Side PTO Provision)	MD-3060P (Close Ratio)
3000 RDS	3500 EVS (Side/Side Power Take-Off Provisions)	MD-3560P (Wide Ratio)
3000 SP (Side/Side PTO Option)	3500 OFS	MD3050CR-P
3000 TRV	3500 ORS (Side/Side PTO Provision)	
3200 (International - Side/Side PTO Provision)	3500 RDS	

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 68 Teeth - L.H. HELIX	TRANSMISSION GEAR DATA: R.S. 10-BOLT Opening Gear FORWARD of Centerline 68 Teeth - L.H. HELIX
PITCH LINE TO APERTURE FACE: 1.7800" (45.2100MM)	PITCH LINE TO APERTURE FACE: 1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd	Rev					I / C ↑	Rot	Fwd	Rev			

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

897LCFJW-*5 (9)	522 C	Eng	93	Furnished	897RCFJW-*5 (9)	522 C	Eng	93	Furnished
897LDFJW-*5 (10)	490 C	Eng	99	Furnished	897RDFJW-*5 (10)	490 C	Eng	99	Furnished
897LEFJW-*5 (11)	429 C	Eng	113	Furnished	897REFJW-*5 (11)	429 C	Eng	113	Furnished
897LFFJW-*5 (12)	379 C	Eng	128	Furnished	897RFFJW-*5 (12)	379 C	Eng	128	Furnished
897LGFJW-*5 (13)	334 C	Eng	145	Furnished	897RGFJW-*5 (13)	334 C	Eng	145	Furnished
897LHFJW-*5 (14)	315 C	Eng	154	Furnished	897RHFJW-*5 (14)	315 C	Eng	154	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

- (9) Input Gear Part No. 5-P-1428-3X
- (10) Input Gear Part No. 5-P-1428-4X
- (11) Input Gear Part No. 5-P-1428-5X
- (12) Input Gear Part No. 5-P-1428-6X
- (13) Input Gear Part No. 5-P-1428-7X
- (14) Input Gear Part No. 5-P-1428-8X

Allison

ALL-13C

ALLISON

CHELSEA®

3000 (3000 Family-Side / Side PTO Provision w/ Integral Cooler)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	72	Furnished	267SBFJP-*3 (4)	402 I	Eng	72	Furnished				
267SDFJP-*5 (3)	390 I	Eng	87	Furnished	267SDFJP-*3 (3)	390 I	Eng	87	Furnished				
267SGFJP-*5 (2)	360 I	Eng	103	Furnished	267SGFJP-*3 (2)	360 I	Eng	103	Furnished				
267SMFJP-*5 (5)	318 I	Eng	129	Furnished	267SMFJP-*3 (5)	318 I	Eng	129	Furnished				
267SSFJP-*5 (1)	265 I	Eng	161	Furnished	267SSFJP-*3 (1)	265 I	Eng	161	Furnished				
267XBFJP-*5 (25)	335 I	Eng	72	Furnished	267XBFJP-*3 (25)	335 I	Eng	72	Furnished				
267XDFJP-*5 (26)	325 I	Eng	87	Furnished	267XDFJP-*3 (26)	325 I	Eng	87	Furnished				
267XGFJP-*5 (27)	300 I	Eng	103	Furnished	267XGFJP-*3 (27)	300 I	Eng	103	Furnished				
267XMFJP-*5 (28)	265 I	Eng	129	Furnished	267XMFJP-*3 (28)	265 I	Eng	129	Furnished				
267XSFJP-*5 (1)	250 I	Eng	161	Furnished	267XSFJP-*3 (1)	250 I	Eng	161	Furnished				
287GBFJP-*5 (16)	300 C	Eng	60	Furnished	287GBFJP-*3 (16)	300 C	Eng	60	Furnished				
287GBFJP-*8 (16)	300 C	Eng	56	Furnished	287GBFJP-*8 (16)	300 C	Eng	56	Furnished				
287GCFJP-*5 (17)	390 C	Eng	72	Furnished	287GCFJP-*3 (17)	390 C	Eng	72	Furnished				
287GCFJP-*8 (17)	390 C	Eng	68	Furnished	287GCFJP-*8 (17)	390 C	Eng	68	Furnished				
287GDFJP-*5 (18)	390 C	Eng	87	Furnished	287GDFJP-*3 (18)	390 C	Eng	87	Furnished				
287GDFJP-*8 (18)	390 C	Eng	81	Furnished	287GDFJP-*8 (18)	390 C	Eng	81	Furnished				
287GGFJP-*5 (19)	360 C	Eng	103	Furnished	287GGFJP-*3 (19)	360 C	Eng	103	Furnished				
287GGFJP-*8 (19)	360 C	Eng	96	Furnished	287GGFJP-*8 (19)	360 C	Eng	96	Furnished				
287GKFJP-*5 (20)	340 C	Eng	115	Furnished	287GKFJP-*3 (20)	340 C	Eng	115	Furnished				
287GMFJP-*5 (21)	318 C	Eng	129	Furnished	287GMFJP-*3 (21)	318 C	Eng	129	Furnished				
287GMFJP-*8 (21)	318 C	Eng	119	Furnished	287GMFJP-*8 (21)	318 C	Eng	119	Furnished				
287GPFJP-*5 (22)	290 C	Eng	144	Furnished	287GPFJP-*3 (22)	290 C	Eng	144	Furnished				
287GPFJP-*8 (22)	290 C	Eng	132	Furnished	287GPFJP-*8 (22)	290 C	Eng	132	Furnished				
287GSFJP-*5 (23)	265 C	Eng	161	Furnished	287GSFJP-*3 (23)	265 C	Eng	161	Furnished				
287GSFJP-*8 (23)	265 C	Eng	147	Furnished	287GSFJP-*8 (23)	265 C	Eng	147	Furnished				
287GTFJP-*5 (24)	240 C	Eng	180	Furnished	287GTFJP-*3 (24)	240 C	Eng	180	Furnished				
287GTFJP-*8 (15)	240 C	Eng	173	Furnished	287GTFJP-*8 (15)	240 C	Eng	173	Furnished				
877XAFJP-*5 (6)	591 C	Eng	82	Furnished	877XAFJP-*3 (6)	591 C	Eng	82	Furnished				
877XBFJP-*5 (7)	557 C	Eng	87	Furnished	877XBFJP-*3 (7)	557 C	Eng	87	Furnished				
877XCFJP-*5 (8)	522 C	Eng	93	Furnished	877XCFJP-*3 (8)	522 C	Eng	93	Furnished				
877XDFJP-*5 (9)	490 C	Eng	99	Furnished	877XDFJP-*3 (9)	490 C	Eng	99	Furnished				
877XEFP-*5 (10)	429 C	Eng	113	Furnished	877XEFP-*3 (10)	429 C	Eng	113	Furnished				

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428-11x(7) Input Gear Part No. 5-P-1428-12X
(8) Input Gear Part No. 5-P-1428-3X
(9) Input Gear Part No. 5-P-1428-4X
(10) Input Gear Part No. 5-P-1428-5X
(15) Input Gear Part No. 5-P-1491-10X
(16) Input Gear Part No. 5-P-1491-1X(17) Input Gear Part No. 5-P-1491-2X
(18) Input Gear Part No. 5-P-1491-3X
(19) Input Gear Part No. 5-P-1491-4X
(20) Input Gear Part No. 5-P-1491-5X
(21) Input Gear Part No. 5-P-1491-6X
(22) Input Gear Part No. 5-P-1491-7X(23) Input Gear Part No. 5-P-1491-8X
(24) Input Gear Part No. 5-P-1491-9X
(25) Input Gear Part No. 5-P-912
(26) Input Gear Part No. 5-P-913
(27) Input Gear Part No. 5-P-914
(28) Input Gear Part No. 5-P-915

CHELSEA®**ALLISON****ALL-13C**

3000 (3000 Family-Side / Side PTO Provision w/ Integral Cooler)

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

877XFFJP-*5 (11)	379 C	Eng	128	Furnished	877XFFJP-*3 (11)	379 C	Eng	128	Furnished
877XGFJP-*5 (12)	334 C	Eng	145	Furnished	877XGFJP-*3 (12)	334 C	Eng	145	Furnished
877XHFJP-*5 (13)	315 C	Eng	154	Furnished	877XHFJP-*3 (13)	315 C	Eng	154	Furnished
877XJFJP-*5 (14)	295 C	Eng	164	Furnished	877XJFJP-*3 (14)	295 C	Eng	164	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFJP-*5 (16)	300 C	Eng	60	Furnished	280GBFJP-*3 (16)	300 C	Eng	60	Furnished
280GBFJP-*8 (16)	300 C	Eng	56	Furnished	280GBFJP-*8 (16)	300 C	Eng	56	Furnished
280GCFJP-*5 (17)	390 C	Eng	72	Furnished	280GCFJP-*3 (17)	390 C	Eng	72	Furnished
280GCFJP-*8 (17)	390 C	Eng	68	Furnished	280GCFJP-*8 (17)	390 C	Eng	68	Furnished
280GDFJP-*5 (18)	390 C	Eng	87	Furnished	280GDFJP-*3 (18)	390 C	Eng	87	Furnished
280GDFJP-*8 (18)	390 C	Eng	81	Furnished	280GDFJP-*8 (18)	390 C	Eng	81	Furnished
280GGFJP-*5 (19)	360 C	Eng	103	Furnished	280GGFJP-*3 (19)	360 C	Eng	103	Furnished
280GGFJP-*8 (19)	360 C	Eng	96	Furnished	280GGFJP-*8 (19)	360 C	Eng	96	Furnished
280GKFJP-*5 (20)	340 C	Eng	115	Furnished	280GKFJP-*3 (20)	340 C	Eng	115	Furnished
280GMFJP-*5 (21)	318 C	Eng	129	Furnished	280GMFJP-*3 (21)	318 C	Eng	129	Furnished
280GMFJP-*8 (21)	318 C	Eng	119	Furnished	280GMFJP-*8 (21)	318 C	Eng	119	Furnished
280GPFPJP-*5 (22)	290 C	Eng	144	Furnished	280GPFPJP-*3 (22)	290 C	Eng	144	Furnished
280GPFPJP-*8 (22)	290 C	Eng	132	Furnished	280GPFPJP-*8 (22)	290 C	Eng	132	Furnished
280GSFJP-*5 (23)	265 C	Eng	161	Furnished	280GSFJP-*3 (23)	265 C	Eng	161	Furnished
280GSFJP-*8 (23)	265 C	Eng	147	Furnished	280GSFJP-*8 (23)	265 C	Eng	147	Furnished
280GTFJP-*5 (24)	240 C	Eng	180	Furnished	280GTFJP-*3 (24)	240 C	Eng	180	Furnished
280GTFJP-*8 (15)	240 C	Eng	173	Furnished	280GTFJP-*8 (15)	240 C	Eng	173	Furnished
870XAFJP-*5 (6)	591 C	Eng	82	Furnished	870XAFJP-*3 (6)	591 C	Eng	82	Furnished
870XBFJP-*5 (7)	557 C	Eng	87	Furnished	870XBFJP-*3 (7)	557 C	Eng	87	Furnished
870XCFJP-*5 (8)	522 C	Eng	93	Furnished	870XCFJP-*3 (8)	522 C	Eng	93	Furnished
870XDFJP-*5 (9)	490 C	Eng	99	Furnished	870XDFJP-*3 (9)	490 C	Eng	99	Furnished
870XEFJP-*5 (10)	429 C	Eng	113	Furnished	870XEFJP-*3 (10)	429 C	Eng	113	Furnished
870XFFJP-*5 (11)	379 C	Eng	128	Furnished	870XFFJP-*3 (11)	379 C	Eng	128	Furnished
870XGFJP-*5 (12)	334 C	Eng	145	Furnished	870XGFJP-*3 (12)	334 C	Eng	145	Furnished
870XHFJP-*5 (13)	315 C	Eng	154	Furnished	870XHFJP-*3 (13)	315 C	Eng	154	Furnished
870XJFJP-*5 (14)	295 C	Eng	164	Furnished	870XJFJP-*3 (14)	295 C	Eng	164	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

- (6) Input Gear Part No. 5-P-1428-11x
- (12) Input Gear Part No. 5-P-1428-7X
- (18) Input Gear Part No. 5-P-1491-3X
- (24) Input Gear Part No. 5-P-1491-9X
- (7) Input Gear Part No. 5-P-1428-12X
- (13) Input Gear Part No. 5-P-1428-8X
- (19) Input Gear Part No. 5-P-1491-4X
- (8) Input Gear Part No. 5-P-1428-3X
- (14) Input Gear Part No. 5-P-1428-9X
- (20) Input Gear Part No. 5-P-1491-5X
- (9) Input Gear Part No. 5-P-1428-4X
- (15) Input Gear Part No. 5-P-1491-10X
- (21) Input Gear Part No. 5-P-1491-6X
- (10) Input Gear Part No. 5-P-1428-5X
- (16) Input Gear Part No. 5-P-1491-1X
- (22) Input Gear Part No. 5-P-1491-7X
- (11) Input Gear Part No. 5-P-1428-6X
- (17) Input Gear Part No. 5-P-1491-2X
- (23) Input Gear Part No. 5-P-1491-8X

Allison

ALL-13C

ALLISON

CHELSEA®

3000 (3000 Family-Side / Side PTO Provision w/ Integral Cooler)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LAFJW-*5 (6)	591 C	Eng	82	Furnished	870LAFJW-*3 (6)	591 C	Eng	82	Furnished	870LAFJW-*3 (6)	591 C	Eng	82
870LBFJW-*5 (7)	557 C	Eng	87	Furnished	870LBFJW-*3 (7)	557 C	Eng	87	Furnished	870LBFJW-*3 (7)	557 C	Eng	87
870LCFJW-*5 (8)	522 C	Eng	93	Furnished	870LCFJW-*3 (8)	522 C	Eng	93	Furnished	870LCFJW-*3 (8)	522 C	Eng	93
870LDFJW-*5 (9)	490 C	Eng	99	Furnished	870LDFJW-*3 (9)	490 C	Eng	99	Furnished	870LDFJW-*3 (9)	490 C	Eng	99
870LEFJW-*5 (10)	429 C	Eng	113	Furnished	870LEFJW-*3 (10)	429 C	Eng	113	Furnished	870LEFJW-*3 (10)	429 C	Eng	113
870LFFJW-*5 (11)	379 C	Eng	128	Furnished	870LFFJW-*3 (11)	379 C	Eng	128	Furnished	870LFFJW-*3 (11)	379 C	Eng	128
870LGFJW-*5 (12)	334 C	Eng	145	Furnished	870LGFJW-*3 (12)	334 C	Eng	145	Furnished	870LGFJW-*3 (12)	334 C	Eng	145
870LHFJW-*5 (13)	315 C	Eng	154	Furnished	870LHFJW-*3 (13)	315 C	Eng	154	Furnished	870LHFJW-*3 (13)	315 C	Eng	154
890NAFJW-*3 (6)	591 C	Eng	82	Furnished	890RAFJW-*5 (6)	591 C	Eng	82	Furnished	890RAFJW-*5 (6)	591 C	Eng	82
890NBFJW-*3 (7)	557 C	Eng	87	Furnished	890RBFJW-*5 (7)	557 C	Eng	87	Furnished	890RBFJW-*5 (7)	557 C	Eng	87
890NCFJW-*3 (8)	522 C	Eng	93	Furnished	890RCFJW-*5 (8)	522 C	Eng	93	Furnished	890RCFJW-*5 (8)	522 C	Eng	93
890NDFJW-*3 (9)	490 C	Eng	99	Furnished	890RDJW-*5 (9)	490 C	Eng	99	Furnished	890RDJW-*5 (9)	490 C	Eng	99
890NEFJW-*3 (10)	429 C	Eng	113	Furnished	890REFJW-*5 (10)	429 C	Eng	113	Furnished	890REFJW-*5 (10)	429 C	Eng	113
890NFFJW-*3 (11)	379 C	Eng	128	Furnished	890RFFJW-*5 (11)	379 C	Eng	128	Furnished	890RFFJW-*5 (11)	379 C	Eng	128
890NGFJW-*3 (12)	334 C	Eng	145	Furnished	890RGFJW-*5 (12)	334 C	Eng	145	Furnished	890RGFJW-*5 (12)	334 C	Eng	145
890NHFJW-*3 (13)	315 C	Eng	154	Furnished	890RHJW-*5 (13)	315 C	Eng	154	Furnished	890RHJW-*5 (13)	315 C	Eng	154

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

877LAFJW-*5 (6)	591 C	Eng	82	Furnished	877LAFJW-*3 (6)	591 C	Eng	82	Furnished	877LAFJW-*3 (6)	591 C	Eng	82
877LBFJW-*5 (7)	557 C	Eng	87	Furnished	877LBFJW-*3 (7)	557 C	Eng	87	Furnished	877LBFJW-*3 (7)	557 C	Eng	87
877LCFJW-*5 (8)	522 C	Eng	93	Furnished	877LCFJW-*3 (8)	522 C	Eng	93	Furnished	877LCFJW-*3 (8)	522 C	Eng	93
877LDFJW-*5 (9)	490 C	Eng	99	Furnished	877LDFJW-*3 (9)	490 C	Eng	99	Furnished	877LDFJW-*3 (9)	490 C	Eng	99
877LEFJW-*5 (10)	429 C	Eng	113	Furnished	877LEFJW-*3 (10)	429 C	Eng	113	Furnished	877LEFJW-*3 (10)	429 C	Eng	113
877LFFJW-*5 (11)	379 C	Eng	128	Furnished	877LFFJW-*3 (11)	379 C	Eng	128	Furnished	877LFFJW-*3 (11)	379 C	Eng	128
877LGFJW-*5 (12)	334 C	Eng	145	Furnished	877LGFJW-*3 (12)	334 C	Eng	145	Furnished	877LGFJW-*3 (12)	334 C	Eng	145
877LHFJW-*5 (13)	315 C	Eng	154	Furnished	877LHFJW-*3 (13)	315 C	Eng	154	Furnished	877LHFJW-*3 (13)	315 C	Eng	154
897NAFJW-*3 (6)	591 C	Eng	82	Furnished	897RAFJW-*5 (6)	591 C	Eng	82	Furnished	897RAFJW-*5 (6)	591 C	Eng	82
897NBFJW-*3 (7)	557 C	Eng	87	Furnished	897RBFJW-*5 (7)	557 C	Eng	87	Furnished	897RBFJW-*5 (7)	557 C	Eng	87
897NCFJW-*3 (8)	522 C	Eng	93	Furnished	897RCFJW-*5 (8)	522 C	Eng	93	Furnished	897RCFJW-*5 (8)	522 C	Eng	93
897NDFJW-*3 (9)	490 C	Eng	99	Furnished	897RDJW-*5 (9)	490 C	Eng	99	Furnished	897RDJW-*5 (9)	490 C	Eng	99
897NEFJW-*3 (10)	429 C	Eng	113	Furnished	897REFJW-*5 (10)	429 C	Eng	113	Furnished	897REFJW-*5 (10)	429 C	Eng	113
897NFFJW-*3 (11)	379 C	Eng	128	Furnished	897RFFJW-*5 (11)	379 C	Eng	128	Furnished	897RFFJW-*5 (11)	379 C	Eng	128

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(6) Input Gear Part No. 5-P-1428-11X
(7) Input Gear Part No. 5-P-1428-12X
(8) Input Gear Part No. 5-P-1428-3X
(9) Input Gear Part No. 5-P-1428-4X
(10) Input Gear Part No. 5-P-1428-5X
(11) Input Gear Part No. 5-P-1428-6X(12) Input Gear Part No. 5-P-1428-7X
(13) Input Gear Part No. 5-P-1428-8X

CHELSEA®**ALLISON****ALL-13C**

3000 (3000 Family-Side / Side PTO Provision w/ Integral Cooler)

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**
1.7800" (45.2100MM)**TRANSMISSION GEAR DATA:**R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**
1.7800" (45.2100MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

897NGFJW-*3 (12)	334 C	Eng	145	Furnished	897RGFJW-*5 (12)	334 C	Eng	145	Furnished
897NHFJW-*3 (13)	315 C	Eng	154	Furnished	897RHFJW-*5 (13)	315 C	Eng	154	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(12) Input Gear Part No. 5-P-1428-7X
(13) Input Gear Part No. 5-P-1428-8X

Allison

ALL-13EC

ALLISON

CHELSEA®

3000 (Econic) (3000 Family-Side / Side PTO Provision w/ Integral Cooler
Daimler Econic)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LAFJW-*3 (1)	591 C	Eng	82	Furnished
870LBFJW-*3 (2)	557 C	Eng	87	Furnished
870LCFJW-*3 (3)	522 C	Eng	93	Furnished
870LDFJW-*3 (4)	490 C	Eng	99	Furnished
870LEFJW-*3 (5)	429 C	Eng	113	Furnished
870LFFJW-*3 (6)	379 C	Eng	128	Furnished
870LGFJW-*3 (7)	334 C	Eng	145	Furnished
870LHFJW-*3 (8)	315 C	Eng	154	Furnished

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

877LAFJW-*3 (1)	591 C	Eng	82	Furnished
877LBFJW-*3 (2)	557 C	Eng	87	Furnished
877LCFJW-*3 (3)	522 C	Eng	93	Furnished
877LDFJW-*3 (4)	490 C	Eng	99	Furnished
877LEFJW-*3 (5)	429 C	Eng	113	Furnished
877LFFJW-*3 (6)	379 C	Eng	128	Furnished
877LGFJW-*3 (7)	334 C	Eng	145	Furnished
877LHFJW-*3 (8)	315 C	Eng	154	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

- (1) Input Gear Part No. 5-P-1428-11X
- (2) Input Gear Part No. 5-P-1428-12X
- (3) Input Gear Part No. 5-P-1428-3X
- (4) Input Gear Part No. 5-P-1428-4X
- (5) Input Gear Part No. 5-P-1428-5X
- (6) Input Gear Part No. 5-P-1428-6X
- (7) Input Gear Part No. 5-P-1428-7X
- (8) Input Gear Part No. 5-P-1428-8X

CHELSEA®**ALLISON****ALL-13R**

3000 (3000 Family- Side/Side PTO Provision w/ Retarder)

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	72	Furnished	267SBFJP-*3 (4)	402 I	Eng	72	Furnished	267SBFJP-*3 (4)	402 I	Eng	72
267SDFJP-*5 (3)	390 I	Eng	87	Furnished	267SDFJP-*3 (3)	390 I	Eng	87	Furnished	267SDFJP-*3 (3)	390 I	Eng	87
267SGFJP-*5 (2)	360 I	Eng	103	Furnished	267SGFJP-*3 (2)	360 I	Eng	103	Furnished	267SGFJP-*3 (2)	360 I	Eng	103
267SMFJP-*5 (5)	318 I	Eng	129	Furnished	267SMFJP-*3 (5)	318 I	Eng	129	Furnished	267SMFJP-*3 (5)	318 I	Eng	129
267SSFJP-*5 (1)	265 I	Eng	161	Furnished	267SSFJP-*3 (1)	265 I	Eng	161	Furnished	267SSFJP-*3 (1)	265 I	Eng	161
267XBFJP-*5 (25)	335 I	Eng	72	Furnished	267XBFJP-*3 (25)	335 I	Eng	72	Furnished	267XBFJP-*3 (25)	335 I	Eng	72
267XDFJP-*5 (26)	325 I	Eng	87	Furnished	267XDFJP-*3 (26)	325 I	Eng	87	Furnished	267XDFJP-*3 (26)	325 I	Eng	87
267XGFPJP-*5 (27)	300 I	Eng	103	Furnished	267XGFPJP-*3 (27)	300 I	Eng	103	Furnished	267XGFPJP-*3 (27)	300 I	Eng	103
267XMFJP-*5 (28)	265 I	Eng	129	Furnished	267XMFJP-*3 (28)	265 I	Eng	129	Furnished	267XMFJP-*3 (28)	265 I	Eng	129
267XSFJP-*5 (1)	250 I	Eng	161	Furnished	267XSFJP-*3 (1)	250 I	Eng	161	Furnished	267XSFJP-*3 (1)	250 I	Eng	161
287GBFPJP-*5 (16)	300 C	Eng	60	Furnished	287GBFPJP-*3 (16)	300 C	Eng	60	Furnished	287GBFPJP-*3 (16)	300 C	Eng	60
287GBFPJP-*8 (16)	300 C	Eng	56	Furnished	287GBFPJP-*8 (16)	300 C	Eng	56	Furnished	287GBFPJP-*8 (16)	300 C	Eng	56
287GCFJP-*5 (17)	390 C	Eng	72	Furnished	287GCFJP-*3 (17)	390 C	Eng	72	Furnished	287GCFJP-*3 (17)	390 C	Eng	72
287GCFJP-*8 (17)	390 C	Eng	68	Furnished	287GCFJP-*8 (17)	390 C	Eng	68	Furnished	287GCFJP-*8 (17)	390 C	Eng	68
287GDFJP-*5 (18)	390 C	Eng	87	Furnished	287GDFJP-*3 (18)	390 C	Eng	87	Furnished	287GDFJP-*3 (18)	390 C	Eng	87
287GDFJP-*8 (18)	390 C	Eng	81	Furnished	287GDFJP-*8 (18)	390 C	Eng	81	Furnished	287GDFJP-*8 (18)	390 C	Eng	81
287GGFPJP-*5 (19)	360 C	Eng	103	Furnished	287GGFPJP-*3 (19)	360 C	Eng	103	Furnished	287GGFPJP-*3 (19)	360 C	Eng	103
287GGFPJP-*8 (19)	360 C	Eng	96	Furnished	287GGFPJP-*8 (19)	360 C	Eng	96	Furnished	287GGFPJP-*8 (19)	360 C	Eng	96
287GKFJP-*5 (20)	340 C	Eng	115	Furnished	287GKFJP-*3 (20)	340 C	Eng	115	Furnished	287GKFJP-*3 (20)	340 C	Eng	115
287GMFPJP-*5 (21)	318 C	Eng	129	Furnished	287GMFPJP-*3 (21)	318 C	Eng	129	Furnished	287GMFPJP-*3 (21)	318 C	Eng	129
287GMFPJP-*8 (21)	318 C	Eng	119	Furnished	287GMFPJP-*8 (21)	318 C	Eng	119	Furnished	287GMFPJP-*8 (21)	318 C	Eng	119
287GPFPJP-*5 (22)	290 C	Eng	144	Furnished	287GPFPJP-*3 (22)	290 C	Eng	144	Furnished	287GPFPJP-*3 (22)	290 C	Eng	144
287GPFPJP-*8 (22)	290 C	Eng	132	Furnished	287GPFPJP-*8 (22)	290 C	Eng	132	Furnished	287GPFPJP-*8 (22)	290 C	Eng	132
287GSFPJP-*5 (23)	265 C	Eng	161	Furnished	287GSFPJP-*3 (23)	265 C	Eng	161	Furnished	287GSFPJP-*3 (23)	265 C	Eng	161
287GSFPJP-*8 (23)	265 C	Eng	147	Furnished	287GSFPJP-*8 (23)	265 C	Eng	147	Furnished	287GSFPJP-*8 (23)	265 C	Eng	147
287GTFJP-*5 (24)	240 C	Eng	180	Furnished	287GTFJP-*3 (24)	240 C	Eng	180	Furnished	287GTFJP-*3 (24)	240 C	Eng	180
287GTFJP-*8 (15)	240 C	Eng	173	Furnished	287GTFJP-*8 (15)	240 C	Eng	173	Furnished	287GTFJP-*8 (15)	240 C	Eng	173
877XAFJP-*5 (6)	591 C	Eng	82	Furnished	877XAFJP-*3 (6)	591 C	Eng	82	Furnished	877XAFJP-*3 (6)	591 C	Eng	82
877XBFJP-*5 (7)	557 C	Eng	87	Furnished	877XBFJP-*3 (7)	557 C	Eng	87	Furnished	877XBFJP-*3 (7)	557 C	Eng	87
877XCFJP-*5 (8)	522 C	Eng	93	Furnished	877XCFJP-*3 (8)	522 C	Eng	93	Furnished	877XCFJP-*3 (8)	522 C	Eng	93
877XDFJP-*5 (9)	490 C	Eng	99	Furnished	877XDFJP-*3 (9)	490 C	Eng	99	Furnished	877XDFJP-*3 (9)	490 C	Eng	99
877XEFJP-*5 (10)	429 C	Eng	113	Furnished	877XEFJP-*3 (10)	429 C	Eng	113	Furnished	877XEFJP-*3 (10)	429 C	Eng	113

Continued on Next Page

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.



October 2022

5.2.23

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Allison

ALL-13R

ALLISON

CHELSEA®

3000 (3000 Family- Side/Side PTO Provision w/ Retarder)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

877XFFJP-*5 (11)	379 C	Eng	128	Furnished	877XFFJP-*3 (11)	379 C	Eng	128	Furnished	877XGFJP-*5 (12)	334 C	Eng	145
877XGFJP-*5 (12)	334 C	Eng	145	Furnished	877XGFJP-*3 (12)	334 C	Eng	145	Furnished	877XHFJP-*5 (13)	315 C	Eng	154
877XHFJP-*5 (13)	315 C	Eng	154	Furnished	877XHFJP-*3 (13)	315 C	Eng	154	Furnished	877XJFJP-*5 (14)	295 C	Eng	164
877XJFJP-*5 (14)	295 C	Eng	164	Furnished	877XJFJP-*3 (14)	295 C	Eng	164	Furnished				

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFJP-*5 (16)	300 C	Eng	60	Furnished	280GBFJP-*3 (16)	300 C	Eng	60	Furnished	280GBFJP-*8 (16)	300 C	Eng	56
280GBFJP-*8 (16)	300 C	Eng	56	Furnished	280GBFJP-*8 (16)	300 C	Eng	56	Furnished	280GCFJP-*5 (17)	390 C	Eng	72
280GCFJP-*5 (17)	390 C	Eng	72	Furnished	280GCFJP-*3 (17)	390 C	Eng	72	Furnished	280GCFJP-*8 (17)	390 C	Eng	68
280GCFJP-*8 (17)	390 C	Eng	68	Furnished	280GCFJP-*8 (17)	390 C	Eng	68	Furnished	280GDFJP-*5 (18)	390 C	Eng	87
280GDFJP-*5 (18)	390 C	Eng	87	Furnished	280GDFJP-*3 (18)	390 C	Eng	87	Furnished	280GDFJP-*8 (18)	390 C	Eng	81
280GDFJP-*8 (18)	390 C	Eng	81	Furnished	280GDFJP-*8 (18)	390 C	Eng	81	Furnished	280GGFJP-*5 (19)	360 C	Eng	103
280GGFJP-*5 (19)	360 C	Eng	103	Furnished	280GGFJP-*3 (19)	360 C	Eng	103	Furnished	280GGFJP-*8 (19)	360 C	Eng	96
280GGFJP-*8 (19)	360 C	Eng	96	Furnished	280GGFJP-*8 (19)	360 C	Eng	96	Furnished	280GKFJP-*5 (20)	340 C	Eng	115
280GKFJP-*5 (20)	340 C	Eng	115	Furnished	280GKFJP-*3 (20)	340 C	Eng	115	Furnished	280GMFJP-*5 (21)	318 C	Eng	129
280GMFJP-*5 (21)	318 C	Eng	129	Furnished	280GMFJP-*3 (21)	318 C	Eng	129	Furnished	280GMFJP-*8 (21)	318 C	Eng	119
280GMFJP-*8 (21)	318 C	Eng	119	Furnished	280GMFJP-*8 (21)	318 C	Eng	119	Furnished	280GPFJP-*5 (22)	290 C	Eng	144
280GPFJP-*5 (22)	290 C	Eng	144	Furnished	280GPFJP-*3 (22)	290 C	Eng	144	Furnished	280GPFJP-*8 (22)	290 C	Eng	132
280GPFJP-*8 (22)	290 C	Eng	132	Furnished	280GPFJP-*8 (22)	290 C	Eng	132	Furnished	280GSFJP-*5 (23)	265 C	Eng	161
280GSFJP-*5 (23)	265 C	Eng	161	Furnished	280GSFJP-*3 (23)	265 C	Eng	161	Furnished	280GSFJP-*8 (23)	265 C	Eng	147
280GSFJP-*8 (23)	265 C	Eng	147	Furnished	280GSFJP-*8 (23)	265 C	Eng	147	Furnished	280GTFJP-*5 (24)	240 C	Eng	180
280GTFJP-*5 (24)	240 C	Eng	180	Furnished	280GTFJP-*3 (24)	240 C	Eng	180	Furnished	280GTFJP-*8 (15)	240 C	Eng	173
280GTFJP-*8 (15)	240 C	Eng	173	Furnished	280GTFJP-*8 (15)	240 C	Eng	173	Furnished	870XAFJP-*5 (6)	591 C	Eng	82
870XAFJP-*5 (6)	591 C	Eng	82	Furnished	870XAFJP-*3 (6)	591 C	Eng	82	Furnished	870XBFJP-*5 (7)	557 C	Eng	87
870XBFJP-*5 (7)	557 C	Eng	87	Furnished	870XBFJP-*3 (7)	557 C	Eng	87	Furnished	870XCFJP-*5 (8)	522 C	Eng	93
870XCFJP-*5 (8)	522 C	Eng	93	Furnished	870XCFJP-*3 (8)	522 C	Eng	93	Furnished	870XDFJP-*5 (9)	490 C	Eng	99
870XDFJP-*5 (9)	490 C	Eng	99	Furnished	870XDFJP-*3 (9)	490 C	Eng	99	Furnished	870XEFJP-*5 (10)	429 C	Eng	113
870XEFJP-*5 (10)	429 C	Eng	113	Furnished	870XEFJP-*3 (10)	429 C	Eng	113	Furnished	870XFFJP-*5 (11)	379 C	Eng	128
870XFFJP-*5 (11)	379 C	Eng	128	Furnished	870XFFJP-*3 (11)	379 C	Eng	128	Furnished	870XGFJP-*5 (12)	334 C	Eng	145
870XGFJP-*5 (12)	334 C	Eng	145	Furnished	870XGFJP-*3 (12)	334 C	Eng	145	Furnished	870XHFJP-*5 (13)	315 C	Eng	154
870XHFJP-*5 (13)	315 C	Eng	154	Furnished	870XHFJP-*3 (13)	315 C	Eng	154	Furnished	870XJFJP-*5 (14)	295 C	Eng	164
870XJFJP-*5 (14)	295 C	Eng	164	Furnished	870XJFJP-*3 (14)	295 C	Eng	164	Furnished				

Continued on Next Page[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

- (6) Input Gear Part No. 5-P-1428-11X
- (12) Input Gear Part No. 5-P-1428-7X
- (18) Input Gear Part No. 5-P-1491-3X
- (24) Input Gear Part No. 5-P-1491-9X
- (7) Input Gear Part No. 5-P-1428-12X
- (13) Input Gear Part No. 5-P-1428-8X
- (19) Input Gear Part No. 5-P-1491-4X
- (8) Input Gear Part No. 5-P-1428-3X
- (14) Input Gear Part No. 5-P-1428-9X
- (20) Input Gear Part No. 5-P-1491-5X
- (9) Input Gear Part No. 5-P-1428-4X
- (15) Input Gear Part No. 5-P-1491-10X
- (21) Input Gear Part No. 5-P-1491-6X
- (10) Input Gear Part No. 5-P-1428-5X
- (16) Input Gear Part No. 5-P-1491-1X
- (22) Input Gear Part No. 5-P-1491-7X
- (11) Input Gear Part No. 5-P-1428-6X
- (17) Input Gear Part No. 5-P-1491-2X
- (23) Input Gear Part No. 5-P-1491-8X

CHELSEA®**ALLISON****ALL-13R**

3000 (3000 Family- Side/Side PTO Provision w/ Retarder)

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**
1.7800" (45.2100MM)**TRANSMISSION GEAR DATA:**R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**
1.7800" (45.2100MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LAFJW-*5 (6)	591 C	Eng	82	Furnished	870LAFJW-*3 (6)	591 C	Eng	82	Furnished
870LBFJW-*5 (7)	557 C	Eng	87	Furnished	870LBFJW-*3 (7)	557 C	Eng	87	Furnished
870LCFJW-*5 (8)	522 C	Eng	93	Furnished	870LCFJW-*3 (8)	522 C	Eng	93	Furnished
870LDJFJW-*5 (9)	490 C	Eng	99	Furnished	870LDJFJW-*3 (9)	490 C	Eng	99	Furnished
870LEFJW-*5 (10)	429 C	Eng	113	Furnished	870LEFJW-*3 (10)	429 C	Eng	113	Furnished
870LFJFJW-*5 (11)	379 C	Eng	128	Furnished	870LFJFJW-*3 (11)	379 C	Eng	128	Furnished
870LGFJW-*5 (12)	334 C	Eng	145	Furnished	870LGFJW-*3 (12)	334 C	Eng	145	Furnished
870LHFJW-*5 (13)	315 C	Eng	154	Furnished	870LHFJW-*3 (13)	315 C	Eng	154	Furnished
890MAFJW-*5 (6)	591 C	Eng	82	Furnished					
890MBFJW-*5 (7)	557 C	Eng	87	Furnished					
890MCFJW-*5 (8)	522 C	Eng	93	Furnished					
890MDFJW-*5 (9)	490 C	Eng	99	Furnished					
890MEFJW-*5 (10)	429 C	Eng	113	Furnished					
890MFFJW-*5 (11)	379 C	Eng	128	Furnished					
890MGFJW-*5 (12)	334 C	Eng	145	Furnished					
890MHFJW-*5 (13)	315 C	Eng	154	Furnished					

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

877LAFJW-*5 (6)	591 C	Eng	82	Furnished	877LAFJW-*3 (6)	591 C	Eng	82	Furnished
877LBFJW-*5 (7)	557 C	Eng	87	Furnished	877LBFJW-*3 (7)	557 C	Eng	87	Furnished
877LCFJW-*5 (8)	522 C	Eng	93	Furnished	877LCFJW-*3 (8)	522 C	Eng	93	Furnished
877LDJFJW-*5 (9)	490 C	Eng	99	Furnished	877LDJFJW-*3 (9)	490 C	Eng	99	Furnished
877LEFJW-*5 (10)	429 C	Eng	113	Furnished	877LEFJW-*3 (10)	429 C	Eng	113	Furnished
877LFJFJW-*5 (11)	379 C	Eng	128	Furnished	877LFJFJW-*3 (11)	379 C	Eng	128	Furnished
877LGFJW-*5 (12)	334 C	Eng	145	Furnished	877LGFJW-*3 (12)	334 C	Eng	145	Furnished
877LHFJW-*5 (13)	315 C	Eng	154	Furnished	877LHFJW-*3 (13)	315 C	Eng	154	Furnished
897MAFJW-*5 (6)	591 C	Eng	82	Furnished					
897MBFJW-*5 (7)	557 C	Eng	87	Furnished					
897MCFJW-*5 (8)	522 C	Eng	93	Furnished					
897MDFJW-*5 (9)	490 C	Eng	99	Furnished					
897MEFJW-*5 (10)	429 C	Eng	113	Furnished					
897MFFJW-*5 (11)	379 C	Eng	128	Furnished					

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

- (6) Input Gear Part No. 5-P-1428-11X
- (7) Input Gear Part No. 5-P-1428-12X
- (8) Input Gear Part No. 5-P-1428-3X
- (9) Input Gear Part No. 5-P-1428-4X
- (10) Input Gear Part No. 5-P-1428-5X
- (11) Input Gear Part No. 5-P-1428-6X
- (12) Input Gear Part No. 5-P-1428-7X
- (13) Input Gear Part No. 5-P-1428-8X

Allison

ALL-13R

ALLISON

CHELSEA®

3000 (3000 Family- Side/Side PTO Provision w/ Retarder)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

897MGFJW-5 (12)	334 C	Eng	145	Furnished
897MHFJW-5 (13)	315 C	Eng	154	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(12) Input Gear Part No. 5-P-1428-7X
(13) Input Gear Part No. 5-P-1428-8X

CHELSEA®**ALLISON****ALL-14**

4000 EVS	4500 RDS
4000 MH	B 500
4000 RDS	HD-4060P (Close Ratio)
4000 TRV	HD-4070P
4430	HD-4560P (Wide Ratio)
4430 SP	
4440	
4500 EVS	

LEFT SIDE ONLY	TOP SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX	TRANSMISSION GEAR DATA: TOP 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX
PITCH LINE TO APERTURE FACE: 1.7799" (45.2100MM)	PITCH LINE TO APERTURE FACE: 1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	103	Furnished	267SBFJP-*3 (4)	402 I	Eng	103	Furnished				
267SDFJP-*5 (3)	390 I	Eng	123	Furnished	267SDFJP-*3 (4)	390 I	Eng	123	Furnished				
267SGFJP-*5 (2)	360 I	Eng	147	Furnished	267SGFJP-*3 (2)	360 I	Eng	147	Furnished				
267SMFJP-*5 (5)	318 I	Eng	184	Furnished	267SMFJP-*3 (5)	318 I	Eng	184	Furnished				
267SSFJP-*5 (1)	265 I	Eng	229	Furnished	267SSFJP-*3 (1)	265 I	Eng	229	Furnished				
267XBFJP-*5 (23)	335 I	Eng	103	Furnished	267XBFJP-*3 (23)	335 I	Eng	103	Furnished				
267XDFJP-*5 (24)	325 I	Eng	123	Furnished	267XDFJP-*5 (24)	325 I	Eng	123	Furnished				
267XGFPJ-*5 (25)	300 I	Eng	147	Furnished	267XGFPJ-*3 (25)	300 I	Eng	147	Furnished				
267XMFJP-*5 (26)	265 I	Eng	184	Furnished	267XMFJP-*3 (26)	265 I	Eng	184	Furnished				
267XSFPJ-*5 (1)	250 I	Eng	229	Furnished	267XSFPJ-*3 (1)	250 I	Eng	229	Furnished				
287GBFPJ-*5 (15)	300 C	Eng	85	Furnished	287GBFPJ-*5 (15)	300 C	Eng	85	Furnished				
287GBFPJ-*8 (15)	300 C	Eng	81	Furnished	287GBFPJ-*8 (15)	300 C	Eng	81	Furnished				
287GCFJP-*5 (16)	390 C	Eng	103	Furnished	287GCFJP-*5 (16)	390 C	Eng	103	Furnished				
287GCFJP-*8 (16)	390 C	Eng	97	Furnished	287GCFJP-*8 (16)	390 C	Eng	97	Furnished				
287GDFJP-*5 (17)	390 C	Eng	123	Furnished	287GDFJP-*5 (17)	390 C	Eng	123	Furnished				
287GDFJP-*8 (17)	390 C	Eng	116	Furnished	287GDFJP-*8 (17)	390 C	Eng	116	Furnished				
287GGFPJ-*5 (18)	360 C	Eng	147	Furnished	287GGFPJ-*5 (18)	360 C	Eng	147	Furnished				
287GGFPJ-*8 (18)	360 C	Eng	137	Furnished	287GGFPJ-*8 (18)	360 C	Eng	137	Furnished				
287GKFJP-*5 (19)	340 C	Eng	164	Furnished	287GKFJP-*5 (19)	340 C	Eng	164	Furnished				
287GMFPJ-*5 (20)	318 C	Eng	184	Furnished	287GMFPJ-*5 (20)	318 C	Eng	184	Furnished				
287GMFPJ-*8 (20)	318 C	Eng	170	Furnished	287GMFPJ-*8 (20)	318 C	Eng	170	Furnished				
287GPFPJ-*5 (21)	290 C	Eng	205	Furnished	287GPFPJ-*5 (21)	290 C	Eng	205	Furnished				
287GPFPJ-*8 (21)	290 C	Eng	189	Furnished	287GPFPJ-*8 (21)	290 C	Eng	189	Furnished				
287GSFPJ-*5 (22)	265 C	Eng	229	Furnished	287GSFPJ-*5 (22)	265 C	Eng	229	Furnished				
287GSFPJ-*8 (22)	265 C	Eng	210	Furnished	287GSFPJ-*8 (22)	265 C	Eng	210	Furnished				
877XAJP-*5 (6)	591 C	Eng	116	Furnished	877XAJP-*3 (6)	591 C	Eng	116	Furnished				
877XBFPJ-*5 (7)	552 C	Eng	124	Furnished	877XBFPJ-*3 (7)	552 C	Eng	124	Furnished				
877XCFJP-*5 (8)	515 C	Eng	133	Furnished	877XCFJP-*3 (8)	515 C	Eng	133	Furnished				
877XDFJP-*5 (9)	482 C	Eng	142	Furnished	877XDFJP-*3 (9)	482 C	Eng	142	Furnished				
877XEFJP-*5 (10)	425 C	Eng	161	Furnished	877XEFJP-*3 (10)	425 C	Eng	161	Furnished				
877XFFJP-*5 (11)	376 C	Eng	182	Furnished	877XFFJP-*3 (11)	376 C	Eng	182	Furnished				
877XGFPJ-*5 (12)	332 C	Eng	207	Furnished	877XGFPJ-*3 (12)	332 C	Eng	207	Furnished				

Continued on Next Page

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (1) Input Gear Part No. 5-P-1173
- (2) Input Gear Part No. 5-P-1225
- (3) Input Gear Part No. 5-P-1293
- (4) Input Gear Part No. 5-P-1350
- (5) Input Gear Part No. 5-P-1351
- (6) Input Gear Part No. 5-P-1428-11X
- (7) Input Gear Part No. 5-P-1428-12X
- (8) Input Gear Part No. 5-P-1428-3X
- (9) Input Gear Part No. 5-P-1428-4X
- (10) Input Gear Part No. 5-P-1428-5X
- (11) Input Gear Part No. 5-P-1428-6X
- (12) Input Gear Part No. 5-P-1428-7X
- (15) Input Gear Part No. 5-P-1491-1X
- (16) Input Gear Part No. 5-P-1491-2X
- (17) Input Gear Part No. 5-P-1491-3X
- (18) Input Gear Part No. 5-P-1491-4X
- (19) Input Gear Part No. 5-P-1491-5X
- (20) Input Gear Part No. 5-P-1491-6X
- (21) Input Gear Part No. 5-P-1491-7X
- (22) Input Gear Part No. 5-P-1491-8X
- (23) Input Gear Part No. 5-P-912
- (24) Input Gear Part No. 5-P-913
- (25) Input Gear Part No. 5-P-914
- (26) Input Gear Part No. 5-P-915

Allison

ALL-14

ALLISON

CHELSEA®

4000 EVS 4000 MH 4000 RDS 4000 TRV 4430 4430 ORS 4430 SP 4440	4500 EVS 4500 RDS B 500 HD-4060P (Close Ratio) HD-4070P HD-4560P (Wide Ratio)
--	--

LEFT SIDE ONLY	TOP SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX	TRANSMISSION GEAR DATA: TOP 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX
PITCH LINE TO APERTURE FACE: 1.7799" (45.2100MM)	PITCH LINE TO APERTURE FACE: 1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

877XHFJP-*5 (13)	312 C	Eng	220	Furnished	877XHFJP-*3 (13)	312 C	Eng	220	Furnished
877XJFJP-*5 (14)	293 C	Eng	234	Furnished	877XJFJP-*3 (14)	293 C	Eng	234	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFJP-*5 (15)	300 C	Eng	85	Furnished	280GBFJP-*5 (15)	300 C	Eng	85	Furnished
280GBFJP-*8 (15)	300 C	Eng	81	Furnished	280GBFJP-*8 (15)	300 C	Eng	81	Furnished
280GCFJP-*5 (16)	390 C	Eng	103	Furnished	280GCFJP-*5 (16)	390 C	Eng	103	Furnished
280GCFJP-*8 (16)	390 C	Eng	97	Furnished	280GCFJP-*8 (16)	390 C	Eng	97	Furnished
280GDFJP-*5 (17)	390 C	Eng	123	Furnished	280GDFJP-*5 (17)	390 C	Eng	123	Furnished
280GDFJP-*8 (17)	390 C	Eng	116	Furnished	280GDFJP-*8 (17)	390 C	Eng	116	Furnished
280GGFJP-*5 (18)	360 C	Eng	147	Furnished	280GGFJP-*5 (18)	360 C	Eng	147	Furnished
280GGFJP-*8 (18)	360 C	Eng	137	Furnished	280GGFJP-*8 (18)	360 C	Eng	137	Furnished
280GKFJP-*5 (19)	340 C	Eng	164	Furnished	280GKFJP-*5 (19)	340 C	Eng	164	Furnished
280GMFJP-*5 (20)	318 C	Eng	184	Furnished	280GMFJP-*5 (20)	318 C	Eng	184	Furnished
280GMFJP-*8 (20)	318 C	Eng	170	Furnished	280GMFJP-*8 (20)	318 C	Eng	170	Furnished
280GPFJP-*5 (21)	290 C	Eng	205	Furnished	280GPFJP-*5 (21)	290 C	Eng	205	Furnished
280GPFJP-*8 (21)	290 C	Eng	189	Furnished	280GPFJP-*8 (21)	290 C	Eng	189	Furnished
280GSFJP-*5 (22)	265 C	Eng	229	Furnished	280GSFJP-*5 (22)	265 C	Eng	229	Furnished
280GSFJP-*8 (22)	265 C	Eng	210	Furnished	280GSFJP-*8 (22)	265 C	Eng	210	Furnished
870XAFJP-*5 (6)	591 C	Eng	116	Furnished	870XAFJP-*5 (6)	591 C	Eng	116	Furnished
870XBFJP-*5 (7)	552 C	Eng	124	Furnished	870XBFJP-*5 (7)	552 C	Eng	124	Furnished
870XCFJP-*5 (8)	515 C	Eng	133	Furnished	870XCFJP-*5 (8)	515 C	Eng	133	Furnished
870XDFJP-*5 (9)	482 C	Eng	142	Furnished	870XDFJP-*5 (9)	482 C	Eng	142	Furnished
870XEFJP-*5 (10)	425 C	Eng	161	Furnished	870XEFJP-*5 (10)	425 C	Eng	161	Furnished
870XFFJP-*5 (11)	376 C	Eng	182	Furnished	870XFFJP-*5 (11)	376 C	Eng	182	Furnished
870XGFJP-*5 (12)	332 C	Eng	207	Furnished	870XGFJP-*5 (12)	332 C	Eng	207	Furnished
870XHFJP-*5 (13)	312 C	Eng	220	Furnished	870XHFJP-*5 (13)	312 C	Eng	220	Furnished
870XJFJP-*5 (14)	293 C	Eng	234	Furnished	870XJFJP-*5 (14)	293 C	Eng	234	Furnished

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LAFJW-*5 (6)	591	Eng	116	Furnished	890UAFJW-*5 (6)	591	Eng	116	Furnished
870LBFJW-*5 (7)	552	Eng	124	Furnished	890UBFJW-*5 (7)	552	Eng	124	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (6) Input Gear Part No. 5-P-1428-11X
- (12) Input Gear Part No. 5-P-1428-7X
- (18) Input Gear Part No. 5-P-1491-4X
- (7) Input Gear Part No. 5-P-1428-12X
- (13) Input Gear Part No. 5-P-1428-8X
- (19) Input Gear Part No. 5-P-1491-5X
- (8) Input Gear Part No. 5-P-1428-3X
- (14) Input Gear Part No. 5-P-1428-9X
- (20) Input Gear Part No. 5-P-1491-6X
- (9) Input Gear Part No. 5-P-1428-4X
- (15) Input Gear Part No. 5-P-1491-1X
- (21) Input Gear Part No. 5-P-1491-7X
- (10) Input Gear Part No. 5-P-1428-5X
- (16) Input Gear Part No. 5-P-1491-2X
- (22) Input Gear Part No. 5-P-1491-8X
- (11) Input Gear Part No. 5-P-1428-6X
- (17) Input Gear Part No. 5-P-1491-3X

October 2022

5.2.28

 Parker Hannifin Corporation
 Chelsea Products Division
 Olive Branch, MS 38654 USA

CHELSEA®**ALLISON****ALL-14**

4000 EVS 4000 MH 4000 RDS 4000 TRV 4430 4430 ORS 4430 SP 4440	4500 EVS 4500 RDS B 500 HD-4060P (Close Ratio) HD-4070P HD-4560P (Wide Ratio)
--	--

LEFT SIDE ONLY	TOP SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX	TRANSMISSION GEAR DATA: TOP 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX
PITCH LINE TO APERTURE FACE: 1.7799" (45.2100MM)	PITCH LINE TO APERTURE FACE: 1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LCFJW-*5 (8)	515	Eng	133	Furnished	890UCFJW-*5 (8)	515 C	Eng	133	Furnished
870LDFJW-*5 (9)	482	Eng	142	Furnished	890UDFJW-*5 (9)	482 C	Eng	142	Furnished
870LEFJW-*5 (10)	425	Eng	161	Furnished	890UEFJW-*5 (10)	425 C	Eng	161	Furnished
870LFFJW-*5 (11)	376	Eng	182	Furnished	890UFFJW-*5 (11)	376 C	Eng	182	Furnished
890HAFJW-*5 (6)	591 C	Eng	116	Furnished					
890HBFJW-*5 (7)	552 C	Eng	124	Furnished					
890HCFJW-*5 (8)	515 C	Eng	133	Furnished					
890HDFJW-*5 (9)	482 C	Eng	142	Furnished					
890HEFJW-*5 (10)	425 C	Eng	161	Furnished					
890HFFJW-*5 (11)	376 C	Eng	182	Furnished					

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

877LAFJW-*5 (6)	591	Eng	116	Furnished	897UAFJW-*5 (6)	591 C	Eng	116	Furnished
877LBFJW-*5 (7)	552	Eng	124	Furnished	897UBFJW-*5 (7)	552 C	Eng	124	Furnished
877LCFJW-*5 (8)	515	Eng	133	Furnished	897UCFJW-*5 (8)	515 C	Eng	133	Furnished
877LDFJW-*5 (9)	482	Eng	142	Furnished	897UDFJW-*5 (9)	482 C	Eng	142	Furnished
877LEFJW-*5 (10)	425	Eng	161	Furnished	897UEFJW-*5 (10)	425 C	Eng	161	Furnished
877LFFJW-*5 (11)	376	Eng	182	Furnished	897UFFJW-*5 (11)	376 C	Eng	182	Furnished
897HAFJW-*5 (6)	591 C	Eng	116	Furnished					
897HBFJW-*5 (7)	552 C	Eng	124	Furnished					
897HCFJW-*5 (8)	515 C	Eng	133	Furnished					
897HDFJW-*5 (9)	482 C	Eng	142	Furnished					
897HEFJW-*5 (10)	425 C	Eng	161	Furnished					
897HFFJW-*5 (11)	376 C	Eng	182	Furnished					

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (6) Input Gear Part No. 5-P-1428-11X
- (7) Input Gear Part No. 5-P-1428-12X
- (8) Input Gear Part No. 5-P-1428-3X
- (9) Input Gear Part No. 5-P-1428-4X
- (10) Input Gear Part No. 5-P-1428-5X
- (11) Input Gear Part No. 5-P-1428-6X

Allison

ALL-14C

ALLISON

CHELSEA®

4000 (4000 Family w/ Integral Cooler)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq		Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq		Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot							I / C †	Rot					

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	103	Furnished	267SBFJP-*3 (4)	402 I	Eng	103	Furnished							Furnished
267SDFJP-*5 (3)	390 I	Eng	123	Furnished	267SDFJP-*3 (4)	390 I	Eng	123	Furnished							Furnished
267SGFJP-*5 (2)	360 I	Eng	147	Furnished	267SGFJP-*3 (2)	360 I	Eng	147	Furnished							Furnished
267SMFJP-*5 (5)	318 I	Eng	184	Furnished	267SMFJP-*3 (5)	318 I	Eng	184	Furnished							Furnished
267SSFJP-*5 (1)	265 I	Eng	229	Furnished	267SSFJP-*3 (1)	265 I	Eng	229	Furnished							Furnished
267XBFJP-*5 (23)	335 I	Eng	103	Furnished	267XBFJP-*3 (23)	335 I	Eng	103	Furnished							Furnished
267XDFJP-*5 (24)	325 I	Eng	123	Furnished	267XDFJP-*3 (24)	325 I	Eng	123	Furnished							Furnished
267XGFJP-*5 (25)	300 I	Eng	147	Furnished	267XGFJP-*3 (25)	300 I	Eng	147	Furnished							Furnished
267XMFJP-*5 (26)	265 I	Eng	184	Furnished	267XMFJP-*3 (26)	265 I	Eng	184	Furnished							Furnished
267XSFJP-*5 (1)	250 I	Eng	229	Furnished	267XSFJP-*3 (1)	250 I	Eng	229	Furnished							Furnished
287GBFJP-*5 (15)	300 C	Eng	85	Furnished	287GBFJP-*5 (15)	300 C	Eng	85	Furnished							Furnished
287GBFJP-*8 (15)	300 C	Eng	81	Furnished	287GBFJP-*8 (15)	300 C	Eng	81	Furnished							Furnished
287GCFJP-*5 (16)	390 C	Eng	103	Furnished	287GCFJP-*5 (16)	390 C	Eng	103	Furnished							Furnished
287GCFJP-*8 (16)	390 C	Eng	97	Furnished	287GCFJP-*8 (16)	390 C	Eng	97	Furnished							Furnished
287GDFJP-*5 (17)	390 C	Eng	123	Furnished	287GDFJP-*5 (17)	390 C	Eng	123	Furnished							Furnished
287GDFJP-*8 (17)	390 C	Eng	116	Furnished	287GDFJP-*8 (17)	390 C	Eng	116	Furnished							Furnished
287GGFJP-*5 (18)	360 C	Eng	147	Furnished	287GGFJP-*5 (18)	360 C	Eng	147	Furnished							Furnished
287GGFJP-*8 (18)	360 C	Eng	137	Furnished	287GGFJP-*8 (18)	360 C	Eng	137	Furnished							Furnished
287GKFJP-*5 (19)	340 C	Eng	164	Furnished	287GKFJP-*5 (19)	340 C	Eng	164	Furnished							Furnished
287GMFJP-*5 (20)	318 C	Eng	184	Furnished	287GMFJP-*5 (20)	318 C	Eng	184	Furnished							Furnished
287GMFJP-*8 (20)	318 C	Eng	170	Furnished	287GMFJP-*8 (20)	318 C	Eng	170	Furnished							Furnished
287GPFJP-*5 (21)	290 C	Eng	205	Furnished	287GPFJP-*5 (21)	290 C	Eng	205	Furnished							Furnished
287GPFJP-*8 (21)	290 C	Eng	189	Furnished	287GPFJP-*8 (21)	290 C	Eng	189	Furnished							Furnished
287GSFJP-*5 (22)	265 C	Eng	229	Furnished	287GSFJP-*5 (22)	265 C	Eng	229	Furnished							Furnished
287GSFJP-*8 (22)	265 C	Eng	210	Furnished	287GSFJP-*8 (22)	265 C	Eng	210	Furnished							Furnished
877XAFJP-*5 (6)	591 C	Eng	116	Furnished	877XAFJP-*3 (6)	591 C	Eng	116	Furnished							Furnished
877XBFJP-*5 (7)	552 C	Eng	124	Furnished	877XBFJP-*3 (7)	552 C	Eng	124	Furnished							Furnished
877XCFJP-*5 (8)	515 C	Eng	133	Furnished	877XCFJP-*3 (8)	515 C	Eng	133	Furnished							Furnished
877XDFJP-*5 (9)	482 C	Eng	142	Furnished	877XDFJP-*3 (9)	482 C	Eng	142	Furnished							Furnished
877XEFJP-*5 (10)	425 C	Eng	161	Furnished	877XEFJP-*3 (10)	425 C	Eng	161	Furnished							Furnished
877XFFJP-*5 (11)	376 C	Eng	182	Furnished	877XFFJP-*3 (11)	376 C	Eng	182	Furnished							Furnished
877XGFJP-*5 (12)	332 C	Eng	207	Furnished	877XGFJP-*3 (12)	332 C	Eng	207	Furnished							Furnished

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428-11X

(7) Input Gear Part No. 5-P-1428-12X
(8) Input Gear Part No. 5-P-1428-3X
(9) Input Gear Part No. 5-P-1428-4X
(10) Input Gear Part No. 5-P-1428-5X
(11) Input Gear Part No. 5-P-1428-6X
(12) Input Gear Part No. 5-P-1428-7X

(15) Input Gear Part No. 5-P-1491-1X
(16) Input Gear Part No. 5-P-1491-2X
(17) Input Gear Part No. 5-P-1491-3X
(18) Input Gear Part No. 5-P-1491-4X
(19) Input Gear Part No. 5-P-1491-5X
(20) Input Gear Part No. 5-P-1491-6X

(21) Input Gear Part No. 5-P-1491-7X
(22) Input Gear Part No. 5-P-1491-8X
(23) Input Gear Part No. 5-P-912
(24) Input Gear Part No. 5-P-913
(25) Input Gear Part No. 5-P-914
(26) Input Gear Part No. 5-P-915

CHELSEA®**ALLISON****ALL-14C**

4000 (4000 Family w/ Integral Cooler)

LEFT SIDE ONLY**TOP SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**
1.7799" (45.2100MM)**TRANSMISSION GEAR DATA:**TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**
1.7799" (45.2100MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

877XHFJP-*5 (13)	312 C	Eng	220	Furnished	877XHFJP-*3 (13)	312 C	Eng	220	Furnished
877XJFJP-*5 (14)	293 C	Eng	234	Furnished	877XJFJP-*3 (14)	293 C	Eng	234	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFPJ-*5 (15)	300 C	Eng	85	Furnished	280GBFPJ-*5 (15)	300 C	Eng	85	Furnished
280GBFPJ-*8 (15)	300 C	Eng	81	Furnished	280GBFPJ-*8 (15)	300 C	Eng	81	Furnished
280GCFJP-*5 (16)	390 C	Eng	103	Furnished	280GCFJP-*5 (16)	390 C	Eng	103	Furnished
280GCFJP-*8 (16)	390 C	Eng	97	Furnished	280GCFJP-*8 (16)	390 C	Eng	97	Furnished
280GDFJP-*5 (17)	390 C	Eng	123	Furnished	280GDFJP-*5 (17)	390 C	Eng	123	Furnished
280GDFJP-*8 (17)	390 C	Eng	116	Furnished	280GDFJP-*8 (17)	390 C	Eng	116	Furnished
280GGFJP-*5 (18)	360 C	Eng	147	Furnished	280GGFJP-*5 (18)	360 C	Eng	147	Furnished
280GGFJP-*8 (18)	360 C	Eng	137	Furnished	280GGFJP-*8 (18)	360 C	Eng	137	Furnished
280GKFJP-*5 (19)	340 C	Eng	164	Furnished	280GKFJP-*5 (19)	340 C	Eng	164	Furnished
280GMFJP-*5 (20)	318 C	Eng	184	Furnished	280GMFJP-*5 (20)	318 C	Eng	184	Furnished
280GMFJP-*8 (20)	318 C	Eng	170	Furnished	280GMFJP-*8 (20)	318 C	Eng	170	Furnished
280GPFPJ-*5 (21)	290 C	Eng	205	Furnished	280GPFPJ-*5 (21)	290 C	Eng	205	Furnished
280GPFPJ-*8 (21)	290 C	Eng	189	Furnished	280GPFPJ-*8 (21)	290 C	Eng	189	Furnished
280GSFJP-*5 (22)	265 C	Eng	229	Furnished	280GSFJP-*5 (22)	265 C	Eng	229	Furnished
280GSFJP-*8 (22)	265 C	Eng	210	Furnished	280GSFJP-*8 (22)	265 C	Eng	210	Furnished
870XAFJP-*5 (6)	591 C	Eng	116	Furnished	870XAFJP-*3 (6)	591 C	Eng	116	Furnished
870XBFJP-*5 (7)	552 C	Eng	124	Furnished	870XBFJP-*3 (7)	552 C	Eng	124	Furnished
870XCFJP-*5 (8)	515 C	Eng	133	Furnished	870XCFJP-*3 (8)	515 C	Eng	133	Furnished
870XDFJP-*5 (9)	482 C	Eng	142	Furnished	870XDFJP-*3 (9)	482 C	Eng	142	Furnished
870XEFJP-*5 (10)	425 C	Eng	161	Furnished	870XEFJP-*3 (10)	425 C	Eng	161	Furnished
870XFFJP-*5 (11)	376 C	Eng	182	Furnished	870XFFJP-*3 (11)	376 C	Eng	182	Furnished
870XGFPJ-*5 (12)	332 C	Eng	207	Furnished	870XGFPJ-*3 (12)	332 C	Eng	207	Furnished
870XHFJP-*5 (13)	312 C	Eng	220	Furnished	870XHFJP-*3 (13)	312 C	Eng	220	Furnished
870XJFJP-*5 (14)	293 C	Eng	234	Furnished	870XJFJP-*3 (14)	293 C	Eng	234	Furnished

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LAFJW-*3 (6)	591 C	Eng	116	Furnished	890UAFJW-*5 (6)	591 C	Eng	116	Furnished
870LBFJW-*3 (7)	552 C	Eng	124	Furnished	890UBFJW-*5 (7)	552 C	Eng	124	Furnished

Continued on Next Page

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (6) Input Gear Part No. 5-P-1428-11X
- (12) Input Gear Part No. 5-P-1428-7X
- (18) Input Gear Part No. 5-P-1491-4X
- (7) Input Gear Part No. 5-P-1428-12X
- (13) Input Gear Part No. 5-P-1428-8X
- (19) Input Gear Part No. 5-P-1491-5X
- (8) Input Gear Part No. 5-P-1428-3X
- (14) Input Gear Part No. 5-P-1428-9X
- (20) Input Gear Part No. 5-P-1491-6X
- (9) Input Gear Part No. 5-P-1428-4X
- (15) Input Gear Part No. 5-P-1491-1X
- (21) Input Gear Part No. 5-P-1491-7X
- (10) Input Gear Part No. 5-P-1428-5X
- (16) Input Gear Part No. 5-P-1491-2X
- (22) Input Gear Part No. 5-P-1491-8X
- (11) Input Gear Part No. 5-P-1428-6X
- (17) Input Gear Part No. 5-P-1491-3X

Allison

ALL-14C

ALLISON

CHELSEA®

4000 (4000 Family w/ Integral Cooler)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LCFJP-*3 (8)	515 C	Eng	133	Furnished	890UCFJW-*5 (8)	515 C	Eng	133	Furnished
870LDFJW-*3 (9)	482 C	Eng	142	Furnished	890UDFJW-*5 (9)	482 C	Eng	142	Furnished
870LEFJW-*3 (10)	425 C	Eng	161	Furnished	890UEFJW-*5 (10)	425 C	Eng	161	Furnished
870LFFJW-*3 (11)	376 C	Eng	182	Furnished	890UFFJW-*5 (11)	376 C	Eng	182	Furnished
890CAFJW-*3 (6)	591 C	Eng	116	Furnished					
890CBFJW-*3 (7)	552 C	Eng	124	Furnished					
890CCFJW-*3 (8)	515 C	Eng	133	Furnished					
890CDFJW-*3 (9)	482 C	Eng	142	Furnished					
890CEFJW-*3 (10)	425 C	Eng	161	Furnished					
890CFFJW-*3 (11)	376 C	Eng	182	Furnished					

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

877LAFJW-*3 (6)	591 C	Eng	116	Furnished	897UAFJW-*3 (6)	591 C	Eng	116	Furnished
877LBFJW-*3 (7)	552 C	Eng	124	Furnished	897UBFJW-*5 (7)	552 C	Eng	124	Furnished
877LCFJW-*3 (8)	515 C	Eng	133	Furnished	897UCFJW-*5 (8)	515 C	Eng	133	Furnished
877LDFJW-*3 (9)	482 C	Eng	142	Furnished	897UDFJW-*5 (9)	482 C	Eng	142	Furnished
877LEFJW-*3 (10)	425 C	Eng	161	Furnished	897UEFJW-*5 (10)	425 C	Eng	161	Furnished
877LFFJW-*3 (11)	376 C	Eng	182	Furnished	897UFFJW-*5 (11)	376 C	Eng	182	Furnished
897CAFJW-*3 (6)	591 C	Eng	116	Furnished					
897CBFJW-*3 (7)	552 C	Eng	124	Furnished					
897CCFJW-*3 (8)	515 C	Eng	133	Furnished					
897CDFJW-*3 (9)	482 C	Eng	142	Furnished					
897CEFJW-*3 (10)	425 C	Eng	161	Furnished					
897CFFJW-*3 (11)	376 C	Eng	182	Furnished					

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.**CAUTION:** The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (6) Input Gear Part No. 5-P-1428-11X
- (7) Input Gear Part No. 5-P-1428-12X
- (8) Input Gear Part No. 5-P-1428-3X
- (9) Input Gear Part No. 5-P-1428-4X
- (10) Input Gear Part No. 5-P-1428-5X
- (11) Input Gear Part No. 5-P-1428-6X

CHELSEA®**ALLISON****ALL-14R**

4000 (4000 Family w/ Retarder)

LEFT SIDE ONLY**TOP SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7799" (45.2100MM)

TRANSMISSION GEAR DATA:TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	103	Furnished	267SBFJP-*3 (4)	402 I	Eng	103	Furnished				
267SDFJP-*5 (3)	390 I	Eng	123	Furnished	267SDFJP-*3 (4)	390 I	Eng	123	Furnished				
267SGFJP-*5 (2)	360 I	Eng	147	Furnished	267SGFJP-*3 (2)	360 I	Eng	147	Furnished				
267SMFJP-*5 (5)	318 I	Eng	184	Furnished	267SMFJP-*3 (5)	318 I	Eng	184	Furnished				
267SSFPJ-*5 (1)	265 I	Eng	229	Furnished	267SSFPJ-*3 (1)	265 I	Eng	229	Furnished				
267XBFJP-*5 (23)	335 I	Eng	103	Furnished	267XBFJP-*3 (23)	335 I	Eng	103	Furnished				
267XDFJP-*5 (24)	325 I	Eng	123	Furnished	267XDFJP-*3 (24)	325 I	Eng	123	Furnished				
267XGFJP-*5 (25)	300 I	Eng	147	Furnished	267XGFJP-*3 (25)	300 I	Eng	147	Furnished				
267XMFJP-*5 (26)	265 I	Eng	184	Furnished	267XMFJP-*3 (26)	265 I	Eng	184	Furnished				
267XSFPJ-*5 (1)	250 I	Eng	229	Furnished	267XSFPJ-*3 (1)	250 I	Eng	229	Furnished				
287GBFPJ-*5 (15)	300 C	Eng	85	Furnished	287GBFPJ-*5 (15)	300 C	Eng	85	Furnished				
287GBFPJ-*8 (15)	300 C	Eng	81	Furnished	287GBFPJ-*8 (15)	300 C	Eng	81	Furnished				
287GCFJP-*5 (16)	390 C	Eng	103	Furnished	287GCFJP-*5 (16)	390 C	Eng	103	Furnished				
287GCFJP-*8 (16)	390 C	Eng	97	Furnished	287GCFJP-*8 (16)	390 C	Eng	97	Furnished				
287GDFJP-*5 (17)	390 C	Eng	123	Furnished	287GDFJP-*5 (17)	390 C	Eng	123	Furnished				
287GDFJP-*8 (17)	390 C	Eng	116	Furnished	287GDFJP-*8 (17)	390 C	Eng	116	Furnished				
287GGFPJ-*5 (18)	360 C	Eng	147	Furnished	287GGFPJ-*5 (18)	360 C	Eng	147	Furnished				
287GGFPJ-*8 (18)	360 C	Eng	137	Furnished	287GGFPJ-*8 (18)	360 C	Eng	137	Furnished				
287GKFPJ-*5 (19)	340 C	Eng	164	Furnished	287GKFPJ-*5 (19)	340 C	Eng	164	Furnished				
287GMFPJ-*5 (20)	318 C	Eng	184	Furnished	287GMFPJ-*5 (20)	318 C	Eng	184	Furnished				
287GMFPJ-*8 (20)	318 C	Eng	170	Furnished	287GMFPJ-*8 (20)	318 C	Eng	170	Furnished				
287GPFPJ-*5 (21)	290 C	Eng	205	Furnished	287GPFPJ-*5 (21)	290 C	Eng	205	Furnished				
287GPFPJ-*8 (21)	290 C	Eng	189	Furnished	287GPFPJ-*8 (21)	290 C	Eng	189	Furnished				
287GSFPJ-*5 (22)	265 C	Eng	229	Furnished	287GSFPJ-*5 (22)	265 C	Eng	229	Furnished				
287GSFPJ-*8 (22)	265 C	Eng	210	Furnished	287GSFPJ-*8 (22)	265 C	Eng	210	Furnished				
877XAJP-*5 (6)	591 C	Eng	116	Furnished	877XAJP-*3 (6)	591 C	Eng	116	Furnished				
877XBFPJ-*5 (7)	552 C	Eng	124	Furnished	877XBFPJ-*3 (7)	552 C	Eng	124	Furnished				
877XCFJP-*5 (8)	515 C	Eng	133	Furnished	877XCFJP-*3 (8)	515 C	Eng	133	Furnished				
877XDFJP-*5 (9)	482 C	Eng	142	Furnished	877XDFJP-*3 (9)	482 C	Eng	142	Furnished				
877XEFJP-*5 (10)	425 C	Eng	161	Furnished	877XEFJP-*3 (10)	425 C	Eng	161	Furnished				
877XFFJP-*5 (11)	376 C	Eng	182	Furnished	877XFFJP-*3 (11)	376 C	Eng	182	Furnished				
877XGFPJ-*5 (12)	332 C	Eng	207	Furnished	877XGFPJ-*3 (12)	332 C	Eng	207	Furnished				

Continued on Next Page

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (1) Input Gear Part No. 5-P-1173
- (7) Input Gear Part No. 5-P-1428-12X
- (15) Input Gear Part No. 5-P-1491-1X
- (21) Input Gear Part No. 5-P-1491-7X
- (2) Input Gear Part No. 5-P-1225
- (8) Input Gear Part No. 5-P-1428-3X
- (16) Input Gear Part No. 5-P-1491-2X
- (22) Input Gear Part No. 5-P-1491-8X
- (3) Input Gear Part No. 5-P-1293
- (9) Input Gear Part No. 5-P-1428-4X
- (17) Input Gear Part No. 5-P-1491-3X
- (23) Input Gear Part No. 5-P-912
- (4) Input Gear Part No. 5-P-1350
- (10) Input Gear Part No. 5-P-1428-5X
- (18) Input Gear Part No. 5-P-1491-4X
- (24) Input Gear Part No. 5-P-913
- (5) Input Gear Part No. 5-P-1351
- (11) Input Gear Part No. 5-P-1428-6X
- (19) Input Gear Part No. 5-P-1491-5X
- (25) Input Gear Part No. 5-P-914
- (6) Input Gear Part No. 5-P-1428-11X
- (12) Input Gear Part No. 5-P-1428-7X
- (20) Input Gear Part No. 5-P-1491-6X
- (26) Input Gear Part No. 5-P-915

Allison

ALL-14R

ALLISON

CHELSEA®

4000 (4000 Family w/ Retarder)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

877XHFJP-*5 (13)	312 C	Eng	220	Furnished	877XHFJP-*3 (13)	312 C	Eng	220	Furnished	877XHFJP-*5 (14)	293 C	Eng	234	Furnished
------------------	-------	-----	-----	-----------	------------------	-------	-----	-----	-----------	------------------	-------	-----	-----	-----------

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFJP-*5 (15)	300 C	Eng	85	Furnished	280GBFJP-*5 (15)	300 C	Eng	85	Furnished	280GBFJP-*8 (15)	300 C	Eng	81	Furnished
280GBFJP-*8 (15)	300 C	Eng	81	Furnished	280GBFJP-*8 (15)	300 C	Eng	81	Furnished	280GCFJP-*5 (16)	390 C	Eng	103	Furnished
280GCFJP-*5 (16)	390 C	Eng	103	Furnished	280GCFJP-*5 (16)	390 C	Eng	103	Furnished	280GCFJP-*8 (16)	390 C	Eng	97	Furnished
280GCFJP-*8 (16)	390 C	Eng	97	Furnished	280GCFJP-*8 (16)	390 C	Eng	97	Furnished	280GDFJP-*5 (17)	390 C	Eng	123	Furnished
280GDFJP-*5 (17)	390 C	Eng	123	Furnished	280GDFJP-*5 (17)	390 C	Eng	123	Furnished	280GDFJP-*8 (17)	390 C	Eng	116	Furnished
280GDFJP-*8 (17)	390 C	Eng	116	Furnished	280GDFJP-*8 (17)	390 C	Eng	116	Furnished	280GGFJP-*5 (18)	360 C	Eng	147	Furnished
280GGFJP-*5 (18)	360 C	Eng	147	Furnished	280GGFJP-*5 (18)	360 C	Eng	147	Furnished	280GGFJP-*8 (18)	360 C	Eng	137	Furnished
280GGFJP-*8 (18)	360 C	Eng	137	Furnished	280GGFJP-*8 (18)	360 C	Eng	137	Furnished	280GKFJP-*5 (19)	340 C	Eng	164	Furnished
280GKFJP-*5 (19)	340 C	Eng	164	Furnished	280GKFJP-*5 (19)	340 C	Eng	164	Furnished	280GMFJP-*5 (20)	318 C	Eng	184	Furnished
280GMFJP-*5 (20)	318 C	Eng	184	Furnished	280GMFJP-*5 (20)	318 C	Eng	184	Furnished	280GMFJP-*8 (20)	318 C	Eng	170	Furnished
280GMFJP-*8 (20)	318 C	Eng	170	Furnished	280GMFJP-*8 (20)	318 C	Eng	170	Furnished	280GPFJP-*5 (21)	290 C	Eng	205	Furnished
280GPFJP-*5 (21)	290 C	Eng	205	Furnished	280GPFJP-*5 (21)	290 C	Eng	205	Furnished	280GPFJP-*8 (21)	290 C	Eng	189	Furnished
280GPFJP-*8 (21)	290 C	Eng	189	Furnished	280GPFJP-*8 (21)	290 C	Eng	189	Furnished	280GSFJP-*5 (22)	265 C	Eng	229	Furnished
280GSFJP-*5 (22)	265 C	Eng	229	Furnished	280GSFJP-*5 (22)	265 C	Eng	229	Furnished	280GSFJP-*8 (22)	265 C	Eng	210	Furnished
280GSFJP-*8 (22)	265 C	Eng	210	Furnished	280GSFJP-*8 (22)	265 C	Eng	210	Furnished	870XAFJP-*5 (6)	591 C	Eng	116	Furnished
870XAFJP-*5 (6)	591 C	Eng	116	Furnished	870XAFJP-*5 (6)	591 C	Eng	116	Furnished	870XBFJP-*5 (7)	552 C	Eng	124	Furnished
870XBFJP-*5 (7)	552 C	Eng	124	Furnished	870XBFJP-*5 (7)	552 C	Eng	124	Furnished	870XCFJP-*5 (8)	515 C	Eng	133	Furnished
870XCFJP-*5 (8)	515 C	Eng	133	Furnished	870XCFJP-*5 (8)	515 C	Eng	133	Furnished	870XDFJP-*5 (9)	482 C	Eng	142	Furnished
870XDFJP-*5 (9)	482 C	Eng	142	Furnished	870XDFJP-*5 (9)	482 C	Eng	142	Furnished	870XEFJP-*5 (10)	425 C	Eng	161	Furnished
870XEFJP-*5 (10)	425 C	Eng	161	Furnished	870XEFJP-*5 (10)	425 C	Eng	161	Furnished	870XFFJP-*5 (11)	376 C	Eng	182	Furnished
870XFFJP-*5 (11)	376 C	Eng	182	Furnished	870XFFJP-*5 (11)	376 C	Eng	182	Furnished	870XGFJP-*5 (12)	332 C	Eng	207	Furnished
870XGFJP-*5 (12)	332 C	Eng	207	Furnished	870XGFJP-*5 (12)	332 C	Eng	207	Furnished	870XHFJP-*5 (13)	312 C	Eng	220	Furnished
870XHFJP-*5 (13)	312 C	Eng	220	Furnished	870XHFJP-*5 (13)	312 C	Eng	220	Furnished	870XJFJP-*5 (14)	293 C	Eng	234	Furnished

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LAFJW-*5 (6)	591	Eng	116	Furnished	890KAFJW-*5 (6)	591 C	Eng	116	Furnished
870LBFJW-*5 (7)	552	Eng	124	Furnished	890KBFJW-*5 (7)	552 C	Eng	124	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (6) Input Gear Part No. 5-P-1428-11X
- (12) Input Gear Part No. 5-P-1428-7X
- (7) Input Gear Part No. 5-P-1428-12X
- (13) Input Gear Part No. 5-P-1428-8X
- (8) Input Gear Part No. 5-P-1428-3X
- (14) Input Gear Part No. 5-P-1428-9X
- (9) Input Gear Part No. 5-P-1428-4X
- (15) Input Gear Part No. 5-P-1491-1X
- (10) Input Gear Part No. 5-P-1428-5X
- (16) Input Gear Part No. 5-P-1491-2X
- (11) Input Gear Part No. 5-P-1428-6X
- (17) Input Gear Part No. 5-P-1491-3X
- (18) Input Gear Part No. 5-P-1491-4X
- (19) Input Gear Part No. 5-P-1491-5X
- (20) Input Gear Part No. 5-P-1491-6X
- (21) Input Gear Part No. 5-P-1491-7X
- (22) Input Gear Part No. 5-P-1491-8X

CHELSEA®**ALLISON****ALL-14R**

4000 (4000 Family w/ Retarder)

LEFT SIDE ONLY**TOP SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7799" (45.2100MM)

TRANSMISSION GEAR DATA:TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LCFJW-*5 (8)	515	Eng	133		Furnished	890KCFJW-*5 (8)	515 C	Eng	133				Furnished
870LDFJW-*5 (9)	482	Eng	142		Furnished	890KDFJW-*5 (9)	482 C	Eng	142				Furnished
870LEFJW-*5 (10)	425	Eng	161		Furnished	890KEFJW-*5 (10)	425 C	Eng	161				Furnished
870LFFJW-*5 (11)	376	Eng	182		Furnished	890KFFJW-*5 (11)	376 C	Eng	182				Furnished
890JAFJW-*3 (6)	591 C	Eng	116		Furnished								
890JBFJW-*3 (7)	552 C	Eng	124		Furnished								
890JCFJW-*3 (8)	515 C	Eng	133		Furnished								
890JDFJW-*3 (9)	482 C	Eng	142		Furnished								
890JEFJW-*3 (10)	425 C	Eng	161		Furnished								
890JFFJW-*3 (11)	376 C	Eng	182		Furnished								
890PAFJW-*5 (6)	591 C	Eng	116		Furnished								
890PBFJW-*5 (7)	552 C	Eng	124		Furnished								
890PCFJW-*5 (8)	515 C	Eng	133		Furnished								
890PDFJW-*5 (9)	482 C	Eng	142		Furnished								
890PEFJW-*5 (10)	425 C	Eng	161		Furnished								
890PFFJW-*5 (11)	376 C	Eng	182		Furnished								

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

877LAFJW-*5 (6)	591	Eng	116		Furnished	897KAFJW-*5 (6)	591 C	Eng	116				Furnished
877LBFJW-*5 (7)	552	Eng	124		Furnished	897KBFJW-*5 (7)	552 C	Eng	124				Furnished
877LCFJW-*5 (8)	515	Eng	133		Furnished	897KCFJW-*5 (8)	515 C	Eng	133				Furnished
877LDFJW-*5 (9)	482	Eng	142		Furnished	897KDFJW-*5 (9)	482 C	Eng	142				Furnished
877LEFJW-*5 (10)	425	Eng	161		Furnished	897KEFJW-*5 (10)	425 C	Eng	161				Furnished
877LFFJW-*5 (11)	376	Eng	182		Furnished	897KFFJW-*5 (11)	376 C	Eng	182				Furnished
897JAFJW-*3 (6)	591 C	Eng	116		Furnished								
897JBFJW-*3 (7)	552 C	Eng	127		Furnished								
897JCFJW-*3 (8)	515 C	Eng	133		Furnished								
897JDFJW-*3 (9)	482 C	Eng	142		Furnished								
897JEFJW-*3 (10)	425 C	Eng	161		Furnished								
897JFFJW-*3 (11)	376 C	Eng	182		Furnished								
897PAFJW-*5 (6)	591 C	Eng	116		Furnished								
897PBFJW-*5 (7)	552 C	Eng	127		Furnished								

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (6) Input Gear Part No. 5-P-1428-11X
- (7) Input Gear Part No. 5-P-1428-12X
- (8) Input Gear Part No. 5-P-1428-3X
- (9) Input Gear Part No. 5-P-1428-4X
- (10) Input Gear Part No. 5-P-1428-5X
- (11) Input Gear Part No. 5-P-1428-6X

Allison

ALL-14R

ALLISON

CHELSEA®

4000 (4000 Family w/ Retarder)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7799" (45.2100MM)

TRANSMISSION GEAR DATA:TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

897PCFJW-*5 (8)	515 C	Eng	133	Furnished
897PDFJW-*5 (9)	482 C	Eng	142	Furnished
897PEFJW-*5 (10)	425 C	Eng	161	Furnished
897PFFJW-*5 (11)	376 C	Eng	182	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.**CAUTION:** The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (8) Input Gear Part No. 5-P-1428-3X
- (9) Input Gear Part No. 5-P-1428-4X
- (10) Input Gear Part No. 5-P-1428-5X
- (11) Input Gear Part No. 5-P-1428-6X

CHELSEA®**ALLISON****ALL-15**

1000	1350 SP (Available in 4,5 & 6 Speed)	2300 RDS
1000 EVS	2000	2400
1000 MH	2100 EVS	2500 EVS
1000 RDS	2100 MH	2500 MH
1350 (Available in 4,5 & 6 Speed)	2100 RDS	2500 RDS
1350 EVS (Available in 4,5 & 6 Speed)	2200 EVS	
1350 MH (Available in 4,5 & 6 Speed)	2200 MH	
350 RDS (Available in 4,5 & 6 Speed)	2200 RDS	

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 06-BOLT Opening Gear FORWARD of Centerline 64 Teeth - SPUR	TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 64 Teeth - SPUR
PITCH LINE TO APERTURE FACE: 1.0080" (25.6000MM)	PITCH LINE TO APERTURE FACE: 1.0080" (25.6032MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442GBHVP-*5 (3)	215 I	Eng	96	Furnished	442GBHVP-*3 (3)	215 I	Eng	96	Furnished				
442GBHVP-*5 (3)	150 I	Eng	96	Furnished	442GBHVP-*3 (3)	150 I	Eng	96	Furnished				
442GFHVP-*5 (2)	165 I	Eng	151	Furnished	442GFHVP-*3 (2)	165 I	Eng	151	Furnished				

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272GAHVP-*5 (5)	294 C	Eng	85	Furnished	272GAHVP-*3 (5)	294 C	Eng	85	Furnished				
272GBHVP-*5 (6)	240 C	Eng	104	Furnished	272GBHVP-*3 (6)	240 C	Eng	104	Furnished				
272GCHVP-*5 (7)	198 C	Eng	126	Furnished	272GCHVP-*3 (7)	198 C	Eng	126	Furnished				
272GDHVP-*5 (8)	166 C	Eng	151	Furnished	272GDHVP-*3 (8)	166 C	Eng	151	Furnished				

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272NAHVP-*3 (5)	294 C	Eng	85	Furnished	272NAHVP-*5 (5)	294 C	Eng	85	Furnished				
272NBHVP-*3 (6)	240 C	Eng	104	Furnished	272NBHVP-*5 (6)	240 C	Eng	104	Furnished				
272NCHVP-*3 (7)	198 C	Eng	126	Furnished	272NCHVP-*5 (7)	198 C	Eng	126	Furnished				
272NDHVP-*3 (8)	166 C	Eng	151	Furnished	272NDHVP-*5 (8)	166 C	Eng	151	Furnished				

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

252GDHVP-*5 (1)	120 I	Eng	122	Furnished	252GDHVP-*5 (1)	120 I	Eng	122	Furnished				
252GMHVP-*5 (4)	50 I	Eng	178	Furnished	252GMHVP-*5 (4)	50 I	Eng	178	Furnished				

GEARED ADAPTERS

626GHVX-4HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished	626GHVX-3HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished				
630GHVX-4HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished	630GHVX-3HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished				
645GHVX-4HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished	645GHVX-3HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished				

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(1) Input Gear Part No. 5-P-1294
(2) Input Gear Part No. 5-P-1300
(3) Input Gear Part No. 5-P-1358
(4) Input Gear Part No. 5-P-1386
(5) Input Gear Part No. 5-P-1516-1X
(6) Input Gear Part No. 5-P-1516-2X(7) Input Gear Part No. 5-P-1516-3X
(8) Input Gear Part No. 5-P-1516-4X
(9) Filler block furnished with PTO

Allison

ALL-16

ALLISON

CHELSEA®

MD-3066P (Europe Only)
 3000 RDS (Side/Top PTO Provision)
 3500 RDS (Side/Top PTO Provision)
 3500 ORS (Side/Top PTO Provision)
 3200 ORS (Side/Top PTO Provision)
 3000 ORS (Side/Top PTO Provision)
 3000 SP (Side/Top PTO Provision)
 3200 SP (Side/Top PTO Provision)

3500 SP (Side/Top PTO Provision)
 3000 (International - Side/Top PTO Provision)
 3200 (International - Side/Top PTO Provision)
 3500 (International - Side/Top PTO Provision)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
 83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
 83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	88	Furnished	267SBFJP-*3 (4)	402 I	Eng	88	Furnished	267SBFJP-*3 (3)	390 I	Eng	106
267SDFJP-*5 (3)	390 I	Eng	106	Furnished	267SDFJP-*3 (2)	360 I	Eng	126	Furnished	267SDFJP-*3 (5)	309 I	Eng	157
267SGFJP-*5 (2)	360 I	Eng	126	Furnished	267SGFJP-*3 (2)	360 I	Eng	126	Furnished	267SGFJP-*3 (5)	309 I	Eng	157
267SMFJP-*5 (5)	309 I	Eng	157	Furnished	267SMFJP-*3 (5)	309 I	Eng	157	Furnished	267SSFJP-*3 (1)	247 I	Eng	196
267SSFJP-*5 (1)	247 I	Eng	196	Furnished	267SSFJP-*3 (1)	247 I	Eng	196	Furnished	267XBFJP-*3 (25)	335 I	Eng	88
267XBFJP-*5 (25)	335 I	Eng	88	Furnished	267XBFJP-*3 (25)	335 I	Eng	88	Furnished	267XDFJP-*3 (26)	325 I	Eng	106
267XDFJP-*5 (26)	325 I	Eng	106	Furnished	267XDFJP-*3 (26)	325 I	Eng	106	Furnished	267XGFJP-*3 (27)	300 I	Eng	126
267XGFJP-*5 (27)	300 I	Eng	126	Furnished	267XGFJP-*3 (27)	300 I	Eng	126	Furnished	267XMFJP-*3 (28)	265 I	Eng	157
267XMFJP-*5 (28)	265 I	Eng	157	Furnished	267XMFJP-*3 (28)	265 I	Eng	157	Furnished	267XSFJP-*3 (1)	247 I	Eng	196
267XSFJP-*5 (1)	247 I	Eng	196	Furnished	267XSFJP-*3 (1)	247 I	Eng	196	Furnished	287GBFJP-*3 (17)	300 C	Eng	73
287GBFJP-*5 (17)	300 C	Eng	73	Furnished	287GBFJP-*3 (17)	300 C	Eng	73	Furnished	287GBFJP-*8 (17)	300 C	Eng	69
287GBFJP-*8 (17)	300 C	Eng	69	Furnished	287GBFJP-*8 (17)	300 C	Eng	69	Furnished	287GCFJP-*3 (18)	390 C	Eng	88
287GCFJP-*5 (18)	390 C	Eng	88	Furnished	287GCFJP-*3 (18)	390 C	Eng	88	Furnished	287GCFJP-*8 (18)	390 C	Eng	83
287GCFJP-*8 (18)	390 C	Eng	83	Furnished	287GCFJP-*8 (18)	390 C	Eng	83	Furnished	287GDFJP-*3 (19)	390 C	Eng	87
287GDFJP-*5 (19)	390 C	Eng	87	Furnished	287GDFJP-*3 (19)	390 C	Eng	87	Furnished	287GDFJP-*8 (19)	390 C	Eng	99
287GDFJP-*8 (19)	390 C	Eng	99	Furnished	287GDFJP-*8 (19)	390 C	Eng	99	Furnished	287GGFJP-*3 (20)	360 C	Eng	126
287GGFJP-*5 (20)	360 C	Eng	126	Furnished	287GGFJP-*3 (20)	360 C	Eng	126	Furnished	287GGFJP-*8 (20)	360 C	Eng	117
287GGFJP-*8 (20)	360 C	Eng	117	Furnished	287GGFJP-*8 (20)	360 C	Eng	117	Furnished	287GKFJP-*3 (21)	340 C	Eng	140
287GKFJP-*5 (21)	340 C	Eng	140	Furnished	287GKFJP-*3 (21)	340 C	Eng	140	Furnished	287GMFJP-*3 (22)	309 C	Eng	157
287GMFJP-*5 (22)	309 C	Eng	157	Furnished	287GMFJP-*3 (22)	309 C	Eng	157	Furnished	287GMFJP-*8 (22)	318 C	Eng	145
287GMFJP-*8 (22)	318 C	Eng	145	Furnished	287GMFJP-*8 (22)	318 C	Eng	145	Furnished	287GPFPJ-*3 (23)	275 C	Eng	175
287GPFPJ-*5 (23)	275 C	Eng	175	Furnished	287GPFPJ-*3 (23)	275 C	Eng	175	Furnished	287GPFPJ-*8 (23)	290 C	Eng	162
287GPFPJ-*8 (23)	290 C	Eng	162	Furnished	287GPFPJ-*8 (23)	290 C	Eng	162	Furnished	287GSFPJ-*3 (24)	247 C	Eng	196
287GSFPJ-*5 (24)	247 C	Eng	196	Furnished	287GSFPJ-*3 (24)	247 C	Eng	196	Furnished	287GSFPJ-*8 (24)	265 C	Eng	180
287GSFPJ-*8 (24)	265 C	Eng	180	Furnished	287GSFPJ-*8 (24)	265 C	Eng	180	Furnished	287GTFJP-*8 (16)	230 C	Eng	211
287GTFJP-*8 (16)	230 C	Eng	211	Furnished	287GTFJP-*8 (16)	230 C	Eng	211	Furnished	287XAFJP-*3 (7)	485 C	Eng	100
877XAFJP-*5 (7)	485 C	Eng	100	Furnished	287XAFJP-*3 (7)	485 C	Eng	100	Furnished	877XBFJP-*3 (8)	458 C	Eng	106
877XBFJP-*5 (8)	458 C	Eng	106	Furnished	877XBFJP-*3 (8)	458 C	Eng	106	Furnished	877XCFJP-*3 (9)	425 C	Eng	114
877XCFJP-*5 (9)	425 C	Eng	114	Furnished	877XCFJP-*3 (9)	425 C	Eng	114	Furnished	877XDFJP-*3 (10)	401 C	Eng	121
877XDFJP-*5 (10)	401 C	Eng	121	Furnished	877XDFJP-*3 (10)	401 C	Eng	121	Furnished	877XEFJP-*3 (11)	351 C	Eng	138
877XEFJP-*5 (11)	351 C	Eng	138	Furnished	877XEFJP-*3 (11)	351 C	Eng	138	Furnished	877XFFJP-*3 (12)	311C	Eng	156
877XFFJP-*5 (12)	311C	Eng	156	Furnished	877XFFJP-*3 (12)	311C	Eng	156	Furnished				

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

(1) Input Gear Part No. 5-P-1173
 (2) Input Gear Part No. 5-P-1225
 (3) Input Gear Part No. 5-P-1293
 (4) Input Gear Part No. 5-P-1350
 (5) Input Gear Part No. 5-P-1351
 (7) Input Gear Part No. 5-P-1428-11X

(8) Input Gear Part No. 5-P-1428-12X
 (9) Input Gear Part No. 5-P-1428-3X
 (10) Input Gear Part No. 5-P-1428-4X
 (11) Input Gear Part No. 5-P-1428-5X
 (12) Input Gear Part No. 5-P-1428-6X
 (16) Input Gear Part No. 5-P-1491-10X

(17) Input Gear Part No. 5-P-1491-1X
 (18) Input Gear Part No. 5-P-1491-2X
 (19) Input Gear Part No. 5-P-1491-3X
 (20) Input Gear Part No. 5-P-1491-4X
 (21) Input Gear Part No. 5-P-1491-5X
 (22) Input Gear Part No. 5-P-1491-6X

(23) Input Gear Part No. 5-P-1491-7X
 (24) Input Gear Part No. 5-P-1491-8X
 (25) Input Gear Part No. 5-P-912
 (26) Input Gear Part No. 5-P-913
 (27) Input Gear Part No. 5-P-914
 (28) Input Gear Part No. 5-P-915

Parker Hannifin Corporation
 Chelsea Products Division
 Olive Branch, MS 38654 USA

October 2022

5.2.38

CHELSEA®**ALLISON****ALL-16**

MD-3066P (Europe Only) 3000 RDS (Side/Top PTO Provision) 3500 RDS (Side/Top PTO Provision) 3500 ORS (Side/Top PTO Provision) 3200 ORS (Side/Top PTO Provision) 3000 ORS (Side/Top PTO Provision) 3000 SP (Side/Top PTO Provision) 3200 SP (Side/Top PTO Provision)	3500 SP (Side/Top PTO Provision) 3000 (International - Side/Top PTO Provision) 3200 (International - Side/Top PTO Provision) 3500 (International - Side/Top PTO Provision)
---	---

LEFT SIDE ONLY	TOP SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 83 Teeth - L.H. HELIX	TRANSMISSION GEAR DATA: TOP 10-BOLT Opening Gear FORWARD of Centerline 83 Teeth - L.H. HELIX
PITCH LINE TO APERTURE FACE: 1.7800" (45.2100MM)	PITCH LINE TO APERTURE FACE: 1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

877XGFJP-*5 (13)	274 C	Eng	177	Furnished	877XGFJP-*3 (13)	274 C	Eng	177	Furnished
877XHFJP-*5 (14)	258 C	Eng	188	Furnished	877XHFJP-*3 (14)	258 C	Eng	188	Furnished
877XJFJP-*5 (15)	242 C	Eng	200	Furnished	877XJFJP-*3 (15)	242 C	Eng	200	Furnished
877XKFJP-*5 (6)	292 C	Eng	166	Furnished	877XKFJP-*3 (6)	292 C	Eng	166	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFJP-*5 (17)	300 C	Eng	73	Furnished	280GBFJP-*3 (17)	300 C	Eng	73	Furnished
280GBFJP-*8 (17)	300 C	Eng	69	Furnished	280GBFJP-*8 (17)	300 C	Eng	69	Furnished
280GCFJP-*5 (18)	390 C	Eng	88	Furnished	280GCFJP-*3 (18)	390 C	Eng	88	Furnished
280GCFJP-*8 (18)	390 C	Eng	83	Furnished	280GCFJP-*8 (18)	390 C	Eng	83	Furnished
280GDFJP-*5 (19)	390 C	Eng	106	Furnished	280GDFJP-*3 (19)	390 C	Eng	106	Furnished
280GDFJP-*8 (19)	390 C	Eng	99	Furnished	280GDFJP-*8 (19)	390 C	Eng	99	Furnished
280GGFJP-*5 (20)	360 C	Eng	126	Furnished	280GGFJP-*3 (20)	360 C	Eng	126	Furnished
280GGFJP-*8 (20)	360 C	Eng	117	Furnished	280GGFJP-*8 (20)	360 C	Eng	117	Furnished
280GKFJP-*5 (21)	340 C	Eng	140	Furnished	280GKFJP-*3 (21)	340 C	Eng	140	Furnished
280GMFJP-*5 (22)	309 C	Eng	157	Furnished	280GMFJP-*3 (22)	309 C	Eng	157	Furnished
280GMFJP-*8 (22)	318 C	Eng	145	Furnished	280GMFJP-*8 (22)	318 C	Eng	145	Furnished
280GPFPJP-*5 (23)	275 C	Eng	175	Furnished	280GPFPJP-*3 (23)	275 C	Eng	175	Furnished
280GPFPJP-*8 (23)	290 C	Eng	162	Furnished	280GPFPJP-*8 (23)	290 C	Eng	162	Furnished
280GSFJP-*5 (24)	247 C	Eng	196	Furnished	280GSFJP-*3 (24)	247 C	Eng	196	Furnished
280GSFJP-*8 (24)	265 C	Eng	180	Furnished	280GSFJP-*8 (24)	265 C	Eng	180	Furnished
280GTFJP-*8 (16)	230 C	Eng	211	Furnished	280GTFJP-*8 (16)	230 C	Eng	211	Furnished
870XAFJP-*5 (7)	485 C	Eng	100	Furnished	870XAFJP-*3 (7)	485 C	Eng	100	Furnished
870XBFJP-*5 (8)	458 C	Eng	106	Furnished	870XBFJP-*3 (8)	458 C	Eng	106	Furnished
870XCFJP-*5 (9)	425 C	Eng	114	Furnished	870XCFJP-*3 (9)	425 C	Eng	114	Furnished
870XDFJP-*5 (10)	401 C	Eng	121	Furnished	870XDFJP-*3 (10)	401 C	Eng	121	Furnished
870XEFJP-*5 (11)	351 C	Eng	138	Furnished	870XEFJP-*3 (11)	351 C	Eng	138	Furnished
870XFFJP-*5 (12)	311 C	Eng	156	Furnished	870XFFJP-*3 (12)	311 C	Eng	156	Furnished
870XGFJP-*5 (13)	274 C	Eng	177	Furnished	870XGFJP-*3 (13)	274 C	Eng	177	Furnished
870XHFJP-*5 (14)	258 C	Eng	188	Furnished	870XHFJP-*3 (14)	258 C	Eng	188	Furnished
870XJFJP-*5 (15)	242 C	Eng	200	Furnished	870XJFJP-*3 (15)	242 C	Eng	200	Furnished

Continued on Next Page

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (6) Input Gear Part No. 5-P-1428-10X
- (12) Input Gear Part No. 5-P-1428-6X
- (18) Input Gear Part No. 5-P-1491-2X
- (24) Input Gear Part No. 5-P-1491-8X
- (7) Input Gear Part No. 5-P-1428-11X
- (13) Input Gear Part No. 5-P-1428-7X
- (19) Input Gear Part No. 5-P-1491-3X
- (8) Input Gear Part No. 5-P-1428-12X
- (14) Input Gear Part No. 5-P-1428-8X
- (20) Input Gear Part No. 5-P-1491-4X
- (9) Input Gear Part No. 5-P-1428-3X
- (15) Input Gear Part No. 5-P-1428-9X
- (21) Input Gear Part No. 5-P-1491-5X
- (10) Input Gear Part No. 5-P-1428-4X
- (16) Input Gear Part No. 5-P-1491-10X
- (22) Input Gear Part No. 5-P-1491-6X
- (11) Input Gear Part No. 5-P-1428-5X
- (17) Input Gear Part No. 5-P-1491-1X
- (23) Input Gear Part No. 5-P-1491-7X

Allison

ALL-16

ALLISON

CHELSEA®

MD-3066P (Europe Only)
 3000 RDS (Side/Top PTO Provision)
 3500 RDS (Side/Top PTO Provision)
 3500 ORS (Side/Top PTO Provision)
 3200 ORS (Side/Top PTO Provision)
 3000 ORS (Side/Top PTO Provision)
 3000 SP (Side/Top PTO Provision)
 3200 SP (Side/Top PTO Provision)

3500 SP (Side/Top PTO Provision)
 3000 (International - Side/Top PTO Provision)
 3200 (International - Side/Top PTO Provision)
 3500 (International - Side/Top PTO Provision)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
 83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
 83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LAFJW-*5 (7)	485 C	Eng	100	Furnished	890TAFJW-*5 (7)	485 C	Eng	100	Furnished	890TBFJW-*5 (8)	458 C	Eng	106
870LBFJW-*5 (8)	458 C	Eng	106	Furnished	890TBFJW-*5 (8)	458 C	Eng	106	Furnished	890TCFJW-*5 (9)	425 C	Eng	114
870LCFJW-*5 (9)	425 C	Eng	114	Furnished	890TCFJW-*5 (9)	425 C	Eng	114	Furnished	890TDFJW-*5 (10)	401 C	Eng	121
870LDFJW-*5 (10)	401 C	Eng	121	Furnished	890TDFJW-*5 (10)	401 C	Eng	121	Furnished	890TEFJW-*5 (11)	351 C	Eng	138
870LEFJW-*5 (11)	351 C	Eng	138	Furnished	890TEFJW-*5 (11)	351 C	Eng	138	Furnished	890TFFJW-*5 (12)	311 C	Eng	156
870LFFJW-*5 (12)	311 C	Eng	156	Furnished	890TFFJW-*5 (12)	311 C	Eng	156	Furnished	890TGFJW-*5 (13)	274 C	Eng	177
870LGFJW-*5 (13)	274 C	Eng	177	Furnished	890TGFJW-*5 (13)	274 C	Eng	177	Furnished	890THFJW-*5 (14)	258 C	Eng	188
870LHFJW-*5 (14)	258 C	Eng	188	Furnished	890THFJW-*5 (14)	258 C	Eng	188	Furnished				
890EAFJW-*5 (7)	485 C	Eng	100	Furnished									
890EBFJW-*5 (8)	458 C	Eng	106	Furnished									
890ECFJW-*5 (9)	425 C	Eng	114	Furnished									
890EDFJW-*5 (10)	401 C	Eng	121	Furnished									
890EEFJW-*5 (11)	351 C	Eng	138	Furnished									
890EFFJW-*5 (12)	311 C	Eng	156	Furnished									
890EGFJW-*5 (13)	274 C	Eng	177	Furnished									
890EHFJW-*5 (14)	258 C	Eng	188	Furnished									

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

877LAFJW-*5 (7)	485 C	Eng	100	Furnished	897TAFJW-*5 (7)	485 C	Eng	100	Furnished	897TBFJW-*5 (8)	458 C	Eng	106
877LBFJW-*5 (8)	458 C	Eng	106	Furnished	897TBFJW-*5 (8)	458 C	Eng	106	Furnished	897TCFJW-*5 (9)	425 C	Eng	114
877LCFJW-*5 (9)	425 C	Eng	114	Furnished	897TCFJW-*5 (9)	425 C	Eng	114	Furnished	897TDFJW-*5 (10)	401 C	Eng	121
877LDFJW-*5 (10)	401 C	Eng	121	Furnished	897TDFJW-*5 (10)	401 C	Eng	121	Furnished	897TEFJW-*5 (11)	351 C	Eng	138
877LEFJW-*5 (11)	351 C	Eng	138	Furnished	897TEFJW-*5 (11)	351 C	Eng	138	Furnished	897TFFJW-*5 (12)	311 C	Eng	156
877LFFJW-*5 (12)	311 C	Eng	156	Furnished	897TFFJW-*5 (12)	311 C	Eng	156	Furnished	897TGFJW-*5 (13)	274 C	Eng	177
877LGFJW-*5 (13)	274 C	Eng	177	Furnished	897TGFJW-*5 (13)	274 C	Eng	177	Furnished	897THFJW-*5 (14)	258 C	Eng	188
877LHFJW-*5 (14)	258 C	Eng	188	Furnished	897THFJW-*5 (14)	258 C	Eng	188	Furnished				
897EAFJW-*5 (7)	485 C	Eng	100	Furnished									
897EBFJW-*5 (8)	458 C	Eng	106	Furnished									
897ECFJW-*5 (9)	425 C	Eng	114	Furnished									
897EDFJW-*5 (10)	401 C	Eng	121	Furnished									
897EEFJW-*5 (11)	351 C	Eng	138	Furnished									
897EFFJW-*5 (12)	311 C	Eng	156	Furnished									

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (7) Input Gear Part No. 5-P-1428-11X
- (8) Input Gear Part No. 5-P-1428-12X
- (9) Input Gear Part No. 5-P-1428-3X
- (10) Input Gear Part No. 5-P-1428-4X
- (11) Input Gear Part No. 5-P-1428-5X
- (12) Input Gear Part No. 5-P-1428-6X
- (13) Input Gear Part No. 5-P-1428-7X
- (14) Input Gear Part No. 5-P-1428-8X

Allison

CHELSEA®**ALLISON****ALL-16**

MD-3066P (Europe Only) 3000 RDS (Side/Top PTO Provision) 3500 RDS (Side/Top PTO Provision) 3500 ORS (Side/Top PTO Provision) 3200 ORS (Side/Top PTO Provision) 3000 ORS (Side/Top PTO Provision) 3000 SP (Side/Top PTO Provision) 3200 SP (Side/Top PTO Provision)	3500 SP (Side/Top PTO Provision) 3000 (International - Side/Top PTO Provision) 3200 (International - Side/Top PTO Provision) 3500 (International - Side/Top PTO Provision)
LEFT SIDE ONLY	TOP SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 83 Teeth - L.H. HELIX	TRANSMISSION GEAR DATA: TOP 10-BOLT Opening Gear FORWARD of Centerline 83 Teeth - L.H. HELIX
PITCH LINE TO APERTURE FACE: 1.7800" (45.2100MM)	PITCH LINE TO APERTURE FACE: 1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

897EGFJW-*5 (13)	274 C	Eng	177	Furnished
897EHFJW-*5 (14)	258 C	Eng	188	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

(13) Input Gear Part No. 5-P-1428-7X
(14) Input Gear Part No. 5-P-1428-8X

Allison

ALL-16C

ALLISON

CHELSEA®

3000 (3000 Family Side/Top PTO Provision w/ Integral Cooler)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq		Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq		Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot							I / C †	Rot					

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	88	Furnished	267SBFJP-*3 (4)	402 I	Eng	88	Furnished							Furnished
267SDFJP-*5 (3)	390 I	Eng	106	Furnished	267SDFJP-*3 (3)	390 I	Eng	106	Furnished							Furnished
267SGFJP-*5 (2)	360 I	Eng	126	Furnished	267SGFJP-*3 (2)	360 I	Eng	126	Furnished							Furnished
267SMFJP-*5 (5)	309 I	Eng	157	Furnished	267SMFJP-*3 (5)	309 I	Eng	157	Furnished							Furnished
267SSFJP-*5 (1)	247 I	Eng	196	Furnished	267SSFJP-*3 (1)	247 I	Eng	196	Furnished							Furnished
267XBFJP-*5 (25)	335 I	Eng	88	Furnished	267XBFJP-*3 (25)	335 I	Eng	88	Furnished							Furnished
267XDFJP-*5 (26)	325 I	Eng	106	Furnished	267XDFJP-*3 (26)	325 I	Eng	106	Furnished							Furnished
267XGFJP-*5 (27)	300 I	Eng	126	Furnished	267XGFJP-*3 (27)	300 I	Eng	126	Furnished							Furnished
267XMFJP-*5 (28)	265 I	Eng	157	Furnished	267XMFJP-*3 (28)	265 I	Eng	157	Furnished							Furnished
267XSFJP-*5 (1)	247 I	Eng	196	Furnished	267XSFJP-*3 (1)	247 I	Eng	196	Furnished							Furnished
287GBFJP-*5 (17)	300 C	Eng	73	Furnished	287GBFJP-*3 (17)	300 C	Eng	73	Furnished							Furnished
287GBFJP-*8 (17)	300 C	Eng	69	Furnished	287GBFJP-*8 (17)	300 C	Eng	69	Furnished							Furnished
287GCFJP-*5 (18)	390 C	Eng	88	Furnished	287GCFJP-*3 (18)	390 C	Eng	88	Furnished							Furnished
287GCFJP-*8 (18)	390 C	Eng	83	Furnished	287GCFJP-*8 (18)	390 C	Eng	83	Furnished							Furnished
287GDFJP-*5 (19)	390 C	Eng	87	Furnished	287GDFJP-*3 (19)	390 C	Eng	87	Furnished							Furnished
287GDFJP-*8 (19)	390 C	Eng	99	Furnished	287GDFJP-*8 (19)	390 C	Eng	99	Furnished							Furnished
287GGFJP-*5 (20)	360 C	Eng	126	Furnished	287GGFJP-*3 (20)	360 C	Eng	126	Furnished							Furnished
287GGFJP-*8 (20)	360 C	Eng	117	Furnished	287GGFJP-*8 (20)	360 C	Eng	117	Furnished							Furnished
287GKFJP-*5 (21)	340 C	Eng	140	Furnished	287GKFJP-*3 (21)	340 C	Eng	140	Furnished							Furnished
287GMFJP-*5 (22)	309 C	Eng	157	Furnished	287GMFJP-*3 (22)	309 C	Eng	157	Furnished							Furnished
287GMFJP-*8 (22)	318 C	Eng	145	Furnished	287GMFJP-*8 (22)	318 C	Eng	145	Furnished							Furnished
287GPFJP-*5 (23)	275 C	Eng	175	Furnished	287GPFJP-*3 (23)	275 C	Eng	175	Furnished							Furnished
287GPFJP-*8 (23)	290 C	Eng	162	Furnished	287GPFJP-*8 (23)	290 C	Eng	162	Furnished							Furnished
287GSFJP-*5 (24)	247 C	Eng	196	Furnished	287GSFJP-*3 (24)	247 C	Eng	196	Furnished							Furnished
287GSFJP-*8 (24)	265 C	Eng	180	Furnished	287GSFJP-*8 (24)	265 C	Eng	180	Furnished							Furnished
287GTFJP-*8 (16)	230 C	Eng	211	Furnished	287GTFJP-*8 (16)	230 C	Eng	211	Furnished							Furnished
877XAFJP-*5 (7)	485 C	Eng	100	Furnished	877XAFJP-*3 (7)	485 C	Eng	100	Furnished							Furnished
877XBFJP-*5 (8)	458 C	Eng	106	Furnished	877XBFJP-*3 (8)	458 C	Eng	106	Furnished							Furnished
877XCFJP-*5 (9)	425 C	Eng	114	Furnished	877XCFJP-*3 (9)	425 C	Eng	114	Furnished							Furnished
877XDFJP-*5 (10)	401 C	Eng	121	Furnished	877XDFJP-*3 (10)	401 C	Eng	121	Furnished							Furnished
877XEFJP-*5 (11)	351 C	Eng	138	Furnished	877XEFJP-*3 (11)	351 C	Eng	138	Furnished							Furnished
877XFFJP-*5 (12)	311C	Eng	156	Furnished	877XFFJP-*3 (12)	311C	Eng	156	Furnished							Furnished

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (1) Input Gear Part No. 5-P-1173
- (8) Input Gear Part No. 5-P-1428-12X
- (17) Input Gear Part No. 5-P-1491-1X
- (23) Input Gear Part No. 5-P-1491-7X
- (2) Input Gear Part No. 5-P-1225
- (9) Input Gear Part No. 5-P-1428-3X
- (18) Input Gear Part No. 5-P-1491-2X
- (24) Input Gear Part No. 5-P-1491-8X
- (3) Input Gear Part No. 5-P-1293
- (10) Input Gear Part No. 5-P-1428-4X
- (19) Input Gear Part No. 5-P-1491-3X
- (25) Input Gear Part No. 5-P-912
- (4) Input Gear Part No. 5-P-1350
- (11) Input Gear Part No. 5-P-1428-5X
- (20) Input Gear Part No. 5-P-1491-4X
- (26) Input Gear Part No. 5-P-913
- (5) Input Gear Part No. 5-P-1351
- (12) Input Gear Part No. 5-P-1428-6X
- (21) Input Gear Part No. 5-P-1491-5X
- (27) Input Gear Part No. 5-P-914
- (7) Input Gear Part No. 5-P-1428-11X
- (16) Input Gear Part No. 5-P-1491-10X
- (22) Input Gear Part No. 5-P-1491-6X
- (28) Input Gear Part No. 5-P-915

CHELSEA®**ALLISON****ALL-16C**

3000 (3000 Family Side/Top PTO Provision w/ Integral Cooler)

LEFT SIDE ONLY**TOP SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

877XGFJP-*5 (13)	274	C	Eng	177	Furnished	877XGFJP-*3 (13)	274	C	Eng	177	Furnished
877XHFJP-*5 (14)	258	C	Eng	188	Furnished	877XHFJP-*3 (14)	258	C	Eng	188	Furnished
877XJFJP-*5 (15)	242	C	Eng	200	Furnished	877XJFJP-*3 (15)	242	C	Eng	200	Furnished
877XKFJP-*5 (6)	292	C	Eng	166	Furnished	877XKFJP-*3 (6)	292	C	Eng	166	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFPJ-*5 (17)	300	C	Eng	73	Furnished	280GBFPJ-*3 (17)	300	C	Eng	73	Furnished
280GBFPJ-*8 (17)	300	C	Eng	69	Furnished	280GBFPJ-*8 (17)	300	C	Eng	69	Furnished
280GCFJP-*5 (18)	390	C	Eng	88	Furnished	280GCFJP-*3 (18)	390	C	Eng	88	Furnished
280GCFJP-*8 (18)	390	C	Eng	83	Furnished	280GCFJP-*8 (18)	390	C	Eng	83	Furnished
280GDFJP-*5 (19)	390	C	Eng	106	Furnished	280GDFJP-*3 (19)	390	C	Eng	106	Furnished
280GDFJP-*8 (19)	390	C	Eng	99	Furnished	280GDFJP-*8 (19)	390	C	Eng	99	Furnished
280GGFJP-*5 (20)	360	C	Eng	126	Furnished	280GGFJP-*3 (20)	360	C	Eng	126	Furnished
280GGFJP-*8 (20)	360	C	Eng	117	Furnished	280GGFJP-*8 (20)	360	C	Eng	117	Furnished
280GKFJP-*5 (21)	340	C	Eng	140	Furnished	280GKFJP-*3 (21)	340	C	Eng	140	Furnished
280GMFJP-*5 (22)	309	C	Eng	157	Furnished	280GMFJP-*3 (22)	309	C	Eng	157	Furnished
280GMFJP-*8 (22)	318	C	Eng	145	Furnished	280GMFJP-*8 (22)	318	C	Eng	145	Furnished
280GPFPJ-*5 (23)	275	C	Eng	175	Furnished	280GPFPJ-*3 (23)	275	C	Eng	175	Furnished
280GPFPJ-*8 (23)	290	C	Eng	162	Furnished	280GPFPJ-*8 (23)	290	C	Eng	162	Furnished
280GSFPJ-*5 (24)	247	C	Eng	196	Furnished	280GSFPJ-*3 (24)	247	C	Eng	196	Furnished
280GSFPJ-*8 (24)	265	C	Eng	180	Furnished	280GSFPJ-*8 (24)	265	C	Eng	180	Furnished
280GTFJP-*8 (16)	230	C	Eng	211	Furnished	280GTFJP-*8 (16)	230	C	Eng	211	Furnished
870XAFJP-*5 (7)	485	C	Eng	100	Furnished	870XAFJP-*3 (7)	485	C	Eng	100	Furnished
870XBFJP-*5 (8)	458	C	Eng	106	Furnished	870XBFJP-*3 (8)	458	C	Eng	106	Furnished
870XCFJP-*5 (9)	425	C	Eng	114	Furnished	870XCFJP-*3 (9)	425	C	Eng	114	Furnished
870XDFJP-*5 (10)	401	C	Eng	121	Furnished	870XDFJP-*3 (10)	401	C	Eng	121	Furnished
870XEFJP-*5 (11)	351	C	Eng	138	Furnished	870XEFJP-*3 (11)	351	C	Eng	138	Furnished
870XFFJP-*5 (12)	311	C	Eng	156	Furnished	870XFFJP-*3 (12)	311	C	Eng	156	Furnished
870XGFJP-*5 (13)	274	C	Eng	177	Furnished	870XGFJP-*3 (13)	274	C	Eng	177	Furnished
870XHFJP-*5 (14)	258	C	Eng	188	Furnished	870XHFJP-*3 (14)	258	C	Eng	188	Furnished
870XJFJP-*5 (15)	242	C	Eng	200	Furnished	870XJFJP-*3 (15)	242	C	Eng	200	Furnished

Continued on Next Page

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (6) Input Gear Part No. 5-P-1428-10X
- (12) Input Gear Part No. 5-P-1428-6X
- (18) Input Gear Part No. 5-P-1491-2X
- (24) Input Gear Part No. 5-P-1491-8X
- (7) Input Gear Part No. 5-P-1428-11X
- (13) Input Gear Part No. 5-P-1428-7X
- (19) Input Gear Part No. 5-P-1491-3X
- (8) Input Gear Part No. 5-P-1428-12X
- (14) Input Gear Part No. 5-P-1428-8X
- (20) Input Gear Part No. 5-P-1491-4X
- (9) Input Gear Part No. 5-P-1428-3X
- (15) Input Gear Part No. 5-P-1428-9X
- (21) Input Gear Part No. 5-P-1491-5X
- (10) Input Gear Part No. 5-P-1428-4X
- (16) Input Gear Part No. 5-P-1491-10X
- (22) Input Gear Part No. 5-P-1491-6X
- (11) Input Gear Part No. 5-P-1428-5X
- (17) Input Gear Part No. 5-P-1491-1X
- (23) Input Gear Part No. 5-P-1491-7X

Allison

ALL-16C

ALLISON

CHELSEA®

3000 (3000 Family Side/Top PTO Provision w/ Integral Cooler)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]							Fwd					

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LAFJW-*5 (7)	485 C	Eng	100	Furnished	890TAFJW-*5 (7)	485 C	Eng	100	Furnished
870LBFJW-*5 (8)	458 C	Eng	106	Furnished	890TBFJW-*5 (8)	458 C	Eng	106	Furnished
870LCFJW-*5 (9)	425 C	Eng	114	Furnished	890TCFJW-*5 (9)	425 C	Eng	114	Furnished
870LDFJW-*5 (10)	401 C	Eng	121	Furnished	890TDFJW-*5 (10)	401 C	Eng	121	Furnished
870LEFJW-*5 (11)	351 C	Eng	138	Furnished	890TEFJW-*5 (11)	351 C	Eng	138	Furnished
870LFFJW-*5 (12)	311 C	Eng	156	Furnished	890TFFJW-*5 (12)	311 C	Eng	156	Furnished
870LGJFJW-*5 (13)	274 C	Eng	177	Furnished	890TGFJW-*5 (13)	274 C	Eng	177	Furnished
870LHFJW-*5 (14)	258 C	Eng	188	Furnished	890THFJW-*5 (14)	258 C	Eng	188	Furnished

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

877LAFJW-*5 (7)	485 C	Eng	100	Furnished	897TAFJW-*5 (7)	485 C	Eng	100	Furnished
877LBFJW-*5 (8)	458 C	Eng	106	Furnished	897TBFJW-*5 (8)	458 C	Eng	106	Furnished
877LCFJW-*5 (9)	425 C	Eng	114	Furnished	897TCFJW-*5 (9)	425 C	Eng	114	Furnished
877LDFJW-*5 (10)	401 C	Eng	121	Furnished	897TDFJW-*5 (10)	401 C	Eng	121	Furnished
877LEFJW-*5 (11)	351 C	Eng	138	Furnished	897TEFJW-*5 (11)	351 C	Eng	138	Furnished
877LFFJW-*5 (12)	311 C	Eng	156	Furnished	897TFFJW-*5 (12)	311 C	Eng	156	Furnished
877LGJFJW-*5 (13)	274 C	Eng	177	Furnished	897TGFJW-*5 (13)	274 C	Eng	177	Furnished
877LHFJW-*5 (14)	258 C	Eng	188	Furnished	897THFJW-*5 (14)	258 C	Eng	188	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.**CAUTION:** The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (7) Input Gear Part No. 5-P-1428-11X (13) Input Gear Part No. 5-P-1428-7X
 (8) Input Gear Part No. 5-P-1428-12X (14) Input Gear Part No. 5-P-1428-8X
 (9) Input Gear Part No. 5-P-1428-3X
 (10) Input Gear Part No. 5-P-1428-4X
 (11) Input Gear Part No. 5-P-1428-5X
 (12) Input Gear Part No. 5-P-1428-6X

October 2022

5.2.44

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

CHELSEA®**ALLISON****ALL-16EV**

3000 EVS (Emergency Vehicles Only Top / Side PTO Provisions)
 3500 EVS (Emergency Vehicles Only Top / Side PTO Provisions)

LEFT SIDE ONLY**TOP SIDE ONLY****TRANSMISSION GEAR DATA:**

L.S. 10-BOLT Opening Gear FORWARD of Centerline

83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline

83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	88	Furnished	267SBFJP-*3 (4)	402 I	Eng	88	Furnished	267SBFJP-*3 (4)	402 I	Eng	88
267SDFJP-*5 (3)	390 I	Eng	106	Furnished	267SDFJP-*3 (3)	390 I	Eng	106	Furnished	267SDFJP-*3 (3)	390 I	Eng	106
267SGFJP-*5 (2)	360 I	Eng	126	Furnished	267SGFJP-*3 (2)	360 I	Eng	126	Furnished	267SGFJP-*3 (2)	360 I	Eng	126
267SMFJP-*5 (5)	309 I	Eng	157	Furnished	267SMFJP-*3 (5)	309 I	Eng	157	Furnished	267SMFJP-*3 (5)	309 I	Eng	157
267SSFJP-*5 (1)	247 I	Eng	196	Furnished	267SSFJP-*3 (1)	247 I	Eng	196	Furnished	267SSFJP-*3 (1)	247 I	Eng	196
267XBFJP-*5 (25)	335 I	Eng	88	Furnished	267XBFJP-*3 (25)	335 I	Eng	88	Furnished	267XBFJP-*3 (25)	335 I	Eng	88
267XDFJP-*5 (26)	325 I	Eng	106	Furnished	267XDFJP-*3 (26)	325 I	Eng	106	Furnished	267XDFJP-*3 (26)	325 I	Eng	106
267XGFPJ-*5 (27)	300 I	Eng	126	Furnished	267XGFPJ-*3 (27)	300 I	Eng	126	Furnished	267XGFPJ-*3 (27)	300 I	Eng	126
267XMFJP-*5 (28)	265 I	Eng	157	Furnished	267XMFJP-*3 (28)	265 I	Eng	157	Furnished	267XMFJP-*3 (28)	265 I	Eng	157
267XSFPJ-*5 (1)	247 I	Eng	196	Furnished	267XSFPJ-*3 (1)	247 I	Eng	196	Furnished	267XSFPJ-*3 (1)	247 I	Eng	196
287GBFPJ-*5 (17)	300 C	Eng	73	Furnished	287GBFPJ-*3 (17)	300 C	Eng	73	Furnished	287GBFPJ-*3 (17)	300 C	Eng	73
287GBFPJ-*8 (17)	300 C	Eng	69	Furnished	287GBFPJ-*8 (17)	300 C	Eng	69	Furnished	287GBFPJ-*8 (17)	300 C	Eng	69
287GCFJP-*5 (18)	390 C	Eng	88	Furnished	287GCFJP-*3 (18)	390 C	Eng	88	Furnished	287GCFJP-*3 (18)	390 C	Eng	88
287GCFJP-*8 (18)	390 C	Eng	83	Furnished	287GCFJP-*8 (18)	390 C	Eng	83	Furnished	287GCFJP-*8 (18)	390 C	Eng	83
287GDFJP-*5 (19)	390 C	Eng	87	Furnished	287GDFJP-*3 (19)	390 C	Eng	87	Furnished	287GDFJP-*3 (19)	390 C	Eng	87
287GDFJP-*8 (19)	390 C	Eng	99	Furnished	287GDFJP-*8 (19)	390 C	Eng	99	Furnished	287GDFJP-*8 (19)	390 C	Eng	99
287GGFPJ-*5 (20)	360 C	Eng	126	Furnished	287GGFPJ-*3 (20)	360 C	Eng	126	Furnished	287GGFPJ-*3 (20)	360 C	Eng	126
287GGFPJ-*8 (20)	360 C	Eng	117	Furnished	287GGFPJ-*8 (20)	360 C	Eng	117	Furnished	287GGFPJ-*8 (20)	360 C	Eng	117
287GKFPJ-*5 (21)	340 C	Eng	140	Furnished	287GKFPJ-*3 (21)	340 C	Eng	140	Furnished	287GKFPJ-*3 (21)	340 C	Eng	140
287GMFPJ-*5 (22)	318 C	Eng	157	Furnished	287GMFPJ-*3 (22)	318 C	Eng	157	Furnished	287GMFPJ-*3 (22)	318 C	Eng	157
287GMFPJ-*8 (22)	318 C	Eng	145	Furnished	287GMFPJ-*8 (22)	318 C	Eng	145	Furnished	287GMFPJ-*8 (22)	318 C	Eng	145
287GPFPJ-*5 (23)	290 C	Eng	175	Furnished	287GPFPJ-*3 (23)	290 C	Eng	175	Furnished	287GPFPJ-*3 (23)	290 C	Eng	175
287GPFPJ-*8 (23)	290 C	Eng	162	Furnished	287GPFPJ-*8 (23)	290 C	Eng	162	Furnished	287GPFPJ-*8 (23)	290 C	Eng	162
287GSFPJ-*5 (24)	265 C	Eng	196	Furnished	287GSFPJ-*3 (24)	265 C	Eng	196	Furnished	287GSFPJ-*3 (24)	265 C	Eng	196
287GSFPJ-*8 (24)	265 C	Eng	180	Furnished	287GSFPJ-*8 (24)	265 C	Eng	180	Furnished	287GSFPJ-*8 (24)	265 C	Eng	180
287GTFPJ-*8 (16)	230 C	Eng	211	Furnished	287GTFPJ-*8 (16)	230 C	Eng	211	Furnished	287GTFPJ-*8 (16)	230 C	Eng	211
877XAFJP-*5 (7)	670 C	Eng	100	Furnished	877XAFJP-*3 (7)	670 C	Eng	100	Furnished	877XAFJP-*3 (7)	670 C	Eng	100
877XBFJP-*5 (8)	632 C	Eng	106	Furnished	877XBFJP-*3 (8)	632 C	Eng	106	Furnished	877XBFJP-*3 (8)	632 C	Eng	106
877XCFJP-*5 (9)	588 C	Eng	114	Furnished	877XCFJP-*3 (9)	588 C	Eng	114	Furnished	877XCFJP-*3 (9)	588 C	Eng	114
877XDFJP-*5 (10)	554 C	Eng	121	Furnished	877XDFJP-*3 (10)	554 C	Eng	121	Furnished	877XDFJP-*3 (10)	554 C	Eng	121
877XEFJP-*5 (11)	486 C	Eng	138	Furnished	877XEFJP-*3 (11)	486 C	Eng	138	Furnished	877XEFJP-*3 (11)	486 C	Eng	138
877XFFJP-*5 (12)	429 C	Eng	156	Furnished	877XFFJP-*3 (12)	429 C	Eng	156	Furnished	877XFFJP-*3 (12)	429 C	Eng	156

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

- (1) Input Gear Part No. 5-P-1173
- (8) Input Gear Part No. 5-P-1428-12X
- (17) Input Gear Part No. 5-P-1491-1X
- (23) Input Gear Part No. 5-P-1491-7X
- (2) Input Gear Part No. 5-P-1225
- (9) Input Gear Part No. 5-P-1428-3X
- (18) Input Gear Part No. 5-P-1491-2X
- (24) Input Gear Part No. 5-P-1491-8X
- (3) Input Gear Part No. 5-P-1293
- (10) Input Gear Part No. 5-P-1428-4X
- (19) Input Gear Part No. 5-P-1491-3X
- (25) Input Gear Part No. 5-P-912
- (4) Input Gear Part No. 5-P-1350
- (11) Input Gear Part No. 5-P-1428-5X
- (20) Input Gear Part No. 5-P-1491-4X
- (26) Input Gear Part No. 5-P-913
- (5) Input Gear Part No. 5-P-1351
- (12) Input Gear Part No. 5-P-1428-6X
- (21) Input Gear Part No. 5-P-1491-5X
- (27) Input Gear Part No. 5-P-914
- (7) Input Gear Part No. 5-P-1428-11X
- (16) Input Gear Part No. 5-P-1491-10X
- (22) Input Gear Part No. 5-P-1491-6X
- (28) Input Gear Part No. 5-P-915

October 2022

5.2.45

Parker Hannifin Corporation
 Chelsea Products Division
 Olive Branch, MS 38654 USA

Allison

ALL-16EV

ALLISON

CHELSEA®

3000 EVS (Emergency Vehicles Only Top / Side PTO Provisions)
3500 EVS (Emergency Vehicles Only Top / Side PTO Provisions)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline

83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline

83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

877XGFJP-*5 (13)	379 C	Eng	177	Furnished	877XGFJP-*3 (13)	379 C	Eng	177	Furnished	877XHFJP-*5 (14)	356 C	Eng	188
877XHFJP-*5 (14)	356 C	Eng	188	Furnished	877XHFJP-*3 (14)	356 C	Eng	188	Furnished	877XJFJP-*5 (15)	334 C	Eng	200
877XJFJP-*5 (15)	334 C	Eng	200	Furnished	877XJFJP-*3 (15)	334 C	Eng	200	Furnished	877XKFJP-*5 (6)	404 C	Eng	166
877XKFJP-*5 (6)	404 C	Eng	166	Furnished	877XKFJP-*3 (6)	404 C	Eng	166	Furnished				

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFJP-*5 (17)	300 C	Eng	73	Furnished	280GBFJP-*3 (17)	300 C	Eng	73	Furnished	280GBFJP-*8 (17)	300 C	Eng	69
280GBFJP-*8 (17)	300 C	Eng	69	Furnished	280GBFJP-*3 (18)	390 C	Eng	88	Furnished	280GCFJP-*5 (18)	390 C	Eng	88
280GCFJP-*5 (18)	390 C	Eng	88	Furnished	280GCFJP-*8 (18)	390 C	Eng	83	Furnished	280GDFJP-*5 (19)	390 C	Eng	106
280GCFJP-*8 (18)	390 C	Eng	83	Furnished	280GDFJP-*3 (19)	390 C	Eng	106	Furnished	280GDFJP-*8 (19)	390 C	Eng	99
280GDFJP-*5 (19)	390 C	Eng	106	Furnished	280GDFJP-*8 (19)	390 C	Eng	99	Furnished	280GGFJP-*5 (20)	360 C	Eng	126
280GDFJP-*8 (19)	390 C	Eng	99	Furnished	280GGFJP-*3 (20)	360 C	Eng	126	Furnished	280GGFJP-*8 (20)	360 C	Eng	117
280GGFJP-*5 (20)	360 C	Eng	126	Furnished	280GGFJP-*8 (20)	360 C	Eng	117	Furnished	280GKFJP-*5 (21)	340 C	Eng	140
280GGFJP-*8 (20)	360 C	Eng	117	Furnished	280GKFJP-*3 (21)	340 C	Eng	140	Furnished	280GMFJP-*5 (22)	318 C	Eng	157
280GKFJP-*5 (21)	340 C	Eng	140	Furnished	280GMFJP-*3 (22)	318 C	Eng	157	Furnished	280GMFJP-*8 (22)	318 C	Eng	145
280GMFJP-*5 (22)	318 C	Eng	157	Furnished	280GMFJP-*8 (22)	318 C	Eng	145	Furnished	280GPFJP-*5 (23)	290 C	Eng	175
280GMFJP-*8 (22)	318 C	Eng	145	Furnished	280GPFJP-*3 (23)	290 C	Eng	175	Furnished	280GPFJP-*8 (23)	290 C	Eng	162
280GPFJP-*5 (23)	290 C	Eng	175	Furnished	280GPFJP-*8 (23)	290 C	Eng	162	Furnished	280GSFJP-*5 (24)	265 C	Eng	196
280GPFJP-*8 (23)	290 C	Eng	162	Furnished	280GSFJP-*3 (24)	265 C	Eng	196	Furnished	280GSFJP-*8 (24)	265 C	Eng	180
280GSFJP-*5 (24)	265 C	Eng	196	Furnished	280GSFJP-*8 (24)	265 C	Eng	180	Furnished	280GTFJP-*8 (16)	230 C	Eng	211
280GSFJP-*8 (24)	265 C	Eng	180	Furnished	280GTFJP-*8 (16)	230 C	Eng	211	Furnished	870XAFJP-*5 (7)	670 C	Eng	100
280GTFJP-*8 (16)	230 C	Eng	211	Furnished	870XAFJP-*3 (7)	670 C	Eng	100	Furnished	870XBFJP-*5 (8)	632 C	Eng	106
870XAFJP-*5 (7)	670 C	Eng	100	Furnished	870XBFJP-*3 (8)	632 C	Eng	106	Furnished	870XCFJP-*5 (9)	588 C	Eng	114
870XBFJP-*5 (8)	632 C	Eng	106	Furnished	870XCFJP-*3 (9)	588 C	Eng	114	Furnished	870XDFJP-*5 (10)	554 C	Eng	121
870XCFJP-*5 (9)	588 C	Eng	114	Furnished	870XDFJP-*3 (10)	554 C	Eng	121	Furnished	870XEFJP-*5 (11)	486 C	Eng	138
870XDFJP-*5 (10)	554 C	Eng	121	Furnished	870XEFJP-*3 (11)	486 C	Eng	138	Furnished	870XFFJP-*5 (12)	429 C	Eng	156
870XEFJP-*5 (11)	486 C	Eng	138	Furnished	870XFFJP-*3 (12)	429 C	Eng	156	Furnished	870XGFJP-*5 (13)	379 C	Eng	177
870XFFJP-*5 (12)	429 C	Eng	156	Furnished	870XGFJP-*3 (13)	379 C	Eng	177	Furnished	870XHFJP-*5 (14)	356 C	Eng	188
870XGFJP-*5 (13)	379 C	Eng	177	Furnished	870XHFJP-*3 (14)	356 C	Eng	188	Furnished	870XJFJP-*5 (15)	334 C	Eng	200
870XHFJP-*5 (14)	356 C	Eng	188	Furnished	870XJFJP-*3 (15)	334 C	Eng	200	Furnished				

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

- (6) Input Gear Part No. 5-P-1428-10X
- (12) Input Gear Part No. 5-P-1428-6X
- (18) Input Gear Part No. 5-P-1491-2X
- (24) Input Gear Part No. 5-P-1491-8X
- (7) Input Gear Part No. 5-P-1428-11X
- (13) Input Gear Part No. 5-P-1428-7X
- (19) Input Gear Part No. 5-P-1491-3X
- (8) Input Gear Part No. 5-P-1428-12X
- (14) Input Gear Part No. 5-P-1428-8X
- (20) Input Gear Part No. 5-P-1491-4X
- (9) Input Gear Part No. 5-P-1428-3X
- (15) Input Gear Part No. 5-P-1428-9X
- (21) Input Gear Part No. 5-P-1491-5X
- (10) Input Gear Part No. 5-P-1428-4X
- (16) Input Gear Part No. 5-P-1491-10X
- (22) Input Gear Part No. 5-P-1491-6X
- (11) Input Gear Part No. 5-P-1428-5X
- (17) Input Gear Part No. 5-P-1491-1X
- (23) Input Gear Part No. 5-P-1491-7X

CHELSEA®**ALLISON****ALL-16EV**

3000 EVS (Emergency Vehicles Only Top / Side PTO Provisions)
 3500 EVS (Emergency Vehicles Only Top / Side PTO Provisions)

LEFT SIDE ONLY**TOP SIDE ONLY****TRANSMISSION GEAR DATA:**

L.S. 10-BOLT Opening Gear FORWARD of Centerline
 83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
 83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C ↑	Rot	Fwd					I/C ↑	Rot	Fwd			

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LAFJW-*5 (7)	670 C	Eng	100	Furnished	890TAFJW-*5 (7)	670 C	Eng	100	Furnished				Furnished
870LBFJW-*5 (8)	632 C	Eng	106	Furnished	890TBFJW-*5 (8)	632 C	Eng	106	Furnished				Furnished
870LCFJW-*5 (9)	588 C	Eng	114	Furnished	890TCFJW-*5 (9)	588 C	Eng	114	Furnished				Furnished
870LDJW-*5 (10)	554 C	Eng	121	Furnished	890TDFJW-*5 (10)	554 C	Eng	121	Furnished				Furnished
870LEFJW-*5 (11)	486 C	Eng	138	Furnished	890TEFJW-*5 (11)	486 C	Eng	138	Furnished				Furnished
870LFJW-*5 (12)	429 C	Eng	156	Furnished	890TFFJW-*5 (12)	429 C	Eng	156	Furnished				Furnished
870LGFJW-*5 (13)	378 C	Eng	177	Furnished	890TGFJW-*5 (13)	378 C	Eng	177	Furnished				Furnished
870LHFJW-*5 (14)	356 C	Eng	188	Furnished	890THFJW-*5 (14)	356 C	Eng	188	Furnished				Furnished
890EAFJW-*5 (7)	670 C	Eng	100	Furnished									
890EBFJW-*5 (8)	632 C	Eng	106	Furnished									
890ECFJW-*5 (9)	588 C	Eng	114	Furnished									
890EDFJW-*5 (10)	554 C	Eng	121	Furnished									
890EEFJW-*5 (11)	486 C	Eng	138	Furnished									
890EFFJW-*5 (12)	429 C	Eng	156	Furnished									
890EGFJW-*5 (13)	378 C	Eng	177	Furnished									
890EHFJW-*5 (14)	356 C	Eng	188	Furnished									

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

877LAFJW-*5 (7)	670 C	Eng	100	Furnished	897TAFJW-*5 (7)	670 C	Eng	100	Furnished				Furnished
877LBFJW-*5 (8)	632 C	Eng	106	Furnished	897TBFJW-*5 (8)	632 C	Eng	106	Furnished				Furnished
877LCFJW-*5 (9)	588 C	Eng	114	Furnished	897TCFJW-*5 (9)	588 C	Eng	114	Furnished				Furnished
877LDJW-*5 (10)	554 C	Eng	121	Furnished	897TDFJW-*5 (10)	554 C	Eng	121	Furnished				Furnished
877LEFJW-*5 (11)	486 C	Eng	138	Furnished	897TEFJW-*5 (11)	486 C	Eng	138	Furnished				Furnished
877LFFJW-*5 (12)	429 C	Eng	156	Furnished	897TFFJW-*5 (12)	429 C	Eng	156	Furnished				Furnished
877LGFJW-*5 (13)	378 C	Eng	177	Furnished	897TGFJW-*5 (13)	378 C	Eng	177	Furnished				Furnished
877LHFJW-*5 (14)	356 C	Eng	188	Furnished	897THFJW-*5 (14)	356 C	Eng	188	Furnished				Furnished
897EAFJW-*5 (7)	670 C	Eng	100	Furnished									
897EBFJW-*5 (8)	632 C	Eng	106	Furnished									
897ECFJW-*5 (9)	588 C	Eng	114	Furnished									
897EDFJW-*5 (10)	554 C	Eng	121	Furnished									
897EEFJW-*5 (11)	486 C	Eng	138	Furnished									
897EFFJW-*5 (12)	429 C	Eng	156	Furnished									

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

- (7) Input Gear Part No. 5-P-1428-11X
- (8) Input Gear Part No. 5-P-1428-12X
- (9) Input Gear Part No. 5-P-1428-3X
- (10) Input Gear Part No. 5-P-1428-4X
- (11) Input Gear Part No. 5-P-1428-5X
- (12) Input Gear Part No. 5-P-1428-6X
- (13) Input Gear Part No. 5-P-1428-7X
- (14) Input Gear Part No. 5-P-1428-8X

Allison

ALL-16EV

ALLISON

CHELSEA®

3000 EVS (Emergency Vehicles Only Top / Side PTO Provisions)
 3500 EVS (Emergency Vehicles Only Top / Side PTO Provisions)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline

83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline

83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

897EGFJW-*5 (13)	378 C	Eng	177	Furnished
897EHFJW-*5 (14)	356 C	Eng	188	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(13) Input Gear Part No. 5-P-1428-7X
 (14) Input Gear Part No. 5-P-1428-8X

CHELSEA®**ALLISON****ALL-16R**

3000 (3000 Family - Side/Top PTO Provision w/ Retarder)

LEFT SIDE ONLY**TOP SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	88	Furnished	267SBFJP-*3 (4)	402 I	Eng	88	Furnished	267SBFJP-*3 (4)	402 I	Eng	88
267SDFJP-*5 (3)	390 I	Eng	106	Furnished	267SDFJP-*3 (3)	390 I	Eng	106	Furnished	267SDFJP-*3 (3)	390 I	Eng	106
267SGFJP-*5 (2)	360 I	Eng	126	Furnished	267SGFJP-*3 (2)	360 I	Eng	126	Furnished	267SGFJP-*3 (2)	360 I	Eng	126
267SMFJP-*5 (5)	309 I	Eng	157	Furnished	267SMFJP-*3 (5)	309 I	Eng	157	Furnished	267SMFJP-*3 (5)	309 I	Eng	157
267SSFJP-*5 (1)	247 I	Eng	196	Furnished	267SSFJP-*3 (1)	247 I	Eng	196	Furnished	267SSFJP-*3 (1)	247 I	Eng	196
267XBFJP-*5 (25)	335 I	Eng	88	Furnished	267XBFJP-*3 (25)	335 I	Eng	88	Furnished	267XBFJP-*3 (25)	335 I	Eng	88
267XDFJP-*5 (26)	325 I	Eng	106	Furnished	267XDFJP-*3 (26)	325 I	Eng	106	Furnished	267XDFJP-*3 (26)	325 I	Eng	106
267XGFPJP-*5 (27)	300 I	Eng	126	Furnished	267XGFPJP-*3 (27)	300 I	Eng	126	Furnished	267XGFPJP-*3 (27)	300 I	Eng	126
267XMFJP-*5 (28)	265 I	Eng	157	Furnished	267XMFJP-*3 (28)	265 I	Eng	157	Furnished	267XMFJP-*3 (28)	265 I	Eng	157
267XSFPJP-*5 (1)	247 I	Eng	196	Furnished	267XSFPJP-*3 (1)	247 I	Eng	196	Furnished	267XSFPJP-*3 (1)	247 I	Eng	196
287GBFPJP-*5 (17)	300 C	Eng	73	Furnished	287GBFPJP-*3 (17)	300 C	Eng	73	Furnished	287GBFPJP-*3 (17)	300 C	Eng	73
287GBFPJP-*8 (17)	300 C	Eng	69	Furnished	287GBFPJP-*8 (17)	300 C	Eng	69	Furnished	287GBFPJP-*8 (17)	300 C	Eng	69
287GCFJP-*5 (18)	390 C	Eng	88	Furnished	287GCFJP-*3 (18)	390 C	Eng	88	Furnished	287GCFJP-*3 (18)	390 C	Eng	88
287GCFJP-*8 (18)	390 C	Eng	83	Furnished	287GCFJP-*8 (18)	390 C	Eng	83	Furnished	287GCFJP-*8 (18)	390 C	Eng	83
287GDFJP-*5 (19)	390 C	Eng	87	Furnished	287GDFJP-*3 (19)	390 C	Eng	87	Furnished	287GDFJP-*3 (19)	390 C	Eng	87
287GDFJP-*8 (19)	390 C	Eng	99	Furnished	287GDFJP-*8 (19)	390 C	Eng	99	Furnished	287GDFJP-*8 (19)	390 C	Eng	99
287GGFPJP-*5 (20)	360 C	Eng	126	Furnished	287GGFPJP-*3 (20)	360 C	Eng	126	Furnished	287GGFPJP-*3 (20)	360 C	Eng	126
287GGFPJP-*8 (20)	360 C	Eng	117	Furnished	287GGFPJP-*8 (20)	360 C	Eng	117	Furnished	287GGFPJP-*8 (20)	360 C	Eng	117
287GKFPJP-*5 (21)	340 C	Eng	140	Furnished	287GKFPJP-*3 (21)	340 C	Eng	140	Furnished	287GKFPJP-*3 (21)	340 C	Eng	140
287GMFPJP-*5 (22)	309 C	Eng	157	Furnished	287GMFPJP-*3 (22)	309 C	Eng	157	Furnished	287GMFPJP-*3 (22)	309 C	Eng	157
287GMFPJP-*8 (22)	318 C	Eng	145	Furnished	287GMFPJP-*8 (22)	318 C	Eng	145	Furnished	287GMFPJP-*8 (22)	318 C	Eng	145
287GPFPJP-*5 (23)	275 C	Eng	175	Furnished	287GPFPJP-*3 (23)	275 C	Eng	175	Furnished	287GPFPJP-*3 (23)	275 C	Eng	175
287GPFPJP-*8 (23)	290 C	Eng	162	Furnished	287GPFPJP-*8 (23)	290 C	Eng	162	Furnished	287GPFPJP-*8 (23)	290 C	Eng	162
287GSFPJP-*5 (24)	247 C	Eng	196	Furnished	287GSFPJP-*3 (24)	247 C	Eng	196	Furnished	287GSFPJP-*3 (24)	247 C	Eng	196
287GSFPJP-*8 (24)	265 C	Eng	180	Furnished	287GSFPJP-*8 (24)	265 C	Eng	180	Furnished	287GSFPJP-*8 (24)	265 C	Eng	180
287GTFPJP-*8 (16)	230 C	Eng	211	Furnished	287GTFPJP-*8 (16)	230 C	Eng	211	Furnished	287GTFPJP-*8 (16)	230 C	Eng	211
877XAFJP-*5 (7)	485 C	Eng	100	Furnished	877XAFJP-*3 (7)	485 C	Eng	100	Furnished	877XAFJP-*3 (7)	485 C	Eng	100
877XBFJP-*5 (8)	458 C	Eng	106	Furnished	877XBFJP-*3 (8)	458 C	Eng	106	Furnished	877XBFJP-*3 (8)	458 C	Eng	106
877XCFJP-*5 (9)	425 C	Eng	114	Furnished	877XCFJP-*3 (9)	425 C	Eng	114	Furnished	877XCFJP-*3 (9)	425 C	Eng	114
877XDFJP-*5 (10)	401 C	Eng	121	Furnished	877XDFJP-*3 (10)	401 C	Eng	121	Furnished	877XDFJP-*3 (10)	401 C	Eng	121
877XEFJP-*5 (11)	351 C	Eng	138	Furnished	877XEFJP-*3 (11)	351 C	Eng	138	Furnished	877XEFJP-*3 (11)	351 C	Eng	138
877XFFJP-*5 (12)	311 C	Eng	158	Furnished	877XFFJP-*3 (12)	311 C	Eng	158	Furnished	877XFFJP-*3 (12)	311 C	Eng	158

Continued on Next Page

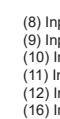
† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.



October 2022

5.2.49

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Allison

ALL-16R

ALLISON

CHELSEA®

3000 (3000 Family - Side/Top PTO Provision w/ Retarder)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

877XGFJP-*5 (13)	274 C	Eng	177	Furnished	877XGFJP-*3 (13)	274 C	Eng	177	Furnished
877XHFJP-*5 (14)	258 C	Eng	188	Furnished	877XHFJP-*3 (14)	258 C	Eng	188	Furnished
877XJFJP-*5 (15)	242 C	Eng	200	Furnished	877XJFJP-*3 (15)	242 C	Eng	200	Furnished
877XKFP-*5 (6)	292 C	Eng	166	Furnished	877XKFP-*3 (6)	292 C	Eng	166	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFJP-*5 (17)	300 C	Eng	73	Furnished	280GBFJP-*3 (17)	300 C	Eng	73	Furnished
280GBFJP-*8 (17)	300 C	Eng	69	Furnished	280GBFJP-*8 (17)	300 C	Eng	69	Furnished
280GCFJP-*5 (18)	390 C	Eng	88	Furnished	280GCFJP-*3 (18)	390 C	Eng	88	Furnished
280GCFJP-*8 (18)	390 C	Eng	83	Furnished	280GCFJP-*8 (18)	390 C	Eng	83	Furnished
280GDFJP-*5 (19)	390 C	Eng	106	Furnished	280GDFJP-*3 (19)	390 C	Eng	106	Furnished
280GDFJP-*8 (19)	390 C	Eng	99	Furnished	280GDFJP-*8 (19)	390 C	Eng	99	Furnished
280GGFJP-*5 (20)	360 C	Eng	126	Furnished	280GGFJP-*3 (20)	360 C	Eng	126	Furnished
280GGFJP-*8 (20)	360 C	Eng	117	Furnished	280GGFJP-*8 (20)	360 C	Eng	117	Furnished
280GKFJP-*5 (21)	340 C	Eng	140	Furnished	280GKFJP-*3 (21)	340 C	Eng	140	Furnished
280GMFJP-*5 (22)	309 C	Eng	157	Furnished	280GMFJP-*3 (22)	309 C	Eng	157	Furnished
280GMFJP-*8 (22)	318 C	Eng	145	Furnished	280GMFJP-*8 (22)	318 C	Eng	145	Furnished
280GPFPJ-*5 (23)	275 C	Eng	175	Furnished	280GPFPJ-*3 (23)	275 C	Eng	175	Furnished
280GPFPJ-*8 (23)	290 C	Eng	162	Furnished	280GPFPJ-*8 (23)	290 C	Eng	162	Furnished
280GSFJP-*5 (24)	247 C	Eng	196	Furnished	280GSFJP-*3 (24)	247 C	Eng	196	Furnished
280GSFJP-*8 (24)	265 C	Eng	180	Furnished	280GSFJP-*8 (24)	265 C	Eng	180	Furnished
870XAFJP-*5 (7)	485 C	Eng	100	Furnished	870XAFJP-*3 (7)	485 C	Eng	100	Furnished
870XBFJP-*5 (8)	458 C	Eng	106	Furnished	870XBFJP-*3 (8)	458 C	Eng	106	Furnished
870XCFJP-*5 (9)	425 C	Eng	114	Furnished	870XCFJP-*3 (9)	425 C	Eng	114	Furnished
870XDFJP-*5 (10)	401 C	Eng	121	Furnished	870XDFJP-*3 (10)	401 C	Eng	121	Furnished
870XEFPJ-*5 (11)	351 C	Eng	138	Furnished	870XEFPJ-*3 (11)	351 C	Eng	138	Furnished
870XFFJP-*5 (12)	311 C	Eng	156	Furnished	870XFFJP-*3 (12)	311 C	Eng	156	Furnished
870XGFJP-*5 (13)	274 C	Eng	177	Furnished	870XGFJP-*3 (13)	274 C	Eng	177	Furnished
870XHFJP-*5 (14)	258 C	Eng	188	Furnished	870XHFJP-*3 (14)	258 C	Eng	188	Furnished
870XJFP-*5 (15)	242 C	Eng	200	Furnished	870XJFP-*3 (15)	242 C	Eng	200	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (6) Input Gear Part No. 5-P-1428-10X
- (12) Input Gear Part No. 5-P-1428-6X
- (19) Input Gear Part No. 5-P-1491-3X
- (7) Input Gear Part No. 5-P-1428-11X
- (13) Input Gear Part No. 5-P-1428-7X
- (20) Input Gear Part No. 5-P-1491-4X
- (8) Input Gear Part No. 5-P-1428-12X
- (14) Input Gear Part No. 5-P-1428-8X
- (21) Input Gear Part No. 5-P-1491-5X
- (9) Input Gear Part No. 5-P-1428-3X
- (15) Input Gear Part No. 5-P-1428-9X
- (22) Input Gear Part No. 5-P-1491-6X
- (10) Input Gear Part No. 5-P-1428-4X
- (17) Input Gear Part No. 5-P-1491-1X
- (23) Input Gear Part No. 5-P-1491-7X
- (11) Input Gear Part No. 5-P-1428-5X
- (18) Input Gear Part No. 5-P-1491-2X
- (24) Input Gear Part No. 5-P-1491-8X

CHELSEA®**ALLISON****ALL-16R**

3000 (3000 Family - Side/Top PTO Provision w/ Retarder)

LEFT SIDE ONLY**TOP SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LAFJW-*5 (7)	485 C	Eng	100										
870LBFJW-*5 (8)	458 C	Eng	106										
870LCFJW-*5 (9)	425 C	Eng	114										
870LDJW-*5 (10)	401 C	Eng	121										
870LEFJW-*5 (11)	351 C	Eng	138										
870LFFJW-*5 (12)	311 C	Eng	156										
870LGFJW-*5 (13)	274 C	Eng	177										
870LHFJW-*5 (14)	258 C	Eng	188										
890FAFJW-*5 (7)	485 C	Eng	100										
890FBFJW-*5 (8)	458 C	Eng	106										
890FCFJW-*5 (9)	425 C	Eng	114										
890FDJW-*5 (10)	401 C	Eng	121										
890FEFJW-*5 (11)	351 C	Eng	138										
890FFFJW-*5 (12)	311 C	Eng	156										
890FGFJW-*5 (13)	274 C	Eng	177										
890FFFJW-*5 (14)	258 C	Eng	188										

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

877LAFJW-*5 (7)	485 C	Eng	100										
877LBFJW-*5 (8)	458 C	Eng	106										
877LCFJW-*5 (9)	425 C	Eng	114										
877LDJW-*5 (10)	401 C	Eng	121										
877LEFJW-*5 (11)	351 C	Eng	138										
877LFFJW-*5 (12)	311 C	Eng	156										
877LGFJW-*5 (13)	274 C	Eng	177										
877LHFJW-*5 (14)	258 C	Eng	188										
897FAFJW-*5 (7)	485 C	Eng	100										
897FBFJW-*5 (8)	458 C	Eng	106										
897FCFJW-*5 (9)	425 C	Eng	114										
897FDJW-*5 (10)	401 C	Eng	121										
897FEFJW-*5 (11)	351 C	Eng	138										
897FFFJW-*5 (12)	311 C	Eng	156										

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION:** Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.**CAUTION:** The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (7) Input Gear Part No. 5-P-1428-11X
- (8) Input Gear Part No. 5-P-1428-12X
- (9) Input Gear Part No. 5-P-1428-3X
- (10) Input Gear Part No. 5-P-1428-4X
- (11) Input Gear Part No. 5-P-1428-5X
- (12) Input Gear Part No. 5-P-1428-6X
- (13) Input Gear Part No. 5-P-1428-7X
- (14) Input Gear Part No. 5-P-1428-8X

Allison

ALL-16R

ALLISON

CHELSEA®

3000 (3000 Family - Side/Top PTO Provision w/ Retarder)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

897FGFJW-*5 (13)	274 C	Eng	177	Furnished
897FHFJW-*5 (14)	258 C	Eng	188	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.**CAUTION:** The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.(13) Input Gear Part No. 5-P-1428-7X
(14) Input Gear Part No. 5-P-1428-8X

CHELSEA®**ALLISON****ALL-17**

1000 (GM 3600 Cab-Chassis)

RIGHT SIDE ONLY**TRANSMISSION GEAR DATA:**

R.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0080" (25.6032MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

252GDHVX-*5 (1)	120 I	Eng	122	Furnished
252GMHVX-*5 (2)	50 I	Eng	178	Furnished

Pump Option Charts**252 Pumps offered in the PGP511 (5/8" - 9T / SAE A Flange – XE Output)**

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size	Porting	
							Inlet	Outlet
1116	CGP-P11C016-1AC	0.37	0.003	3988	3500	5/8" - 9T	SAE12	SAE10
1121	CGP-P11C021-1AC	0.49	0.002	3988	4000	5/8" - 9T	SAE12	SAE10
1126	CGP-P11C026-1AC	0.61	0.003	3988	3600	5/8" - 9T	SAE12	SAE10
1129	CGP-P11C029-1AC	0.67	0.003	3988	3600	5/8" - 9T	SAE12	SAE10
1137	CGP-P11C037-1AC	0.85	0.004	3988	3300	5/8" - 9T	SAE12	SAE10
1449	CGP-P31C054-1AE	1.24	0.005	3500	3000	5/8" - 9T	SAE16	SAE10
1462	CGP-P31C061-1AE	1.40	0.006	3500	3000	5/8" - 9T	SAE16	SAE10

252 Pumps offered in the PGP511 (3/4" - 11T / SAE A Flange – AD Output)

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size	Porting	
							Inlet	Outlet
P37	CGP-P11C037-5AC	0.85	0.004	3988	3300	3/4" - 11T	SAE12	SAE10
P42	CGP-P11C042-5AC	0.98	0.004	3988	3000	3/4" - 11T	SAE12	SAE10
P55	CGP-P11C055-5AC	1.28	0.006	3408	2800	3/4" - 11T	SAE12	SAE10
P71	CGP-P11C071-5AC	1.65	0.007	2900	2400	3/4" - 11T	SAE12	SAE10
P82	CGP-P11C082-5AC	1.89	0.008	2465	2300	3/4" - 11T	SAE12	SAE10

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal will activate the Variable Modulated Main Pressure and line pressure may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission.

(1) Input Gear Part No. 5-P-1294
(2) Input Gear Part No. 5-P-1386

Allison

ALL-18

ALLISON

CHELSEA®

3700
3700 SP
MD-3070P (Close Ratio)

LEFT SIDE ONLY							RIGHT SIDE ONLY						
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 68 Teeth - L.H. HELIX							TRANSMISSION GEAR DATA: R.S. 10-BOLT Opening Gear FORWARD of Centerline 68 Teeth - L.H. HELIX						
PITCH LINE TO APERTURE FACE: 1.7800" (45.2100MM)							PITCH LINE TO APERTURE FACE: 1.7800" (45.2100MM)						

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd	Rev					I/C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	72	Furnished	267SBFJP-*3 (4)	402 I	Eng	72	Furnished
267SDFJP-*5 (3)	390 I	Eng	87	Furnished	267SDFJP-*3 (3)	390 I	Eng	87	Furnished
267SGFJP-*5 (2)	360 I	Eng	103	Furnished	267SGFJP-*3 (2)	360 I	Eng	103	Furnished
267SMFJP-*5 (5)	318 I	Eng	129	Furnished	267SMFJP-*3 (5)	318 I	Eng	129	Furnished
267SSFJP-*5 (1)	265 I	Eng	161	Furnished	267SSFJP-*3 (1)	265 I	Eng	161	Furnished
267XBFJP-*5 (25)	335 I	Eng	72	Furnished	267XBFJP-*3 (25)	335 I	Eng	72	Furnished
267XDFJP-*5 (26)	325 I	Eng	87	Furnished	267XDFJP-*3 (26)	325 I	Eng	87	Furnished
267XGFJP-*5 (27)	300 I	Eng	103	Furnished	267XGFJP-*3 (27)	300 I	Eng	103	Furnished
267XMFJP-*5 (28)	265 I	Eng	129	Furnished	267XMFJP-*3 (28)	265 I	Eng	129	Furnished
267XSFJP-*5 (1)	250 I	Eng	161	Furnished	267XSFJP-*3 (1)	250 I	Eng	161	Furnished
287GBFJP-*5 (16)	300 C	Eng	60	Furnished	287GBFJP-*3 (16)	300 C	Eng	60	Furnished
287GBFJP-*8 (16)	300 C	Eng	56	Furnished	287GBFJP-*8 (16)	300 C	Eng	56	Furnished
287GCFJP-*5 (17)	390 C	Eng	72	Furnished	287GCFJP-*3 (17)	390 C	Eng	72	Furnished
287GCFJP-*8 (17)	390 C	Eng	68	Furnished	287GCFJP-*8 (17)	390 C	Eng	68	Furnished
287GDFJP-*5 (18)	390 C	Eng	87	Furnished	287GDFJP-*3 (18)	390 C	Eng	87	Furnished
287GDFJP-*8 (18)	390 C	Eng	81	Furnished	287GDFJP-*8 (18)	390 C	Eng	81	Furnished
287GGFJP-*5 (19)	360 C	Eng	103	Furnished	287GGFJP-*3 (19)	360 C	Eng	103	Furnished
287GGFJP-*8 (19)	360 C	Eng	96	Furnished	287GGFJP-*8 (19)	360 C	Eng	96	Furnished
287GKFJP-*5 (20)	340 C	Eng	115	Furnished	287GKFJP-*3 (20)	340 C	Eng	115	Furnished
287GMFJP-*5 (21)	318 C	Eng	129	Furnished	287GMFJP-*3 (21)	318 C	Eng	129	Furnished
287GMFJP-*8 (21)	318 C	Eng	119	Furnished	287GMFJP-*8 (21)	318 C	Eng	119	Furnished
287GPFPJ-*5 (22)	290 C	Eng	144	Furnished	287GPFPJ-*3 (22)	290 C	Eng	144	Furnished
287GPFPJ-*8 (22)	290 C	Eng	132	Furnished	287GPFPJ-*8 (22)	290 C	Eng	132	Furnished
287GSFJP-*5 (23)	265 C	Eng	161	Furnished	287GSFJP-*3 (23)	265 C	Eng	161	Furnished
287GSFJP-*8 (23)	265 C	Eng	147	Furnished	287GSFJP-*8 (23)	265 C	Eng	147	Furnished
287GTFJP-*5 (24)	240 C	Eng	180	Furnished	287GTFJP-*3 (24)	240 C	Eng	180	Furnished
287GTFJP-*8 (15)	240 C	Eng	173	Furnished	287GTFJP-*8 (15)	240 C	Eng	173	Furnished
877XAFJP-*5 (6)	591 C	Eng	82	Furnished	877XAFJP-*3 (6)	591 C	Eng	82	Furnished
877XBFJP-*5 (7)	557 C	Eng	87	Furnished	877XBFJP-*3 (7)	557 C	Eng	87	Furnished
877XCFJP-*5 (8)	522 C	Eng	93	Furnished	877XCFJP-*3 (8)	522 C	Eng	93	Furnished
877XDFJP-*5 (9)	490 C	Eng	99	Furnished	877XDFJP-*3 (9)	490 C	Eng	99	Furnished
877XEFPJ-*5 (10)	429 C	Eng	113	Furnished	877XEFPJ-*3 (10)	429 C	Eng	113	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (1) Input Gear Part No. 5-P-1173
- (7) Input Gear Part No. 5-P-1428-12X
- (17) Input Gear Part No. 5-P-1491-2X
- (23) Input Gear Part No. 5-P-1491-8X
- (2) Input Gear Part No. 5-P-1225
- (8) Input Gear Part No. 5-P-1428-3X
- (18) Input Gear Part No. 5-P-1491-3X
- (24) Input Gear Part No. 5-P-1491-9X
- (3) Input Gear Part No. 5-P-1293
- (9) Input Gear Part No. 5-P-1428-4X
- (19) Input Gear Part No. 5-P-1491-4X
- (25) Input Gear Part No. 5-P-912
- (4) Input Gear Part No. 5-P-1350
- (10) Input Gear Part No. 5-P-1428-5X
- (20) Input Gear Part No. 5-P-1491-5X
- (26) Input Gear Part No. 5-P-913
- (5) Input Gear Part No. 5-P-1351
- (15) Input Gear Part No. 5-P-1491-10X
- (21) Input Gear Part No. 5-P-1491-6X
- (27) Input Gear Part No. 5-P-914
- (6) Input Gear Part No. 5-P-1428-11X
- (16) Input Gear Part No. 5-P-1491-1X
- (22) Input Gear Part No. 5-P-1491-7X
- (28) Input Gear Part No. 5-P-915

CHELSEA®**ALLISON****ALL-18**

3700
3700 SP
MD-3070P (Close Ratio)

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**

L.S. 10-BOLT Opening Gear FORWARD of Centerline

68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

R.S. 10-BOLT Opening Gear FORWARD of Centerline

68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

877XFFJP-*5 (11)	379 C	Eng	128	Furnished	877XFFJP-*3 (11)	379 C	Eng	128	Furnished
877XGFJP-*5 (12)	334 C	Eng	145	Furnished	877XGFJP-*3 (12)	334 C	Eng	145	Furnished
877XHFJP-*5 (13)	315 C	Eng	154	Furnished	877XHFJP-*3 (13)	315 C	Eng	154	Furnished
877XJFJP-*5 (14)	295 C	Eng	164	Furnished	877XHFJP-*3 (13)	295 C	Eng	164	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFJP-*5 (16)	300 C	Eng	60	Furnished	280GBFJP-*3 (16)	300 C	Eng	60	Furnished
280GBFJP-*8 (16)	300 C	Eng	56	Furnished	280GBFJP-*8 (16)	300 C	Eng	56	Furnished
280GCFJP-*5 (17)	390 C	Eng	72	Furnished	280GCFJP-*3 (17)	390 C	Eng	72	Furnished
280GCFJP-*8 (17)	390 C	Eng	68	Furnished	280GCFJP-*8 (17)	390 C	Eng	68	Furnished
280GDFJP-*5 (18)	390 C	Eng	87	Furnished	280GDFJP-*3 (18)	390 C	Eng	87	Furnished
280GDFJP-*8 (18)	390 C	Eng	81	Furnished	280GDFJP-*8 (18)	390 C	Eng	81	Furnished
280GGFJP-*5 (19)	360 C	Eng	103	Furnished	280GGFJP-*3 (19)	360 C	Eng	103	Furnished
280GGFJP-*8 (19)	360 C	Eng	96	Furnished	280GGFJP-*8 (19)	360 C	Eng	96	Furnished
280GKFJP-*5 (20)	340 C	Eng	115	Furnished	280GKFJP-*3 (20)	340 C	Eng	115	Furnished
280GMFJP-*5 (21)	318 C	Eng	129	Furnished	280GMFJP-*3 (21)	318 C	Eng	129	Furnished
280GMFJP-*8 (21)	318 C	Eng	119	Furnished	280GMFJP-*8 (21)	318 C	Eng	119	Furnished
280GPFPJ-*5 (22)	290 C	Eng	144	Furnished	280GPFPJ-*3 (22)	290 C	Eng	144	Furnished
280GPFPJ-*8 (22)	290 C	Eng	132	Furnished	280GPFPJ-*8 (22)	290 C	Eng	132	Furnished
280GSFJP-*5 (23)	265 C	Eng	161	Furnished	280GSFJP-*3 (23)	265 C	Eng	161	Furnished
280GSFJP-*8 (23)	265 C	Eng	147	Furnished	280GSFJP-*8 (23)	265 C	Eng	147	Furnished
280GTFJP-*5 (24)	240 C	Eng	180	Furnished	280GTFJP-*3 (24)	240 C	Eng	180	Furnished
280GTFJP-*8 (15)	240 C	Eng	173	Furnished	280GTFJP-*8 (15)	240 C	Eng	173	Furnished
870XAFJP-*5 (6)	591 C	Eng	82	Furnished	870XAFJP-*3 (6)	591 C	Eng	82	Furnished
870XBFJP-*5 (7)	557 C	Eng	87	Furnished	870XBFJP-*3 (7)	557 C	Eng	87	Furnished
870XCFJP-*5 (8)	522 C	Eng	93	Furnished	870XCFJP-*3 (8)	522 C	Eng	93	Furnished
870XDFJP-*5 (9)	490 C	Eng	99	Furnished	870XDFJP-*3 (9)	490 C	Eng	99	Furnished
870XEFJP-*5 (10)	429 C	Eng	113	Furnished	870XEFJP-*3 (10)	429 C	Eng	113	Furnished
870XFFJP-*5 (11)	379 C	Eng	128	Furnished	870XFFJP-*3 (11)	379 C	Eng	128	Furnished
870XGFJP-*5 (12)	334 C	Eng	145	Furnished	870XGFJP-*3 (12)	334 C	Eng	145	Furnished
870XHFJP-*5 (13)	315 C	Eng	154	Furnished	870XHFJP-*3 (13)	315 C	Eng	154	Furnished
870XJFJP-*5 (14)	295 C	Eng	164	Furnished	870XJFJP-*3 (14)	295 C	Eng	164	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (6) Input Gear Part No. 5-P-1428-11X
- (12) Input Gear Part No. 5-P-1428-7X
- (18) Input Gear Part No. 5-P-1491-3X
- (24) Input Gear Part No. 5-P-1491-9X
- (7) Input Gear Part No. 5-P-1428-12X
- (13) Input Gear Part No. 5-P-1428-8X
- (19) Input Gear Part No. 5-P-1491-4X
- (8) Input Gear Part No. 5-P-1428-3X
- (14) Input Gear Part No. 5-P-1428-9X
- (20) Input Gear Part No. 5-P-1491-5X
- (9) Input Gear Part No. 5-P-1428-4X
- (15) Input Gear Part No. 5-P-1491-10X
- (21) Input Gear Part No. 5-P-1491-6X
- (10) Input Gear Part No. 5-P-1428-5X
- (16) Input Gear Part No. 5-P-1491-1X
- (22) Input Gear Part No. 5-P-1491-7X
- (11) Input Gear Part No. 5-P-1428-6X
- (17) Input Gear Part No. 5-P-1491-2X
- (23) Input Gear Part No. 5-P-1491-8X

Allison

ALL-19

ALLISON

CHELSEA®

4700 4700 EVS 4700 OFS 4700 RDS 4700 SP 4800 4800 EVS 4800 SP	4850 EVS

LEFT SIDE ONLY		TOP SIDE ONLY	
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX	TRANSMISSION GEAR DATA: TOP 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX	PITCH LINE TO APERTURE FACE: 1.7799" (45.2100MM)	PITCH LINE TO APERTURE FACE: 1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFP-*5 (4)	402 I	Eng	103	Furnished	267SBFP-*3 (4)	402 I	Eng	103	Furnished
267SDFJP-*5 (3)	390 I	Eng	123	Furnished	267SDFJP-*3 (4)	390 I	Eng	123	Furnished
267SGFJP-*5 (2)	360 I	Eng	147	Furnished	267SGFJP-*3 (2)	360 I	Eng	147	Furnished
267SMFJP-*5 (5)	318 I	Eng	184	Furnished	267SMFJP-*3 (5)	318 I	Eng	184	Furnished
267SSFJP-*5 (1)	265 I	Eng	229	Furnished	267SSFJP-*3 (1)	265 I	Eng	229	Furnished
267XBFJP-*5 (20)	335 I	Eng	103	Furnished	267XBFJP-*3 (20)	335 I	Eng	103	Furnished
267XDFJP-*5 (21)	325 I	Eng	123	Furnished	267XDFJP-*3 (21)	325 I	Eng	123	Furnished
267XGFJP-*5 (22)	300 I	Eng	147	Furnished	267XGFJP-*3 (22)	300 I	Eng	147	Furnished
267XMFJP-*5 (23)	265 I	Eng	184	Furnished	267XMFJP-*3 (23)	265 I	Eng	184	Furnished
267XSFP-*5 (1)	250 I	Eng	229	Furnished	267XSFP-*3 (1)	250 I	Eng	229	Furnished
287GBFP-*5 (12)	300 C	Eng	85	Furnished	287GBFP-*3 (12)	300 C	Eng	85	Furnished
287GBFP-*8 (12)	300 C	Eng	81	Furnished	287GBFP-*8 (12)	300 C	Eng	81	Furnished
287GCFJP-*5 (13)	390 C	Eng	103	Furnished	287GCFJP-*3 (13)	390 C	Eng	103	Furnished
287GCFJP-*8 (13)	390 C	Eng	97	Furnished	287GCFJP-*8 (13)	390 C	Eng	97	Furnished
287GDFJP-*5 (14)	390 C	Eng	123	Furnished	287GDFJP-*3 (14)	390 C	Eng	123	Furnished
287GDFJP-*8 (14)	390 C	Eng	116	Furnished	287GDFJP-*8 (14)	390 C	Eng	116	Furnished
287GGFJP-*5 (15)	360 C	Eng	147	Furnished	287GGFJP-*3 (15)	360 C	Eng	147	Furnished
287GGFJP-*8 (15)	360 C	Eng	137	Furnished	287GGFJP-*8 (15)	360 C	Eng	137	Furnished
287GKFJP-*5 (16)	340 C	Eng	164	Furnished	287GKFJP-*3 (16)	340 C	Eng	164	Furnished
287GMFJP-*5 (17)	318 C	Eng	184	Furnished	287GMFJP-*3 (17)	318 C	Eng	184	Furnished
287GMFJP-*8 (17)	318 C	Eng	170	Furnished	287GMFJP-*8 (17)	318 C	Eng	170	Furnished
287GPFJP-*5 (18)	290 C	Eng	205	Furnished	287GPFJP-*3 (18)	290 C	Eng	205	Furnished
287GPFJP-*8 (18)	290 C	Eng	189	Furnished	287GPFJP-*8 (18)	290 C	Eng	189	Furnished
287GSFJP-*5 (19)	265 C	Eng	229	Furnished	287GSFJP-*3 (19)	265 C	Eng	229	Furnished
287GSFJP-*8 (19)	265 C	Eng	210	Furnished	287GSFJP-*8 (19)	265 C	Eng	210	Furnished
877XAFJP-*5 (6)	591 C	Eng	116	Furnished	877XAFJP-*3 (6)	591 C	Eng	116	Furnished
877XBFJP-*5 (7)	552 C	Eng	124	Furnished	877XBFJP-*3 (7)	552 C	Eng	124	Furnished
877XCFJP-*5 (8)	515 C	Eng	133	Furnished	877XCFJP-*3 (8)	515 C	Eng	133	Furnished
877XDFJP-*5 (9)	482 C	Eng	142	Furnished	877XDFJP-*3 (9)	482 C	Eng	142	Furnished
877XEFP-*5 (10)	425 C	Eng	161	Furnished	877XEFP-*3 (10)	425 C	Eng	161	Furnished
877XFFJP-*5 (11)	376 C	Eng	182	Furnished	877XFFJP-*3 (11)	376 C	Eng	182	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (1) Input Gear Part No. 5-P-1173
- (7) Input Gear Part No. 5-P-1428-12X
- (13) Input Gear Part No. 5-P-1491-2X
- (19) Input Gear Part No. 5-P-1491-8X
- (2) Input Gear Part No. 5-P-1225
- (8) Input Gear Part No. 5-P-1428-3X
- (14) Input Gear Part No. 5-P-1491-3X
- (20) Input Gear Part No. 5-P-912
- (3) Input Gear Part No. 5-P-1293
- (9) Input Gear Part No. 5-P-1428-4X
- (15) Input Gear Part No. 5-P-1491-4X
- (21) Input Gear Part No. 5-P-913
- (4) Input Gear Part No. 5-P-1350
- (10) Input Gear Part No. 5-P-1428-5X
- (16) Input Gear Part No. 5-P-1491-5X
- (22) Input Gear Part No. 5-P-914
- (5) Input Gear Part No. 5-P-1351
- (11) Input Gear Part No. 5-P-1428-6X
- (17) Input Gear Part No. 5-P-1491-6X
- (23) Input Gear Part No. 5-P-915
- (6) Input Gear Part No. 5-P-1428-11X
- (12) Input Gear Part No. 5-P-1491-1X
- (18) Input Gear Part No. 5-P-1491-7X

4700 4700 EVS 4700 OFS 4700 RDS 4700 SP 4800 4800 EVS 4800 SP	4850 EVS
LEFT SIDE ONLY	TOP SIDE ONLY

TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX	TRANSMISSION GEAR DATA: TOP 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX
PITCH LINE TO APERTURE FACE: 1.7799" (45.2100MM)	PITCH LINE TO APERTURE FACE: 1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFJP-*5 (12)	300 C	Eng	85	Furnished	280GBFJP-*5 (12)	300 C	Eng	85	Furnished
280GBFJP-*8 (12)	300 C	Eng	81	Furnished	280GBFJP-*8 (12)	300 C	Eng	81	Furnished
280GCFJP-*5 (13)	390 C	Eng	103	Furnished	280GCFJP-*5 (13)	390 C	Eng	103	Furnished
280GCFJP-*8 (13)	390 C	Eng	97	Furnished	280GCFJP-*8 (13)	390 C	Eng	97	Furnished
280GDFJP-*5 (14)	390 C	Eng	123	Furnished	280GDFJP-*5 (14)	390 C	Eng	123	Furnished
280GDFJP-*8 (14)	390 C	Eng	116	Furnished	280GDFJP-*8 (14)	390 C	Eng	116	Furnished
280GGFJP-*5 (15)	360 C	Eng	147	Furnished	280GGFJP-*5 (15)	360 C	Eng	147	Furnished
280GGFJP-*8 (15)	360 C	Eng	137	Furnished	280GGFJP-*8 (15)	360 C	Eng	137	Furnished
280GKFJP-*5 (16)	340 C	Eng	164	Furnished	280GKFJP-*5 (16)	340 C	Eng	164	Furnished
280GMFJP-*5 (17)	318 C	Eng	184	Furnished	280GMFJP-*5 (17)	318 C	Eng	184	Furnished
280GMFJP-*8 (17)	318 C	Eng	170	Furnished	280GMFJP-*8 (17)	318 C	Eng	170	Furnished
280GPFJP-*5 (18)	290 C	Eng	205	Furnished	280GPFJP-*5 (18)	290 C	Eng	205	Furnished
280GPFJP-*8 (18)	290 C	Eng	189	Furnished	280GPFJP-*8 (18)	290 C	Eng	189	Furnished
280GSFJP-*5 (19)	265 C	Eng	229	Furnished	280GSFJP-*5 (19)	265 C	Eng	229	Furnished
280GSFJP-*8 (19)	265 C	Eng	210	Furnished	280GSFJP-*8 (19)	265 C	Eng	210	Furnished
870XAFJP-*6 (6)	591 C	Eng	116	Furnished	870XAFJP-*3 (6)	591 C	Eng	116	Furnished
870XBFJP-*5 (7)	552 C	Eng	124	Furnished	870XBFJP-*3 (7)	552 C	Eng	124	Furnished
870XCFJP-*5 (8)	515C	Eng	133	Furnished	870XCFJP-*3 (8)	515C	Eng	133	Furnished
870XDFJP-*5 (9)	482 C	Eng	142	Furnished	870XDFJP-*3 (9)	482 C	Eng	142	Furnished
870XEFJP-*5 (10)	425 C	Eng	161	Furnished	870XEFJP-*3 (10)	425 C	Eng	161	Furnished
870XFFJP-*5 (11)	376 C	Eng	182	Furnished	870XFFJP-*3 (11)	376 C	Eng	182	Furnished

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

892HAFJW-*5 (6)	591 C	Eng	116	Furnished	892UAFJW-*5 (6)	591 C	Eng	116	Furnished
892HBFJW-*5 (7)	552 C	Eng	124	Furnished	892UBFJW-*5 (7)	552 C	Eng	124	Furnished
892HCFJW-*5 (8)	515C	Eng	133	Furnished	892UCFJW-*5 (8)	515C	Eng	133	Furnished
892HDFJW-*5 (9)	482 C	Eng	142	Furnished	892UDFJW-*5 (9)	482 C	Eng	142	Furnished
892HEFJW-*5 (10)	425 C	Eng	161	Furnished	892UEFJW-*5 (10)	425 C	Eng	161	Furnished
892HFFJW-*5 (11)	376 C	Eng	182	Furnished	892UFFJW-*5 (11)	376 C	Eng	182	Furnished

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

899HAFJW-*5 (6)	591 C	Eng	116	Furnished	899UAFJW-*5 (6)	591 C	Eng	116	Furnished
-----------------	-------	-----	-----	-----------	-----------------	-------	-----	-----	-----------

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (6) Input Gear Part No. 5-P-1428-11X
- (12) Input Gear Part No. 5-P-1491-1X
- (18) Input Gear Part No. 5-P-1491-7X
- (7) Input Gear Part No. 5-P-1428-12X
- (13) Input Gear Part No. 5-P-1491-2X
- (19) Input Gear Part No. 5-P-1491-8X
- (8) Input Gear Part No. 5-P-1428-3X
- (14) Input Gear Part No. 5-P-1491-3X
- (9) Input Gear Part No. 5-P-1428-4X
- (15) Input Gear Part No. 5-P-1491-4X
- (10) Input Gear Part No. 5-P-1428-5X
- (16) Input Gear Part No. 5-P-1491-5X
- (11) Input Gear Part No. 5-P-1428-6X
- (17) Input Gear Part No. 5-P-1491-6X

Allison

ALL-19

ALLISON

CHELSEA®

4700
4700 EVS
4700 OFS
4700 RDS
4700 SP
4800
4800 EVS
4800 SP

4850 EVS

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

899HBFJW-*5 (7)	552 C	Eng	124	Furnished	899UBFJW-*5 (7)	552 C	Eng	124	Furnished	Furnished
899HCFJW-*5 (8)	515 C	Eng	133	Furnished	899UCFJW-*5 (8)	515 C	Eng	133	Furnished	Furnished
899HDFJW-*5 (9)	482 C	Eng	142	Furnished	899UDFJW-*5 (9)	482 C	Eng	142	Furnished	Furnished
899HEFJW-*5 (10)	425 C	Eng	161	Furnished	899UEFJW-*5 (10)	425 C	Eng	161	Furnished	Furnished
899HFFJW-*5 (11)	376 C	Eng	182	Furnished	899UFFJW-*5 (11)	376 C	Eng	182	Furnished	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

(7) Input Gear Part No. 5-P-1428-12X
(8) Input Gear Part No. 5-P-1428-3X
(9) Input Gear Part No. 5-P-1428-4X
(10) Input Gear Part No. 5-P-1428-5X
(11) Input Gear Part No. 5-P-1428-6X

CHELSEA®**ALLISON****ALL-19C**4700 (4700 Family w/ Integral Cooler)
4800 (4800 Family w/ Integral Cooler)**LEFT SIDE ONLY****TOP SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7799" (45.2100MM)

TRANSMISSION GEAR DATA:TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**

1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	103	Furnished	267SBFJP-*3 (4)	402 I	Eng	103	Furnished				Furnished
267SDFJP-*5 (3)	390 I	Eng	123	Furnished	267SDFJP-*3 (4)	390 I	Eng	123	Furnished				Furnished
267SGFJP-*5 (2)	360 I	Eng	147	Furnished	267SGFJP-*3 (2)	360 I	Eng	147	Furnished				Furnished
267SMFJP-*5 (5)	318 I	Eng	184	Furnished	267SMFJP-*3 (5)	318 I	Eng	184	Furnished				Furnished
267SSFJP-*5 (1)	265 I	Eng	229	Furnished	267SSFJP-*3 (1)	265 I	Eng	229	Furnished				Furnished
267XBFJP-*5 (20)	335 I	Eng	103	Furnished	267XBFJP-*3 (20)	335 I	Eng	103	Furnished				Furnished
267XDFJP-*5 (21)	325 I	Eng	123	Furnished	267XDFJP-*3 (21)	325 I	Eng	123	Furnished				Furnished
267XGFPJ-*5 (22)	300 I	Eng	147	Furnished	267XGFPJ-*3 (22)	300 I	Eng	147	Furnished				Furnished
267XMFJP-*5 (23)	265 I	Eng	184	Furnished	267XMFJP-*3 (23)	265 I	Eng	184	Furnished				Furnished
267XSFPJ-*5 (1)	250 I	Eng	229	Furnished	267XSFPJ-*3 (1)	250 I	Eng	229	Furnished				Furnished
287GBFPJ-*5 (12)	300 C	Eng	85	Furnished	287GBFPJ-*3 (12)	300 C	Eng	85	Furnished				Furnished
287GBFPJ-*8 (12)	300 C	Eng	81	Furnished	287GBFPJ-*8 (12)	300 C	Eng	81	Furnished				Furnished
287GCFJP-*5 (13)	390 C	Eng	103	Furnished	287GCFJP-*3 (13)	390 C	Eng	103	Furnished				Furnished
287GCFJP-*8 (13)	390 C	Eng	97	Furnished	287GCFJP-*8 (13)	390 C	Eng	97	Furnished				Furnished
287GDFJP-*5 (14)	390 C	Eng	123	Furnished	287GDFJP-*3 (14)	390 C	Eng	123	Furnished				Furnished
287GDFJP-*8 (14)	390 C	Eng	116	Furnished	287GDFJP-*8 (14)	390 C	Eng	116	Furnished				Furnished
287GGFPJ-*5 (15)	360 C	Eng	147	Furnished	287GGFPJ-*3 (15)	360 C	Eng	147	Furnished				Furnished
287GGFPJ-*8 (15)	360 C	Eng	137	Furnished	287GGFPJ-*8 (15)	360 C	Eng	137	Furnished				Furnished
287GKFJP-*5 (16)	340 C	Eng	164	Furnished	287GKFJP-*3 (16)	340 C	Eng	164	Furnished				Furnished
287GMFPJ-*5 (17)	318 C	Eng	184	Furnished	287GMFPJ-*3 (17)	318 C	Eng	184	Furnished				Furnished
287GMFPJ-*8 (17)	318 C	Eng	170	Furnished	287GMFPJ-*8 (17)	318 C	Eng	170	Furnished				Furnished
287GPFPJ-*5 (18)	290 C	Eng	205	Furnished	287GPFPJ-*3 (18)	290 C	Eng	205	Furnished				Furnished
287GPFPJ-*8 (18)	290 C	Eng	189	Furnished	287GPFPJ-*8 (18)	290 C	Eng	189	Furnished				Furnished
287GSFPJ-*5 (19)	265 C	Eng	229	Furnished	287GSFPJ-*3 (19)	265 C	Eng	229	Furnished				Furnished
287GSFPJ-*8 (19)	265 C	Eng	210	Furnished	287GSFPJ-*8 (19)	265 C	Eng	210	Furnished				Furnished
287XAFJP-*5 (6)	591 C	Eng	116	Furnished	287XAFJP-*3 (6)	591 C	Eng	116	Furnished				Furnished
287XBFJP-*5 (7)	552 C	Eng	124	Furnished	287XBFJP-*3 (7)	552 C	Eng	124	Furnished				Furnished
287XCFJP-*5 (8)	515 C	Eng	133	Furnished	287XCFJP-*3 (8)	515 C	Eng	133	Furnished				Furnished
287XDFJP-*5 (9)	482 C	Eng	142	Furnished	287XDFJP-*3 (9)	482 C	Eng	142	Furnished				Furnished
287XEFJP-*5 (10)	425 C	Eng	161	Furnished	287XEFJP-*3 (10)	425 C	Eng	161	Furnished				Furnished
287XFFJP-*5 (11)	376 C	Eng	182	Furnished	287XFFJP-*3 (11)	376 C	Eng	182	Furnished				Furnished

Continued on Next Page

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (1) Input Gear Part No. 5-P-1173
- (7) Input Gear Part No. 5-P-1428-12X
- (13) Input Gear Part No. 5-P-1491-2X
- (19) Input Gear Part No. 5-P-1491-8X
- (2) Input Gear Part No. 5-P-1225
- (8) Input Gear Part No. 5-P-1428-3X
- (14) Input Gear Part No. 5-P-1491-3X
- (20) Input Gear Part No. 5-P-912
- (3) Input Gear Part No. 5-P-1293
- (9) Input Gear Part No. 5-P-1428-4X
- (15) Input Gear Part No. 5-P-1491-4X
- (21) Input Gear Part No. 5-P-913
- (4) Input Gear Part No. 5-P-1350
- (10) Input Gear Part No. 5-P-1428-5X
- (16) Input Gear Part No. 5-P-1491-5X
- (22) Input Gear Part No. 5-P-914
- (5) Input Gear Part No. 5-P-1351
- (11) Input Gear Part No. 5-P-1428-6X
- (17) Input Gear Part No. 5-P-1491-6X
- (23) Input Gear Part No. 5-P-915
- (6) Input Gear Part No. 5-P-1428-11X
- (12) Input Gear Part No. 5-P-1491-1X
- (18) Input Gear Part No. 5-P-1491-7X

Allison

ALL-19C

ALLISON

CHELSEA®

4700 (4700 Family w/ Integral Cooler)
4800 (4800 Family w/ Integral Cooler)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline

97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline

97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFJP-*5 (12)	300 C	Eng	85	Furnished	280GBFJP-*5 (12)	300 C	Eng	85	Furnished	280GBFJP-*8 (12)	300 C	Eng	81
280GBFJP-*8 (12)	300 C	Eng	81	Furnished	280GBFJP-*8 (12)	300 C	Eng	81	Furnished	280GBFJP-*5 (13)	390 C	Eng	103
280GCFJP-*5 (13)	390 C	Eng	103	Furnished	280GCFJP-*8 (13)	390 C	Eng	97	Furnished	280GDFJP-*5 (14)	390 C	Eng	123
280GCFJP-*8 (13)	390 C	Eng	97	Furnished	280GDFJP-*5 (14)	390 C	Eng	123	Furnished	280GDFJP-*8 (14)	390 C	Eng	116
280GDFJP-*5 (14)	390 C	Eng	123	Furnished	280GDFJP-*8 (14)	390 C	Eng	116	Furnished	280GGFJP-*5 (15)	360 C	Eng	147
280GDFJP-*8 (14)	390 C	Eng	116	Furnished	280GGFJP-*5 (15)	360 C	Eng	147	Furnished	280GGFJP-*8 (15)	360 C	Eng	137
280GGFJP-*5 (15)	360 C	Eng	147	Furnished	280GGFJP-*8 (15)	360 C	Eng	137	Furnished	280GKFJP-*5 (16)	340 C	Eng	164
280GKFJP-*5 (16)	340 C	Eng	164	Furnished	280GKFJP-*5 (16)	340 C	Eng	164	Furnished	280GMFJP-*5 (17)	318 C	Eng	184
280GMFJP-*5 (17)	318 C	Eng	184	Furnished	280GMFJP-*5 (17)	318 C	Eng	184	Furnished	280GMFJP-*8 (17)	318 C	Eng	170
280GMFJP-*8 (17)	318 C	Eng	170	Furnished	280GMFJP-*8 (17)	318 C	Eng	170	Furnished	280GPFJP-*5 (18)	290 C	Eng	205
280GPFJP-*5 (18)	290 C	Eng	205	Furnished	280GPFJP-*5 (18)	290 C	Eng	205	Furnished	280GPFJP-*8 (18)	290 C	Eng	189
280GPFJP-*8 (18)	290 C	Eng	189	Furnished	280GPFJP-*8 (18)	290 C	Eng	189	Furnished	280GSFJP-*5 (19)	265 C	Eng	229
280GSFJP-*5 (19)	265 C	Eng	229	Furnished	280GSFJP-*5 (19)	265 C	Eng	229	Furnished	280GSFJP-*8 (19)	265 C	Eng	210
280GSFJP-*8 (19)	265 C	Eng	210	Furnished	280GSFJP-*8 (19)	265 C	Eng	210	Furnished	870XAFJP-*5 (6)	591 C	Eng	116
870XAFJP-*5 (6)	591 C	Eng	116	Furnished	870XAFJP-*3 (6)	591 C	Eng	116	Furnished	870XBFJP-*5 (7)	552 C	Eng	124
870XBFJP-*5 (7)	552 C	Eng	124	Furnished	870XBFJP-*3 (7)	552 C	Eng	124	Furnished	870XCFJP-*5 (8)	515C	Eng	133
870XCFJP-*5 (8)	515C	Eng	133	Furnished	870XCFJP-*3 (8)	515C	Eng	133	Furnished	870XDFJP-*5 (9)	482 C	Eng	142
870XDFJP-*5 (9)	482 C	Eng	142	Furnished	870XDFJP-*3 (9)	482 C	Eng	142	Furnished	870XEFJP-*5 (10)	425 C	Eng	161
870XEFJP-*5 (10)	425 C	Eng	161	Furnished	870XEFJP-*3 (10)	425 C	Eng	161	Furnished	870XFFJP-*5 (11)	376 C	Eng	182
870XFFJP-*5 (11)	376 C	Eng	182	Furnished	870XFFJP-*3 (11)	376 C	Eng	182	Furnished				

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

892CAFJW-*3 (6)	591 C	Eng	116	Furnished	892UAFJW-*5 (6)	591 C	Eng	116	Furnished
892CBFJW-*3 (7)	552 C	Eng	124	Furnished	892UBFJW-*5 (7)	552 C	Eng	124	Furnished
892CCFJW-*3 (8)	515C	Eng	133	Furnished	892UCFJW-*5 (8)	515C	Eng	133	Furnished
892CDFJW-*3 (9)	482 C	Eng	142	Furnished	892UDFJW-*5 (9)	482 C	Eng	142	Furnished
892CEFJP-*3 (10)	425 C	Eng	161	Furnished	892UEFJP-*5 (10)	425 C	Eng	161	Furnished
892CCFJP-*3 (11)	376 C	Eng	182	Furnished	892UFFJP-*5 (11)	376 C	Eng	182	Furnished

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

899CAFJW-*3 (6)	591 C	Eng	116	Furnished	899UAFJW-*5 (6)	591 C	Eng	116	Furnished
-----------------	-------	-----	-----	-----------	-----------------	-------	-----	-----	-----------

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (6) Input Gear Part No. 5-P-1428-11X
- (12) Input Gear Part No. 5-P-1491-1X
- (18) Input Gear Part No. 5-P-1491-7X
- (7) Input Gear Part No. 5-P-1428-12X
- (13) Input Gear Part No. 5-P-1491-2X
- (19) Input Gear Part No. 5-P-1491-8X
- (8) Input Gear Part No. 5-P-1428-3X
- (14) Input Gear Part No. 5-P-1491-3X
- (9) Input Gear Part No. 5-P-1428-4X
- (15) Input Gear Part No. 5-P-1491-4X
- (10) Input Gear Part No. 5-P-1428-5X
- (16) Input Gear Part No. 5-P-1491-5X
- (11) Input Gear Part No. 5-P-1428-6X
- (17) Input Gear Part No. 5-P-1491-6X

CHELSEA®**ALLISON****ALL-19C**

4700 (4700 Family w/ Integral Cooler)
4800 (4800 Family w/ Integral Cooler)

LEFT SIDE ONLY**TOP SIDE ONLY****TRANSMISSION GEAR DATA:**

L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

899CBFJW-*3 (7)	552 C	Eng	124	Furnished	899UBFJW-*5 (7)	552 C	Eng	124	Furnished
899CCFJW-*3 (8)	515 C	Eng	133	Furnished	899UCFJW-*5 (8)	515 C	Eng	133	Furnished
899CDFJW-*3 (9)	482 C	Eng	142	Furnished	899UDFJW-*5 (9)	482 C	Eng	142	Furnished
899CEFJW-*3 (10)	425 C	Eng	161	Furnished	899UEFJW-*5 (10)	425 C	Eng	161	Furnished
899CFFJW-*3 (11)	376 C	Eng	182	Furnished	899UFFJW-*5 (11)	376 C	Eng	182	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (7) Input Gear Part No. 5-P-1428-12X
- (8) Input Gear Part No. 5-P-1428-3X
- (9) Input Gear Part No. 5-P-1428-4X
- (10) Input Gear Part No. 5-P-1428-5X
- (11) Input Gear Part No. 5-P-1428-6X

Allison

ALL-19R

ALLISON

CHELSEA®

4700 (4700 Family w/ Retarder)
4800 (4800 Family w/ Retarder)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	103	Furnished	267SBFJP-*3 (4)	402 I	Eng	103	Furnished	267SBFJP-*3 (4)	402 I	Eng	103
267SDFJP-*5 (3)	390 I	Eng	123	Furnished	267SDFJP-*3 (4)	402 I	Eng	103	Furnished	267SDFJP-*3 (4)	402 I	Eng	103
267SGFJP-*5 (2)	360 I	Eng	147	Furnished	267SGFJP-*3 (2)	360 I	Eng	147	Furnished	267SGFJP-*3 (2)	360 I	Eng	147
267SMFJP-*5 (5)	318 I	Eng	184	Furnished	267SMFJP-*3 (5)	318 I	Eng	184	Furnished	267SMFJP-*3 (5)	318 I	Eng	184
267SSFJP-*5 (1)	265 I	Eng	229	Furnished	267SSFJP-*3 (1)	265 I	Eng	229	Furnished	267SSFJP-*3 (1)	265 I	Eng	229
267XBFJP-*5 (20)	335 I	Eng	103	Furnished	267XBFJP-*3 (20)	335 I	Eng	103	Furnished	267XBFJP-*3 (20)	335 I	Eng	103
267XDFJP-*5 (21)	325 I	Eng	123	Furnished	267XDFJP-*3 (21)	325 I	Eng	123	Furnished	267XDFJP-*3 (21)	325 I	Eng	123
267XGFJP-*5 (22)	300 I	Eng	147	Furnished	267XGFJP-*3 (22)	300 I	Eng	147	Furnished	267XGFJP-*3 (22)	300 I	Eng	147
267XMFJP-*5 (23)	265 I	Eng	184	Furnished	267XMFJP-*3 (23)	265 I	Eng	184	Furnished	267XMFJP-*3 (23)	265 I	Eng	184
267XSFJP-*5 (1)	250 I	Eng	229	Furnished	267XSFJP-*3 (1)	250 I	Eng	229	Furnished	267XSFJP-*3 (1)	250 I	Eng	229
287GBFJP-*5 (12)	300 C	Eng	85	Furnished	287GBFJP-*3 (12)	300 C	Eng	85	Furnished	287GBFJP-*3 (12)	300 C	Eng	85
287GBFJP-*8 (12)	300 C	Eng	81	Furnished	287GBFJP-*8 (12)	300 C	Eng	81	Furnished	287GBFJP-*8 (12)	300 C	Eng	81
287GCFJP-*5 (13)	390 C	Eng	103	Furnished	287GCFJP-*3 (13)	390 C	Eng	103	Furnished	287GCFJP-*3 (13)	390 C	Eng	103
287GCFJP-*8 (13)	390 C	Eng	97	Furnished	287GCFJP-*8 (13)	390 C	Eng	97	Furnished	287GCFJP-*8 (13)	390 C	Eng	97
287GDFJP-*5 (14)	390 C	Eng	123	Furnished	287GDFJP-*3 (14)	390 C	Eng	123	Furnished	287GDFJP-*3 (14)	390 C	Eng	123
287GDFJP-*8 (14)	390 C	Eng	116	Furnished	287GDFJP-*8 (14)	390 C	Eng	116	Furnished	287GDFJP-*8 (14)	390 C	Eng	116
287GGFJP-*5 (15)	360 C	Eng	147	Furnished	287GGFJP-*3 (15)	360 C	Eng	147	Furnished	287GGFJP-*3 (15)	360 C	Eng	147
287GGFJP-*8 (15)	360 C	Eng	137	Furnished	287GGFJP-*8 (15)	360 C	Eng	137	Furnished	287GGFJP-*8 (15)	360 C	Eng	137
287GKFJP-*5 (16)	340 C	Eng	164	Furnished	287GKFJP-*3 (16)	340 C	Eng	164	Furnished	287GKFJP-*3 (16)	340 C	Eng	164
287GMFJP-*5 (17)	318 C	Eng	184	Furnished	287GMFJP-*3 (17)	318 C	Eng	184	Furnished	287GMFJP-*3 (17)	318 C	Eng	184
287GMFJP-*8 (17)	318 C	Eng	170	Furnished	287GMFJP-*8 (17)	318 C	Eng	170	Furnished	287GMFJP-*8 (17)	318 C	Eng	170
287GPFJP-*5 (18)	290 C	Eng	205	Furnished	287GPFJP-*3 (18)	290 C	Eng	205	Furnished	287GPFJP-*3 (18)	290 C	Eng	205
287GPFJP-*8 (18)	290 C	Eng	189	Furnished	287GPFJP-*8 (18)	290 C	Eng	189	Furnished	287GPFJP-*8 (18)	290 C	Eng	189
287GSFJP-*5 (19)	265 C	Eng	229	Furnished	287GSFJP-*3 (19)	265 C	Eng	229	Furnished	287GSFJP-*3 (19)	265 C	Eng	229
287GSFJP-*8 (19)	265 C	Eng	210	Furnished	287GSFJP-*8 (19)	265 C	Eng	210	Furnished	287GSFJP-*8 (19)	265 C	Eng	210
877XAFJP-*5 (6)	591 C	Eng	116	Furnished	877XAFJP-*3 (6)	591 C	Eng	116	Furnished	877XAFJP-*3 (6)	591 C	Eng	116
877XBFJP-*5 (7)	552 C	Eng	124	Furnished	877XBFJP-*3 (7)	552 C	Eng	124	Furnished	877XBFJP-*3 (7)	552 C	Eng	124
877XCFJP-*5 (8)	515 C	Eng	133	Furnished	877XCFJP-*3 (8)	515 C	Eng	133	Furnished	877XCFJP-*3 (8)	515 C	Eng	133
877XDFJP-*5 (9)	482 C	Eng	142	Furnished	877XDFJP-*3 (9)	482 C	Eng	142	Furnished	877XDFJP-*3 (9)	482 C	Eng	142
877XEFPJ-*5 (10)	425 C	Eng	161	Furnished	877XEFPJ-*3 (10)	425 C	Eng	161	Furnished	877XEFPJ-*3 (10)	425 C	Eng	161
877XFFJP-*5 (11)	376 C	Eng	182	Furnished	877XFFJP-*3 (11)	376 C	Eng	182	Furnished	877XFFJP-*3 (11)	376 C	Eng	182

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428-11X

(7) Input Gear Part No. 5-P-1428-12X
(8) Input Gear Part No. 5-P-1428-3X
(9) Input Gear Part No. 5-P-1428-4X
(10) Input Gear Part No. 5-P-1428-5X
(11) Input Gear Part No. 5-P-1428-6X
(12) Input Gear Part No. 5-P-1491-1X

(13) Input Gear Part No. 5-P-1491-2X
(14) Input Gear Part No. 5-P-1491-3X
(15) Input Gear Part No. 5-P-1491-4X
(16) Input Gear Part No. 5-P-1491-5X
(17) Input Gear Part No. 5-P-1491-6X
(18) Input Gear Part No. 5-P-1491-7X

(19) Input Gear Part No. 5-P-1491-8X
(20) Input Gear Part No. 5-P-912
(21) Input Gear Part No. 5-P-913
(22) Input Gear Part No. 5-P-914
(23) Input Gear Part No. 5-P-915

CHELSEA®**ALLISON****ALL-19R**

4700 (4700 Family w/ Retarder)
4800 (4800 Family w/ Retarder)

LEFT SIDE ONLY**TOP SIDE ONLY****TRANSMISSION GEAR DATA:**

L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFPJ-5 (12)	300 C	Eng	85	Furnished	280GBFPJ-5 (12)	300 C	Eng	85	Furnished	280GBFPJ-8 (12)	300 C	Eng	81
280GBFPJ-8 (12)	300 C	Eng	81	Furnished	280GBFPJ-8 (12)	300 C	Eng	81	Furnished	280GBFPJ-5 (13)	390 C	Eng	103
280GCFJP-5 (13)	390 C	Eng	103	Furnished	280GCFJP-5 (13)	390 C	Eng	103	Furnished	280GCFJP-8 (13)	390 C	Eng	97
280GCFJP-8 (13)	390 C	Eng	97	Furnished	280GCFJP-8 (13)	390 C	Eng	97	Furnished	280GDFJP-5 (14)	390 C	Eng	123
280GDFJP-5 (14)	390 C	Eng	123	Furnished	280GDFJP-5 (14)	390 C	Eng	123	Furnished	280GDFJP-8 (14)	390 C	Eng	116
280GDFJP-8 (14)	390 C	Eng	116	Furnished	280GDFJP-8 (14)	390 C	Eng	116	Furnished	280GGFJP-5 (15)	360 C	Eng	147
280GGFJP-5 (15)	360 C	Eng	147	Furnished	280GGFJP-5 (15)	360 C	Eng	147	Furnished	280GGFJP-8 (15)	360 C	Eng	137
280GGFJP-8 (15)	360 C	Eng	137	Furnished	280GGFJP-8 (15)	360 C	Eng	137	Furnished	280GKFJP-5 (16)	340 C	Eng	164
280GKFJP-5 (16)	340 C	Eng	164	Furnished	280GKFJP-5 (16)	340 C	Eng	164	Furnished	280GMFJP-5 (17)	318 C	Eng	184
280GMFJP-5 (17)	318 C	Eng	184	Furnished	280GMFJP-5 (17)	318 C	Eng	184	Furnished	280GMFJP-8 (17)	318 C	Eng	170
280GMFJP-8 (17)	318 C	Eng	170	Furnished	280GMFJP-8 (17)	318 C	Eng	170	Furnished	280GPFPJ-5 (18)	290 C	Eng	205
280GPFPJ-5 (18)	290 C	Eng	205	Furnished	280GPFPJ-5 (18)	290 C	Eng	205	Furnished	280GPFPJ-8 (18)	290 C	Eng	189
280GPFPJ-8 (18)	290 C	Eng	189	Furnished	280GPFPJ-8 (18)	290 C	Eng	189	Furnished	280GSFPJ-5 (19)	265 C	Eng	229
280GSFPJ-5 (19)	265 C	Eng	229	Furnished	280GSFPJ-5 (19)	265 C	Eng	229	Furnished	280GSFPJ-8 (19)	265 C	Eng	210
280GSFPJ-8 (19)	265 C	Eng	210	Furnished	280GSFPJ-8 (19)	265 C	Eng	210	Furnished	870XAFJP-5 (6)	591 C	Eng	116
870XAFJP-5 (6)	591 C	Eng	116	Furnished	870XAFJP-5 (6)	591 C	Eng	116	Furnished	870XBFJP-3 (7)	552 C	Eng	124
870XBFJP-5 (7)	552 C	Eng	124	Furnished	870XBFJP-3 (7)	552 C	Eng	124	Furnished	870XCFJP-3 (8)	515 C	Eng	133
870XCFJP-5 (8)	515 C	Eng	133	Furnished	870XCFJP-3 (8)	515 C	Eng	133	Furnished	870XDFJP-3 (9)	482 C	Eng	142
870XDFJP-5 (9)	482 C	Eng	142	Furnished	870XDFJP-3 (9)	482 C	Eng	142	Furnished	870XEFJP-3 (10)	425 C	Eng	161
870XEFJP-5 (10)	425 C	Eng	161	Furnished	870XEFJP-3 (10)	425 C	Eng	161	Furnished	870XFFJP-3 (11)	376 C	Eng	182
870XFFJP-5 (11)	376 C	Eng	182	Furnished	870XFFJP-3 (11)	376 C	Eng	182	Furnished				

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

892JAFJW-*3 (6)	591 C	Eng	116	Furnished	892KAFJW-*5 (6)	591 C	Eng	116	Furnished
892JBFJW-*3 (7)	552 C	Eng	124	Furnished	892KBFJW-*5 (7)	552 C	Eng	124	Furnished
892JCFJW-*3 (8)	515 C	Eng	133	Furnished	892KCFJW-*5 (8)	515 C	Eng	133	Furnished
892JDFJW-*3 (9)	482 C	Eng	142	Furnished	892KDFJW-*5 (9)	482 C	Eng	142	Furnished
892JEFJW-*3 (10)	425 C	Eng	161	Furnished	892KEFJW-*5 (10)	425 C	Eng	161	Furnished
892JFFJW-*3 (11)	376 C	Eng	182	Furnished	892KFFJW-*5 (11)	376 C	Eng	182	Furnished

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

899JAFJW-*3 (6)	591 C	Eng	116	Furnished	899KAFJW-*5 (6)	591 C	Eng	116	Furnished
-----------------	-------	-----	-----	-----------	-----------------	-------	-----	-----	-----------

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (6) Input Gear Part No. 5-P-1428-11X
- (7) Input Gear Part No. 5-P-1428-12X
- (8) Input Gear Part No. 5-P-1428-3X
- (9) Input Gear Part No. 5-P-1428-4X
- (10) Input Gear Part No. 5-P-1428-5X
- (11) Input Gear Part No. 5-P-1428-6X
- (12) Input Gear Part No. 5-P-1491-1X
- (13) Input Gear Part No. 5-P-1491-2X
- (14) Input Gear Part No. 5-P-1491-3X
- (15) Input Gear Part No. 5-P-1491-4X
- (16) Input Gear Part No. 5-P-1491-5X
- (17) Input Gear Part No. 5-P-1491-6X
- (18) Input Gear Part No. 5-P-1491-7X
- (19) Input Gear Part No. 5-P-1491-8X

Allison

ALL-19R

ALLISON

CHELSEA®

4700 (4700 Family w/ Retarder)
 4800 (4800 Family w/ Retarder)

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
 97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

TRANSMISSION GEAR DATA:

TOP 10-BOLT Opening Gear FORWARD of Centerline
 97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

899JBFJW-*3 (7)	552 C	Eng	124	Furnished	899KBFJW-*5 (7)	552 C	Eng	124	Furnished	899JCFJW-*3 (8)	515 C	Eng	133
899JCFJW-*3 (8)	515 C	Eng	133	Furnished	899KCFJW-*5 (8)	515 C	Eng	133	Furnished	899JDFJW-*3 (9)	482 C	Eng	142
899JDFJW-*3 (9)	482 C	Eng	142	Furnished	899KDFJW-*5 (9)	482 C	Eng	142	Furnished	899JEFJW-*3 (10)	425 C	Eng	161
899JEFJW-*3 (10)	425 C	Eng	161	Furnished	899KEFJW-*5 (10)	425 C	Eng	161	Furnished	899JFFJW-*3 (11)	376 C	Eng	182
899JFFJW-*3 (11)	376 C	Eng	182	Furnished	899KFFJW-*5 (11)	376 C	Eng	182	Furnished				

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The torque values given for specific application pages may be limited to the rated torque of the Allison transmission.

- (7) Input Gear Part No. 5-P-1428-12X
- (8) Input Gear Part No. 5-P-1428-3X
- (9) Input Gear Part No. 5-P-1428-4X
- (10) Input Gear Part No. 5-P-1428-5X
- (11) Input Gear Part No. 5-P-1428-6X

CHELSEA®**ALLISON****ALL-20**

TC-10

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

REAR MOUNT - POWERSHIFT (HYDRAULIC)

590XRFJW-*X 650 Eng 128

Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

Allison

ALL-21

ALLISON

CHELSEA®

1700
1750
2700
2750

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0080" (25.6000MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0080" (25.6000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442GBHVP-*5 (3)	215 I	Eng	96	Furnished	442GBHVP-*3 (3)	215 I	Eng	96	Furnished				
442GBHVX-*5 (3)	150 I	Eng	96	Furnished	442GBHVX-*3 (3)	150 I	Eng	96	Furnished				
442GFHVP-*5 (2)	165 I	Eng	151	Furnished	442GFHVP-*3 (2)	165 I	Eng	151	Furnished				

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272GAHVP-*5 (5)	294 C	Eng	85	Furnished	272GAHVP-*3 (5)	294 C	Eng	85	Furnished				
272GBHVP-*5 (6)	240 C	Eng	104	Furnished	272GBHVP-*3 (6)	240 C	Eng	104	Furnished				
272GCHVP-*5 (7)	198 C	Eng	126	Furnished	272GCHVP-*3 (7)	198 C	Eng	126	Furnished				
272GDHVP-*5 (8)	166 C	Eng	151	Furnished	272GDHVP-*3 (8)	166 C	Eng	151	Furnished				

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

252GDHVP-*5 (1)	120 I	Eng	122	Furnished	252GDHVP-*5 (1)	120 I	Eng	122	Furnished				
252GMHVP-*5 (4)	50 I	Eng	178	Furnished	252GMHVP-*5 (4)	50 I	Eng	178	Furnished				

GEARED ADAPTERS

626GHVX-4HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished	626GHVX-3HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished				
630GHVX-4HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished	630GHVX-3HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished				
645GHVX-4HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished	645GHVX-3HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished				

See next page for more pump options.**Continued on Next Page**[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea requires PTO installation on 1700/1750/2700/2750 series transmissions to utilize Vehicle Interface Module, or chassis manufacturer's equivalent controller to incorporate all the PTO control features available, including "PTO Request" and "PTO Enable Output" features. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal will activate Variable Modulated Main Pressure which may not be sufficient for the PTO. This may cause damage to the PTO and/or transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: Left side opening was unavailable on early 2019 models due to ABS module interference. Verify truck prior to ordering PTO.

- (1) Input Gear Part No. 5-P-1294
- (2) Input Gear Part No. 5-P-1300
- (3) Input Gear Part No. 5-P-1358
- (4) Input Gear Part No. 5-P-1386
- (5) Input Gear Part No. 5-P-1516-1X
- (6) Input Gear Part No. 5-P-1516-2X

- (7) Input Gear Part No. 5-P-1516-3X
- (8) Input Gear Part No. 5-P-1516-4X
- (9) Filler block furnished with PTO

CHELSEA®**ALLISON****ALL-21**

1700
1750
2700
2750

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0080" (25.6000MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0080" (25.6032MM)

Pump Option Charts**252 Pumps offered in the PGP511 (5/8" - 9T / SAE A Flange – XE Output)**

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size	Porting	
							Inlet	Outlet
1116	CGP-P11C016-1AC	0.37	0.003	3988	3500	5/8" - 9T	SAE12	SAE10
1121	CGP-P11C021-1AC	0.49	0.002	3988	4000	5/8" - 9T	SAE12	SAE10
1126	CGP-P11C026-1AC	0.61	0.003	3988	3600	5/8" - 9T	SAE12	SAE10
1129	CGP-P11C029-1AC	0.67	0.003	3988	3600	5/8" - 9T	SAE12	SAE10
1137	CGP-P11C037-1AC	0.85	0.004	3988	3300	5/8" - 9T	SAE12	SAE10
1449	CGP-P31C054-1AE	1.24	0.005	3500	3000	5/8" - 9T	SAE16	SAE10
1462	CGP-P31C061-1AE	1.40	0.006	3500	3000	5/8" - 9T	SAE16	SAE10

252 Pumps offered in the PGP511 (3/4" - 11T / SAE A Flange – AD Output)

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size	Porting	
							Inlet	Outlet
P37	CGP-P11C037-5AC	0.85	0.004	3988	3300	3/4" - 11T	SAE12	SAE10
P42	CGP-P11C042-5AC	0.98	0.004	3988	3000	3/4" - 11T	SAE12	SAE10
P55	CGP-P11C055-5AC	1.28	0.006	3408	2800	3/4" - 11T	SAE12	SAE10
P71	CGP-P11C071-5AC	1.65	0.007	2900	2400	3/4" - 11T	SAE12	SAE10
P82	CGP-P11C082-5AC	1.89	0.008	2465	2300	3/4" - 11T	SAE12	SAE10

Allison

Allison Notes

ALL-4

1. Speeds shown are with engine RPM at or above torque converter lockup speed. If the PTO is going to be operated below torque converter lockup speeds, contact your CHELSEA distributor for specific speeds and torque requirements.
2. 378840 street tee required for pressure lube and must be purchased separately. Only the pressure lube line 328075X (line to the idler pin) is included with the PTO For 270/271 Series due to varying valve installation locations on the vehicle installer must supply the following hoses or order the following separately. One 329087X (line from tranny to valve) and two 328075X (valve dump back to PTO housing & valve to PTO clutch).
3. 272 Series PTOs ordered with Pressure Lube and Hyd Shift will be supplied with (1) Lube Hose and (1) Shift Hose.
4. Do not use adapter gear assemblies on any Allison automatic transmissions.

ALL-5

1. If the 270/271/272/230/231 Series is ordered with the Drag Brake option, the rear cover of the PTO may interfere with the transmission clutch housing. Clearance must be verified prior to ordering PTO.
2. Speeds shown are with engine RPM at, or above, torque converter lockup speed. If the PTO is going to be operated below torque converter lockup speeds, contact your CHELSEA distributor for specific speeds and torque requirements.
3. 378970 street tee required for pressure lube for 1975 and after, and must be purchased separately. 378880 street tee required for pressure lube prior to 1975. Only the pressure lube line 328075X (line to the idler pin) is included with the PTO For 270/271 Series due to varying valve installation locations on the vehicle installer must supply the following hoses or order the following separately. One 329087X (line from tranny to valve) and two 328075X (valve dump back to PTO housing & valve to PTO clutch).
4. The AJ input gear designator shown on this application, which is a full addendum 6-pitch gear, is recommended for use on these transmissions. The AH input gear designator, which is a 6/8-pitch gear, can also be used on these transmissions; however, you may notice some additional rattle between the meshing gears.
5. 442 SERIES - The 442 listed above is a bulge up arrangement and pump clearance must be verified by the installer. The 442*3 arrangement has interrefernece issues with the idler pin lube fitting against the bell housing.
6. Do not use adapter gear assemblies on any Allison automatic transmissions.

ALL-6

1. CRT-5630 & 5631 have only RH openings.
2. Right Side opening is optional. Input gear interference prohibits use of any PTOs other than those shown.
3. Do not use geared adapter assemblies on any Allison Automatic Transmission.
4. Do not use adapter gear assemblies on any Allison automatic transmissions.

ALL-8

1. CRT-5630 & 5631 have only RH openings.
2. Right Side opening is optional. Input gear interference prohibits use of any PTOs other than those shown.
3. Do not use geared adapter assemblies on any Allison Automatic Transmission.

ALL-11

1. RH opening is optional. Input gear interference prohibits use of any PTO other than those shown.
2. Use a 3/8" NPT to 1/4" NPT pipe reducer to adapt to the pressure lube hose supplied with the unit.
3. The CLT or CLBT prefix refers to an engine driven section mounted to the front of the transmission.
4. The 8000 and 9000 Series transmission models use all the same PTO models.
5. Only the pressure lube line 328075X (line to the idler pin) is included with the PTO.
6. The PTO input gear mates to a transmission PTO idler gear, the top opening will have 39 teeth and the side opening will have 52 teeth.
These idler gears are driven from the 59 tooth PTO drive gear.
7. Do not use geared adapter assemblies on any Allison Automatic Transmission.

Allison Notes**ALL-12**

1. For SAE 6-bolt aperture located 40° from vertical or approximately 10 o'clock when viewed from rear, see application number ALL-7 or contact your CHELSEA distributor for PTO applications prior to serial build number 32404. For applications after 32404 see application number ALL-6.
2. Engine must be stopped in order to engage/disengage Mechanical shift PTOs.
3. Left side opening located at approximately 7 o'clock, right side at 1 o'clock as viewed from rear of transmission.
4. Lube Tee Required - 378897 Street Tee is required for pressure lube PTOs and must be purchased separately. Only the pressure lube hose assembly 328075X (line to the idler pin) is included with the PTO. For 270/271 Series, due to varying valve installation locations on the vehicle, installer must supply the following hoses or order the following separately. One 329087X (line from tranny to valve) and two 328075X (valve dump back to PTO housing & valve to PTO clutch).
5. Do not use geared adapter assemblies on any Allison Automatic Transmission.

ALL-13

1. 890/897 Series - The Combined Weight of Pump, Fittings and Hoses Should Not Exceed 120 Lbs. Refer to Owner's Manual (HY25-1890- M1/US) for Complete Details.
2. When direct mounting a Parker P2 060 piston pump to a 267 Series PTO on the left (drivers) side opening, the PTO must be ordered as a 3 assembly arrangement for pump clearance.
3. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280/287, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
4. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
5. Wiring harness 379926 must be used in 2003 GM trucks for the 277, 278 and 859 Series PTOs if the GM provided in-dash PTO switch is used to control PTO operations.
6. Do not use adapter gear assemblies on Allison 3000/4000 Series Automatic Transmissions.
7. Quiet Gear™ input option QT is available on 870/877 and 870L/877L Series PTOs.
8. For an 870-XL and 877-XL (870L and 877L) Extended Shaft PTOs, the transmission bracket (50-P-XXX) and bolt kit (329928-1X) must be ordered separately: Left Side 5 Arrangement use 50-P-162, Left Side 3 Arrangement use 50-P-164, Right Side 5 Arrangement use 50-P-161, Right Side 3 Arrangement use 50-P-157.

ALL-13C

1. When direct mounting a Parker P2 060 piston pump to a 267 Series PTO on the left (drivers) side opening, the PTO must be ordered as a 3 assembly arrangement for pump clearance.
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. For the 269, 277, 278 and 867 Series, use 329130-5X for left side, 329075-2X for top right and 329075-1X for right side. If ordering shift options R, G or H for 277, 278 or 859 Series use 329130-5X for left side, 329075-1X for right side THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 859, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
4. 890/897 Series - The Combined Weight of Pump, Fittings and Hoses Should Not Exceed 120 lbs. Refer to Owner's Manual (HY25-1890- M1/US) for Complete Details
5. Quiet Gear™ input option (QT) is available on 870/877 and 870L/877L Series PTOs.
6. For an 870-XL and 877-XL (870L and 877L) Extended Shaft PTOs, the transmission bracket (50-P-XXX) and bolt kit (329928-1X) must be ordered separately: Left Side 5 Arrangement use 50-P-162, Left Side 3 Arrangement use 50-P-164, Right Side 5 Arrangement use 50-P-161, Right Side 3 Arrangement use 50-P-157.

Allison

Allison Notes**ALL-13R**

1. When direct mounting a Parker P2 060 piston pump to a 267 Series PTO on the left (drivers) side opening, the PTO must be ordered as a 3 assembly arrangement for pump clearance.
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
4. 890/897 Series - The Combined Weight of Pump, Fittings and Hoses Should Not Exceed 120 lbs. Refer to Owner's Manual (HY25-1890- M1/US) for Complete Details
5. Do not use adapter gear assemblies on Allison 3000/4000 Series Automatic Transmissions.
6. Quiet Gear™ input option QT is available on 870/877 and 870L/877L Series PTOs.
7. For an 870-XL and 877-XL (870L and 877L) Extended Shaft PTOs, the transmission bracket (50-P-XXX) and bolt kit (329928-3X) must be ordered separately: Left Side 5 Arrangement use 50-P-162, Left Side 3 Arrangement use 50-P-164, Right Side 5 Arrangement use 50-P-161, Right Side 3 Arrangement use 50-P-157.

ALL-13EC

1. All models require a hose assembly. For 870L/877L - All Mounting Hardware and Hose Assemblies are Included with the Unit.
2. Quiet Gear™ input option (QT) is available on 870L/877L Series PTOs.
3. For 870L/877L, utilize Daimler's integral PTO support bracket.

ALL-14

1. LEFT SIDE - 870/877/890/897 PTOs may encounter interference with leaf spring assembly when using the 3 or 5 arrangement on the Peterbilt 320 chassis.
2. The Right Side opening is located at approximately 1 o'clock when viewed from the rear. All PTOs mounted in this location require pressure lubrication.
3. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
4. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
5. 890/897 Series - The Combined Weight of Pump, Fittings and Hoses Should Not Exceed 120 lbs. Refer to Owner's Manual (HY25-1890- M1/US) for Complete Details.
6. Do not use Adapter Gear Assemblies on Allison 3000/4000 Series Automatic Transmissions.
7. Quiet Gear™ input option QT is available on 870/877 and 870L/877L Series PTOs.
8. For an 870-XL and 877-XL (870L and 877L) Extended Shaft PTOs, the transmission bracket (50-P-XXX) and bolt kit (329928-1X) must be ordered separately: Left Side 5 Arrangement use 50-P-165, Left Side 3 Arrangement use 50-P-158.

ALL-14C

1. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
2. 890/897 Series - The Combined Weight of Pump, Fittings and Hoses Should Not Exceed 120 lbs. Refer to Owner's Manual (HY25-1890- M1/US) for Complete Details.
3. The Right Side opening is located at approximately 1 o'clock when viewed from the rear. All PTOs mounted in this location require pressure lubrication.
4. Quiet Gear™ input option QT is available on 870/877 and 870L/877L Series PTOs.
5. For an 870-XL and 877-XL (870L and 877L) Extended Shaft PTOs, the transmission bracket (50-P-XXX) and bolt kit (329928-1X) must be ordered separately: Left Side 3 Arrangement use 50-P-158.

Allison Notes**ALL-14R**

1. The Right Side opening is located at approximately 1 o'clock when viewed from the rear. All PTOs mounted in this location require pressure lubrication.
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. 890/897 Series - The Combined Weight of Pump, Fittings and Hoses Should Not Exceed 120 Lbs. Refer to Owner's Manual (HY25-1890-M1/US) for Complete Details.
4. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
5. Do not use Adapter Gear Assemblies on Allison 3000/4000 Series Automatic Transmissions.
6. Quiet Gear™ input option QT is available on 870/877 and 870L/877L Series PTOs.
7. For an 870-XL and 877-XL (870L and 877L) Extended Shaft PTOs, the transmission bracket (50-P-XXX) and bolt kit (329928-2X) must be ordered separately: Left Side 5 Arrangement use 50-P-165, Left Side 3 Arrangement use 50-P-158.

ALL-15

1. There is a torque converter lock up feature available with the 1000/2000/2400 series transmissions. The torque converter lock up feature comes on and is controlled by the Transmission Control Module (TCM) when a signal is provided to the "PTO Enable" circuit of the TCM by the PTO switch. Lock up will only come on in the "NEUTRAL" and "PARK" positions at 1100 RPM transmission turbine speed. This equates to 1200-1250 RPM or higher engine speed, depending on PTO load. The lock up clutch does not come on automatically in "DRIVE." Refer to the appropriate owner's manual for wiring installation.
2. If the 442 Series is ordered with Pressure Lube, Hose 328075X is supplied with the PTO A Restrictor Orifice, 379896 (442*FHV) or 379594 (442*BHV) is required and is shipped with the PTO.
3. 442*B Ratio - DO NOT USE with Geared Adapter.
4. Geared Adapters - 626/630/645 listed on this application page are for the 442 (F Ratio Only) or 272. 442*F Ratio - Use 442ZFHV with (1) 7-A-140 filler block and (1) 328170-94X stud kit when mounting the PTO to one of the adapters listed. 272 - Use 272L*HV (deep mount) with (1) 7-A-140 and (1) 328170-94X. Use 35-P-41 gasket between transmission and adapter. Use filler block (1) 7-A-140 between the adapter and PTO with 35-P-1 or 2 shim gaskets to obtain .006-.012" of backlash between the driver gears.
5. To maintain proper hydraulic pressure to PTO clutch, connect Chelsea specified wire to Allison "PTO Request" circuit wire/pin within transmission TCM. Location of PTO Request wire/pin is dependant on Transmission Location Code. For assistance, contact your local Allison representative or contact Allison Technical Assistance at 1-800-252-5283.
6. Limited Ratios - the K Ratio and above will not fit on this transmission due to adjacent interference with the input ratio gear. In some instances the D ratio will not fit either. There seems to be two variations of the transmission case that effect the D ratio, but we have no way to confirm which case is which.
7. A lube T fitting is required in the oil return cooling line to supply low pressure oil to the idler shaft of the 252 (left side), 272, or 442 Series PTO. The 378840 T fitting is for transmission model 1000 with the SAE #3 bell housing, 378970 T fitting is for the transmission model 1000/2000/2400 with the SAE #2 bell housing, or the low pressure return line may be cut with a tube cutter and a compression T fitting may be installed.
8. MY2003 and after GM C/K Series 4500/5500/6500/7500/8500 Trucks - If using the GM provided in-dash switch, use wiring harness 379924 for the 230/231/270/271/272 Series PTOs. The kits must be ORDERED SEPARATELY.
9. 252 Series PTO - (GM C/K Series 2003-Current) If using the factory provided GM PTO switch, an additional wiring harness is required. MY2003-2006 - Order 329619X; MY2007-2014 - Order 329620X; MY2015-Current - Order 75-P-33. Wiring harnesses must be ordered separately.
10. 272 Low Profile - MY2022+ MACK MD6 chassis has cross-member interference on the driver side and a 272N cannot be used. 272G in a 5 arrangement is recommended if there are no other obstructions.

ALL-16

1. The Allison Model MD-3066 has two 10-Bolt aperture openings located at 9 o'clock on the left side and 2 o'clock on the right side (Top Right).
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
4. 890/897 Series - The combined weight of pump, fittings, and hoses should not exceed 120 lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.
5. Do not use Geared Adapters Assemblies on Allison 3000/4000 Series Automatic Transmissions.
6. Quiet Gear™ input option (QT) is available on 870/877 and 870L/877L Series PTOs.
7. For an 870-XL and 877-XL (870L and 877L) Extended Shaft PTOs, the transmission bracket (50-P-XXX) and bolt kit (329928-1X) must be ordered separately: Left Side 5 Arrangement use 50-P-163.

Allison

Allison Notes**ALL-16C**

1. The 280, 870, and 890 will not fit in a 3 arrangement on the left side of this transmission with a cooler. The remote and integral valve cap assembly hits the transmission.
2. The Allison Model MD-3066 has two 10 bolt aperture openings located at 9 o'clock on the left side and 2 o'clock on the right side (Top Right). Every PTO mounted on this transmission must have the pressure lube option (P).
3. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
4. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
5. 890/897 Series - The combined weight of pump, fittings, and hoses should not exceed 120 lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.
6. Do not use Geared Adapter Assemblies on Allison 3000/4000 Series Automatic Transmissions.
7. Quiet Gear™ input option (QT) is available on 870/877 and 870L/877L Series PTOs.
8. For an 870-XL and 877-XL (870L and 877L) Extended Shaft PTOs, the transmission bracket (50-P-XXX) and bolt kit (329928-1X) must be ordered separately: Left Side (5 Arrangement) use 50-P-163.

ALL-16EV

1. "How to Calculate" Torque for two (2) PTO INTERMITTENT Applications. Combined Total = [Actual Torque of PTO#1] divided by [Per Cent of Engine] + [Actual Torque of PTO#2] divided by [Per Cent of Engine]. Application is OK if Combined Torque is less than 790 lbs-ft for Intermittent use and the PTOs Torque Requirements are less than Stated PTO Torque Limits. For CONTINUOUS Applications = Application is OK if Combined Torque is less than 685 lbs-ft and the PTOs Torque Requirements are less than Stated PTO Torque Limits x .80.
2. All Stated Torque Values on this page are for CONTINUOUS Duty Cycles for Fire & Emergency Applications with ONE (1) PTO Torque Values are as follows - Continuous/Intermittent (lb-ft): "A" Ratio-670/793, "B" Ratio-632/742, "C" Ratio-588/696, "D" Ratio-554/652, "E" Ratio-486/574, "F" Ratio-429/507, "G" Ratio 379/447 and "J" Ratio-334/394. Refer to Allison Tech Data (Watch # 291) for more information on Fire & Emergency PTO Applications and Transmission Torque Ratings.
3. The Stated INTERMITTENT Torque Values on this Page are for Fire and Emergency Vehicle Applications with One PTO not to Exceed 790 Lbs.ft [1068 Nm] on the Transmission PTO Drive Gear. For Two PTO Applications the Combined Torque Valve Can Not Exceed 790 lbs-ft [1068 Nm] at the Transmission PTO Drive Gear. See Example on "How to Calculate".
4. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280/287, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
5. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
6. 890/897 Series - The combined weight of pump, fittings, and hoses should not exceed 120 lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.
7. Allison Transmission Maximum Power Capability of the Top Mount PTO Drive Gear on MD Series Transmissions used in the Fire and Emergency Vehicle Vocations has been Increased. The ratings on this page are valid only for the Side/Top Mount PTO Options. Refer to Allison Watch #291 for complete details.
8. Quiet Gear™ input option (QT) is available on 870/877 and 870L/877L Series PTOs.
9. For an 870-XL and 877-XL (870L and 877L) Extended Shaft PTOs, the transmission bracket (50-P-XXX) and bolt kit (329928-1X) must be ordered separately: Left Side (5 Arrangement) use 50-P-163.

ALL-16R

1. The Allison Model MD-3066 has two 10 bolt aperture openings located at 9 o'clock on the left side and 2 o'clock on the right side (Top Right). Every PTO mounted on this transmission must have the pressure lube option (P).
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
4. 890/897 Series - The combined weight of pump, fittings, and hoses should not exceed 120 lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.
5. Do not use Adapter Gear Assemblies on Allison 3000/4000 Series Automatic Transmissions.
6. Quiet Gear™ input option (QT) is available on 870/877 and 870L/877L Series PTOs.
7. For an 870-XL and 877-XL (870L and 877L) Extended Shaft PTOs, the transmission bracket (50-P-XXX) and bolt kit (329928-3X) must be ordered separately: Left Side (5 ARR) use 50-P-163.

Allison Notes**ALL-17**

1. For MY2015 GM has changed the engine exhaust design. The exhaust pipe can not be removed as in previous model years. This is causing issues with PTO installation. Contact GM Upfitter Integration for assistance on PTO installation.
2. There is torque converter lock up feature available with the 1000 series transmission. The torque converter lock up feature comes on and is controlled by the Transmission Control Module (TCM) at 1100 RPM transmission turbine speed when a signal is provided to the "PTO Enable" circuit of the TCM by the PTO switch. This equates to 1200-1250 RPM or higher engine speed, depending on PTO load. Lock up will only come on in the "PARK" position. The lock up clutch does not come on automatically in "DRIVE" at 1100 RPM. Refer to the appropriate owner's manual for wiring installation.
3. The PTO torque ratings shown are based on the maximum allowable torque of 250 lb-ft at the 64 tooth gear in the transmission with the PTO on one opening only. With PTOs mounted on both openings the maximum allowable torque at the 64 tooth gear in the transmission is 200 lb-ft. For a more precise evaluation of your PTO application refer to the Allison Body Builders Book, Section F, PTO Systems Provisions.
4. The 252 Series for MY2015 and later GM C/K series Cab/Chassis order wiring harness part number 75-P-33. For 2007-2014 order Chelsea part number 329620X. This harness must be ordered separately and is required for proper PTO to Engine interface operation. Refer to GM UI Bulletin #80.
5. Only the 12V B option shifter can be used on this application.
6. The left PTO aperture opening on this application is not usable due to engine fuel lines blocking the opening.

ALL-18

1. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
2. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
3. The 3700 and MD3070 have PTO Availability on the Left-Side Only. The Right-Side is Utilized by OE Equipment. The Transfer Case is Integral to the Transmission
4. Do not use Geared Adapter Assemblies on Allison 3000/4000 Series Automatic Transmissions.

ALL-19

1. The Right Side opening is located at approximately 1 o'clock when viewed from the rear. All PTOs mounted in this location require pressure lubrication.
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
4. 892/899 Series - The combined weight of pump, fittings, and hoses should not exceed 120 lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.
5. Do not use Geared Adapter Assemblies on Allison 3000/4000 Series Automatic Transmissions.

ALL-19C

1. The Right Side opening is located at approximately 1 o'clock when viewed from the rear. All PTOs mounted in this location require pressure lubrication.
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
4. 892/899 Series - The combined weight of pump, fittings, and hoses should not exceed 120 lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.
5. Do not use Geared Adapter Assemblies on Allison 3000/4000 Series Automatic Transmissions.

Allison

Allison Notes**ALL-19R**

1. The Right Side opening is located at approximately 1 o'clock when viewed from the rear. All PTOs mounted in this location require pressure lubrication.
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
4. 892/899 SERIES - The combined weight of pump, fittings, and hoses should not exceed 120 lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.
5. Do not use Geared Adapter Assemblies on Allison 3000/4000 Series Automatic Transmissions.

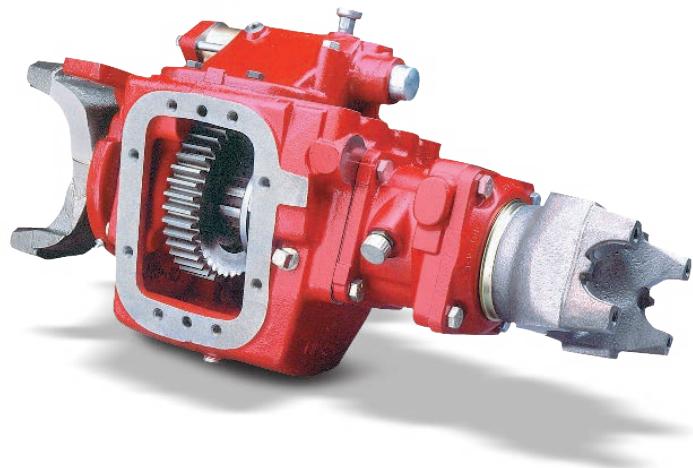
ALL-20

1. The PTO Provision is optional for the TC10. All TC10 Transmissions have a PTO pad and cover located on the rear cover. The TC10 includes the PTO drive shaft if the PTO option is ordered with the transmission. If the transmission does not have optional PTO provision, the PTO adapter can be added (Contact Allison)
2. For all PTO installations, the Allison 5th Generation Controls' PTO Drive Interface must be integrated into the installation of the PTO control.

ALL-21

1. The PTO torque ratings shown are based on the maximum allowable torque of 250 lb/ft at the 64 tooth gear in the transmission with the PTO on one opening only. With PTOs mounted on both openings, the maximum allowable torque at the 64 tooth gear in the transmission is 200 lb/ft per PTO. Therefore, the 272 Series torque ratings will be adjusted as follows: A ratio = 235 lb/ft., B ratio = 192 lb/ft., C ratio = 159 lb/ft. and D ratio = 135 lbs/ft. The 442 Series w/Pressure Lube on both sides, PTO torque ratings will be as follows, B ratio = 208 lb/ft., F ratio = 135 lb/ft. For a more precise evaluation of your PTO application refer to the Allison Body Builders Book, Section F, PTO Systems Provisions.
2. There is a torque converter lock up feature available with the 1000/2000/2400 series transmissions. The torque converter lock up feature comes on and is controlled by the Transmission Control Module (TCM) when a signal is provided to the "PTO Enable" circuit of the TCM by the PTO switch. Lock up will only come on in the "NEUTRAL" and "PARK" positions at 1100 RPM transmission turbine speed. This equates to 1200-1250 RPM or higher engine speed, depending on PTO load. The lock up clutch does not come on automatically in "DRIVE." Refer to the appropriate owner's manual for wiring installation.
3. 2019 GM 4500HD, 5500HD, 6500HD Chassis or International CV™ Series Chassis - If using the provided in-dash switch, use wiring harness 75-P-33 for either the 252 or 272 Series PTOs. This harness must be ORDERED SEPARATELY and is required for proper PTO to Engine interface operation.
4. FITMENT ISSUE - The 272G with a shaft-high (belly up) output WILL NOT fit on the 4500/5500 applications due to cab floor interference. The 272G shaft high housing may possibly fit on the 6500 chassis, but fitment must be verified before ordering PTO. Otherwise, the 272G shaft low is the only confirmed fit for all chassis.
5. For installation of PTO on right side opening, the exhaust must be temporarily removed. Please refer to the latest revision of GM Upfitter Integration Bulletin #146 ("Partial Exhaust System Removal to Enable Installation of a PTO.") available at gmupfitter.com.
6. A lube T fitting is required in the oil return cooling line to supply low pressure oil to the idler shaft of the 252, 272, or 442 Series PTO. Lube T fitting 378970 is required and must be purchased separately. Return line U-bolt may need to be removed to make installation of T fitting easier. Installer is responsible for any required modifications necessary to reinstall U-bolt.
7. 442*B Ratio - DO NOT USE with Geared Adapter.
8. Geared Adapters - 626/630/645 listed on this application page are for the 442 (F Ratio Only) or 272. 442*F Ratio - Use 442ZFHV with (1) 7-A-140 filler block and (1) 328170-94X stud kit when mounting the PTO to one of the adapters listed. 272 - Use 272L*HV (deep mount) with (1) 7-A-140 and (1) 328170-94X. Use 35-P-41 gasket between transmission and adapter. Use filler block (1) 7-A-140 between the adapter and PTO with 35-P-1 or 2 shim gaskets to obtain .006"-012" of backlash between the driver gears.
9. If the 442 Series is ordered with pressure lube, hose 328075X is supplied with the PTO. A restrictor orifice, 379896 (442*FHVP) or 379594 (442*BHVP) is required and is shipped with the PTO.
10. Limited Ratios - the K Ratio and above will not fit on this transmission due to adjacent interference with the input ratio gear. In some instances the D ratio will not fit either. There seems to be two variations of the transmission case that effect the D ratio, but we have no way to confirm which case is which.

CHELSEA



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
912 AH (Uses 8-Bolt PTOs)	CHL-3	1	L39-R39
912 AH (Uses 8-Bolt PTOs)(Top)	CHL-3A	1	T39



*IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US*

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Chelsea

CHL-3

CHELSEA

CHELSEA®

912 AH (Uses 8-Bolt PTOs)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
39 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8100" (20.5700MM)

TRANSMISSION GEAR DATA:

R.S. 08-BOLT Opening Gear FORWARD of Centerline
39 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8100" (20.5700MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*5	250 I	Eng	72	7-A-032(P)(35)	328564X	Furnished	221ZCAHX-*3	250 I	Eng	72	7-A-032(P)(35)	328564X	Furnished
221ZEAHX-*5	250 I	Eng	84		328564X	Furnished	221ZEAHX-*3	250 I	Eng	84		328564X	Furnished
489XFAHX-*5 (2)	250 I	Eng	101			Furnished	489XFAHX-*3 (2)	250 I	Eng	101			Furnished
489XHAHX-*5 (13)	250 I	Eng	117			Furnished	489XHAHX-*3 (13)	250 I	Eng	117			Furnished
489XLAHX-*5 (1)	250 I	Eng	130			Furnished	489XLAHX-*3 (1)	250 I	Eng	130			Furnished
489XQAHX-*5 (1)	225 I	Eng	140			Furnished	489XQAHX-*3 (1)	225 I	Eng	140			Furnished
489XRAHX-*5 (1)	225 I	Eng	162			Furnished	489XRAHX-*3 (1)	225 I	Eng	162			Furnished
489XSAHX-*5 (1)	200 I	Eng	193			Furnished	489XSAHX-*3 (1)	200 I	Eng	193			Furnished
489XUAHX-*5 (1)	195 I	Eng	230			Furnished	489XUAHX-*3 (1)	195 I	Eng	230			Furnished
489XWAHX-*5 (1)	175 I	Eng	271			Furnished	489XWAHX-*3 (1)	175 I	Eng	271			Furnished
489XXAHX-*5 (1)	140 I	Eng	321			Furnished	489XXAHX-*3 (1)	140 I	Eng	321			Furnished
680XFAHX-*5 (10)	375 I	Eng	101			Furnished	680XFAHX-*3 (10)	375 I	Eng	101			Furnished
680XHAHX-*5 (17)	375 I	Eng	117			Furnished	680XHAHX-*3 (17)	375 I	Eng	117			Furnished
680XQAHX-*5 (11)	375 I	Eng	140			Furnished	680XQAHX-*3 (11)	375 I	Eng	140			Furnished
680XRAHX-*5 (16)	350 I	Eng	162			Furnished	680XRAHX-*3 (16)	350 I	Eng	162			Furnished
680XSAHX-*5 (12)	325 I	Eng	193			Furnished	680XSAHX-*3 (12)	325 I	Eng	193			Furnished
823XBAHX-*5 (29)	750 I	Eng	69			Furnished	823XBAHX-*3 (29)	750 I	Eng	69			Furnished
823XDAHX-*5 (33)	750 I	Eng	81			Furnished	823XDAHX-*3 (33)	750 I	Eng	81			Furnished
823XGAHX-*5 (34)	750 I	Eng	88			Furnished	823XGAHX-*3 (34)	750 I	Eng	88			Furnished
823XJAHX-*5 (30)	750 I	Eng	104			Furnished	823XJAHX-*3 (30)	750 I	Eng	104			Furnished
823XMAHX-*5 (28)	650 I	Eng	122			Furnished	823XMAHX-*3 (28)	650 I	Eng	122			Furnished
823XRAHX-*5 (32)	400 I	Eng	168			Furnished	823XRAHX-*3 (32)	400 I	Eng	168			Furnished
823XTKTX-*5 (15)	350 I	Eng	204	8-A-165(35)		Furnished	823XTKTX-*3 (15)	350 I	Eng	204	8-A-165(35)		Furnished
880XBAHX-*5 (3)	500 I	Eng	69			Furnished	880XBAHX-*3 (3)	500 I	Eng	69			Furnished
880XDAHX-*5 (4)	500 I	Eng	81			Furnished	880XDAHX-*3 (4)	500 I	Eng	81			Furnished
880XGAHX-*5 (9)	500 I	Eng	88			Furnished	880XGAHX-*3 (9)	500 I	Eng	88			Furnished
880XJAHX-*5 (5)	500 I	Eng	104			Furnished	880XJAHX-*3 (5)	500 I	Eng	104			Furnished
880XMAHX-*5 (6)	500 I	Eng	122			Furnished	880XMAHX-*3 (6)	500 I	Eng	122			Furnished
880XQAHX-*5 (14)	450 I	Eng	142			Furnished	880XQAHX-*3 (14)	450 I	Eng	142			Furnished
880XRAHX-*5 (7)	400 I	Eng	168			Furnished	880XRAHX-*3 (7)	400 I	Eng	168			Furnished
880XTAHX-*5 (8)	350 I	Eng	217			Furnished	880XTAHX-*3 (8)	350 I	Eng	217			Furnished

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION: Do not use 442/489 A or C ratios on Chelsea split shafts if final rotation is ENG.**

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1103
- (11) Input Gear Part No. 5-P-1246
- (16) Input Gear Part No. 5-P-1441
- (32) Input Gear Part No. 5-P-721
- (2) Input Gear Part No. 5-P-1077
- (7) Input Gear Part No. 5-P-1104
- (12) Input Gear Part No. 5-P-1322
- (17) Input Gear Part No. 5-P-1494
- (33) Input Gear Part No. 5-P-971
- (3) Input Gear Part No. 5-P-1100
- (8) Input Gear Part No. 5-P-1105
- (13) Input Gear Part No. 5-P-1364
- (28) Input Gear Part No. 5-P-283
- (34) Input Gear Part No. 5-P-980
- (4) Input Gear Part No. 5-P-1101
- (9) Input Gear Part No. 5-P-1135
- (14) Input Gear Part No. 5-P-1385
- (29) Input Gear Part No. 5-P-285
- (35) Filler block furnished with PTO
- (5) Input Gear Part No. 5-P-1102
- (10) Input Gear Part No. 5-P-1242
- (15) Input Gear Part No. 5-P-1395
- (30) Input Gear Part No. 5-P-325

Chelsea

CHELSEA®**CHELSEA****CHL-3**

912 AH (Uses 8-Bolt PTOs)

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 08-BOLT Opening Gear FORWARD of Centerline
39 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**
0.8100" (20.5700MM)**TRANSMISSION GEAR DATA:**R.S. 08-BOLT Opening Gear FORWARD of Centerline
39 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**
0.8100" (20.5700MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*5 (27)	300 C	Eng	56	7-A-032(P)	328481X	Furnished	272XAAJX-*3 (27)	300 C	Eng	56	7-A-032(P)	328481X	Furnished
282XBAJX-*5 (18)	250 C	Eng	69	8-A-032		Furnished	282XBAJX-*3 (18)	250 C	Eng	69	8-A-032		Furnished
282XCAJX-*5 (19)	250 C	Eng	83	8-A-032		Furnished	282XCAJX-*3 (19)	250 C	Eng	83	8-A-032		Furnished
282XDAJX-*5 (20)	250 C	Eng	99	8-A-032		Furnished	282XDAJX-*3 (20)	250 C	Eng	99	8-A-032		Furnished
282XGAJX-*5 (21)	250 C	Eng	118	8-A-032		Furnished	282XGAJX-*3 (21)	250 C	Eng	118	8-A-032		Furnished
282XKAJX-*5 (22)	250 C	Eng	132	8-A-032		Furnished	282XKAJX-*3 (22)	250 C	Eng	132	8-A-032		Furnished
282XMAJX-*5 (23)	250 C	Eng	148	8-A-032		Furnished	282XMAJX-*3 (23)	250 C	Eng	148	8-A-032		Furnished
282XPAJX-*5 (24)	250 C	Eng	165	8-A-032		Furnished	282XPAJX-*3 (24)	250 C	Eng	165	8-A-032		Furnished
282XSAXJX-*5 (25)	225 C	Eng	184	8-A-032		Furnished	282XSAXJX-*3 (25)	225 C	Eng	184	8-A-032		Furnished
282XTAJX-*5 (26)	225 C	Eng	206	8-A-032		Furnished	282XTAJX-*3 (26)	225 C	Eng	206	8-A-032		Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*5 (3)	500 I	Eng	69			Furnished	885XBAHX-*3 (3)	500 I	Eng	69			Furnished
885XGAHX-*5 (9)	500 I	Eng	88			Furnished	885XGAHX-*3 (9)	500 I	Eng	88			Furnished
885XJAHX-*5 (5)	500 I	Eng	104			Furnished	885XJAHX-*3 (5)	500 I	Eng	104			Furnished
885XMAHX-*5 (6)	500 I	Eng	122			Furnished	885XMAHX-*3 (6)	500 I	Eng	122			Furnished

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (31)	200 I	Eng	88	92		Furnished	348XFAHX-*5 (31)	200 I	Eng	88	92		Furnished
863XBAHX-*5	500 I	Eng	69	85		Furnished	863XBAHX-*5	500 I	Eng	69	85		Furnished

GEARED ADAPTERS

628XAHX-4AH	250 I	Opp				Furnished	628XAHX-3AH	250 I	Opp				Furnished
-------------	-------	-----	--	--	--	-----------	-------------	-------	-----	--	--	--	-----------

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use 442/489 A or C ratios on Chelsea split shafts if final rotation is ENG.

- (3) Input Gear Part No. 5-P-1100
- (19) Input Gear Part No. 5-P-1510-12X
- (24) Input Gear Part No. 5-P-1510-17X
- (5) Input Gear Part No. 5-P-1102
- (20) Input Gear Part No. 5-P-1510-13X
- (25) Input Gear Part No. 5-P-1510-18X
- (6) Input Gear Part No. 5-P-1103
- (21) Input Gear Part No. 5-P-1510-14X
- (26) Input Gear Part No. 5-P-1510-19X
- (9) Input Gear Part No. 5-P-1135
- (22) Input Gear Part No. 5-P-1510-15X
- (27) Input Gear Part No. 5-P-1510-1X
- (18) Input Gear Part No. 5-P-1510-11X
- (23) Input Gear Part No. 5-P-1510-16X
- (31) Input Gear Part No. 5-P-581

Chelsea

CHL-3A**CHELSEA****CHELSEA®**

912 AH (Uses 8-Bolt PTOs)(Top)

TOP SIDE ONLY**TRANSMISSION GEAR DATA:**TOP 08-BOLT Opening Gear FORWARD of Centerline
39 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

0.8100" (20.5700MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489XFAHP-*3 (2)	250 I	Eng	101	Furnished
489XHAAHP-*3 (13)	250 I	Eng	117	Furnished
489XLAAHP-*3 (1)	250 I	Eng	130	Furnished
489XQAAHP-*3 (1)	225 I	Eng	140	Furnished
489XRRAHP-*3 (1)	225 I	Eng	162	Furnished
489XSAAHP-*3 (1)	200 I	Eng	193	Furnished
489XUAHP-*3 (1)	195 I	Eng	230	Furnished
489XWAHP-*3 (1)	175 I	Eng	271	Furnished
489XXAHP-*3 (1)	140 I	Eng	321	Furnished
680XFAHP-*3 (10)	375 I	Eng	101	Furnished
680XHAAHP-*3 (16)	375 I	Eng	117	Furnished
680XQAAHP-*3 (11)	375 I	Eng	140	Furnished
680XRRAHP-*3 (15)	350 I	Eng	350	Furnished
680XSAAHP-*3 (12)	325 I	Eng	193	Furnished
880XBAHP-*3 (3)	500 I	Eng	69	Furnished
880XDAHP-*3 (4)	500 I	Eng	81	Furnished
880XGAHP-*3 (9)	500 I	Eng	88	Furnished
880XJAHP-*3 (5)	500 I	Eng	104	Furnished
880XMAHP-*3 (6)	500 I	Eng	122	Furnished
880XQAAHP-*3 (14)	450 I	Eng	142	Furnished
880XRRAHP-*3 (7)	400 I	Eng	168	Furnished
880XTAHP-*3 (8)	350 I	Eng	217	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use 442/489 A or C ratios on Chelsea split shafts if final rotation is ENG.

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1103
- (11) Input Gear Part No. 5-P-1246
- (16) Input Gear Part No. 5-P-1494
- (2) Input Gear Part No. 5-P-1077
- (7) Input Gear Part No. 5-P-1104
- (12) Input Gear Part No. 5-P-1322
- (3) Input Gear Part No. 5-P-1100
- (8) Input Gear Part No. 5-P-1105
- (13) Input Gear Part No. 5-P-1364
- (4) Input Gear Part No. 5-P-1101
- (9) Input Gear Part No. 5-P-1135
- (14) Input Gear Part No. 5-P-1385
- (5) Input Gear Part No. 5-P-1102
- (10) Input Gear Part No. 5-P-1242
- (15) Input Gear Part No. 5-P-1441

Chelsea Notes

CHL-3

1. If two or three 8-Bolt PTOs are to be mounted on split shaft use stud kit 328170-190X to prevent thread interference.
2. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
3. 272/282 Series-Must be used as an AIR Shift PTO. Order Air Shift Options Only

CHL-3A

1. PTOs for this application must be ordered with L output designator for self lube option. EX: 442XFAHP-W3LD for self lube with a 1.25" std. output.
2. Pressure lube installation kits must be ordered separately. 880 Series PTOs use kit 329110-1X, all other models use 329110X.
3. If two or three 8-Bolt PTOs are to be mounted on split shaft, use stud kit 328170-190X to prevent thread interference.
4. The AK & XK output flanges cannot be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

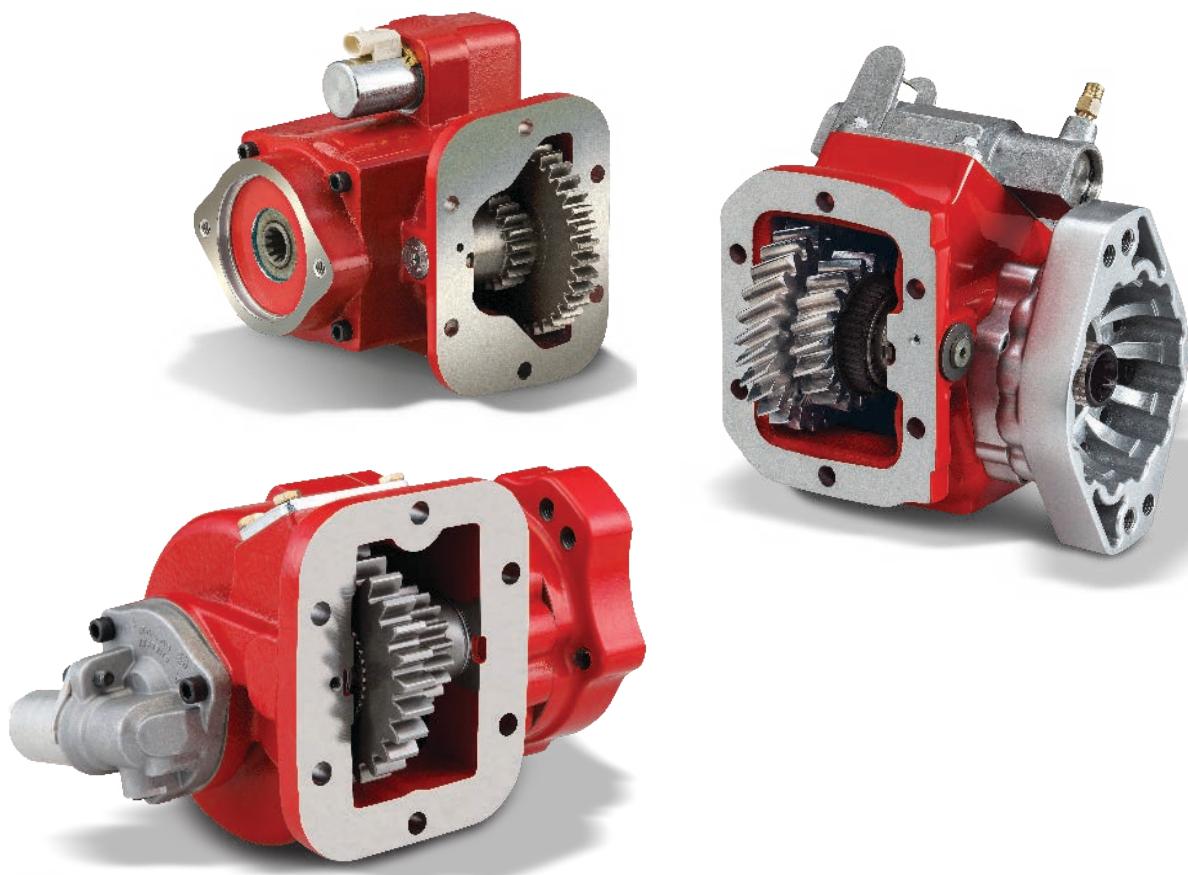
Chelsea

NOTES



Chelsea

DODGE/RAM



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

 **WARNING:** This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
AS66RC (MY2014 & Later) Gas	DDG-3	6	L69-R69
AS68RC (MY2010 & Prior)	DDG-1	6	R69
AS68RC (MY2011 & 2012)	DDG-1A	6	R69
AS69RC (MY2013 and Later) Diesel	DDG-3	6	L69-R69
G56 Dodge/RAM/Sterling Cab Chassis (Manual) - 4X2 ONLY	DDG-2	6	L52-R52

Dodge/RAM



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershft
For transmissions not listed, contact your authorized Chelsea Distributor.

DDG-1

DODGE/RAM

CHELSEA®

AS68RC (MY2010 & Prior)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.1200" (28.4480MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272DAKUP-*3 (3)	196	C	Eng	69	Furnished
272DBKUP-*3 (4)	160	C	Eng	84	Furnished
272DCKUP-*3 (5)	132	C	Eng	102	Furnished
272DDKUP-*3 (6)	111	C	Eng	122	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

252DDKUX-*5 (1)	85	I	Eng	99	Furnished
252DMKUX-*5 (2)	50	I	Eng	144	Furnished

See next page for more pump options.

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: 2010 + Prior - Chelsea Wiring Harness 329457X is used for the 270D The 329621X is used for the 252D and 272D. This will Allow the OBD II Monitoring System to be Disabled while the PTO System is being Operated. This will Prevent "False" Lighting of the "Check Engine" Lamp due to the Engine-PTO Driven Accessories.

- (1) Input Gear Part No. 5-P-1427 (6) Input Gear Part No. 5-P-1515-4X
- (2) Input Gear Part No. 5-P-1437
- (3) Input Gear Part No. 5-P-1515-1X
- (4) Input Gear Part No. 5-P-1515-2X
- (5) Input Gear Part No. 5-P-1515-3X

AS68RC (MY2010 & Prior)

RIGHT SIDE ONLY**TRANSMISSION GEAR DATA:**

R.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.1200" (28.4480MM)

Pump Option Charts**252 Pumps offered in the PGP511 (5/8" - 9T / SAE A Flange – XE Output)**

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size	Porting	
							Inlet	Outlet
1116	CGP-P11C016-1AC	0.37	0.003	3988	3500	5/8" - 9T	SAE12	SAE10
1121	CGP-P11C021-1AC	0.49	0.002	3988	4000	5/8" - 9T	SAE12	SAE10
1126	CGP-P11C026-1AC	0.61	0.003	3988	3600	5/8" - 9T	SAE12	SAE10
1129	CGP-P11C029-1AC	0.67	0.003	3988	3600	5/8" - 9T	SAE12	SAE10
1137	CGP-P11C037-1AC	0.85	0.004	3988	3300	5/8" - 9T	SAE12	SAE10
1449	CGP-P31C054-1AE	1.24	0.005	3500	3000	5/8" - 9T	SAE16	SAE10
1462	CGP-P31C061-1AE	1.40	0.006	3500	3000	5/8" - 9T	SAE16	SAE10

252 Pumps offered in the PGP511 (3/4" - 11T / SAE A Flange – AD Output)

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size	Porting	
							Inlet	Outlet
P37	CGP-P11C037-5AC	0.85	0.004	3988	3300	3/4" - 11T	SAE12	SAE10
P42	CGP-P11C042-5AC	0.98	0.004	3988	3000	3/4" - 11T	SAE12	SAE10
P55	CGP-P11C055-5AC	1.28	0.006	3408	2800	3/4" - 11T	SAE12	SAE10
P71	CGP-P11C071-5AC	1.65	0.007	2900	2400	3/4" - 11T	SAE12	SAE10
P82	CGP-P11C082-5AC	1.89	0.008	2465	2300	3/4" - 11T	SAE12	SAE10

DDG-1A

DODGE/RAM

CHELSEA®

AS68RC (MY2011 & 2012)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.1200" (28.4480MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272RAKUP-*3 (3)	196	C	Eng	69	Furnished
272RBKUP-*3 (4)	160	C	Eng	84	Furnished
272RCKUP-*3 (5)	132	C	Eng	102	Furnished
272RDKUP-*3 (6)	111	C	Eng	122	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

252RDKUX-*5 (1)	85	I	Eng	99	Furnished
252RMKUX-*5 (2)	50	I	Eng	144	Furnished

See next page for more pump options.

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: It is Required for MY2011/12 Trucks, the 252R & 272R use Wiring Harness (329663X) and the 270R use (329664X). This will allow the OBD II Monitoring System to be Disabled while the PTO System is being Operated. This will Prevent "False" Lighting of the "Check Engine" Lamp due to the Engine-PTO Driven Accessories.

- (1) Input Gear Part No. 5-P-1427 (6) Input Gear Part No. 5-P-1515-4X
- (2) Input Gear Part No. 5-P-1437
- (3) Input Gear Part No. 5-P-1515-1X
- (4) Input Gear Part No. 5-P-1515-2X
- (5) Input Gear Part No. 5-P-1515-3X

CHELSEA®**DODGE/RAM****DDG-1A**

AS68RC (MY2011 & 2012)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
 R.S. 06-BOLT Opening Gear FORWARD of Centerline
 69 Teeth - SPUR
PITCH LINE TO APERTURE FACE:
 1.1200" (28.4480MM)

Pump Option Charts**252 Pumps offered in the PGP511 (5/8" - 9T / SAE A Flange – XE Output)**

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size	Porting	
							Inlet	Outlet
1116	CGP-P11C016-1AC	0.37	0.003	3988	3500	5/8" - 9T	SAE12	SAE10
1121	CGP-P11C021-1AC	0.49	0.002	3988	4000	5/8" - 9T	SAE12	SAE10
1126	CGP-P11C026-1AC	0.61	0.003	3988	3600	5/8" - 9T	SAE12	SAE10
1129	CGP-P11C029-1AC	0.67	0.003	3988	3600	5/8" - 9T	SAE12	SAE10
1137	CGP-P11C037-1AC	0.85	0.004	3988	3300	5/8" - 9T	SAE12	SAE10
1449	CGP-P31C054-1AE	1.24	0.005	3500	3000	5/8" - 9T	SAE16	SAE10
1462	CGP-P31C061-1AE	1.40	0.006	3500	3000	5/8" - 9T	SAE16	SAE10

252 Pumps offered in the PGP511 (3/4" - 11T / SAE A Flange – AD Output)

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size	Porting	
							Inlet	Outlet
P37	CGP-P11C037-5AC	0.85	0.004	3988	3300	3/4" - 11T	SAE12	SAE10
P42	CGP-P11C042-5AC	0.98	0.004	3988	3000	3/4" - 11T	SAE12	SAE10
P55	CGP-P11C055-5AC	1.28	0.006	3408	2800	3/4" - 11T	SAE12	SAE10
P71	CGP-P11C071-5AC	1.65	0.007	2900	2400	3/4" - 11T	SAE12	SAE10
P82	CGP-P11C082-5AC	1.89	0.008	2465	2300	3/4" - 11T	SAE12	SAE10

Dodge/RAM

G56 Dodge/RAM/Sterling Cab Chassis (Manual) -
4X2 ONLY

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear REAR of Centerline

52 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.3760" (35.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442LLKHX-*6 (1)	250 I	Opp	67	7170-72X
442LQKHX-*6 (1)	225 I	Opp	72	7170-72X
442LRKHX-*6 (1)	225 I	Opp	84	7170-72X
442LSKHX-*6 (1)	200 I	Opp	100	7170-72X
442LUKHX-*6 (1)	195 I	Opp	119	7170-72X
442LWKHX-*6 (1)	175 I	Opp	140	7170-72X
442LXKHX-*6 (1)	140 I	Opp	165	7170-72X

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** For Dodge Model Years 2007-2010 Chelsea Wiring Harness 329460X and for RAM Model Years 2011 and Later Chelsea Wiring Harness 329749X Must be Used to Complete the Installation (Order Separately). This will allow the ODB II Monitoring System to be Disabled While the PTO System is being Operated.

(1) Input Gear Part No. 5-P-1343

CHELSEA®**DODGE/RAM****DDG-3**AS66RC (MY2014 & Later) Gas
AS69RC (MY2013 and Later) Diesel**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**R.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**
1.1200" (28.4480MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272RAKUP-*3 (3)	300	C	Eng	69	Furnished
272RBKUP-*3 (4)	296	C	Eng	84	Furnished
272RCKUP-*3 (5)	245	C	Eng	102	Furnished
272RDKUP-*3 (6)	205	C	Eng	122	Furnished
272RGKUP-*3 (7)	173	C	Eng	145	Furnished
272RKKUP-*3 (8)	154	C	Eng	162	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

252RDKUX-*5 (1)	85	I	Eng	99	Furnished
252RMKUX-*5 (2)	50	I	Eng	144	Furnished

See next page for more pump options.

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**WARNING:** RATIO LIMITATIONS - Due to gear interference in the aperture of the transmissions, RAM applications are limited to A thru K.**CAUTION:** It is Required for MY2011/12 Trucks, the 252R & 272R use Wiring Harness (329663X) and the 270R use (329664X). This will allow the ODB II Monitoring System to be Disabled while the PTO System is being Operated. This will Prevent "False" Lighting of the "Check Engine" Lamp due to the Engine-PTO Driven Accessories.

- (1) Input Gear Part No. 5-P-1427
- (2) Input Gear Part No. 5-P-1437
- (3) Input Gear Part No. 5-P-1515-1X
- (4) Input Gear Part No. 5-P-1515-2X
- (5) Input Gear Part No. 5-P-1515-3X
- (6) Input Gear Part No. 5-P-1515-4X
- (7) Input Gear Part No. 5-P-1515-5X
- (8) Input Gear Part No. 5-P-1515-6X

Dodge/RAM

AS66RC (MY2014 & Later) Gas
AS69RC (MY2013 and Later) Diesel

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR
PITCH LINE TO APERTURE FACE:
1.1200" (28.4480MM)

Pump Option Charts

252 Pumps offered in the PGP511 (5/8" - 9T / SAE A Flange – XE Output)

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size	Porting	
							Inlet	Outlet
1116	CGP-P11C016-1AC	0.37	0.003	3988	3500	5/8" - 9T	SAE12	SAE10
1121	CGP-P11C021-1AC	0.49	0.002	3988	4000	5/8" - 9T	SAE12	SAE10
1126	CGP-P11C026-1AC	0.61	0.003	3988	3600	5/8" - 9T	SAE12	SAE10
1129	CGP-P11C029-1AC	0.67	0.003	3988	3600	5/8" - 9T	SAE12	SAE10
1137	CGP-P11C037-1AC	0.85	0.004	3988	3300	5/8" - 9T	SAE12	SAE10
1449	CGP-P31C054-1AE	1.24	0.005	3500	3000	5/8" - 9T	SAE16	SAE10
1462	CGP-P31C061-1AE	1.40	0.006	3500	3000	5/8" - 9T	SAE16	SAE10

252 Pumps offered in the PGP511 (3/4" - 11T / SAE A Flange – AD Output)

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size	Porting	
							Inlet	Outlet
P37	CGP-P11C037-5AC	0.85	0.004	3988	3300	3/4" - 11T	SAE12	SAE10
P42	CGP-P11C042-5AC	0.98	0.004	3988	3000	3/4" - 11T	SAE12	SAE10
P55	CGP-P11C055-5AC	1.28	0.006	3408	2800	3/4" - 11T	SAE12	SAE10
P71	CGP-P11C071-5AC	1.65	0.007	2900	2400	3/4" - 11T	SAE12	SAE10
P82	CGP-P11C082-5AC	1.89	0.008	2465	2300	3/4" - 11T	SAE12	SAE10

Dodge/RAM Notes

DDG-1

1. The PTO output shaft torque ratings are based on the maximum allowable torque at the 69 tooth transmission gear of 135 lb-ft
2. Limited Ratios - The 272*D Ratio is the fastest ratio available due to adjacent gear interference in the transmission.
3. When ordering one of the listed PTOs, Hose Kit, Wire Harness Kit and Metric Stud Kit are furnished with the PTO. The hose, wire harness and metric stud kits are required for completing the PTO installation.
4. To install one of the listed PTOs on this truck the exhaust pipe and transmission support must be dropped or installed through the passenger side floor "cut out". An OEM installed passenger side floor pan modification "Bulge" cut out must be installed. Order Mopar #82211579 "Patch Panel" Installation Kit if not Installed. Refer to Dodge Body Builders web site for complete details under "Chassis cab PTO Operation & Installation Guide-PTO Installation Alternative".

DDG-1A

1. For MY2011/12 and later RAM Cab Chassis Trucks, the torque converter locks up at an ENGINE Speed of 1200 RPM and stays on for PTO function to a maximum ENGINE Speed of 2000 RPM. The torque converter will unlock at an ENGINE Speed below 1000 RPM. The default PTO operation ENGINE speed is 900 RPM. Refer to Dodge Body Builders web site for details on raising the ENGINE speeds for PTO operation.
2. The PTO output shaft torque ratings are based on the maximum allowable torque at the 69 tooth transmission gear of 135 lb-ft
3. To install the one of the listed PTOs on this truck the exhaust pipe and transmission support must be dropped or installed through the passenger side floor "cut out". An OEM installed passenger side floor pan modification "Bulge" cut out must be installed. Order Mopar #82211579 "Patch Panel" Installation Kit if not Installed. Refer to Dodge Body Builders web site for complete details under "Chassis cab PTO Operation & Installation Guide-PTO Installation Alternative".
4. When ordering one of the listed PTOs; Hose Kit, Wire Harness Kit and Metric Stud Kit are furnished with the PTO. The hose, wire harness and metric stud kits are required for completing the PTO installation.

DDG-2

1. PTOs will not fit on 4 x 4 Dodge/Sterling 3500/4500/5500 Series Vehicles.
2. PTOs are shown in the Standard Arrangements with the PTO Housing "Bulge" Down and the Output Shaft to the rear of the vehicle. Other arrangements may be needed to install PTO/Pump applications due to the transmission cross member support interfering with pump installations to the rear of the vehicle.

DDG-3

1. The PTO Output shaft torque ratings are based on the maximum allowable torque at the 69 tooth transmission gear of 250 lb-ft
2. To install one of the listed PTOs on the RIGHT SIDE, the truck exhaust pipe and transmission support must be dropped or installed through the passenger side floor "cut out." An OEM installed passenger side floor pan modification "Bulge" cut out must be installed. Order Mopar #82211579 "Patch Panel" Installation Kit if not Installed. Refer to Dodge Body Builders web site for complete details under "Chassis cab PTO Operation & Installation Guide-PTO Installation Alternative."
3. For MY2013 and later RAM Cab Chassis Trucks, the torque converter locks up at an ENGINE Speed of 1200 RPM and stays on for PTO function to a maximum ENGINE Speed of 2000 RPM. The torque converter will unlock at an ENGINE Speed below 1000 RPM. The default PTO operation ENGINE speed is 900 RPM. Refer to Dodge Body Builders web site for details on raising the ENGINE speeds for PTO operation.
4. When ordering one of the PTOs listed above, the Hose Kit, Wire Harness Kit, and Metric Stud Kit are furnished with the PTO. All of these components are required for completing the PTO installation.

Dodge/RAM

NOTES



Dodge/RAM

EATON FULLER



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

Transmission/Chelsea Power Take-Offs Torque Capacities

Eaton Transmissions has recently reviewed the maximum allowable torque ratings on the heavy duty transmissions PTO driver gear. These limits are the maximum allowable torque ratings that are not to be exceeded under any operating conditions. The following Eaton transmissions are affected by this new torque limit, all FA/FO, FR/FRO and all RT/RTO/RTLO.

1. FA/FO, FR/FRO Transmissions have the HD main shaft bearing factory installed. The maximum torque rating for the transmission PTO gear is 750 lb-ft intermittent and 500 lb-ft continuous.

FR/FRO Application Pages

FLR-88 FLR-90 FLR-91

FA/FO Application Pages

FLR-105 FLR-106 FLR-107 FLR-111 FLR-112

2. RT/RTO/RTLO Transmissions can come with a Standard (350 lb-ft) Main Shaft Bearing or a Heavy Duty (750 lb-ft) Main Shaft Bearing. The Standard Bearing is capable of 350 lb-ft Intermittent or Continuous Duty. The Heavy Duty Bearing is rated for 750 lb-ft Intermittent or 500 lb-ft Continuous Duty.

NOTE: It is the responsibility of the installer to verify which main shaft bearing is installed in the transmission.

RT/RTO/RTLO Application Pages

FLR-34	FLR-37	FLR-43	FLR-46	FLR-49	FLR-59	FLR-80	FLR-85	FLR-99
FLR-35	FLR-38	FLR-44	FLR-47	FLR-57	FLR-61	FLR-81	FLR-87	
FLR-36	FLR-39	FLR-45	FLR-48	FLR-58	FLR-64	FLR-82	FLR-98	

Using the Torque Limit Charts

- The torque charts on the following pages will help you determine the correct torque limits for your application. Listed are the standard Chelsea torque values for each series/speed ratio and the new values under the Eaton guidelines for the FA/FO, FR/FRO and RT/RTO/RTLO HD transmissions.
- If you have a RT/RTO/RTLO transmission with the roller type heavy duty input bearing (Eaton part number 4301417) the charts on the following pages will provide you with the torque values for each PTO Series/speed ratio.
- Continuous torque ratings are also listed for series and PTO speed ratios. In some cases these values will be the same as the intermittent value, which is because the new continuous rating is still below the Chelsea standard continuous rating for the PTO and does not exceed the transmission drive gear rating.
- Refer to the Input Shaft Bearing Matrix on page 5.6.4 to determine which type of bearing is available in each series or model of transmission. For any series not listed in the chart, contact your local OE Chassis manufacturer or EATON Fuller representative.

EATON FULLER TRANSMISSION INDEX**EATON FULLER Transmission Gear Load Chart**

				RIGHT Side – 6-Bolt								BOTTOM – 8-Bolt				
				45 Teeth Driver Gear								47 Teeth Driver Gear				
				Standard Bearing		HD Bearing		Standard Bearing		HD Bearing						
PTO RATING		Transmission Application Rating														
PTO Series	Ratio	Intermittent	Continuous	Int	Cont	Int	Cont	Ratio	Int	Cont	Int	Cont	Int	Cont	Int	Cont
272	A	300	300	300	300	300	300	A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
272/282	B	300	300	300	300	300	300	B	300	300	300	300	300	300	300	
	C	300	300	300	300	300	300	C	300	300	300	300	300	300	300	
	D	300	300	300	300	300	300	D	293	293	300	300	300	300	300	
	G	300	300	257	257	300	300	G	246	246	300	300	300	300	300	
	K	300	300	230	230	300	300	K	220	220	300	300	300	300	300	
	M	300	300	206	206	300	294	M	197	197	300	281	300	281	281	
	P	300	300	184	184	300	263	P	176	176	300	252	300	252	252	
	S	300	300	165	165	300	235	S	158	158	300	225	300	225	225	
282	T	300	300	N/A	N/A	N/A	N/A	T	141	141	300	201	300	201	201	
442/489	A	250	175	250	175	250	175	A	250	175	250	175	250	175	250	
	B	250	175	250	175	250	175	B	250	175	250	175	250	175	250	
	C	250	175	250	175	250	175	C	250	175	250	175	250	175	250	
	F	250	175	250	175	250	175	F	250	175	250	175	250	175	250	
	H	250	175	250	175	250	175	H	249	175	250	175	250	175	250	
	L	250	175	233	175	250	175	L	223	175	250	175	250	175	250	
	Q	225	158	216	158	225	158	Q	207	158	225	158	225	158	158	
	R	225	158	187	158	225	158	R	179	158	225	158	225	158	158	
	S	200	140	157	140	200	140	S	150	140	200	140	200	140	140	
	U	195	137	132	132	195	137	U	126	126	195	137	195	137	137	
	W	175	123	112	112	175	123	W	107	107	175	123	175	123	123	
	X	140	98	95	95	140	98	X	91	91	140	98	140	98	98	
660/680	F	375	263	301	263	375	263	F	289	263	375	263	375	263	263	
	H	375	263	260	260	375	263	H	249	249	375	263	375	263	263	
	Q	375	263	216	216	375	263	Q	207	207	375	263	375	263	263	
	R	350	245	187	187	350	245	R	179	179	350	245	350	245	245	
	S	350	245	157	157	336	224	S	150	150	322	215	322	215	215	

NOTES:

1. STANDARD BEARING (STD) = 350 lb-ft CONTINUOUS DUTY
2. HEAVY DUTY BEARING (HD) = 750 lb-ft INTERMITTENT, 500 lb-ft CONTINUOUS DUTY
3. RT/RTL/RTO/RTLO Transmissions can come from the factory with either the standard or HD bearing. See chart on page 5.6.4 for guidance.
4. All FR/FRO and FA/FO Transmissions have the HD Bearing factory installed and the HD Bearing chart should be used for these applications.

Gray area denotes the **Transmission Application Rating** is LOWER than the **PTO Rating** alone.

EATON FULLER TRANSMISSION INDEX

EATON FULLER Transmission Gear Load Chart

				RIGHT Side – 6-Bolt						BOTTOM – 8-Bolt							
				45 Teeth Driver Gear						47 Teeth Driver Gear							
				Standard Bearing		HD Bearing				Standard Bearing		HD Bearing					
		PTO RATING				Transmission Application Rating											
PTO Series	Ratio	Intermittent	Continuous	Int	Cont	Int	Cont	Ratio	Int	Cont	Int	Cont	Int	Cont			
880	B	500	350	N/A	N/A	N/A	N/A	B	424	350	500	350					
	D	500	350					D	357	350	500	350					
	G	500	350					G	329	329	500	350					
	J	500	350					J	280	280	500	350					
	M	500	350					M	238	238	500	340					
	Q	450	315					Q	203	203	435	290					
	R	400	280					R	173	173	370	247					
	T	350	245					T	134	134	287	191					
823	B	750	500	N/A	N/A	N/A	N/A	B	424	424	750	500					
	D	750	500					D	357	357	750	500					
	G	750	500					Q	329	329	705	470					
	J	750	500					J	280	280	599	400					
	M	650	450					M	238	238	511	340					
	R	550	400					R	173	173	370	247					
	T	500	350					T	142	142	305	203					
885	B	500	350	N/A	N/A	N/A	N/A	B	424	350	500	350					
	G	500	350					G	329	329	500	350					
	J	500	350					J	280	280	500	350					
	M	500	350					M	238	238	500	340					
NOTES:																	
1. STANDARD BEARING (STD) = 350 lb-ft CONTINUOUS DUTY																	
2. HEAVY DUTY BEARING (HD) = 750 lb-ft INTERMITTENT, 500 lb-ft CONTINUOUS DUTY																	
3. RT/RTL/RTO/RTLO Transmissions can come from the factory with either the standard or HD bearing. See chart on page 5.6.4 for guidance.																	
4. All FR/FRO and FA/FO Transmissions have the HD Bearing factory installed and the HD Bearing chart should be used for these applications.																	
Gray area denotes the Transmission Application Rating is LOWER than the PTO Rating alone.																	

EATON FULLER TRANSMISSION INDEX**Input Shaft Bearing Matrix for Fuller**

FOR REFERENCE ONLY

Transmission Model	INPUT SHAFT BEARING	
	Standard Duty 81504	Heavy Duty 4301417
F-14E316B-LSE, 15E316B-LSE, 17E316B-LSE	N/A	
FM-1XD310B-LST		OPTION
FM-14E310B-LAS, FM-15E310B-LAS, 15E316B-LSE	N/A	
FO-14E310C-LAS, 16E310C-LAS	N/A	
FO(M)-16D313E-LEP		OPTION
FOM-15E310C-LAS, 16E310C-LAS	N/A	
FR/FRO-xx210B/C	N/A	
RT-6609A	4301863	N/A
RT-8608L		OPTION
RT-8709B	N/A	
RTX-xx609B		OPTION
RT-xx709H		OPTION
RTOC-16909A (T2)		OPTION
RTOC-18909A (T2)	N/A	
RT/O-xx908LL	N/A	
RTO-xx909ALL	N/A	
RTLO-xx913A		OPTION
RT/O-xx915	N/A	
RTLO-xx918B (except 22918B)		OPTION
RTLO-22918B	N/A	
RTO-xx910B/C-AS/DM		OPTION
RTLO(M)-16913L-DM		OPTION
RTLO-xx918A-AS2 (except 22918A-AS)		OPTION
RTLO-22918A-AS	N/A	
T/TX-14607A/B		OPTION

HD Bearing Part Number - 4301417

NOTE: Eaton recommends the use of a heavy duty input shaft bearing for transmissions that will be equipped with a transmission mounted 6 or 8-Bolt PTO.

Maximum total* PTO output cannot exceed :

750 lb-ft intermittent load when using the heavy duty bearing - 500 lb-ft continuous
350 lb-ft when using the standard duty bearing

*Total = the sum of all PTOs that can be used at the same time.

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
AT-1202	FLR-60	2	T30-B30
EA-11109LA	FLR-117	9	L39-R39
EDCO-6F107A-P (Precision Series w/ Park Paw)	FLR-114	7	L23-R47
EDCO-6F107A-X (Precision Series)	FLR-114	7	L23-R47
EDCO-9N107A-P (Precision Series w/ Park Paw)	FLR-114	7	L23-R47
EDCO-9N107A-X (Precision Series)	FLR-114	7	L23-R47
EE-17F111B (Endurant)	FLR-116	11	CS-B42
EEO-14F112C (Endurant)	FLR-116	12	CS-B42
EEO-15F112C (Endurant)	FLR-116	12	CS-B42
EEO-16F112C (Endurant)	FLR-116	12	CS-B42
EEO-17F112C (Endurant)	FLR-116	12	CS-B42
EEO-18F112C (Endurant)	FLR-116	12	CS-B42
EH-6E706B-CD (Hybrid Electric System)	FLR-92Hy	6	L48
EH-6E706B-P (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E306A-CD (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E306A-UP (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E306A-UPG (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E406A-CD (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E406A-CDR (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E406A-P (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E406A-T (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E406A-UP (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E406A-UPG (Hybrid Electric System)	FLR-92Hy	6	L48
EHD-14F112C-N (Endurant CNG)	FLR-116	12	CS-B42
ES-11109 (Left Side Forward Opening)	FLR-84LF	9	LF32-CS
ESO-4106A	FLR-118	6	L22
ESO-4206A	FLR-118	6	L22
ESO-6106	FLR-115	6	L33-R33
EXD-16F118D	FLR-119	18	CS-B46
EXD-18F118D	FLR-119	18	CS-B46
EXDP-16F118D	FLR-119	18	CS-B46
EXDP-18F118D	FLR-119	18	CS-B46
EXDP-20F118D	FLR-119	18	CS-B46
F-14E16B-LSE (UltraShift Plus)	FLR-107	16	CS-R45-B47
F-15E16B-LSE (UltraShift Plus)	FLR-107	16	CS-R45-B47
F-17E16B-LSE (UltraShift Plus)	FLR-107	16	CS-R45-B47
F-5405B-DM3 (UltraShift HV)	FLR-92	5	L48-R48
F-5405-DM3	FLR-97	5	L39-R39
F-6405B-DM3 (UltraShift HV)	FLR-92	5	L48-R48
F-6406N-ASW	FLR-97	6	L39-R39
F-6406N-ASX	FLR-97	6	L39-R39



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

EATON FULLER TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
F-6406N-AW3	FLR-97	6	L39-R39
F-8406N-ASW	FLR-97	6	L39-R39
FA-11810B (Advantage Series) ThruShaft use AV	FLR-105	10	R45-B47
FA-12810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FA-13810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FA-14810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FA-15810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FA-9810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FAF-11810B (Advantage Series) ThruShaft use AV	FLR-105	10	R45-B47
FAF-12810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FAF-13810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FAF-14810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FAF-15810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FAF-9810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FAM-14810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FAM-14810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-105	10	R45-B47
FAM-15810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FAM-15810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-105	10	R45-B47
FAMF-14810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FAMF-15810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	R45-B47
FAO-11810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAO-12810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAO-13810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAO-14810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAO-14810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAO-15810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAO-16810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAO-16810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAO-16810S-EN3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAO-16810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOF-11810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOF-12810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOF-13810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOF-14810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOF-15810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOF-16810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
FAOM-14810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOM-14810S-EC3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOM-15810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOM-15810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOM-15810S-EC3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOM-15810S-EN3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOM-15810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOM-16810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOM-16810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOMF-14810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOMF-15810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FAOMF-16810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	R45-B47
FM-14E310B-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-111	10	R45-B47
FM-15E16B-LSE (UltraShift Plus)	FLR-107	16	CS-R45-B47
FM-15E310B-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-111	10	R45-B47
FO-10E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting	FLR-106	8+2	CS-R45-B47
FO-10E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting	FLR-107	9+2	CS-R45-B47
FO-10E310C-VAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FO-11E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting	FLR-106	8	CS-R45-B47
FO-11E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting	FLR-107	9+2	CS-R45-B47
FO-12E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting	FLR-106	8+2	CS-R45-B47
FO-12E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting	FLR-107	9+2	CS-R45-B47
FO-12E310C-VAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FO-12E310C-VAS (UltraShift Plus) Thrushaft use BD mounting	FLR-106	8+2	CS-R45-B47
FO-14E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting	FLR-107	9+2	CS-R45-B47
FO-14E310C-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FO-14E310C-VAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FO-14E313A-MHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-14E313A-VHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-14E318B-MXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-14E318B-VXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-16D313E-LEP (UltraShift)	FLR-113	13	R45
FO-16E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting	FLR-106	8+2	CS-R45-B47
FO-16E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting	FLR-107	9+2	CS-R45-B47
FO-16E310C-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FO-16E310C-VAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

EATON FULLER TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
FO-16E313A-MHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-16E313A-VHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-16E318B-MXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-16E318B-VXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-17E308LL-VCS (UltraShift Plus) Thrushaft use BD Mounting	FLR-106	8+2	CS-R45-B47
FO-17E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting	FLR-107	9+2	CS-R45-B47
FO-18E310C-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FO-18E313A-MHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-18E313A-VHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-18E318B-MXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-18E318B-VXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-20E313A-MHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-20E313A-VHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-20E318B-MXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-20E318B-VXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-22E318B-MXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-22E318B-VXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-5406B-DM3 (UltraShift HV)	FLR-92	6	L48-R48
FO-6406A-ASW	FLR-92	6	L48-R48
FO-6406A-ASX	FLR-92	6	L48-R48
FO-6406A-AW3	FLR-92	6	L48-R48
FO-6406B-DM3 (UltraShift HV)	FLR-92	6	L48-R48
FO-6406N-AW3	FLR-97	6	L39-R39
FO-8406A-ASW	FLR-92	6	L48-R48
FO-8406A-ASX	FLR-92	6	L48-R48
FO-8406A-AW3	FLR-92	6	L48-R48
FOM-14E310C-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FOM-14E310C-VAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FOM-15E310C-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FOM-15E310C-VAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FOM-16D313E-LEP	FLR-58	13	CS-R45-B47
FOM-16D313E-LEP (UltraShift)	FLR-113	13	R45
FOM-16E310C-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FOM-16E310C-VAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FR-11210B	FLR-90	10	CS-R45-B47
FR-12210B	FLR-90	10	CS-R45-B47



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
FR-13210B	FLR-90	10	CS-R45-B47
FR-14210B	FLR-90	10	CS-R45-B47
FR-15210B	FLR-90	10	CS-R45-B47
FR-9210	FLR-90	10	CS-R45-B47
FR-9210B	FLR-90	10	CS-R45-B47
FRF-9210B	FLR-90	10	CS-R45-B47
FRLO-14410C	FLR-95	10	L51-R51
FRLO-14410C-T2	FLR-95	10	L51-R51
FRLO-15410C	FLR-95	10	L51-R51
FRLO-15410C-T2	FLR-95	10	L51-R51
FRLO-16410C	FLR-95	10	L51-R51
FRLO-16410C-T2	FLR-95	10	L51-R51
FRM-15210B (Thrushaft use BJ mounting)	FLR-90	10	CS-R45-B47
FRO-11210B	FLR-91	10	CS-R45-B47
FRO-11210C	FLR-88	10	CS-R45-B47
FRO-12210B	FLR-91	10	CS-R45-B47
FRO-12210C	FLR-88	10	CS-R45-B47
FRO-13210B	FLR-91	10	CS-R45-B47
FRO-13210C	FLR-88	10	CS-R45-B47
FRO-14210B	FLR-91	10	CS-R45-B47
FRO-14210C	FLR-88	10	CS-R45-B47
FRO-15210B	FLR-91	10	CS-R45-B47
FRO-15210C	FLR-88	10	CS-R45-B47
FRO-16210B	FLR-91	10	CS-R45-B47
FRO-16210C	FLR-88	10	CS-R45-B47
FRO-16210R	FLR-88	10	CS-R45-B47
FRO-17210C	FLR-88	10	CS-R45-B47
FRO-18210C	FLR-88	10	CS-R45-B47
FROF-15210C	FLR-88	10	CS-R45-B47
FRW-15210B	FLR-90	10	CS-R45-B47
FS-4205A	FLR-78	5	L28-R28
FS-4205B	FLR-79	5	L28-R28
FS-5306A	FLR-68	6	L38-CS-R38
FS-5406A	FLR-68	6	L38-CS-R38
FS-5406N	FLR-97	6	L39-R39
FS-6106A	FLR-67	6	L50-R50



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Eaton Fuller

EATON FULLER TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
FS-6109A (Left Side Forward Opening)	FLR-84LF	9	LF32-CS
FS-6205A	FLR-69	5	L39-R39
FS-6205B	FLR-70	5	L41-R41
FS-6206	FLR-68	6	L38-CS-R38
FS-6206A	FLR-68	6	L38-CS-R38
FS-6209A (Left Side Forward Opening)	FLR-84LF	9	LF32-CS
FS-6305A	FLR-69	5	L39-R39
FS-6305B	FLR-70	5	L41-R41
FS-6306	FLR-68	6	L38-CS-R38
FS-6306A	FLR-68	6	L38-CS-R38
FS-6309A (Left Side Forward Opening)	FLR-84LF	9	LF32-CS
FS-6406	FLR-68	6	L38-CS-R38
FS-6406A	FLR-68	6	L38-CS-R38
FS-6406N	FLR-97	6	L39-R39
FS-7206A	FLR-67	6	L50-R50
FS-8206A	FLR-67	6	L50-R50
FS-8209A (ES11109)(Left Side Forward Opening)	FLR-84LF	9	LF32-CS
FS-8309 (Left Side Forward Opening)	FLR-84LF	9	LF32-CS
FS-8406A	FLR-67	6	L50-R50
FSB-5406B	FLR-94	6	L38-R38
FSB-6206A	FLR-94	6	L38-R38
FSB-6406B	FLR-94	6	L38-R38
FSO-5206 (B)	FLR-87	6	L47-CS
FSO-5406A	FLR-92	6	L48-R48
FSO-6109A (Left Forward)	FLR-96LF	9	LF43
FSO-6406A (Eaton Brazil)	FLR-92	6	L48-R48
FSO-8209A (Left Side Forward Opening)	FLR-96LF	9	LF43
FSO-8406A (Eaton Brazil)	FLR-92	6	L48-R48
RT-11609A (Thrushaft option use AT mounting)	FLR-34	8+1	CS-R45-B47
RT-11709H (Thrushaft option use AU mounting)	FLR-34	9	CS-R45-B47
RT-12609A (Thrushaft option use AT mounting)	FLR-34	9	CS-R45-B47
RT-12709A	FLR-34	9	CS-R45-B47
RT-12710B (Thrushaft option use AU mounting)	FLR-34	10	CS-R45-B47
RT-13609A (Thrushaft option use AT mounting)	FLR-34	9	CS-R45-B47
RT-13709H (Thrushaft option use AU mounting)	FLR-34	9	CS-R45-B47
RT-13710B (Thrushaft option use AU mounting)	FLR-34	10	CS-R45-B47



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RT-14609A (Thrushaft option use AU mounting)	FLR-34	8+1	CS-R45-B47
RT-14709A	FLR-34	9	CS-R45-B47
RT-14710B (Thrushaft option use AU mounting)	FLR-34	10	CS-R45-B47
RT-14710B-AS2	FLR-34	10	CS-R45-B47
RT-14715 (Thrushaft option use BD mounting)	FLR-34	15	CS-R45-B47
RT-14910B-AS2	FLR-34	10	CS-R45-B47
RT-14915	FLR-34	15	CS-R45-B47
RT-15715	FLR-34	15	CS-R45-B47
RT-613	FLR-40	13	R33-B33
RT-6609A	FLR-66	9	R33-B33
RT-6610	FLR-40	10	R33-B33
RT-6613	FLR-40	13	R33-B33
RT-7608LL	FLR-66	8+2	R33-B33
RT-8608L	FLR-64	8	R45-B47
RT-8609	FLR-66	9	R33-B33
RT-8709B	FLR-34	9	CS-R45-B47
RT-8908LL	FLR-34	8+2	CS-R45-B47
RT-9710B (Thrushaft option use AU mounting)	FLR-34	10	CS-R45-B47
RTA-14710B-AS	FLR-34	10	CS-R45-B47
RTAO-10710B-AC	FLR-57	10	CS-R45-B47
RTAO-10710B-AS	FLR-57	10	CS-R45-B47
RTAO-10710C-AC	FLR-58	10	CS-R45-B47
RTAO-10710C-AS	FLR-58	10	CS-R45-B47
RTAO-12710B-AC	FLR-57	10	CS-R45-B47
RTAO-12710B-AS	FLR-57	10	CS-R45-B47
RTAO-12710C-AC	FLR-58	10	CS-R45-B47
RTAO-12710C-AS	FLR-58	10	CS-R45-B47
RTAO-14710B-AC	FLR-57	10	CS-R45-B47
RTAO-14710B-AS	FLR-57	10	CS-R45-B47
RTAO-14710C-AC	FLR-58	10	CS-R45-B47
RTAO-14710C-AS	FLR-58	10	CS-R45-B47
RTAO-16710B-AC	FLR-57	10	CS-R45-B47
RTAO-16710B-AS	FLR-57	10	CS-R45-B47
RTAO-16710C-AS	FLR-58	10	CS-R45-B47
RTF-11609A	FLR-34	9	CS-R45-B47
RTF-12609A	FLR-34	9	CS-R45-B47



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

EATON FULLER TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RTF-12709H	FLR-34	9	CS-R45-B47
RTF-12710B	FLR-34	10	CS-R45-B47
RTF-13609A	FLR-34	9	CS-R45-B47
RTF-13709H	FLR-34	9	CS-R45-B47
RTF-13710B	FLR-34	10	CS-R45-B47
RTF-14609A	FLR-34	9	CS-R45-B47
RTF-14709H	FLR-34	9	CS-R45-B47
RTF-14710B	FLR-34	10	CS-R45-B47
RTF-14715	FLR-34	15	CS-R45-B47
RTF-14915	FLR-34	15	CS-R45-B47
RTF-15715	FLR-34	15	CS-R45-B47
RTL-13710B	FLR-34	10	CS-R45-B47
RTL-14710B	FLR-34	10	CS-R45-B47
RTLC-16609E (Convertible 9 to 13 Speed)	FLR-58	9	CS-R45-B47
RTLO-11610B-T2	FLR-34	10	CS-R45-B47
RTLO-12610B	FLR-34	10	CS-R45-B47
RTLO-12610B-T2	FLR-34	10	CS-R45-B47
RTLO-12713A	FLR-58	13	CS-R45-B47
RTLO-13118-AMT	FLR-58	13	CS-R45-B47
RTLO-13610B	FLR-34	10	CS-R45-B47
RTLO-13610B-T2	FLR-34	10	CS-R45-B47
RTLO-14610A	FLR-34	10	CS-R45-B47
RTLO-14610B	FLR-34	10	CS-R45-B47
RTLO-14610B-T2	FLR-34	10	CS-R45-B47
RTLO-14613B	FLR-34	13	CS-R45-B47
RTLO-14713A	FLR-58	13	CS-R45-B47
RTLO-14713A-T2	FLR-58	13	CS-R45-B47
RTLO-14718B	FLR-58	18	CS-R45-B47
RTLO-14718B-T2	FLR-58	18	CS-R45-B47
RTLO-14918A-AS2	FLR-58	18	CS-R45-B47
RTLO-14918A-AS3	FLR-58	18	CS-R45-B47
RTLO-14918B	FLR-58	18	CS-R45-B47
RTLO-14918B-AS	FLR-58	18	CS-R45-B47
RTLO-15610B-T2	FLR-34	10	CS-R45-B47
RTLO-16610B	FLR-34	10	CS-R45-B47
RTLO-16610B-T2	FLR-34	10	CS-R45-B47



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RTLO-16713A	FLR-58	13	CS-R45-B47
RTLO-16713A-T2	FLR-58	13	CS-R45-B47
RTLO-16718B	FLR-58	18	CS-R45-B47
RTLO-16718B-T2	FLR-58	18	CS-R45-B47
RTLO-16913A	FLR-58	13	CS-R45-B47
RTLO-16913L-DM3 (UltraShift)	FLR-113	13	R45
RTLO-16913L-LHP	FLR-58	13	CS-R45-B47
RTLO-16918A-AS2	FLR-58	18	CS-R45-B47
RTLO-16918A-AS3	FLR-58	18	CS-R45-B47
RTLO-16918B	FLR-58	18	CS-R45-B47
RTLO-16918B-AS	FLR-58	18	CS-R45-B47
RTLO-17610B	FLR-34	10	CS-R45-B47
RTLO-17610B-T2	FLR-34	10	CS-R45-B47
RTLO-18610B	FLR-34	10	CS-R45-B47
RTLO-18718B	FLR-58	18	CS-R45-B47
RTLO-18718B-T2	FLR-58	18	CS-R45-B47
RTLO-18913A	FLR-58	13	CS-R45-B47
RTLO-18913A-T2	FLR-58	13	CS-R45-B47
RTLO-18918A-AS2	FLR-58	18	CS-R45-B47
RTLO-18918B	FLR-58	18	CS-R45-B47
RTLO-18918B-AS	FLR-58	18	CS-R45-B47
RTLO-20913A	FLR-58	13	CS-R45-B47
RTLO-20918A-AS2	FLR-58	18	CS-R45-B47
RTLO-20918B	FLR-58	18	CS-R45-B47
RTLO-20918B-AS	FLR-58	18	CS-R45-B47
RTLO-22918A-AS2	FLR-58	18	CS-R45-B47
RTLO-22918A-AS3	FLR-58	18	CS-R45-B47
RTLO-22918B	FLR-58	18	CS-R45-B47
RTLOM-16913L-DM3 (UltraShift)	FLR-113	13	R45
RTLOM-16913L-LHP	FLR-58	13	CS-R45-B47
RTO-10710B-AS2	FLR-57	10	CS-R45-B47
RTO-10910B-AS2	FLR-57	10	CS-R45-B47
RTO-10910B-AS3	FLR-57	10	CS-R45-B47
RTO-10910B-DM2 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-10910B-DM3 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-11709MLL	FLR-58	9+2	CS-R45-B47



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

EATON FULLER TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RTO-11908LL	FLR-57	8+2	CS-R45-B47
RTO-11909ALL	FLR-58	11	CS-R45-B47
RTO-11909MLL	FLR-58	9	CS-R45-B47
RTO-12710B-AS2	FLR-57	10	CS-R45-B47
RTO-12910B-AS2 (Thrushaft option use AT mounting)	FLR-57	10	CS-R45-B47
RTO-12910B-AS3 (Thrushaft option use AT mounting)	FLR-57	10	CS-R45-B47
RTO-12910B-DM2 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-12910B-DM3 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-14609B (Thrushaft option use AU mounting)	FLR-58	9	CS-R45-B47
RTO-14613	FLR-34	13	CS-R45-B47
RTO-14709MLL	FLR-58	9+2	CS-R45-B47
RTO-14710B-AS2	FLR-57	10	CS-R45-B47
RTO-14908LL	FLR-57	8+2	CS-R45-B47
RTO-14909ALL	FLR-58	11	CS-R45-B47
RTO-14910B-AS2	FLR-57	10	CS-R45-B47
RTO-14910B-AS3	FLR-57	10	CS-R45-B47
RTO-14910B-DM2 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-14910B-DM3 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-14910C-AS2	FLR-58	10	CS-R45-B47
RTO-14910C-AS3	FLR-58	10	CS-R45-B47
RTO-14915	FLR-59	15	CS-R45-B47
RTO-16710B	FLR-57	10	CS-R45-B47
RTO-16710B-AS2	FLR-57	10	CS-R45-B47
RTO-16710C-AS2	FLR-58	10	CS-R45-B47
RTO-16908LL (Thrushaft use BD mounting)	FLR-57	8+2	CS-R45-B47
RTO-16909ALL (Thrushaft use BD mounting)	FLR-58	11	CS-R45-B47
RTO-16910B-AS2	FLR-57	10	CS-R45-B47
RTO-16910B-AS3	FLR-57	10	CS-R45-B47
RTO-16910B-DM2 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-16910B-DM3 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-16910C-AS2	FLR-58	10	CS-R45-B47
RTO-16910C-AS3	FLR-58	10	CS-R45-B47
RTO-16915	FLR-59	15	CS-R45-B47
RTO-18910B-AS2	FLR-58	10	CS-R45-B47
RTO-18910B-AS3	FLR-58	10	CS-R45-B47
RTO-6610	FLR-41	10	R33-B33



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RTO-6613	FLR-41	13	R33-B33
RTO-7613	FLR-40	13	R33-B33
RTO-909B	FLR-58	8+1	CS-R45-B47
RTO-9513	FLR-34	13	CS-R45-B47
RTOC-16909A (Convertible 9 to 13 Speed)	FLR-58	9	CS-R45-B47
RTOC-18909A	FLR-58	9	CS-R45-B47
RTOCM-16909A (Convertible 9 to 13 Speed)	FLR-58	13	CS-R45-B47
RTOM-16910B-DM3 (UltraShift)	FLR-100	10	CS-R45-B47
RTX-11609B	FLR-58	9	CS-R45-B47
RTX-11609P	FLR-57	9	CS-R45-B47
RTX-11609R (Thrushaft option use AT mounting)	FLR-57	8+1	CS-R45-B47
RTX-12609B (Thrushaft option use AT mounting)	FLR-58	9	CS-R45-B47
RTX-12609P	FLR-57	9	CS-R45-B47
RTX-12609R	FLR-57	9	CS-R45-B47
RTX-12709H	FLR-58	9	CS-R45-B47
RTX-12710C (Thrushaft option use AU mounting)	FLR-58	10	CS-R45-B47
RTX-13609B	FLR-58	9	CS-R45-B47
RTX-13609B (Thrushaft option use AT mounting)	FLR-58	9	CS-R45-B47
RTX-13709H	FLR-58	9	CS-R45-B47
RTX-13710B	FLR-57	10	CS-R45-B47
RTX-13710C (Thrushaft option use AU mounting)	FLR-58	10	CS-R45-B47
RTX-14609B	FLR-58	9	CS-R45-B47
RTX-14609R (Thrushaft option use AU mounting)	FLR-57	8+1	CS-R45-B47
RTX-14708LL	FLR-57	8	CS-R45-B47
RTX-14709H	FLR-58	9	CS-R45-B47
RTX-14710B (Thrushaft option use AU mounting)	FLR-57	10	CS-R45-B47
RTX-14710C (Thrushaft option use AU mounting)	FLR-58	10	CS-R45-B47
RTX-14715	FLR-59	15	CS-R45-B47
RTX-15715	FLR-59	15	CS-R45-B47
RTX-16709B	FLR-58	9	CS-R45-B47
RTX-16709H	FLR-58	9	CS-R45-B47
RTX-16710B	FLR-57	10	CS-R45-B47
RTX-16710X	FLR-58	10	CS-R45-B47
T-14607A	FLR-75	7	L78-R78
T-14607B	FLR-75	7	L78-R78
TX-14607B	FLR-77	7	L78-R78



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

FLR-34

EATON FULLER

CHELSEA®

RT-11609A (Thrushaft option use "AT" mounting)	RT-14609A (Thrushaft option use "AU" mounting)	RT-8709B
RT-11709H (Thrushaft option use "AU" mounting)	RT-14709A	RT-8908LL
RT-12609A (Thrushaft option use "AT" mounting)	RT-14710B (Thrushaft option use "AU" mounting)	RT-9710B (Thrushaft option use "AU" mounting)
RT-12709A	RT-14710B-AS2	RTA-14710B-AS
RT-12710B (Thrushaft option use "AU" mounting)	RT-14715 (Thrushaft option use "BD" mounting)	RTF-11609A
RT-13609A (Thrushaft option use "AT" mounting)	RT-14910B-AS2	RTF-12609A
RT-13709H (Thrushaft option use "AU" mounting)	RT-14915	RTF-12709H
RT-13710B (Thrushaft option use "AU" mounting)	RT-15715	RTF-12710B

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq		Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq		Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C	C							I / C	C					

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	61	7-A-032(P)(46)	328564X	Furnished	221XCAHX-*3	250 I	Opp	58	7-A-032(46)	Furnished
221ZEAHX-*3	250 I	Opp	70		328564X	Furnished	221XEAHX-*3	250 I	Opp	67		Furnished
489XAAHX-*5 (12)	250 I	Opp	54			Furnished	442XAAHX-*3 (12)	250 I	Opp	51		Furnished
489XCAHX-*5 (13)	250 I	Opp	69			Furnished	442XBAHX-*3 (18)	250 I	Eng	51		Furnished
489XFAHX-*5 (2)	250 I	Opp	85			Furnished	442XCAHX-*3 (13)	250 I	Opp	66		Furnished
489XHAHX-*5 (15)	250 I	Opp	99			Furnished	442XFAXH-*3 (2)	250 I	Opp	81		Furnished
489XLAHX-*5 (1)	222 I	Opp	110			Furnished	442XHAHX-*3 (15)	250 I	Opp	94		Furnished
489XQAHX-*5 (1)	206 I	Opp	118			Furnished	442XLAHX-*3 (1)	233 I	Opp	105		Furnished
489XRAHX-*5 (1)	178 I	Opp	137			Furnished	442XQAHX-*3 (1)	216 I	Opp	113		Furnished
489XSAHX-*5 (1)	150 I	Opp	163			Furnished	442XRAHX-*3 (1)	187 I	Opp	131		Furnished
489XUAHX-*5 (1)	126 I	Opp	194			Furnished	442XSAHX-*3 (1)	156 I	Opp	156		Furnished
489XWAHX-*5 (1)	107 I	Opp	229			Furnished	442XUAHX-*3 (1)	132 I	Opp	186		Furnished
489XXAHX-*5 (1)	91 I	Opp	271			Furnished	442XWAHX-*3 (1)	112 I	Opp	219		Furnished
680XFAHX-*3 (10)	288 I	Opp	85			Furnished	442XXAHX-*3 (1)	94 I	Opp	259		Furnished
680XHAHX-*3 (20)	249 I	Opp	99			Furnished	660XFAHX-*3 (10)	301 I	Opp	81		Furnished
680XQAHX-*3 (11)	206 I	Opp	118			Furnished	660XHAHX-*3 (15)	260 I	Opp	94		Furnished
680XRAHX-*3 (19)	178 I	Opp	137			Furnished	660XQAHX-*3 (11)	216 I	Opp	113		Furnished
680XSAHX-*3 (14)	150 I	Opp	163			Furnished	660XRAHX-*3 (19)	187 I	Opp	131		Furnished
823XBAHX-*3 (40)	423 I	Opp	58			Furnished	660XSAHX-*3 (14)	156 I	Opp	156		Furnished
823XDAHX-*3 (44)	357 I	Opp	69			Furnished						
823XGAHX-*3 (45)	329 I	Opp	74			Furnished						
823XJAHX-*3 (41)	279 I	Opp	88			Furnished						
823XMAHX-*3 (39)	238 I	Opp	103			Furnished						
823XRAHX-*3 (43)	172 I	Opp	142			Furnished						
823XTKTX-*3 (17)	142 I	Opp	172			Furnished						
880XBAHX-*3 (3)	423 I	Opp	58			Furnished						
880XDAHX-*3 (4)	357 I	Opp	69			Furnished						
880XGAHX-*3 (9)	329 I	Opp	74			Furnished						
880XJAHX-*3 (5)	279 I	Opp	88			Furnished						
880XMAHX-*3 (6)	238 I	Opp	103			Furnished						
880XQAHX-*3 (16)	203 I	Opp	120			Furnished						

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1103
- (13) Input Gear Part No. 5-P-1287
- (18) Input Gear Part No. 5-P-1418
- (41) Input Gear Part No. 5-P-325
- (2) Input Gear Part No. 5-P-1077
- (9) Input Gear Part No. 5-P-1135
- (14) Input Gear Part No. 5-P-1322
- (19) Input Gear Part No. 5-P-1441
- (43) Input Gear Part No. 5-P-721
- (3) Input Gear Part No. 5-P-1100
- (10) Input Gear Part No. 5-P-1242
- (15) Input Gear Part No. 5-P-1364
- (20) Input Gear Part No. 5-P-1494
- (44) Input Gear Part No. 5-P-971
- (4) Input Gear Part No. 5-P-1101
- (11) Input Gear Part No. 5-P-1246
- (16) Input Gear Part No. 5-P-1385
- (39) Input Gear Part No. 5-P-283
- (45) Input Gear Part No. 5-P-980
- (5) Input Gear Part No. 5-P-1102
- (12) Input Gear Part No. 5-P-1280
- (17) Input Gear Part No. 5-P-1395
- (40) Input Gear Part No. 5-P-285
- (46) Filler block furnished with PTO

RT-11609A (Thrustshaft option use "AT" mounting)	RT-14609A (Thrustshaft option use "AU" mounting)	RT-8709B
RT-11709H (Thrustshaft option use "AU" mounting)	RT-14709A	RT-8908LL
RT-12609A (Thrustshaft option use "AT" mounting)	RT-14710B (Thrustshaft option use "AU" mounting)	RT-9710B (Thrustshaft option use "AU" mounting)
RT-12709A	RT-14710B-AS2	RTA-14710B-AS
RT-12710B (Thrustshaft option use "AU" mounting)	RT-14715 (Thrustshaft option use "BD" mounting)	RTF-11609A
RT-13609A (Thrustshaft option use "AT" mounting)	RT-14910B-AS2	RTF-12609A
RT-13709H (Thrustshaft option use "AU" mounting)	RT-14915	RTF-12709H
RT-13710B (Thrustshaft option use "AU" mounting)	RT-15715	RTF-12710B

BOTTOM SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**

BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XRAHX-*3 (7)	172 I	Opp	142	Furnished
880XTAHX-*3 (8)	134 I	Opp	183	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (30)	300 C	Opp	47	328481X	Furnished	272XAAJX-*3 (30)	300 C	Opp	45	Furnished
282XBAJX-*3 (21)	300 C	Opp	58	8-A-032	Furnished	272XBAJX-*3 (31)	300 C	Opp	55	Furnished
282XCAJX-*3 (22)	300 C	Opp	70	8-A-032	Furnished	272XCAJX-*3 (32)	300 C	Opp	67	Furnished
282XDAXJ-*3 (23)	293 C	Opp	84	8-A-032	Furnished	272XDAXJ-*3 (33)	300 C	Opp	79	Furnished
282XGAJX-*3 (24)	257 C	Opp	95	8-A-032	Furnished	272XGAJX-*3 (34)	300 C	Opp	95	Furnished
282XKAJX-*3 (25)	220 C	Opp	112	8-A-032	Furnished	272XKAJX-*3 (35)	300 C	Opp	106	Furnished
282XMAJX-*3 (26)	206 C	Opp	119	8-A-032	Furnished	272XMAJX-*3 (36)	300 C	Opp	119	Furnished
282XP AJX-*3 (27)	184 C	Opp	133	8-A-032	Furnished	272XP AJX-*3 (37)	300 C	Opp	133	Furnished
282XSAJX-*3 (28)	158 C	Opp	156	8-A-032	Furnished	272XSAJX-*3 (38)	300 C	Opp	149	Furnished
282XTAJX-*3 (29)	147 C	Opp	166	8-A-032	Furnished					

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	423 I	Opp	58	Furnished
885XGAHX-*3 (9)	329 I	Opp	74	Furnished
885XJAHX-*3 (5)	279 I	Opp	88	Furnished
885XMAHX-*3 (6)	238 I	Opp	103	Furnished

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (42)	200 I	Opp	74	78	Furnished	340XFAHX-*5 (42)	200 I	Opp	71	75	7-A-140(46)	Furnished
863XBAHX-*5	423 I	Opp	58	72	Furnished							

GEARED ADAPTERS

628XAHX-4AH	250 I	Eng	8-A-032	Furnished	626XAHX-3AH	250 I	Eng					Furnished
					630XAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (5) Input Gear Part No. 5-P-1102
- (6) Input Gear Part No. 5-P-1103
- (7) Input Gear Part No. 5-P-1104
- (8) Input Gear Part No. 5-P-1105
- (9) Input Gear Part No. 5-P-1135
- (21) Input Gear Part No. 5-P-1510-11X
- (22) Input Gear Part No. 5-P-1510-12X
- (23) Input Gear Part No. 5-P-1510-13X
- (24) Input Gear Part No. 5-P-1510-14X
- (25) Input Gear Part No. 5-P-1510-15X
- (26) Input Gear Part No. 5-P-1510-16X
- (27) Input Gear Part No. 5-P-1510-17X
- (28) Input Gear Part No. 5-P-1510-18X
- (29) Input Gear Part No. 5-P-1510-19X
- (30) Input Gear Part No. 5-P-1510-1X
- (31) Input Gear Part No. 5-P-1510-2X
- (32) Input Gear Part No. 5-P-1510-3X
- (33) Input Gear Part No. 5-P-1510-4X
- (34) Input Gear Part No. 5-P-1510-5X
- (35) Input Gear Part No. 5-P-1510-6X
- (36) Input Gear Part No. 5-P-1510-7X
- (37) Input Gear Part No. 5-P-1510-8X
- (38) Input Gear Part No. 5-P-1510-9X
- (42) Input Gear Part No. 5-P-581
- (46) Filler block furnished with PTO

FLR-34

EATON FULLER

CHELSEA®

RT-11609A (Thrushaft option use "AT" mounting) RT-11709H (Thrushaft option use "AU" mounting) RT-12609A (Thrushaft option use "AT" mounting) RT-12709A RT-12710B (Thrushaft option use "AU" mounting) RT-13609A (Thrushaft option use "AT" mounting) RT-13709H (Thrushaft option use "AU" mounting) RT-13710B (Thrushaft option use "AU" mounting)	RT-14609A (Thrushaft option use "AU" mounting) RT-14709A RT-14710B (Thrushaft option use "AU" mounting) RT-14710B-AS2 RT-14715 (Thrushaft option use "BD" mounting) RT-14910B-AS2 RT-14915 RT-15715	RT-8709B RT-8908LL RT-9710B (Thrushaft option use "AU" mounting) RTA-14710B-AS RTF-11609A RTF-12609A RTF-12709H RTF-12710B
---	--	---

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 03-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

REAR MOUNT - AU MOUNTING OPTION

541-LAU-* [*]	400 I	Eng	67	Furnished
541-MAU-* [*]	350 I	Eng	87	Furnished
541-NAU-* [*]	300 I	Eng	99	Furnished

REAR MOUNT - BD MOUNTING OPTION

541-LBD-* [*]	400 I	Eng	67	Furnished
541-MBD-* [*]	350 I	Eng	87	Furnished
541-NBD-* [*]	300 I	Eng	99	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

RT-613
RT-6610
RT-6613
RTO-7613

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear REAR of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear REAR of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*6	250 I	Opp	44	7-A-032(P)(27)	328564X	Furnished	221XCAHX-*6	250 I	Opp	44	7-A-032(27)	Furnished
221ZEAHX-*6	250 I	Opp	51		328564X	Furnished	221XEAHX-*6	250 I	Opp	51		Furnished
489XAAX-*6 (12)	250 I	Opp	41			Furnished	442XFAHX-*6 (2)	250 I	Opp	62		Furnished
489XCAHX-*6 (13)	250 I	Opp	50			Furnished	442XHAX-*6 (15)	250 I	Opp	72		Furnished
489XFAHX-*6 (2)	250 I	Opp	62			Furnished	442XLAHX-*6 (1)	250 I	Opp	80		Furnished
489XHAX-*6 (15)	250 I	Opp	72			Furnished	442XQAHX-*6 (1)	225 I	Opp	86		Furnished
489XLAHX-*6 (1)	250 I	Opp	80			Furnished	442XRAHX-*6 (1)	225 I	Opp	99		Furnished
489XQAHX-*6 (1)	225 I	Opp	86			Furnished	442XSAHX-*6 (1)	200 I	Opp	118		Furnished
489XRAXH-*6 (1)	225 I	Opp	99			Furnished	442XUAXH-*6 (1)	195 I	Opp	141		Furnished
489XSAHX-*6 (1)	200 I	Opp	118			Furnished	442XWAHX-*6 (1)	175 I	Opp	166		Furnished
489XUAHX-*6 (1)	195 I	Opp	141			Furnished	442XXAHX-*6 (1)	140 I	Opp	196		Furnished
489XWAHX-*6 (1)	175 I	Opp	166			Furnished	660XFAHX-*6 (10)	375 I	Opp	62		Furnished
489XXAHX-*6 (1)	140 I	Opp	196			Furnished	660XHAX-*6 (15)	375 I	Opp	72		Furnished
680XFAXH-*6 (10)	375 I	Opp	62			Furnished	660XOAHX-*6 (11)	375 I	Opp	86		Furnished
680XHAXH-*6 (19)	375 I	Opp	72			Furnished	660XRAHX-*6 (18)	350 I	Opp	99		Furnished
680XQAHX-*6 (11)	375 I	Opp	86			Furnished	660XSAHX-*6 (14)	325 I	Opp	118		Furnished
680XRAXH-*6 (18)	350 I	Opp	99			Furnished						
680XSAHX-*6 (14)	325 I	Opp	118			Furnished						
823XBAHX-*6 (21)	500 I	Opp	42			Furnished						
823XDAHX-*6 (25)	500 I	Opp	50			Furnished						
823XGAHX-*6 (26)	500 I	Opp	54			Furnished						
823XJAHX-*6 (22)	500 I	Opp	64			Furnished						
823XMAHX-*6 (20)	500 I	Opp	75			Furnished						
823XRAXH-*6 (24)	400 I	Opp	103			Furnished						
823XTKTX-*6 (17)	372 I	Opp	125	8-A-165(27)		Furnished						
880XBAHX-*6 (3)	500 I	Opp	42			Furnished						
880XDAHX-*6 (4)	500 I	Opp	50			Furnished						
880XGAHX-*6 (9)	500 I	Opp	54			Furnished						
880XJAHX-*6 (5)	500 I	Opp	64			Furnished						
880XMAHX-*6 (6)	500 I	Opp	75			Furnished						
880XQAHX-*6 (16)	450 I	Opp	87			Furnished						

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1103
- (9) Input Gear Part No. 5-P-1135
- (13) Input Gear Part No. 5-P-1287
- (18) Input Gear Part No. 5-P-1441
- (24) Input Gear Part No. 5-P-721
- (2) Input Gear Part No. 5-P-1077
- (10) Input Gear Part No. 5-P-1242
- (14) Input Gear Part No. 5-P-1322
- (19) Input Gear Part No. 5-P-1494
- (25) Input Gear Part No. 5-P-971
- (3) Input Gear Part No. 5-P-1100
- (11) Input Gear Part No. 5-P-1246
- (15) Input Gear Part No. 5-P-1364
- (20) Input Gear Part No. 5-P-283
- (26) Input Gear Part No. 5-P-980
- (4) Input Gear Part No. 5-P-1101
- (12) Input Gear Part No. 5-P-1280
- (16) Input Gear Part No. 5-P-1385
- (21) Input Gear Part No. 5-P-285
- (27) Filler block furnished with PTO
- (5) Input Gear Part No. 5-P-1102
- (17) Input Gear Part No. 5-P-1395
- (22) Input Gear Part No. 5-P-325

FLR-40

EATON FULLER

CHELSEA®

RT-613
RT-6610
RT-6613
RTO-7613

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear REAR of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear REAR of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XRAHX-*6 (7)	400 I	Opp	103	Furnished
880XTAHX-*6 (8)	350 I	Opp	133	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*6 (3)	500 I	Opp	42	Furnished
885XGAHX-*6 (9)	500 I	Opp	54	Furnished
885XJAHX-*6 (5)	500 I	Opp	64	Furnished
885XMAHX-*6 (6)	500 I	Opp	75	Furnished

ONE SPEED - FORWARD & REVERSE

348XFAXH-*4 (23)	200 I	Opp	54	56	Furnished	340XFAXH-*4 (23)	200 I	Opp	54	56	7-A-140(27)	Furnished
863XBAHX-*4	500 I	Opp	42	52	Furnished							

GEARED ADAPTERS

628XAHX-4AH	250 I	Eng	8-A-032	Furnished	626XAHX-4AH	250 I	Eng					Furnished
					630XAHX-4AH	250 I	Eng					Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (9) Input Gear Part No. 5-P-1135
- (5) Input Gear Part No. 5-P-1102
- (23) Input Gear Part No. 5-P-581
- (6) Input Gear Part No. 5-P-1103
- (27) Filler block furnished with PTO
- (7) Input Gear Part No. 5-P-1104
- (8) Input Gear Part No. 5-P-1105

RTO-6610
RTO-6613

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear REAR of Centerline
33 Teeth - SPURPITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear REAR of Centerline
33 Teeth - SPURPITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*6	250 I	Opp	55	7-A-032(P)(25)	328564X	Furnished	221XCAHX-*6	250 I	Opp	55	7-A-032(25)	Furnished
221ZEAHX-*6	250 I	Opp	63		328564X	Furnished	221XEAHX-*6	250 I	Opp	63		Furnished
489XFAHX-*6 (2)	250 I	Opp	76			Furnished	442XFAHX-*6 (2)	250 I	Opp	76		Furnished
489XHAHX-*6 (13)	250 I	Opp	88			Furnished	442XHAHX-*6 (13)	250 I	Opp	88		Furnished
489XLAHX-*6 (1)	250 I	Opp	99			Furnished	442XLAHX-*6 (1)	250 I	Opp	99		Furnished
489XQAHX-*6 (1)	225 I	Opp	106			Furnished	442XQAHX-*6 (1)	225 I	Opp	106		Furnished
489XRAHX-*6 (1)	225 I	Opp	123			Furnished	442XRAHX-*6 (1)	225 I	Opp	123		Furnished
489XSAXH-*6 (1)	200 I	Opp	147			Furnished	442XSAXH-*6 (1)	200 I	Opp	147		Furnished
489XUAHX-*6 (1)	195 I	Opp	175			Furnished	442XUAHX-*6 (1)	195 I	Opp	175		Furnished
489XWAHX-*6 (1)	175 I	Opp	206			Furnished	442XWAHX-*6 (1)	175 I	Opp	206		Furnished
489XXAHX-*6 (1)	140 I	Opp	243			Furnished	442XXAHX-*6 (1)	140 I	Opp	243		Furnished
680XFAHX-*6 (10)	375 I	Opp	76			Furnished	660XFAHX-*6 (10)	375 I	Opp	76		Furnished
680XHAHX-*6 (17)	375 I	Opp	88			Furnished	660XHAHX-*6 (13)	375 I	Opp	88		Furnished
680XQAHX-*6 (11)	375 I	Opp	106			Furnished	660XQAHX-*6 (11)	375 I	Opp	106		Furnished
680XRAHX-*6 (16)	350 I	Opp	123			Furnished	660XRAHX-*6 (16)	350 I	Opp	123		Furnished
680XSAHX-*6 (12)	325 I	Opp	147			Furnished	660XSAHX-*6 (12)	325 I	Opp	147		Furnished
823XBAHX-*6 (19)	500 I	Opp	52			Furnished						
823XDAHX-*6 (23)	500 I	Opp	62			Furnished						
823XGAHX-*6 (24)	500 I	Opp	67			Furnished						
823XJAHX-*6 (20)	500 I	Opp	79			Furnished						
823XMAHX-*6 (18)	500 I	Opp	92			Furnished						
823XRAHX-*6 (22)	400 I	Opp	128			Furnished						
823XTKTX-*6 (15)	372 I	Opp	154	8-A-165(25)		Furnished						
880XBAHX-*6 (3)	500 I	Opp	52			Furnished						
880XDAHX-*6 (4)	500 I	Opp	62			Furnished						
880XGAHX-*6 (9)	500 I	Opp	67			Furnished						
880XJAHX-*6 (5)	500 I	Opp	79			Furnished						
880XMAHX-*6 (6)	500 I	Opp	92			Furnished						
880XQAHX-*6 (14)	450 I	Opp	109			Furnished						
880XRAHX-*6 (7)	400 I	Opp	128			Furnished						
880XTAHX-*6 (8)	350 I	Opp	164			Furnished						

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

**IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.****CAUTION:** Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1103
- (11) Input Gear Part No. 5-P-1246
- (16) Input Gear Part No. 5-P-1441
- (22) Input Gear Part No. 5-P-721
- (2) Input Gear Part No. 5-P-1077
- (7) Input Gear Part No. 5-P-1104
- (12) Input Gear Part No. 5-P-1322
- (17) Input Gear Part No. 5-P-1494
- (23) Input Gear Part No. 5-P-971
- (3) Input Gear Part No. 5-P-1100
- (8) Input Gear Part No. 5-P-1105
- (13) Input Gear Part No. 5-P-1364
- (18) Input Gear Part No. 5-P-283
- (24) Input Gear Part No. 5-P-980
- (4) Input Gear Part No. 5-P-1101
- (9) Input Gear Part No. 5-P-1135
- (14) Input Gear Part No. 5-P-1385
- (19) Input Gear Part No. 5-P-285
- (25) Filler block furnished with PTO
- (5) Input Gear Part No. 5-P-1102
- (10) Input Gear Part No. 5-P-1242
- (15) Input Gear Part No. 5-P-1395
- (20) Input Gear Part No. 5-P-325

RTO-6610
RTO-6613

BOTTOM SIDE ONLY

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear REAR of Centerline
33 Teeth - SPURPITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear REAR of Centerline
33 Teeth - SPURPITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*6 (3)	500 I	Opp	52	Furnished
885XGAHX-*6 (9)	500 I	Opp	67	Furnished
885XJAHX-*6 (5)	500 I	Opp	79	Furnished
885XMAHX-*6 (6)	500 I	Opp	92	Furnished

ONE SPEED - FORWARD & REVERSE

348XFAHX-*4 (21)	200 I	Opp	67	70	Furnished	340XFAHX-*4 (21)	200 I	Opp	67	70	7-A-140(25)	Furnished
863XBAHX-*4	500 I	Opp	52	64	Furnished							

GEARED ADAPTERS

628XAHX-4AH	250 I	Eng	Furnished	626XAHX-4AH	250 I	Eng	Furnished
				630XAHX-4AH	250 I	Eng	Furnished
				645XAHX-4AH	250 I	Eng	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(21) Input Gear Part No. 5-P-581

(25) Filler block furnished with PTO

October 2022
5.5.22Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RTAO-10710B-AC	RTAO-16710B-AS	RTO-14710B-AS2
RTAO-10710B-AS	RTAO-10710B-AS2	RTO-14908LL
RTAO-12710B-AC	RTAO-10910B-AS2	RTO-14910B-AS2
RTAO-12710B-AS	RTAO-10910B-AS3	RTO-14910B-AS3
RTAO-14710B-AC	RTAO-11908LL	RTO-16710B
RTAO-14710B-AC	RTAO-12710B-AS2	RTO-16710B-AS2
RTAO-14710B-AS	RTAO-12910B-AS2 (Thrushaft option use AT mounting)	RTO-16908LL (Thrushaft use BD mounting)
RTAO-16710B-AC	RTAO-12910B-AS3 (Thrushaft option use AT mounting)	RTO-16910B-AS2

BOTTOM SIDE ONLY		RIGHT SIDE ONLY	
TRANSMISSION GEAR DATA: BOT 08-BOLT Opening Gear FORWARD of Centerline 47 Teeth - SPUR		TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 45 Teeth - SPUR	
PITCH LINE TO APERTURE FACE: 0.8050" (20.4500MM)		PITCH LINE TO APERTURE FACE: 1.0850" (27.5600MM)	

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	82	7-A-032(P)(46)	328564X	Furnished	221XCAHX-*3	250 I	Opp	79	7-A-032(46)	Furnished
221ZEAHX-*3	250 I	Opp	95		328564X	Furnished	221XEAHX-*3	250 I	Opp	91		Furnished
489XAAHX-*5 (12)	250 I	Opp	72			Furnished	442XAAHX-*3 (12)	250 I	Opp	69		Furnished
489XCAHX-*5 (13)	250 I	Opp	93			Furnished	442XBAHX-*3 (18)	250 I	Eng	69		Furnished
489XFAXH-*5 (2)	250 I	Opp	114			Furnished	442XCAHX-*3 (13)	250 I	Opp	89		Furnished
489XHAHX-*5 (15)	250 I	Opp	132			Furnished	442XFAHX-*3 (2)	250 I	Opp	110		Furnished
489XLAHX-*5 (1)	222 I	Opp	148			Furnished	442XHAHX-*3 (15)	250 I	Opp	127		Furnished
489XQAHX-*5 (1)	206 I	Opp	160			Furnished	442XLAHX-*3 (1)	233 I	Opp	142		Furnished
489XRAXH-*5 (1)	178 I	Opp	185			Furnished	442XQAHX-*3 (1)	216 I	Opp	153		Furnished
489XSAXH-*5 (1)	150 I	Opp	220			Furnished	442XRAHX-*3 (1)	187 I	Opp	177		Furnished
489XUAHX-*5 (1)	126 I	Opp	262			Furnished	442XSAHX-*3 (1)	156 I	Opp	211		Furnished
489XWAHX-*5 (1)	107 I	Opp	308			Furnished	442XUAHX-*3 (1)	132 I	Opp	251		Furnished
489XXAHX-*5 (1)	91 I	Opp	365			Furnished	442XWAHX-*3 (1)	112 I	Opp	295		Furnished
680XFAHX-*3 (10)	288 I	Opp	114			Furnished	442XXAHX-*3 (1)	94 I	Opp	349		Furnished
680XHAHX-*3 (20)	249 I	Opp	132			Furnished	660XFAHX-*3 (10)	301 I	Opp	110		Furnished
680XQAHX-*3 (11)	206 I	Opp	160			Furnished	660XHAHX-*3 (15)	260 I	Opp	127		Furnished
680XRAHX-*3 (19)	178 I	Opp	185			Furnished	660XQAHX-*3 (11)	216 I	Opp	153		Furnished
680XSAHX-*3 (14)	150 I	Opp	220			Furnished	660XRAHX-*3 (19)	187 I	Opp	177		Furnished
823XBAHX-*3 (40)	423 I	Opp	78			Furnished	660XSAHX-*3 (14)	156 I	Opp	211		Furnished
823XDAHX-*3 (44)	357 I	Opp	92			Furnished						
823XGAHX-*3 (45)	329 I	Opp	100			Furnished						
823XJAHX-*3 (41)	279 I	Opp	118			Furnished						
823XMAHX-*3 (39)	238 I	Opp	139			Furnished						
823XRAHX-*3 (43)	172 I	Opp	191			Furnished						
823XTKTX-*3 (17)	142 I	Opp	231			Furnished						
880XBAHX-*3 (3)	423 I	Opp	78			Furnished						
880XDAHX-*3 (4)	357 I	Opp	92			Furnished						
880XGAHX-*3 (9)	329 I	Opp	100			Furnished						
880XJAHX-*3 (5)	279 I	Opp	118			Furnished						
880XMAHX-*3 (6)	238 I	Opp	139			Furnished						
880XQAHX-*3 (16)	203 I	Opp	162			Furnished						

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1103
- (9) Input Gear Part No. 5-P-1135
- (13) Input Gear Part No. 5-P-1287
- (18) Input Gear Part No. 5-P-1418
- (41) Input Gear Part No. 5-P-325
- (2) Input Gear Part No. 5-P-1077
- (10) Input Gear Part No. 5-P-1242
- (14) Input Gear Part No. 5-P-1322
- (19) Input Gear Part No. 5-P-1441
- (43) Input Gear Part No. 5-P-721
- (3) Input Gear Part No. 5-P-1100
- (11) Input Gear Part No. 5-P-1246
- (15) Input Gear Part No. 5-P-1364
- (20) Input Gear Part No. 5-P-1494
- (44) Input Gear Part No. 5-P-971
- (4) Input Gear Part No. 5-P-1101
- (12) Input Gear Part No. 5-P-1280
- (16) Input Gear Part No. 5-P-1385
- (39) Input Gear Part No. 5-P-283
- (45) Input Gear Part No. 5-P-980
- (5) Input Gear Part No. 5-P-1102
- (17) Input Gear Part No. 5-P-1395
- (40) Input Gear Part No. 5-P-285
- (46) Filler block furnished with PTO

FLR-57

EATON FULLER

CHELSEA®

RTAO-10710B-AC	RTAO-16710B-AS	RTO-14710B-AS2
RTAO-10710B-AS	RTO-10710B-AS2	RTO-14908LL
RTAO-12710B-AC	RTO-10910B-AS2	RTO-14910B-AS2
RTAO-12710B-AS	RTO-10910B-AS3	RTO-14910B-AS3
RTAO-14710B-AC	RTO-11908LL	RTO-16710B
RTAO-14710B-AC	RTO-12710B-AS2	RTO-16710B-AS2
RTAO-14710B-AS	RTO-12910B-AS2 (Thrushaft option use AT mounting)	RTO-16908LL (Thrushaft use BD mounting)
RTAO-16710B-AC	RTO-12910B-AS3 (Thrushaft option use AT mounting)	RTO-16910B-AS2

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XRAHX-*3 (7)	172 I	Opp	191	Furnished
880XTAHX-*3 (8)	134 I	Opp	246	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (30)	300 C	Opp	63	328481X	Furnished	272XAAJX-*3 (30)	300 C	Opp	61	Furnished
282XBAJX-*3 (21)	300 C	Opp	78	8-A-032	Furnished	272XBAJX-*3 (31)	300 C	Opp	75	Furnished
282XCAJX-*3 (22)	300 C	Opp	94	8-A-032	Furnished	272XCAJX-*3 (32)	300 C	Opp	90	Furnished
282XDAJX-*3 (23)	293 C	Opp	113	8-A-032	Furnished	272XDAJX-*3 (33)	300 C	Opp	107	Furnished
282XGAJX-*3 (24)	246 C	Opp	134	8-A-032	Furnished	272XGAJX-*3 (34)	257 C	Opp	128	Furnished
282XKAJX-*3 (25)	220 C	Opp	150	8-A-032	Furnished	272XKAJX-*3 (35)	230 C	Opp	144	Furnished
282XMAJX-*3 (26)	197 C	Opp	168	8-A-032	Furnished	272XMAJX-*3 (36)	206 C	Opp	161	Furnished
282XP AJX-*3 (27)	176 C	Opp	187	8-A-032	Furnished	272XP AJX-*3 (37)	175 C	Opp	180	Furnished
282XSAJX-*3 (28)	158 C	Opp	209	8-A-032	Furnished	272XSAJX-*3 (38)	157 C	Opp	201	Furnished
282XTAJX-*3 (29)	141 C	Opp	234	8-A-032	Furnished					

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	423 I	Opp	78	Furnished
885XGAHX-*3 (9)	329 I	Opp	100	Furnished
885XJAHX-*3 (5)	279 I	Opp	118	Furnished
885XMAHX-*3 (6)	238 I	Opp	139	Furnished

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (42)	200 I	Opp	100	105	Furnished	340XFAHX-*5 (42)	200 I	Opp	96	101	7-A-140(46)	Furnished
863XBAHX-*5	423 I	Opp	78	97	Furnished							

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng	8-A-032	Furnished	626XAHX-3AH	250 I	Eng	Furnished
					630XAHX-3AH	250 I	Eng	Furnished

645XAHX-3AH 250 I Eng Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (21) Input Gear Part No. 5-P-1510-11X
- (27) Input Gear Part No. 5-P-1510-17X
- (33) Input Gear Part No. 5-P-1510-4X
- (42) Input Gear Part No. 5-P-581
- (5) Input Gear Part No. 5-P-1102
- (22) Input Gear Part No. 5-P-1510-12X
- (28) Input Gear Part No. 5-P-1510-18X
- (34) Input Gear Part No. 5-P-1510-5X
- (46) Filler block furnished with PTO
- (6) Input Gear Part No. 5-P-1103
- (23) Input Gear Part No. 5-P-1510-13X
- (29) Input Gear Part No. 5-P-1510-19X
- (35) Input Gear Part No. 5-P-1510-6X
- (7) Input Gear Part No. 5-P-1104
- (24) Input Gear Part No. 5-P-1510-14X
- (30) Input Gear Part No. 5-P-1510-1X
- (36) Input Gear Part No. 5-P-1510-7X
- (8) Input Gear Part No. 5-P-1105
- (25) Input Gear Part No. 5-P-1510-15X
- (31) Input Gear Part No. 5-P-1510-2X
- (37) Input Gear Part No. 5-P-1510-8X
- (9) Input Gear Part No. 5-P-1135
- (26) Input Gear Part No. 5-P-1510-16X
- (32) Input Gear Part No. 5-P-1510-3X
- (38) Input Gear Part No. 5-P-1510-9X

RTAO-10710B-AC	RTAO-16710B-AS	RTO-14710B-AS2
RTAO-10710B-AS	RTAO-10710B-AS2	RTO-14908LL
RTAO-12710B-AC	RTAO-10910B-AS2	RTO-14910B-AS2
RTAO-12710B-AS	RTAO-10910B-AS3	RTO-14910B-AS3
RTAO-14710B-AC	RTAO-11908LL	RTO-16710B
RTAO-14710B-AC	RTAO-12710B-AS2	RTO-16710B-AS2
RTAO-14710B-AS	RTAO-12910B-AS2 (Thrushaft option use AT mounting)	RTO-16908LL (Thrushaft use BD mounting)
RTAO-16710B-AC	RTAO-12910B-AS3 (Thrushaft option use AT mounting)	RTO-16910B-AS2

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd	Rev					I / C ↑	Rot	Fwd	Rev			

REAR MOUNT - "AU" MOUNTING OPTION

541-LAU-*-*	400 I	Eng	91	Furnished
541-MAU-*-*	350 I	Eng	117	Furnished
541-NAU-*-*	300 I	Eng	133	Furnished

REAR MOUNT - "BD" MOUNTING OPTION

541-LBD-*-*	400 I	Eng	91	Furnished
541-MBD-*-*	350 I	Eng	117	Furnished
541-NBD-*-*	300 I	Eng	133	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

FLR-58

EATON FULLER

CHELSEA®

FOM-16D313E-LEP	RTLC-16609E (Convertible 9 to 13 Speed)	RTLO-14918A-AS3
RTAO-10710C-AC	RTLO-12713A	RTLO-14918B
RTAO-10710C-AS	RTLO-13118-AMT	RTLO-14918B-AS
RTAO-12710C-AC	RTLO-14713A	RTLO-16713A
RTAO-12710C-AS	RTLO-14713A-T2	RTLO-16713A-T2
RTAO-14710C-AC	RTLO-14718B	RTLO-16718B
RTAO-14710C-AS	RTLO-14718B-T2	RTLO-16718B-T2
RTAO-16710C-AS	RTLO-14918A-AS2	RTLO-16913A

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489XAAHX-*5 (11)	250 I	Opp	61	Furnished	221XCAHX-*3	250 I	Eng	66	7-A-032(P)(45)	329138X	Furnished
489XCAHX-*5 (12)	250 I	Opp	78	Furnished	221XEAHX-*3	250 I	Eng	76		329138X	Furnished
489XFAHX-*5 (2)	250 I	Opp	96	Furnished	442XAAHX-*3 (11)	250 I	Opp	58			Furnished
489XHAHX-*5 (14)	250 I	Opp	111	Furnished	442XBAHX-*3 (17)	250 I	Eng	58			REQUIRED
489XLAHX-*5 (1)	222 I	Opp	124	Furnished	442XCAHX-*3 (12)	250 I	Opp	74			Furnished
489XQAHX-*5 (1)	206 I	Opp	134	Furnished	442XFAHX-*3 (2)	250 I	Opp	92			Furnished
489XRAHX-*5 (1)	178 I	Opp	155	Furnished	442XHAX-*3 (14)	250 I	Opp	107			Furnished
489XSAHX-*5 (1)	150 I	Opp	184	Furnished	442XLAHX-*3 (1)	233 I	Opp	119			Furnished
680XFAHX-*3 (9)	288 I	Opp	96	Furnished	442XQAHX-*3 (1)	216 I	Opp	128			Furnished
680XHAHX-*3 (19)	249 I	Opp	111	Furnished	442XRAHX-*3 (1)	187 I	Opp	148			Furnished
680XQAHX-*3 (10)	206 I	Opp	134	Furnished	660XFAHX-*3 (9)	301 I	Opp	92			Furnished
680XRAHX-*3 (18)	178 I	Opp	155	Furnished	660XHAX-*3 (19)	260 I	Opp	107			Furnished
680XSAHX-*3 (13)	150 I	Opp	184	Furnished	660XQAHX-*3 (10)	216 I	Opp	128			Furnished
823XBAHX-*3 (39)	423 I	Opp	65	Furnished	660XRAHX-*3 (18)	187 I	Opp	148			Furnished
823XDAHX-*3 (43)	357 I	Opp	77	Furnished							
823XGAHX-*3 (44)	329 I	Opp	84	Furnished							
823XJAHX-*3 (40)	279 I	Opp	99	Furnished							
823XMAHX-*3 (38)	238 I	Opp	116	Furnished							
823XRAX-*3 (42)	172 I	Opp	160	Furnished							
823XTKTX-*3 (16)	142 I	Opp	194	8-A-165(T)(45)							
880XBAHX-*3 (3)	423 I	Opp	65	Furnished							
880XDAHX-*3 (4)	357 I	Opp	77	Furnished							
880XGAHX-*3 (8)	329 I	Opp	84	Furnished							
880XJAHX-*3 (5)	279 I	Opp	99	Furnished							
880XMAHX-*3 (6)	238 I	Opp	116	Furnished							
880XQAHX-*3 (15)	203 I	Opp	136	Furnished							
880XRAHX-*3 (7)	172 I	Opp	160	Furnished							

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (29)	300 C	Opp	54	328481X	Furnished	272XAAJX-*3 (29)	300 C	Opp	51		Furnished
282XBAJX-*3 (20)	300 C	Opp	65	8-A-032	Furnished	272XBAJX-*3 (30)	300 C	Opp	62		Furnished
282XCAJX-*3 (21)	300 C	Opp	79	8-A-032	Furnished	272XCAJX-*3 (31)	300 C	Opp	76		Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (8) Input Gear Part No. 5-P-1135
- (15) Input Gear Part No. 5-P-1385
- (29) Input Gear Part No. 5-P-1510-1X
- (43) Input Gear Part No. 5-P-971
- (2) Input Gear Part No. 5-P-1077
- (9) Input Gear Part No. 5-P-1242
- (16) Input Gear Part No. 5-P-1395
- (30) Input Gear Part No. 5-P-1510-2X
- (44) Input Gear Part No. 5-P-980
- (3) Input Gear Part No. 5-P-1100
- (10) Input Gear Part No. 5-P-1246
- (17) Input Gear Part No. 5-P-1418
- (31) Input Gear Part No. 5-P-1510-3X
- (45) Filler block furnished with PTO
- (4) Input Gear Part No. 5-P-1101
- (11) Input Gear Part No. 5-P-1280
- (18) Input Gear Part No. 5-P-1441
- (38) Input Gear Part No. 5-P-283
- (5) Input Gear Part No. 5-P-1102
- (12) Input Gear Part No. 5-P-1287
- (19) Input Gear Part No. 5-P-1494
- (39) Input Gear Part No. 5-P-285
- (6) Input Gear Part No. 5-P-1103
- (13) Input Gear Part No. 5-P-1322
- (20) Input Gear Part No. 5-P-1510-11X
- (40) Input Gear Part No. 5-P-325
- (7) Input Gear Part No. 5-P-1104
- (14) Input Gear Part No. 5-P-1364
- (21) Input Gear Part No. 5-P-1510-12X
- (42) Input Gear Part No. 5-P-721

October 2022

5.5.26

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FOM-16D313E-LEP	RTLC-16609E (Convertible 9 to 13 Speed)	RTLO-14918A-AS3
RTAO-10710C-AC	RTLO-12713A	RTLO-14918B
RTAO-10710C-AS	RTLO-13118-AMT	RTLO-14918B-AS
RTAO-12710C-AC	RTLO-14713A	RTLO-16713A
RTAO-12710C-AS	RTLO-14713A-T2	RTLO-16713A-T2
RTAO-14710C-AC	RTLO-14718B	RTLO-16718B
RTAO-14710C-AS	RTLO-14718B-T2	RTLO-16718B-T2
RTAO-16710C-AS	RTLO-14918A-AS2	RTLO-16913A

BOTTOM SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: BOT 08-BOLT Opening Gear FORWARD of Centerline 47 Teeth - SPUR	TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 45 Teeth - SPUR
PITCH LINE TO APERTURE FACE: 0.8050" (20.4500MM)	PITCH LINE TO APERTURE FACE: 1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XDAJX-*3 (22)	293 C	Opp	93	8-A-032	Furnished	272XDAJX-*3 (32)	300 C	Opp	90			Furnished
282XGAJX-*3 (23)	246 C	Opp	112	8-A-032	Furnished	272XGAJX-*3 (33)	257 C	Opp	107			Furnished
282XKAJX-*3 (24)	220 C	Opp	125	8-A-032	Furnished	272XKAJX-*3 (34)	230 C	Opp	120			Furnished
282XMAJX-*3 (25)	197 C	Opp	140	8-A-032	Furnished	272XMAJX-*3 (35)	206 C	Opp	134			Furnished
282XPAJX-*3 (26)	176 C	Opp	156	8-A-032	Furnished	272XPAJX-*3 (36)	184 C	Opp	150			Furnished
282XSAXJX-*3 (27)	158 C	Opp	174	8-A-032	Furnished	272XSAXJX-*3 (37)	165 C	Opp	168			Furnished
282XTAJX-*3 (28)	141 C	Opp	195	8-A-032	Furnished							

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	423 I	Opp	65		Furnished							
885XGAHX-*3 (8)	329 I	Opp	84		Furnished							
885XJAHX-*3 (5)	279 I	Opp	99		Furnished							
885XMAHX-*3 (6)	238 I	Opp	116		Furnished							

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (41)	200 I	Opp	84	88	Furnished	340XFAHX-*5 (41)	200 I	Opp	80	84	7-A-140(45)	Furnished
863XBAHX-*5	423 I	Opp	65	81	Furnished							

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng		8-A-032	Furnished	626XAHX-3AH	250 I	Eng				Furnished
						630XAHX-3AH	250 I	Eng				Furnished
						645XAHX-3AH	250 I	Eng				Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (23) Input Gear Part No. 5-P-1510-14X
- (28) Input Gear Part No. 5-P-1510-19X
- (36) Input Gear Part No. 5-P-1510-8X
- (5) Input Gear Part No. 5-P-1102
- (24) Input Gear Part No. 5-P-1510-15X
- (32) Input Gear Part No. 5-P-1510-4X
- (37) Input Gear Part No. 5-P-1510-9X
- (6) Input Gear Part No. 5-P-1103
- (25) Input Gear Part No. 5-P-1510-16X
- (33) Input Gear Part No. 5-P-1510-5X
- (41) Input Gear Part No. 5-P-581
- (8) Input Gear Part No. 5-P-1135
- (26) Input Gear Part No. 5-P-1510-17X
- (34) Input Gear Part No. 5-P-1510-6X
- (45) Filler block furnished with PTO
- (22) Input Gear Part No. 5-P-1510-13X
- (27) Input Gear Part No. 5-P-1510-18X
- (35) Input Gear Part No. 5-P-1510-7X

FLR-58

EATON FULLER

CHELSEA®

FOM-16D313E-LEP	RTLC-16609E (Convertible 9 to 13 Speed)	RTLO-14918A-AS3
RTAO-10710C-AC	RTLO-12713A	RTLO-14918B
RTAO-10710C-AS	RTLO-13118-AMT	RTLO-14918B-AS
RTAO-12710C-AC	RTLO-14713A	RTLO-16713A
RTAO-12710C-AS	RTLO-14713A-T2	RTLO-16713A-T2
RTAO-14710C-AC	RTLO-14718B	RTLO-16718B
RTAO-14710C-AS	RTLO-14718B-T2	RTLO-16718B-T2
RTAO-16710C-AS	RTLO-14918A-AS2	RTLO-16913A

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 03-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd	Rev					I/C [†]	Rot	Fwd	Rev			

REAR MOUNT - "AU" MOUNTING OPTION

541-LAU-*.*	400 I	Eng	76	Furnished
541-MAU-*.*	350 I	Eng	98	Furnished
541-NAU-*.*	300 I	Eng	112	Furnished

REAR MOUNT - "BD" MOUNTING OPTION

541-LBD-*.*	400 I	Eng	76	Furnished
541-MBD-*.*	350 I	Eng	98	Furnished
541-NBD-*.*	300 I	Eng	112	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

RTO-14915
RTO-16915
RTX-14715
RTX-15715

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.5700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	77	7-A-032(P)(46)	328564X	Furnished	221XCAHX-*3	250 I	Opp	74	7-A-032(46)	Furnished
221ZEAHX-*3	250 I	Opp	89		328564X	Furnished	221XEAHX-*3	250 I	Opp	86		Furnished
489XAAHX-*5 (12)	250 I	Opp	68			Furnished	442XAAHX-*3 (12)	250 I	Opp	65		Furnished
489XCAHX-*5 (13)	250 I	Opp	87			Furnished	442XBAHX-*3 (18)	250 I	Eng	65		Furnished
489XFAXH-*5 (2)	250 I	Opp	108			Furnished	442XCAHX-*3 (13)	250 I	Opp	83		Furnished
489XHAXH-*5 (15)	250 I	Opp	125			Furnished	442XFAHX-*3 (2)	250 I	Opp	103		Furnished
489XLAHX-*5 (1)	222 I	Opp	139			Furnished	442XHAXH-*3 (15)	250 I	Opp	119		Furnished
489XQAHX-*5 (1)	206 I	Opp	150			Furnished	442XLAHX-*3 (1)	233 I	Opp	134		Furnished
489XRAXH-*5 (1)	178 I	Opp	174			Furnished	442XQAHX-*3 (1)	216 I	Opp	144		Furnished
489XSAXH-*5 (1)	150 I	Opp	207			Furnished	442XRAHX-*3 (1)	187 I	Opp	166		Furnished
489XUAXH-*5 (1)	126 I	Opp	247			Furnished	442XSAXH-*3 (1)	156 I	Opp	198		Furnished
489XWAHX-*5 (1)	107 I	Opp	290			Furnished	442XUAHX-*3 (1)	132 I	Opp	236		Furnished
489XXAHX-*5 (1)	91 I	Opp	343			Furnished	442XWAHX-*3 (1)	112 I	Opp	278		Furnished
680XFAHX-*3 (10)	288 I	Opp	108			Furnished	442XXAHX-*3 (1)	94 I	Opp	329		Furnished
680XHAXH-*3 (20)	249 I	Opp	125			Furnished	660XFAHX-*3 (10)	301 I	Opp	103		Furnished
680XQAHX-*3 (11)	206 I	Opp	150			Furnished	660XHAXH-*3 (15)	260 I	Opp	119		Furnished
680XRAXH-*3 (19)	178 I	Opp	174			Furnished	660XQAHX-*3 (11)	216 I	Opp	144		Furnished
680XSAHX-*3 (14)	150 I	Opp	207			Furnished	660XRAHX-*3 (19)	187 I	Opp	166		Furnished
823XBAHX-*3 (40)	423 I	Opp	73			Furnished	660XSAHX-*3 (14)	156 I	Opp	198		Furnished
823XDAHX-*3 (44)	357 I	Opp	87			Furnished						
823XGAHX-*3 (45)	329 I	Opp	94			Furnished						
823XJAHX-*3 (41)	279 I	Opp	111			Furnished						
823XMAHX-*3 (39)	238 I	Opp	130			Furnished						
823XRAXH-*3 (43)	172 I	Opp	180			Furnished						
823XTKTX-*3 (17)	142 I	Opp	218	8-A-165(46)		Furnished						
880XBAHX-*3 (3)	423 I	Opp	73			Furnished						
880XDAHX-*3 (4)	357 I	Opp	87			Furnished						
880XGAHX-*3 (9)	329 I	Opp	94			Furnished						
880XJAHX-*3 (5)	279 I	Opp	111			Furnished						
880XMAHX-*3 (6)	238 I	Opp	130			Furnished						
880XQAHX-*3 (16)	203 I	Opp	153			Furnished						

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1103
- (9) Input Gear Part No. 5-P-1135
- (13) Input Gear Part No. 5-P-1287
- (18) Input Gear Part No. 5-P-1418
- (41) Input Gear Part No. 5-P-325
- (2) Input Gear Part No. 5-P-1077
- (10) Input Gear Part No. 5-P-1242
- (14) Input Gear Part No. 5-P-1322
- (19) Input Gear Part No. 5-P-1441
- (43) Input Gear Part No. 5-P-721
- (3) Input Gear Part No. 5-P-1100
- (11) Input Gear Part No. 5-P-1246
- (15) Input Gear Part No. 5-P-1364
- (20) Input Gear Part No. 5-P-1494
- (44) Input Gear Part No. 5-P-971
- (4) Input Gear Part No. 5-P-1101
- (12) Input Gear Part No. 5-P-1280
- (16) Input Gear Part No. 5-P-1385
- (39) Input Gear Part No. 5-P-283
- (45) Input Gear Part No. 5-P-980
- (5) Input Gear Part No. 5-P-1102
- (17) Input Gear Part No. 5-P-1395
- (40) Input Gear Part No. 5-P-285
- (46) Filler block furnished with PTO

FLR-59

EATON FULLER

CHELSEA®

RTO-14915
RTO-16915
RTX-14715
RTX-15715

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.5700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XRAHX-*3 (7)	172 I	Opp	180	Furnished
880XTAHX-*3 (8)	134 I	Opp	232	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (30)	300 C	Opp	60	328481X	Furnished	272XAAJX-*3 (30)	300 C	Opp	57	Furnished
282XB AJX-*3 (21)	300 C	Opp	73	8-A-032	Furnished	272XB AJX-*3 (31)	300 C	Opp	70	Furnished
282XCAJX-*3 (22)	300 C	Opp	89	8-A-032	Furnished	272XCAJX-*3 (32)	300 C	Opp	85	Furnished
282XDAJX-*3 (23)	293 C	Opp	106	8-A-032	Furnished	272XDAJX-*3 (33)	300 C	Opp	101	Furnished
282XGAJX-*3 (24)	246 C	Opp	126	8-A-032	Furnished	272XGAJX-*3 (34)	257 C	Opp	121	Furnished
282XKAJX-*3 (25)	220 C	Opp	141	8-A-032	Furnished	272XKAJX-*3 (35)	230 C	Opp	135	Furnished
282XMAJX-*3 (26)	197 C	Opp	158	8-A-032	Furnished	272XMAJX-*3 (36)	206 C	Opp	151	Furnished
282XP AJX-*3 (27)	176 C	Opp	176	8-A-032	Furnished	272XP AJX-*3 (37)	184 C	Opp	169	Furnished
282XSAJX-*3 (28)	158 C	Opp	197	8-A-032	Furnished	272XSAJX-*3 (38)	165 C	Opp	189	Furnished
282XTAJX-*3 (29)	141 C	Opp	221	8-A-032	Furnished					

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	423 I	Opp	73	Furnished
885XGAHX-*3 (9)	329 I	Opp	94	Furnished
885XJAHX-*3 (5)	279 I	Opp	111	Furnished
885XMAHX-*3 (6)	238 I	Opp	130	Furnished

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (42)	200 I	Opp	94	99	Furnished	340XFAHX-*5 (42)	200 I	Opp	90	95	7-A-140(46)	Furnished
863XBAHX-*5	423 I	Opp	73	91	Furnished							

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng	8-A-032	Furnished	626XAHX-3AH	250 I	Eng					Furnished
					630XAHX-3AH	250 I	Eng					Furnished
					645XAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (21) Input Gear Part No. 5-P-1510-11X
- (27) Input Gear Part No. 5-P-1510-17X
- (33) Input Gear Part No. 5-P-1510-4X
- (42) Input Gear Part No. 5-P-581
- (5) Input Gear Part No. 5-P-1102
- (22) Input Gear Part No. 5-P-1510-12X
- (28) Input Gear Part No. 5-P-1510-18X
- (34) Input Gear Part No. 5-P-1510-5X
- (46) Filler block furnished with PTO
- (6) Input Gear Part No. 5-P-1103
- (23) Input Gear Part No. 5-P-1510-13X
- (29) Input Gear Part No. 5-P-1510-19X
- (35) Input Gear Part No. 5-P-1510-6X
- (7) Input Gear Part No. 5-P-1104
- (24) Input Gear Part No. 5-P-1510-14X
- (30) Input Gear Part No. 5-P-1510-1X
- (36) Input Gear Part No. 5-P-1510-7X
- (8) Input Gear Part No. 5-P-1105
- (25) Input Gear Part No. 5-P-1510-15X
- (31) Input Gear Part No. 5-P-1510-2X
- (37) Input Gear Part No. 5-P-1510-8X
- (9) Input Gear Part No. 5-P-1135
- (26) Input Gear Part No. 5-P-1510-16X
- (32) Input Gear Part No. 5-P-1510-3X
- (38) Input Gear Part No. 5-P-1510-9X

RTO-14915
RTO-16915
RTX-14715
RTX-15715

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

REAR MOUNT - "BD" MOUNTING OPTION

541-LBD-*-*	400 I	Eng	86	Furnished
541-MBD-*-*	350 I	Eng	111	Furnished
541-NBD-*-*	300 I	Eng	126	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

AT-1202

BOTTOM SIDE ONLY**TOP SIDE ONLY****TRANSMISSION GEAR DATA:**BOT 06-BOLT Opening Gear FORWARD of Centerline
30 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

1.0500" (26.6700MM)

TRANSMISSION GEAR DATA:TOP 08-BOLT Opening Gear FORWARD of Centerline
30 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

0.7750" (19.6900MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221XCABX-*3	250 I	Opp	64	7-A-032	Furnished	221ZCABX-*5	250 I	Opp	64	7-A-032(P)	328564X	Furnished
221XEABX-*3	250 I	Opp	71	7-A-032	Furnished	221ZEABX-*5	250 I	Opp	71	7-A-032(P)	328564X	Furnished
442XAAABX-*3 (4)	250 I	Opp	53	7-A-032	Furnished	489XAAABX-*5 (4)	250 I	Opp	53			Furnished
442XCABX-*3 (5)	250 I	Opp	68	7-A-032	Furnished	489XCABX-*5 (5)	250 I	Opp	68			Furnished
442XFABX-*3 (2)	250 I	Opp	84	7-A-032	Furnished	489XFABX-*5 (2)	250 I	Opp	84			Furnished
442XLABBX-*3 (1)	250 I	Opp	108	7-A-032	Furnished	489XLABBX-*5 (1)	250 I	Opp	108			Furnished
442XQABX-*3 (1)	225 I	Opp	117	7-A-032	Furnished	489XQABX-*5 (1)	225 I	Opp	117			Furnished
442XRABX-*3 (1)	225 I	Opp	135	7-A-032	Furnished	489XRABX-*5 (1)	225 I	Opp	135			Furnished
442XSABX-*3 (1)	200 I	Opp	161	7-A-032	Furnished	489XSABX-*5 (1)	200 I	Opp	161			Furnished
442XUABX-*3 (1)	195 I	Opp	192	7-A-032	Furnished	489XUABX-*5 (1)	195 I	Opp	192			Furnished
442XWABX-*3 (1)	175 I	Opp	225	7-A-032	Furnished	489XWABX-*5 (1)	175 I	Opp	225			Furnished
442XXABX-*3 (1)	140 I	Opp	267	7-A-032	Furnished	489XXABX-*5 (1)	140 I	Opp	267			Furnished
					880XBABX-*5 (3)	500 I	Opp	58				Furnished

ONE SPEED - FORWARD & REVERSE

340SFABX-*5 (6)	200 I	Opp	76	80	7-A-032(P)	310778X	Furnished
348XFABX-*5 (6)	200 I	Opp	76	80	8-A-093		Furnished
863XBABX-*5	500 I	Opp	58	72			Furnished

GEARED ADAPTERS

626XABX-3AB	250 I	Eng	7-A-032	Furnished	628XABX-3AB	250 I	Eng					Furnished
630XABX-3AB	250 I	Eng	7-A-032	Furnished								
645XABX-3AB	250 I	Eng	7-A-032	Furnished								

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1001
- (2) Input Gear Part No. 5-P-1076
- (3) Input Gear Part No. 5-P-1099
- (4) Input Gear Part No. 5-P-1279
- (5) Input Gear Part No. 5-P-1286

- (6) Input Gear Part No. 5-P-579

RT-8608L

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	50	7-A-032(P)(46)	328564X	Furnished	221XCAHX-*3	250 I	Opp	48	7-A-032(46)	Furnished
221ZEAHX-*3	250 I	Opp	58		328564X	Furnished	221XEAHX-*3	250 I	Opp	56		Furnished
489XAAHX-*5 (12)	250 I	Opp	44			Furnished	442XAAHX-*3 (12)	250 I	Opp	42		Furnished
489XCAHX-*5 (13)	250 I	Opp	57			Furnished	442XBAHX-*3 (18)	250 I	Eng	42		Furnished
489XFAHX-*5 (2)	250 I	Opp	70			Furnished	442XCAHX-*3 (13)	250 I	Opp	54		Furnished
489XHAHX-*5 (15)	250 I	Opp	81			Furnished	442XFAHX-*3 (2)	250 I	Opp	67		Furnished
489XLAHX-*5 (1)	222 I	Opp	91			Furnished	442XHAHX-*3 (15)	250 I	Opp	78		Furnished
489XQAHX-*5 (1)	206 I	Opp	98			Furnished	442XLAHX-*3 (1)	233 I	Opp	87		Furnished
489XRAHX-*5 (1)	178 I	Opp	113			Furnished	442XQAHX-*3 (1)	216 I	Opp	94		Furnished
489XSAHX-*5 (1)	150 I	Opp	135			Furnished	442XRAHX-*3 (1)	187 I	Opp	108		Furnished
489XUAHX-*5 (1)	126 I	Opp	161			Furnished	442XSAHX-*3 (1)	156 I	Opp	129		Furnished
489XWAHX-*5 (1)	107 I	Opp	189			Furnished	442XUAHX-*3 (1)	132 I	Opp	154		Furnished
489XXAHX-*5 (1)	91 I	Opp	223			Furnished	442XWAHX-*3 (1)	112 I	Opp	181		Furnished
680XFAHX-*3 (10)	288 I	Opp	70			Furnished	442XXAHX-*3 (1)	94 I	Opp	214		Furnished
680XHAHX-*3 (20)	375 I	Opp	81			Furnished	660XFAHX-*3 (10)	301 I	Opp	67		Furnished
680XQAHX-*3 (11)	206 I	Opp	98			Furnished	660XHAHX-*3 (15)	260 I	Opp	78		Furnished
680XRAXH-*3 (19)	178 I	Opp	113			Furnished	660XQAHX-*3 (11)	216 I	Opp	94		Furnished
680XSAHX-*3 (14)	150 I	Opp	135			Furnished	660XRAXH-*3 (19)	187 I	Opp	108		Furnished
823XBAHX-*3 (40)	423 I	Opp	48			Furnished	660XSAHX-*3 (14)	156 I	Opp	129		Furnished
823XDAHX-*3 (45)	357 I	Opp	57			Furnished						
823XGAHX-*3 (43)	329 I	Opp	61			Furnished						
823XJAHX-*3 (41)	279 I	Opp	72			Furnished						
823XMAHX-*3 (39)	238 I	Opp	85			Furnished						
823XRAXH-*3 (44)	172 I	Opp	117			Furnished						
823XTKTX-*3 (17)	142 I	Opp	142	8-A-165(46)		Furnished						
880XBAHX-*3 (3)	423 I	Opp	48			Furnished						
880XDAHX-*3 (4)	357 I	Opp	57			Furnished						
880XGAHX-*3 (9)	329 I	Opp	61			Furnished						
880XJAHX-*3 (5)	279 I	Opp	72			Furnished						
880XMAHX-*3 (6)	238 I	Opp	85			Furnished						
880XQAHX-*3 (16)	203 I	Opp	99			Furnished						

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1103
- (9) Input Gear Part No. 5-P-1135
- (13) Input Gear Part No. 5-P-1287
- (18) Input Gear Part No. 5-P-1418
- (41) Input Gear Part No. 5-P-325
- (2) Input Gear Part No. 5-P-1077
- (10) Input Gear Part No. 5-P-1242
- (14) Input Gear Part No. 5-P-1322
- (19) Input Gear Part No. 5-P-1441
- (43) Input Gear Part No. 5-P-590
- (3) Input Gear Part No. 5-P-1100
- (11) Input Gear Part No. 5-P-1246
- (15) Input Gear Part No. 5-P-1364
- (20) Input Gear Part No. 5-P-1494
- (44) Input Gear Part No. 5-P-721
- (4) Input Gear Part No. 5-P-1101
- (12) Input Gear Part No. 5-P-1280
- (16) Input Gear Part No. 5-P-1385
- (39) Input Gear Part No. 5-P-283
- (45) Input Gear Part No. 5-P-971
- (5) Input Gear Part No. 5-P-1102
- (17) Input Gear Part No. 5-P-1395
- (40) Input Gear Part No. 5-P-285
- (46) Filler block furnished with PTO

FLR-64

EATON FULLER

CHELSEA®

RT-8608L

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XRAHX-*3 (7)	172 I	Opp	117	Furnished
880XTAHX-*3 (8)	134 I	Opp	151	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (30)	300 C	Opp	39	328481X	Furnished	272XAAJX-*3 (30)	300 C	Opp	37	Furnished
282XB AJX-*3 (21)	300 C	Opp	48	8-A-032	Furnished	272XB AJX-*3 (31)	300 C	Opp	46	Furnished
282XCAJX-*3 (22)	300 C	Opp	58	8-A-032	Furnished	272XCAJX-*3 (32)	300 C	Opp	55	Furnished
282XDAJX-*3 (23)	293 C	Opp	69	8-A-032	Furnished	272XDAJX-*3 (33)	300 C	Opp	65	Furnished
282XGAJX-*3 (24)	246 C	Opp	82	8-A-032	Furnished	272XGAJX-*3 (34)	257 C	Opp	78	Furnished
282XKAJX-*3 (25)	220 C	Opp	92	8-A-032	Furnished	272XKAJX-*3 (35)	230 C	Opp	88	Furnished
282XMAJX-*3 (26)	197 C	Opp	102	8-A-032	Furnished	272XMAJX-*3 (36)	206 C	Opp	98	Furnished
282XPAJX-*3 (27)	176 C	Opp	114	8-A-032	Furnished	272XPAJX-*3 (37)	184 C	Opp	109	Furnished
282XS AJX-*3 (28)	158 C	Opp	128	8-A-032	Furnished	272XS AJX-*3 (38)	165 C	Opp	122	Furnished
282XTAJX-*3 (29)	141 C	Opp	143	8-A-032	Furnished					

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	423 I	Opp	48	Furnished
885XGAHX-*3 (9)	329 I	Opp	61	Furnished
885XJAHX-*3 (5)	279 I	Opp	72	Furnished
885XMAHX-*3 (6)	238 I	Opp	85	Furnished

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (42)	200 I	Opp	61	64	Furnished	340XFAHX-*5 (42)	200 I	Opp	59	62	7-A-140(46)	Furnished
863XBAHX-*5	423 I	Opp	48	59	Furnished							

GEARED ADAPTERS

628XAHH-3AH	250 I	Eng	8-A-032	Furnished	626XAHH-3AH	250 I	Eng					Furnished
					630XAHH-3AH	250 I	Eng					Furnished
					645XAHH-3AH	250 I	Eng					Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

**IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.****CAUTION:** Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (21) Input Gear Part No. 5-P-1510-11X
- (27) Input Gear Part No. 5-P-1510-17X
- (33) Input Gear Part No. 5-P-1510-4X
- (42) Input Gear Part No. 5-P-581
- (5) Input Gear Part No. 5-P-1102
- (22) Input Gear Part No. 5-P-1510-12X
- (28) Input Gear Part No. 5-P-1510-18X
- (34) Input Gear Part No. 5-P-1510-5X
- (46) Filler block furnished with PTO
- (6) Input Gear Part No. 5-P-1103
- (23) Input Gear Part No. 5-P-1510-13X
- (29) Input Gear Part No. 5-P-1510-19X
- (35) Input Gear Part No. 5-P-1510-6X
- (7) Input Gear Part No. 5-P-1104
- (24) Input Gear Part No. 5-P-1510-14X
- (30) Input Gear Part No. 5-P-1510-1X
- (36) Input Gear Part No. 5-P-1510-7X
- (8) Input Gear Part No. 5-P-1105
- (25) Input Gear Part No. 5-P-1510-15X
- (31) Input Gear Part No. 5-P-1510-2X
- (37) Input Gear Part No. 5-P-1510-8X
- (9) Input Gear Part No. 5-P-1135
- (26) Input Gear Part No. 5-P-1510-16X
- (32) Input Gear Part No. 5-P-1510-3X
- (38) Input Gear Part No. 5-P-1510-9X

RT-6609A
RT-7608LL
RT-8609**BOTTOM SIDE ONLY****RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**BOT 08-BOLT Opening Gear FORWARD of Centerline
33 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

0.8100" (20.5700MM)

TRANSMISSION GEAR DATA:BOT 08-BOLT Opening Gear FORWARD of Centerline
33 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

1.0900" (27.6900MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221XCAHX-*3	250 I	Opp	44	7-A-032(P)(46)	328481X	Furnished	221XCAHX-*3	250 I	Opp	44	7-A-032(46)	Furnished
221XEAHX-*3	250 I	Opp	51	7-A-032(P)	328481X	Furnished	221XEAHX-*3	250 I	Opp	51		Furnished
489XAAHX-*5 (12)	250 I	Opp	39			Furnished	442XAAHX-*3 (12)	250 I	Opp	39		Furnished
489XCAHX-*5 (13)	250 I	Opp	50			Furnished	442XBAHX-*3 (18)	250 I	Eng	39		Furnished
489XFAXH-*5 (2)	250 I	Opp	61			Furnished	442XCAHX-*3 (13)	250 I	Opp	50		Furnished
489XHAXH-*5 (15)	250 I	Opp	71			Furnished	442XFAHX-*3 (2)	250 I	Opp	61		Furnished
489XLAHX-*5 (1)	250 I	Opp	79			Furnished	442XHAXH-*3 (15)	250 I	Opp	71		Furnished
489XQAHX-*5 (1)	225 I	Opp	85			Furnished	442XLAHX-*3 (1)	250 I	Opp	79		Furnished
489XRAXH-*5 (1)	225 I	Opp	99			Furnished	442XQAHX-*3 (1)	225 I	Opp	85		Furnished
489XSAHX-*5 (1)	200 I	Opp	118			Furnished	442XRAHX-*3 (1)	225 I	Opp	99		Furnished
489XUAHX-*5 (1)	195 I	Opp	140			Furnished	442XSAHX-*3 (1)	200 I	Opp	118		Furnished
489XWAHX-*5 (1)	175 I	Opp	165			Furnished	442XUAHX-*3 (1)	195 I	Opp	140		Furnished
489XXAHX-*5 (1)	140 I	Opp	195			Furnished	442XWAHX-*3 (1)	175 I	Opp	165		Furnished
680XFAHX-*3 (10)	375 I	Opp	61			Furnished	442XXAHX-*3 (1)	140 I	Opp	195		Furnished
680XHAXH-*3 (20)	375 I	Opp	71			Furnished	660XFAHX-*3 (10)	375 I	Opp	61		Furnished
680XQAHX-*3 (11)	375 I	Opp	85			Furnished	660XHAXH-*3 (15)	375 I	Opp	71		Furnished
680XRAHX-*3 (19)	350 I	Opp	99			Furnished	660XQAHX-*3 (11)	375 I	Opp	85		Furnished
680XSAHX-*3 (14)	325 I	Opp	118			Furnished	660XRAHX-*3 (19)	350 I	Opp	99		Furnished
823XBAHX-*3 (40)	500 I	Opp	42			Furnished	660XSAHX-*3 (14)	325 I	Opp	118		Furnished
823XDAHX-*3 (44)	500 I	Opp	50			Furnished						
823XGAHX-*3 (45)	500 I	Opp	54			Furnished						
823XJAHX-*3 (41)	500 I	Opp	63			Furnished						
823XMAHX-*3 (39)	500 I	Opp	74			Furnished						
823XRAXH-*3 (43)	400 I	Opp	103			Furnished						
823XTKTX-*3 (17)	500 I	Opp	124			Furnished						
880XBAHX-*3 (3)	500 I	Opp	42			Furnished						
880XDAHX-*3 (4)	500 I	Opp	49			Furnished						
880XGAHX-*3 (9)	500 I	Opp	54			Furnished						
880XJAHX-*3 (5)	500 I	Opp	63			Furnished						
880XMAHX-*3 (6)	500 I	Opp	74			Furnished						
880XQAHX-*3 (16)	450 I	Opp	87			Furnished						

8-A-165(46)

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(39) Input Gear Part No. 5-P-283
(40) Input Gear Part No. 5-P-285(41) Input Gear Part No. 5-P-325
(43) Input Gear Part No. 5-P-721
(44) Input Gear Part No. 5-P-971
(45) Input Gear Part No. 5-P-980
(46) Filler block furnished with PTO

FLR-66

EATON FULLER

CHELSEA®

RT-6609A
RT-7608LL
RT-8609

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8100" (20.5700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0900" (27.6900MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XRAHX-*3 (7)	400 I	Opp	103	Furnished
880XTAHX-*3 (8)	500 I	Opp	132	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (30)	300 C	Opp	34	328481X	Furnished	272XAAJX-*3 (30)	300 C	Opp	34	Furnished
282XBAJX-*3 (21)	300 C	Opp	42	8-A-032	Furnished	272XBAJX-*3 (31)	300 C	Opp	42	Furnished
282XCAJX-*3 (22)	300 C	Opp	51	8-A-032	Furnished	272XCAJX-*3 (32)	300 C	Opp	51	Furnished
282XDAJX-*3 (23)	293 C	Opp	60	8-A-032	Furnished	272XDAJX-*3 (33)	293 C	Opp	60	Furnished
282XGAJX-*3 (24)	246 C	Opp	72	8-A-032	Furnished	272XGAJX-*3 (34)	246 C	Opp	72	Furnished
282XKAJX-*3 (25)	220 C	Opp	80	8-A-032	Furnished	272XKAJX-*3 (35)	220 C	Opp	80	Furnished
282XMAJX-*3 (26)	197 C	Opp	90	8-A-032	Furnished	272XMAJX-*3 (36)	197 C	Opp	90	Furnished
282XP AJX-*3 (27)	176 C	Opp	100	8-A-032	Furnished	272XP AJX-*3 (37)	176 C	Opp	100	Furnished
282XSAJX-*3 (28)	158 C	Opp	112	8-A-032	Furnished	272XSAJX-*3 (38)	158 C	Opp	112	Furnished
282XTAJX-*3 (29)	141 C	Opp	126	8-A-032	Furnished					

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MCAJX-*3 (32) 300 C Opp 51 Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	42	Furnished
885XGAHX-*3 (9)	500 I	Opp	54	Furnished
885XJAHX-*3 (5)	500 I	Opp	63	Furnished
885XMAHX-*3 (6)	500 I	Opp	74	Furnished

ONE SPEED - FORWARD & REVERSE

348ZFAHX-* (42)	200 I	Opp	54	56	8-A-032(46)	Furnished	340XFAHX-*5 (42)	200 I	Opp	54	56	7-A-140(46)	Furnished
863XBAHX-*5	500 I	Opp	42	52		Furnished							

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng	8-A-032	Furnished	626XAHX-3AH	250 I	Eng	Furnished
					630XAHX-3AH	250 I	Eng	Furnished
					645XAHX-3AH	250 I	Eng	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (21) Input Gear Part No. 5-P-1510-11X
- (27) Input Gear Part No. 5-P-1510-17X
- (33) Input Gear Part No. 5-P-1510-4X
- (42) Input Gear Part No. 5-P-581
- (5) Input Gear Part No. 5-P-1102
- (22) Input Gear Part No. 5-P-1510-12X
- (28) Input Gear Part No. 5-P-1510-18X
- (34) Input Gear Part No. 5-P-1510-5X
- (46) Filler block furnished with PTO
- (6) Input Gear Part No. 5-P-1103
- (23) Input Gear Part No. 5-P-1510-13X
- (29) Input Gear Part No. 5-P-1510-19X
- (35) Input Gear Part No. 5-P-1510-6X
- (7) Input Gear Part No. 5-P-1104
- (24) Input Gear Part No. 5-P-1510-14X
- (30) Input Gear Part No. 5-P-1510-1X
- (36) Input Gear Part No. 5-P-1510-7X
- (8) Input Gear Part No. 5-P-1105
- (25) Input Gear Part No. 5-P-1510-15X
- (31) Input Gear Part No. 5-P-1510-2X
- (37) Input Gear Part No. 5-P-1510-8X
- (9) Input Gear Part No. 5-P-1135
- (26) Input Gear Part No. 5-P-1510-16X
- (32) Input Gear Part No. 5-P-1510-3X
- (38) Input Gear Part No. 5-P-1510-9X

FS-6106A
FS-7206A
FS-8206A
FS-8406A

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
50 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.1800" (29.9720MM)

TRANSMISSION GEAR DATA:

R.S. 08-BOLT Opening Gear FORWARD of Centerline
50 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

0.9100" (23.1140MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442XFDUX-*5 (2)	250 I	Opp	46	Furnished	489XFDUX-*3 (2)	250 I	Opp	46	Furnished	489XLDUX-*3 (1)	250 I	Opp	60
442XLdux-*5 (1)	250 I	Opp	60	Furnished	489XLDUX-*3 (1)	250 I	Opp	60	Furnished	489XQDUX-*3 (1)	225 I	Opp	64
442XQDUX-*5 (1)	225 I	Opp	64	Furnished	489XQDUX-*3 (1)	225 I	Opp	64	Furnished	489XRdux-*3 (1)	225 I	Opp	74
442XRdux-*5 (1)	225 I	Opp	74	Furnished	489XRdux-*3 (1)	225 I	Opp	74	Furnished	489XSDUX-*3 (1)	200 I	Opp	89
442XSDUX-*5 (1)	200 I	Opp	89	Furnished	489XSDUX-*3 (1)	200 I	Opp	89	Furnished	489XUDUX-*3 (1)	195 I	Opp	106
442XUDUX-*5 (1)	195 I	Opp	106	Furnished	489XUDUX-*3 (1)	195 I	Opp	106	Furnished	489XWDUX-*3 (1)	175 I	Opp	124
442XWDUX-*5 (1)	175 I	Opp	124	Furnished	489XWDUX-*3 (1)	175 I	Opp	124	Furnished	489XXDUX-*3 (1)	140 I	Opp	147
442XXDUX-*5 (1)	140 I	Opp	147	Furnished	489XXDUX-*3 (1)	140 I	Opp	147	Furnished	880XMDUX-*3 (3)	500 I	Opp	58
					880XMDUX-*3 (3)	500 I	Opp	58	Furnished	880XRdux-*3 (5)	400 I	Opp	81
					880XRdux-*3 (5)	400 I	Opp	81	Furnished	880XTDUX-*3 (4)	350 I	Opp	108
					880XTDUX-*3 (4)	350 I	Opp	108	Furnished				

ONE SPEED - FORWARD & REVERSE

340XFDUX-*5 (6)	200 I	Opp	42	44	7-A-140(7)	Furnished	340XFDUX-*3 (6)	200 I	Opp	42	44	7-A-140(7)	328481X	Furnished
-----------------	-------	-----	----	----	------------	-----------	-----------------	-------	-----	----	----	------------	---------	-----------

GEARED ADAPTERS

626XDUK-4HH	250 I	Eng	Furnished	628XDUK-3HH	250 I	Eng	Furnished
630XDUK-4HH	250 I	Eng	Furnished				
645XDUK-4HH	250 I	Eng	Furnished				

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1050
- (6) Input Gear Part No. 5-P-883
- (2) Input Gear Part No. 5-P-1088
- (7) Filler block furnished with PTO
- (3) Input Gear Part No. 5-P-1130
- (4) Input Gear Part No. 5-P-1131
- (5) Input Gear Part No. 5-P-1176

FS-5306A
FS-5406A
FS-6206A
FS-6306A
FS-6406A
FS-6206
FS-6306
FS-6406

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
38 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.0850" (27.5590MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
38 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.0850" (27.5590MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442XAESX-*5 (3)	250 I	Opp	32	7-A-062	Furnished	442XAESX-*3 (3)	250 I	Opp	32	7-A-062	Furnished
442XCESX-*5 (4)	250 I	Opp	41	7-A-062	Furnished	442XCESX-*3 (4)	250 I	Opp	41	7-A-062	Furnished
442XFESX-*5 (2)	250 I	Opp	51	7-A-062	Furnished	442XFESX-*3 (2)	250 I	Opp	51	7-A-062	Furnished
442XLESX-*5 (1)	250 I	Opp	66	7-A-062	Furnished	442XLESX-*3 (1)	250 I	Opp	66	7-A-062	Furnished
442XQESX-*5 (1)	225 I	Opp	71	7-A-062	Furnished	442XQESX-*3 (1)	225 I	Opp	71	7-A-062	Furnished
442XRESX-*5 (1)	225 I	Opp	82	7-A-062	Furnished	442XRESX-*3 (1)	225 I	Opp	82	7-A-062	Furnished
442XSESX-*5 (1)	200 I	Opp	98	7-A-062	Furnished	442XSESX-*3 (1)	200 I	Opp	98	7-A-062	Furnished
442XUESX-*5 (1)	195 I	Opp	117	7-A-062	Furnished	442XUESX-*3 (1)	195 I	Opp	117	7-A-062	Furnished
442XWESX-*5 (1)	175 I	Opp	138	7-A-062	Furnished	442XWESX-*3 (1)	175 I	Opp	138	7-A-062	Furnished
442XXESX-*5 (1)	140 I	Opp	163	7-A-062	Furnished	442XXESX-*3 (1)	140 I	Opp	163	7-A-062	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAESX-*5 (5)	300 C	Opp	31	Furnished	272XAESX-*3 (5)	300 C	Opp	31	Furnished
272XBESX-*5 (6)	300 C	Opp	38	Furnished	272XBESX-*3 (6)	300 C	Opp	38	Furnished
272XCESX-*5 (7)	300 C	Opp	46	Furnished	272XCESX-*3 (7)	300 C	Opp	46	Furnished
272XDESX-*5 (8)	300 C	Opp	55	Furnished	272XDESX-*3 (8)	300 C	Opp	55	Furnished
272XGESX-*5 (9)	300 C	Opp	65	Furnished	272XGESX-*3 (9)	300 C	Opp	65	Furnished
272XKESX-*5 (10)	300 C	Opp	73	Furnished	272XKESX-*3 (10)	300 C	Opp	73	Furnished
272XMESX-*5 (11)	300 C	Opp	82	Furnished	272XMESX-*3 (11)	300 C	Opp	82	Furnished
272XPESX-*5 (12)	286 C	Opp	91	Furnished	272XPESX-*3 (12)	286 C	Opp	91	Furnished
272XSESX-*5 (13)	256 C	Opp	102	Furnished	272XSESX-*3 (13)	256 C	Opp	102	Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MAESX-*5 (5)	300 C	Opp	31	Furnished	272MAESX-*3 (5)	300 C	Opp	31	Furnished
272MBESX-*5 (6)	300 C	Opp	38	Furnished	272MBESX-*3 (6)	300 C	Opp	38	Furnished
272MCESX-*5 (7)	300 C	Opp	46	Furnished	272MCESX-*3 (7)	300 C	Opp	46	Furnished
272MDESX-*5 (8)	300 C	Opp	55	Furnished	272MDESX-*3 (8)	300 C	Opp	55	Furnished
272MGESX-*5 (9)	300 C	Opp	65	Furnished	272MGESX-*3 (9)	300 C	Opp	65	Furnished
272MKESX-*5 (10)	300 C	Opp	73	Furnished	272MKESX-*3 (10)	300 C	Opp	73	Furnished
272MMESX-*5 (11)	300 C	Opp	82	Furnished	272MMESX-*3 (11)	300 C	Opp	82	Furnished
272MPESX-*5 (12)	286 C	Opp	91	Furnished	272MPESX-*3 (12)	286 C	Opp	91	Furnished
272MSESX-*5 (13)	256 C	Opp	102	Furnished	272MSESX-*3 (13)	256 C	Opp	102	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1059
- (6) Input Gear Part No. 5-P-1512-2X
- (11) Input Gear Part No. 5-P-1512-7X
- (2) Input Gear Part No. 5-P-1092
- (7) Input Gear Part No. 5-P-1512-3X
- (12) Input Gear Part No. 5-P-1512-8X
- (3) Input Gear Part No. 5-P-1285
- (8) Input Gear Part No. 5-P-1512-4X
- (13) Input Gear Part No. 5-P-1512-9X
- (4) Input Gear Part No. 5-P-1292
- (9) Input Gear Part No. 5-P-1512-5X
- (5) Input Gear Part No. 5-P-1512-1X
- (10) Input Gear Part No. 5-P-1512-6X

FS-5306A
FS-5406A
FS-6206A
FS-6306A
FS-6406A
FS-6206
FS-6306
FS-6406

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
38 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.0850" (27.5590MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
38 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.0850" (27.5590MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd	Rev					I / C ↑	Rot	Fwd	Rev			

ONE SPEED - FORWARD & REVERSE

340XFESX-*5 (14)	200 I	Opp	47	49	7-A-140(15) 7-A-093		328170-76X	340XFESX-*5 (14)	200 I	Opp	47	49	7-A-140(15) 7-A-093		328170-76X
352XSESX-*5 (1)	140 I	Opp	99	129	7-A-062	Furnished	352XSESX-*3 (1)	140 I	Opp	99	129	7-A-062		Furnished	

GEARED ADAPTERS

626XESX-4HL	250 I	Eng	7-A-062	Furnished	626XESX-3HL	250 I	Eng	7-A-062	Furnished
630XESX-4HL	250 I	Eng	7-A-062	Furnished	630XESX-3HL	250 I	Eng	7-A-062	Furnished
645XESX-4HL	250 I	Eng	7-A-062	Furnished	645XESX-3HL	250 I	Eng	7-A-062	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1059
(14) Input Gear Part No. 5-P-884
(15) Filler block furnished with PTO

FLR-68

EATON FULLER

CHELSEA®

FS-5306A
FS-5406A
FS-6206A
FS-6306A
FS-6406A
FS-6206
FS-6306
FS-6406

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd Rev					I/C [†]	Rot	Fwd Rev			

REAR MOUNT - MECHANICAL SHIFT (6 SPEED TRANSMISSIONS)

511XRALW-* * 590 C Opp 52 Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

FS-6205A
FS-6305A

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.0000" (25.4000MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.0000" (25.4000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442KAESX-*5 (3)	250 I	Opp	30	7-A-165	7170-3X	442KAESX-*3 (3)	250 I	Opp	30	7-A-165	7170-3X
442KCESX-*5 (4)	250 I	Opp	39	7-A-165	7170-3X	442KCESX-*3 (4)	250 I	Opp	39	7-A-165	7170-3X
442KFESX-*5 (2)	250 I	Opp	48	7-A-165	7170-3X	442KFESX-*3 (2)	250 I	Opp	48	7-A-165	7170-3X
442KLESX-*5 (1)	250 I	Opp	62	7-A-165	7170-3X	442KLESX-*3 (1)	250 I	Opp	62	7-A-165	7170-3X
442KQESX-*5 (1)	225 I	Opp	67	7-A-165	7170-3X	442KQESX-*3 (1)	225 I	Opp	67	7-A-165	7170-3X
447KQESX-*5 (10)	225 I	Opp	67	7-A-165	7170-3X	447KQESX-*3 (10)	225 I	Opp	67	7-A-165	7170-3X
447KSESX-*5 (11)	200 I	Opp	93	7-A-165	7170-3X	447KSESX-*3 (11)	200 I	Opp	93	7-A-165	7170-3X
447KUESX-*5 (12)	195 I	Opp	110	7-A-165	7170-3X	447KUESX-*3 (12)	195 I	Opp	110	7-A-165	7170-3X
447KWESX-*5 (13)	175 I	Opp	130	7-A-165	7170-3X	447KWESX-*3 (13)	175 I	Opp	130	7-A-165	7170-3X

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAESX-*5 (5)	300 C	Opp	29	7-A-062	Furnished	272XAESX-*3 (5)	300 C	Opp	29	7-A-062	Furnished
272XBESX-*5 (6)	300 C	Opp	36	7-A-062	Furnished	272XBESX-*3 (6)	300 C	Opp	36	7-A-062	Furnished
272XCESX-*5 (7)	300 C	Opp	43	7-A-062	Furnished	272XCESX-*3 (7)	300 C	Opp	43	7-A-062	Furnished
272XDESX-*5 (8)	300 C	Opp	52	7-A-062	Furnished	272XDESX-*3 (8)	300 C	Opp	52	7-A-062	Furnished
272XGESX-*5 (9)	300 C	Opp	61	7-A-062	Furnished	272XGESX-*3 (9)	300 C	Opp	61	7-A-062	Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MAESX-*5 (5)	300 C	Opp	29	7-A-062	Furnished	272MAESX-*3 (5)	300 C	Opp	29	7-A-062	Furnished
272MBESX-*5 (6)	300 C	Opp	36	7-A-062	Furnished	272MBESX-*3 (6)	300 C	Opp	36	7-A-062	Furnished
272MCESX-*5 (7)	300 C	Opp	43	7-A-062	Furnished	272MCESX-*3 (7)	300 C	Opp	43	7-A-062	Furnished
272MDESX-*5 (8)	300 C	Opp	52	7-A-062	Furnished	272MDESX-*3 (8)	300 C	Opp	52	7-A-062	Furnished
272MGESX-*5 (9)	300 C	Opp	61	7-A-062	Furnished	272MGESX-*3 (9)	300 C	Opp	61	7-A-062	Furnished

ONE SPEED - FORWARD & REVERSE

340XFESX-*5 (14)	200 I	Opp	44	46	7-A-140(15) 7-A-200	328170-76X	340XFESX-*5 (14)	200 I	Opp	44	46	7-A-140(15) 7-A-200	328170-76X
------------------	-------	-----	----	----	------------------------	------------	------------------	-------	-----	----	----	------------------------	------------

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1059
- (6) Input Gear Part No. 5-P-1512-2X
- (11) Input Gear Part No. 5-P-870
- (2) Input Gear Part No. 5-P-1092
- (7) Input Gear Part No. 5-P-1512-3X
- (12) Input Gear Part No. 5-P-871
- (3) Input Gear Part No. 5-P-1285
- (8) Input Gear Part No. 5-P-1512-4X
- (13) Input Gear Part No. 5-P-872
- (4) Input Gear Part No. 5-P-1292
- (9) Input Gear Part No. 5-P-1512-5X
- (14) Input Gear Part No. 5-P-884
- (5) Input Gear Part No. 5-P-1512-1X
- (10) Input Gear Part No. 5-P-869
- (15) Filler block furnished with PTO

FLR-70

EATON FULLER

CHELSEA®

FS-6205B
FS-6305B

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:L.S. 06-BOLT Opening Gear FORWARD of Centerline
41 Teeth - R.H. HELIX**PITCH LINE TO APERTURE FACE:**

0.8860" (22.5044MM)

TRANSMISSION GEAR DATA:R.S. 06-BOLT Opening Gear FORWARD of Centerline
41 Teeth - R.H. HELIX**PITCH LINE TO APERTURE FACE:**

0.8660" (22.5044MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd	Rev					I/C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

447XQETX-*5 (1)	200 I	Opp	82	Furnished	447XQETX-*3 (1)	200 I	Opp	82	Furnished
447XSETX-*5 (2)	200 I	Opp	113	Furnished	447XSETX-*3 (2)	200 I	Opp	113	Furnished
447XUETX-*5 (3)	195 I	Opp	134	Furnished	447XUETX-*3 (3)	195 I	Opp	134	Furnished
447XWETX-*5 (4)	175 I	Opp	158	Furnished	447XWETX-*3 (4)	175 I	Opp	158	Furnished

ONE SPEED - FORWARD & REVERSE

340XFETX-*5 (5)	200 I	Opp	44	46	7-A-140(6) 7-A-300	7170-3X	340XFETX-*5 (5)	200 I	Opp	44	46	7-A-140(6) 7-A-300	7170-3X
-----------------	-------	-----	----	----	-----------------------	---------	-----------------	-------	-----	----	----	-----------------------	---------

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-865
- (2) Input Gear Part No. 5-P-866
- (3) Input Gear Part No. 5-P-867
- (4) Input Gear Part No. 5-P-868
- (5) Input Gear Part No. 5-P-948

- (6) Filler block furnished with PTO

T-14607A
T-14607B

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:L.S. 08-BOLT Opening Gear FORWARD of Centerline
78 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

0.8650" (21.9710MM)

TRANSMISSION GEAR DATA:R.S. 06-BOLT Opening Gear FORWARD of Centerline
78 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

0.9740" (24.7400MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			
ONE SPEED - TWO GEAR - MECHANICAL SHIFT													
489XFEVX-*5 (2)	250 I	Opp	57	8-A-062	Furnished		442KFEVX-*5 (2)	250 I	Opp	57	7-A-187		7170-3X
489XLEVX-*5 (1)	250 I	Opp	73	8-A-062	Furnished		442KLEVX-*5 (1)	250 I	Opp	73	7-A-187		7170-3X
489XQEVX-*5 (1)	225 I	Opp	79	8-A-062	Furnished		442KQEVX-*5 (1)	225 I	Opp	79	7-A-187		7170-3X
489XREVX-*5 (1)	225 I	Opp	92	8-A-062	Furnished		442KREVX-*5 (1)	225 I	Opp	92	7-A-187		7170-3X
489XSEVX-*5 (1)	200 I	Opp	109	8-A-062	Furnished		442KSEVX-*5 (1)	200 I	Opp	109	7-A-187		7170-3X
489XUEVX-*5 (1)	195 I	Opp	130	8-A-062	Furnished		442KUEVX-*5 (1)	195 I	Opp	130	7-A-187		7170-3X
489XWEVX-*5 (1)	175 I	Opp	153	8-A-062	Furnished		442KWEVX-*5 (1)	175 I	Opp	153	7-A-187		7170-3X
489XXEVX-*5 (1)	140 I	Opp	181	8-A-062	Furnished		442KXEVX-*5 (1)	140 I	Opp	181	7-A-187		7170-3X

GEARED ADAPTERS

628XEVX-4EV	250 I	Eng	8-A-062	Furnished	626KEVX-3EV	250 I	Eng		7-A-187		7170-3X
					630KEVX-3EV	250 I	Eng		7-A-187		7170-3X
					645KEVX-3EV	250 I	Eng		7-A-187		7170-3X

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1060
(2) Input Gear Part No. 5-P-1094

TX-14607B

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA:	TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear REAR of Centerline 78 Teeth - SPUR	R.S. 06-BOLT Opening Gear REAR of Centerline 78 Teeth - SPUR
PITCH LINE TO APERTURE FACE:	PITCH LINE TO APERTURE FACE:
0.8650" (21.9710MM)	0.9740" (24.7400MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	
	I / C †							Fwd						
ONE SPEED - TWO GEAR - MECHANICAL SHIFT														
489XFEVX-*4 (2)	250 I	Opp	76	8-A-032	Furnished	442KFEVX-*4 (2)	250 I	Opp	76	7-A-187	7170-3X			
489XLEVX-*4 (1)	250 I	Opp	98	8-A-032	Furnished	442KLEVX-*4 (1)	250 I	Opp	98	7-A-187	7170-3X			
489XQEVX-*4 (1)	225 I	Opp	106	8-A-032	Furnished	442KQEVX-*4 (1)	225 I	Opp	106	7-A-187	7170-3X			
489XREVX-*4 (1)	225 I	Opp	122	8-A-032	Furnished	442KREVX-*4 (1)	225 I	Opp	122	7-A-187	7170-3X			
						447KQEVX-*4 (3)	225 I	Opp	106	7-A-187	7171-3X			
						447KREVX-*4 (7)	225 I	Opp	122	7-A-187	7170-3X			
						447KSEVX-*4 (4)	200 I	Opp	146	7-A-187	7170-3X			
						447KUEVX-*4 (5)	195 I	Opp	174	7-A-187	7170-3X			
						447KWEVX-*4 (6)	175 I	Opp	204	7-A-187	7170-3X			
GEARED ADAPTERS														
628XEVX-3EV	250 I	Eng		8-A-062	Furnished	626KEVX-4EV	250 I	Eng		7-A-187	7170-3X			
						630KEVX-4EV	250 I	Eng		7-A-187	7170-3X			
						645KEVX-4EV	250 I	Eng		7-A-187	7170-3X			

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1060
- (2) Input Gear Part No. 5-P-1094
- (3) Input Gear Part No. 5-P-1205
- (4) Input Gear Part No. 5-P-1206
- (5) Input Gear Part No. 5-P-1207

- (6) Input Gear Part No. 5-P-1208
- (7) Input Gear Part No. 5-P-1219

FS-4205A

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
28 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.1469" (29.1313MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
28 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.1469" (29.1313MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442XFEWX-*5 (2)	250 I	Opp	36	Furnished	442XFEWX-*3 (2)	250 I	Opp	36	Furnished	442XLEWX-*5 (1)	250 I	Opp	47
442XLEWX-*5 (1)	250 I	Opp	47	Furnished	442XLEWX-*3 (1)	250 I	Opp	47	Furnished	442XGEWX-*5 (1)	225 I	Opp	51
442XGEWX-*5 (1)	225 I	Opp	51	Furnished	442XGEWX-*3 (1)	225 I	Opp	51	Furnished	442XREWX-*5 (1)	225 I	Opp	59
442XREWX-*5 (1)	225 I	Opp	59	Furnished	442XREWX-*3 (1)	225 I	Opp	59	Furnished	442XSEWX-*5 (1)	200 I	Opp	70
442XSEWX-*5 (1)	200 I	Opp	70	Furnished	442XSEWX-*3 (1)	200 I	Opp	70	Furnished	442XUEWX-*5 (1)	195 I	Opp	84
442XUEWX-*5 (1)	195 I	Opp	84	Furnished	442XUEWX-*3 (1)	195 I	Opp	84	Furnished	442XWEWX-*5 (1)	175 I	Opp	98
442XWEWX-*5 (1)	175 I	Opp	98	Furnished	442XWEWX-*3 (1)	175 I	Opp	98	Furnished	442XXEWX-*5 (1)	140 I	Opp	116
442XXEWX-*5 (1)	140 I	Opp	116	Furnished	442XXEWX-*3 (1)	140 I	Opp	116	Furnished				

ONE SPEED - FORWARD & REVERSE

340XFEWX-*5 (3)	200 I	Opp	33	35	7-A-140(4)	Furnished	340XFEWX-*5 (3)	200 I	Opp	33	35	7-A-140(4)	Furnished
-----------------	-------	-----	----	----	------------	-----------	-----------------	-------	-----	----	----	------------	-----------

GEARED ADAPTERS

626XEWX-4HM	250 I	Eng	Furnished	626XEWX-3HM	250 I	Eng	Furnished
630XEWX-4HM	250 I	Eng	Furnished	630XEWX-3HM	250 I	Eng	Furnished
645XEWX-4HM	250 I	Eng	Furnished	645XEWX-3HM	250 I	Eng	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1061
- (2) Input Gear Part No. 5-P-1095
- (3) Input Gear Part No. 5-P-886
- (4) Filler block furnished with PTO

FS-4205B

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 06-BOLT Opening Gear FORWARD of Centerline 28 Teeth - R.H. HELIX	TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 28 Teeth - R.H. HELIX
PITCH LINE TO APERTURE FACE: 1.1469" (29.1313MM)	PITCH LINE TO APERTURE FACE: 1.1469" (29.1313MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442XFEWX-*5 (2)	250 I	Opp	42	Furnished	442XFEWX-*3 (2)	250 I	Opp	42	Furnished	442XLEWX-*5 (1)	250 I	Opp	54
442XLEWX-*5 (1)	250 I	Opp	54	Furnished	442XLEWX-*3 (1)	250 I	Opp	54	Furnished	442XLEWX-*5 (1)	250 I	Opp	54
442XQEWX-*5 (1)	225 I	Opp	59	Furnished	442XQEWX-*3 (1)	225 I	Opp	59	Furnished	442XQEWX-*5 (1)	225 I	Opp	59
442XREWX-*5 (1)	225 I	Opp	68	Furnished	442XREWX-*3 (1)	225 I	Opp	68	Furnished	442XREWX-*5 (1)	225 I	Opp	68
442XSEWX-*5 (1)	200 I	Opp	81	Furnished	442XSEWX-*3 (1)	200 I	Opp	81	Furnished	442XSEWX-*5 (1)	200 I	Opp	81
442XUEWX-*5 (1)	195 I	Opp	96	Furnished	442XUEWX-*3 (1)	195 I	Opp	96	Furnished	442XUEWX-*5 (1)	195 I	Opp	96
442XWEWX-*5 (1)	175 I	Opp	113	Furnished	442XWEWX-*3 (1)	175 I	Opp	113	Furnished	442XWEWX-*5 (1)	175 I	Opp	113
442XXEWX-*5 (1)	140 I	Opp	134	Furnished	442XXEWX-*3 (1)	140 I	Opp	134	Furnished	442XXEWX-*5 (1)	140 I	Opp	134

ONE SPEED - FORWARD & REVERSE

340XFEWX-*5 (3)	200 I	Opp	38	40	7-A-140(4)	Furnished	340XFEWX-*5 (3)	200 I	Opp	38	40	7-A-140(4)	Furnished
-----------------	-------	-----	----	----	------------	-----------	-----------------	-------	-----	----	----	------------	-----------

GEARED ADAPTERS

626XEWX-4HM	250 I	Eng	Furnished	626XEWX-3HM	250 I	Eng	Furnished
630XEWX-4HM	250 I	Eng	Furnished	630XEWX-3HM	250 I	Eng	Furnished
645XEWX-4HM	250 I	Eng	Furnished	645XEWX-3HM	250 I	Eng	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1061
- (2) Input Gear Part No. 5-P-1095
- (3) Input Gear Part No. 5-P-886
- (4) Filler block furnished with PTO

ES-11109 (Left Side Forward Opening)
 FS-6109A (Left Side Forward Opening)
 FS-8209A (ES11109)(Left Side Forward Opening)
 FS-6309A (Left Side Forward Opening)
 FS-8309 (Left Side Forward Opening)
 FS-6209A (Left Side Forward Opening)

LEFT FRONT SIDE ONLY

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

L.F. 06-BOLT Opening Gear NON-STANDARD of Centerline
 32 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
 2.9730" (75.5142MM)

TRANSMISSION GEAR DATA:

REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442XFAHX-*5 (2)	250 I	Eng	84	329182-1X	Furnished
442XHAHX-*5 (3)	250 I	Eng	97	329182-1X	Furnished
442XLAHX-*5 (1)	250 I	Eng	109	329182-1X	Furnished
442XQAHX-*5 (1)	225 I	Eng	118	329182-1X	Furnished
442XRAXH-*5 (1)	225 I	Eng	136	329182-1X	Furnished
442XSAXH-*5 (1)	200 I	Eng	162	329182-1X	Furnished
442XUAHX-*5 (1)	195 I	Eng	193	329182-1X	Furnished
442XWAHX-*5 (1)	175 I	Eng	228	329182-1X	Furnished
442XXAHX-*5 (1)	140 I	Eng	269	329182-1X	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*5 (4)	300 C	Eng	47	329182-1X	Furnished
272XBAJX-*5 (5)	300 C	Eng	58	329182-1X	Furnished
272XCAJX-*5 (6)	300 C	Eng	70	329182-1X	Furnished
272XDAJX-*5 (7)	300 C	Eng	84	329182-1X	Furnished
272XGAJX-*5 (8)	271 C	Eng	99	329182-1X	Furnished
272XKAJX-*5 (9)	242 C	Eng	111	329182-1X	Furnished
272XMAJX-*5 (10)	217 C	Eng	124	329182-1X	Furnished
272XPAJX-*5 (11)	194 C	Eng	138	329182-1X	Furnished
272XS AJX-*5 (12)	174 C	Eng	155	329182-1X	Furnished

REAR MOUNT & THRUSHIFT

511XRARW-* * 590 C Opp 77

Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1510-3X
- (11) Input Gear Part No. 5-P-1510-8X
- (2) Input Gear Part No. 5-P-1077
- (7) Input Gear Part No. 5-P-1510-4X
- (12) Input Gear Part No. 5-P-1510-9X
- (3) Input Gear Part No. 5-P-1364
- (8) Input Gear Part No. 5-P-1510-5X
- (4) Input Gear Part No. 5-P-1510-1X
- (9) Input Gear Part No. 5-P-1510-6X
- (5) Input Gear Part No. 5-P-1510-2X
- (10) Input Gear Part No. 5-P-1510-7X

FLR-87

EATON FULLER

CHELSEA®

FSO-5206 (B)

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear REAR of Centerline
47 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

2.1970" (55.8038MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

290GQGFX-6 (1) 175 l Opp 140

Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-993

FRO-11210C FRO-12210C FRO-13210C FRO-14210C FRO-15210C FRO-16210C FRO-16210R FRO-17210C	FRO-18210C FROF-15210C
--	---------------------------

BOTTOM SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: BOT 08-BOLT Opening Gear FORWARD of Centerline 47 Teeth - SPUR	TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 45 Teeth - SPUR
PITCH LINE TO APERTURE FACE: 0.8050" (20.4470MM)	PITCH LINE TO APERTURE FACE: 1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489GAAHX-*5 (12)	250 I	Opp	64	Furnished	442GAAHX-*3 (12)	250 I	Opp	62	Furnished				Furnished
489GCAHX-*5 (13)	250 I	Opp	82	Furnished	442GCAHX-*3 (13)	250 I	Opp	79	Furnished				Furnished
489GFAHX-*5 (2)	250 I	Opp	102	Furnished	442GFAHX-*3 (2)	250 I	Opp	97	Furnished				Furnished
489GHAHX-*5 (15)	250 I	Opp	118	Furnished	442GHAHX-*3 (15)	250 I	Opp	112	Furnished				Furnished
489GLAHX-*5 (1)	250 I	Opp	132	Furnished	442GLAHX-*3 (1)	250 I	Opp	126	Furnished				Furnished
489GQAHX-*5 (1)	225 I	Opp	142	Furnished	442GQAHX-*3 (1)	225 I	Opp	136	Furnished				Furnished
489GRAHX-*5 (1)	225 I	Opp	164	Furnished	442GRAHX-*3 (1)	225 I	Opp	157	Furnished				Furnished
489GSAHX-*5 (1)	200 I	Opp	195	Furnished	442GSAHX-*3 (1)	200 I	Opp	187	Furnished				Furnished
489GUAHX-*5 (1)	195 I	Opp	233	Furnished	660GFAHX-*3 (10)	375 I	Opp	97	Furnished				Furnished
489GWAHX-*5 (1)	175 I	Opp	274	Furnished	660GWAHX-*3 (15)	375 I	Opp	112	Furnished				Furnished
680GFAHX-*3 (10)	375 I	Opp	102	Furnished	660GQAHX-*3 (11)	375 I	Opp	136	Furnished				Furnished
680GHAHX-*3 (18)	375 I	Opp	118	Furnished	660GRAHX-*3 (17)	350 I	Opp	157	Furnished				Furnished
680GQAHX-*3 (11)	375 I	Opp	142	Furnished	660GSAHX-*3 (14)	336 I	Opp	187	Furnished				Furnished
680GRAHX-*3 (17)	350 I	Opp	164	Furnished									
680GSAHX-*3 (14)	322 I	Opp	195	Furnished									
823GBAHX-*3 (38)	750 I	Opp	69	Furnished									
823GDAHX-*3 (42)	750 I	Opp	82	Furnished									
823GGAHX-*3 (43)	705 I	Opp	89	Furnished									
823GJAHX-*3 (39)	599 I	Opp	105	Furnished									
823GMAHX-*3 (37)	511 I	Opp	123	Furnished									
823GRAHX-*3 (41)	370 I	Opp	170	Furnished									
880GBAHX-*3 (3)	500 I	Opp	69	Furnished									
880GDAHX-*3 (4)	500 I	Opp	82	Furnished									
880GGAHX-*3 (9)	500 I	Opp	89	Furnished									
880GJAHX-*3 (5)	500 I	Opp	105	Furnished									
880GMAHX-*3 (6)	500 I	Opp	123	Furnished									
880GQAHX-*3 (16)	435 I	Opp	144	Furnished									
880GRAHX-*3 (7)	370 I	Opp	170	Furnished									
880GTAHX-*3 (8)	287 I	Opp	219	Furnished									

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (28)	300 C	Opp	56	328481G	Furnished	272GAAJX-*3 (28)	300 C	Opp	54				Furnished
------------------	-------	-----	----	---------	-----------	------------------	-------	-----	----	--	--	--	-----------

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 lb-ft [1017 Nm]. All torque limits on this application page reflect the 750 lb-ft [1017 Nm] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

CAUTION: PTOs will not fit on the right side of FRO transmissions with factory installed trans coolers.

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1103
- (11) Input Gear Part No. 5-P-1246
- (16) Input Gear Part No. 5-P-1385
- (38) Input Gear Part No. 5-P-285
- (2) Input Gear Part No. 5-P-1077
- (7) Input Gear Part No. 5-P-1104
- (12) Input Gear Part No. 5-P-1280
- (17) Input Gear Part No. 5-P-1441
- (39) Input Gear Part No. 5-P-325
- (3) Input Gear Part No. 5-P-1100
- (8) Input Gear Part No. 5-P-1105
- (13) Input Gear Part No. 5-P-1287
- (18) Input Gear Part No. 5-P-1494
- (41) Input Gear Part No. 5-P-721
- (4) Input Gear Part No. 5-P-1101
- (9) Input Gear Part No. 5-P-1135
- (14) Input Gear Part No. 5-P-1322
- (28) Input Gear Part No. 5-P-1510-1X
- (42) Input Gear Part No. 5-P-971
- (5) Input Gear Part No. 5-P-1102
- (10) Input Gear Part No. 5-P-1242
- (15) Input Gear Part No. 5-P-1364
- (37) Input Gear Part No. 5-P-283
- (43) Input Gear Part No. 5-P-980

FLR-88

EATON FULLER

CHELSEA®

FRO-11210C	FRO-18210C
FRO-12210C	FROF-15210C
FRO-13210C	
FRO-14210C	
FRO-15210C	
FRO-16210C	
FRO-16210R	
FRO-17210C	

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4470MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282GBAJX-*3 (19)	300 C	Opp	69	8-A-032	Furnished	272GBAJX-*3 (29)	300 C	Opp	67				Furnished
282GCAJX-*3 (20)	300 C	Opp	83	8-A-032	Furnished	272GCAJX-*3 (30)	300 C	Opp	81				Furnished
282GD AJX-*3 (21)	300 C	Opp	100	8-A-032	Furnished	272GD AJX-*3 (31)	300 C	Opp	97				Furnished
282GGAJX-*3 (22)	300 C	Opp	119	8-A-032	Furnished	272GGAJX-*3 (32)	300 C	Opp	115				Furnished
282GKAJX-*3 (23)	300 C	Opp	133	8-A-032	Furnished	272GKAJX-*3 (33)	300 C	Opp	128				Furnished
282GM AJX-*3 (24)	300 C	Opp	148	8-A-032	Furnished	272GM AJX-*3 (34)	300 C	Opp	143				Furnished
282GP AJX-*3 (25)	300 C	Opp	166	8-A-032	Furnished	272GP AJX-*3 (35)	300 C	Opp	160				Furnished
282GS AJX-*3 (26)	300 C	Opp	185	8-A-032	Furnished	272GS AJX-*3 (36)	300 C	Opp	179				Furnished
282GTAJX-*3 (27)	300 C	Opp	208	8-A-032	Furnished								

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885GBAHX-*3 (3)	500 I	Opp	69		Furnished								
885GGAHX-*3 (9)	500 I	Opp	89		Furnished								
885GJAHX-*3 (5)	500 I	Opp	105		Furnished								
885GMAHX-*3 (6)	500 I	Opp	123		Furnished								

ONE SPEED - FORWARD & REVERSE

348GFAHX-*5 (40)	200 I	Opp	89	93	Furnished	340GFAHX-*5 (40)	200 I	Opp	85	89	7-A-140(44)		Furnished
863GBAHX-*5	500 I	Opp	69	86	Furnished								

GEARED ADAPTERS

628GAHX-3AH	250 I	Eng		Furnished	626GAHX-3AH	250 I	Eng						Furnished
					630GAHX-3AH	250 I	Eng						Furnished
					645GAHX-3AH	250 I	Eng						Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION:** Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 lb-ft [1017 Nm]. All torque limits on this application page reflect the 750 lb-ft [1017 Nm] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.**CAUTION:** Do not use geared adapters with 442 A and C ratios.**CAUTION:** PTOs will not fit on the right side of FRO transmissions with factory installed trans coolers.

- (3) Input Gear Part No. 5-P-1100
- (20) Input Gear Part No. 5-P-1510-12X
- (25) Input Gear Part No. 5-P-1510-17X
- (31) Input Gear Part No. 5-P-1510-4X
- (36) Input Gear Part No. 5-P-1510-9X
- (5) Input Gear Part No. 5-P-1102
- (21) Input Gear Part No. 5-P-1510-13X
- (26) Input Gear Part No. 5-P-1510-18X
- (32) Input Gear Part No. 5-P-1510-5X
- (40) Input Gear Part No. 5-P-581
- (6) Input Gear Part No. 5-P-1103
- (22) Input Gear Part No. 5-P-1510-14X
- (27) Input Gear Part No. 5-P-1510-19X
- (33) Input Gear Part No. 5-P-1510-6X
- (44) Filler block furnished with PTO
- (9) Input Gear Part No. 5-P-1135
- (23) Input Gear Part No. 5-P-1510-15X
- (29) Input Gear Part No. 5-P-1510-2X
- (34) Input Gear Part No. 5-P-1510-7X
- (19) Input Gear Part No. 5-P-1510-11X
- (24) Input Gear Part No. 5-P-1510-16X
- (30) Input Gear Part No. 5-P-1510-3X
- (35) Input Gear Part No. 5-P-1510-8X

CHELSEA®**EATON FULLER****FLR-88**

FRO-11210C
FRO-12210C
FRO-13210C
FRO-14210C
FRO-15210C
FRO-16210C
FRO-16210R
FRO-17210C

FRO-18210C
FROF-15210C

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (10 SPEED TRANSMISSIONS)

541-LBJ-*-*	400 I	Eng	81	Furnished
541-MBJ-*-*	350 I	Eng	113	Furnished
541-NBJ-*-*	300 I	Eng	129	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 lb-ft [1017 Nm]. All torque limits on this application page reflect the 750 lb-ft [1017 Nm] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

CAUTION: PTOs will not fit on the right side of FRO transmissions with factory installed trans coolers.

**Eaton
Fuller**

FLR-90

EATON FULLER

CHELSEA®

FR-11210B
FR-12210B
FR-13210B
FR-14210B
FR-15210B
FR-9210
FR-9210B
FRF-9210B

FRM-15210B (Thrushaft use BJ mounting)
FRW-15210B

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4470MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot	Fwd					I / C †	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	57	7-A-032(43)	328564G	Furnished	442GAAHX-*3 (12)	250 I	Opp	48			Furnished
221ZEAHX-*3	250 I	Opp	65		328564G	Furnished	442GCAHX-*3 (13)	250 I	Opp	61			Furnished
489GAAHX-*5 (12)	250 I	Eng	50			Furnished	442GFAHX-*3 (2)	250 I	Opp	75			Furnished
489GCAHX-*5 (13)	250 I	Eng	64			Furnished	442GHAX-*3 (15)	250 I	Opp	87			Furnished
489GFAHX-*5 (2)	250 I	Opp	79			Furnished	442GLAHX-*3 (1)	250 I	Opp	97			Furnished
489GHAHX-*5 (15)	250 I	Opp	92			Furnished	442GQAHX-*3 (1)	225 I	Opp	105			Furnished
489GLAHX-*5 (1)	250 I	Opp	102			Furnished	442GRAHX-*3 (1)	225 I	Opp	121			Furnished
489GQAHX-*5 (1)	225 I	Opp	110			Furnished	442GSAHX-*3 (1)	200 I	Opp	145			Furnished
489GRAHX-*5 (1)	225 I	Opp	127			Furnished	442GUAHX-*3 (1)	195 I	Opp	171			Furnished
489GSAHX-*5 (1)	200 I	Opp	151			Furnished	442GWAHX-*3 (1)	175 I	Opp	208			Furnished
489GUAHX-*5 (1)	195 I	Opp	180			Furnished	442GXAHX-*3 (1)	140 I	Opp	242			Furnished
489GWAHX-*5 (1)	175 I	Opp	212			Furnished	660GFAHX-*3 (10)	375 I	Opp	75			Furnished
680GFAHX-*3 (10)	375 I	Opp	79			Furnished	660GHAHX-*3 (15)	375 I	Opp	87			Furnished
680GHAHX-*3 (19)	375 I	Opp	92			Furnished	660GQAHX-*3 (11)	375 I	Opp	105			Furnished
680GQAHX-*3 (11)	375 I	Opp	110			Furnished	660GRAHX-*3 (18)	350 I	Opp	121			Furnished
680GRAHX-*3 (18)	350 I	Opp	127			Furnished	660GSAHX-*3 (14)	336 I	Opp	145			Furnished
680GSAHX-*3 (14)	322 I	Opp	151			Furnished							
823GTKTX-*3 (17)	305 I	Opp	159	8-A-165(43)									
823GBAHX-*3 (34)	750 I	Opp	53										
823GDAHX-*3 (41)	750 I	Opp	63										
823GGAHX-*3 (42)	705 I	Opp	69										
823GJAHX-*3 (35)	599 I	Opp	81										
823GMAHX-*3 (33)	511 I	Opp	95										
823GRAHX-*3 (40)	370 I	Opp	131										
880GBAHX-*3 (3)	500 I	Opp	54										
880GDAHX-*3 (4)	500 I	Opp	63										
880GGAHX-*3 (9)	500 I	Opp	69										
880GJAHX-*3 (5)	500 I	Opp	81										
880GMAHX-*3 (6)	500 I	Opp	95										
880GQAHX-*3 (16)	435 I	Opp	111										
880GRAHX-*3 (7)	370 I	Opp	131										
880GTAHX-*3 (8)	287 I	Opp	169										

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 lb-ft [1017 Nm]. All torque limits on this application page reflect the 750 lb-ft [1017 Nm] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (7) Input Gear Part No. 5-P-1104
- (13) Input Gear Part No. 5-P-1287
- (19) Input Gear Part No. 5-P-1494
- (42) Input Gear Part No. 5-P-980
- (2) Input Gear Part No. 5-P-1077
- (8) Input Gear Part No. 5-P-1105
- (14) Input Gear Part No. 5-P-1322
- (33) Input Gear Part No. 5-P-283
- (43) Filler block furnished with PTO
- (3) Input Gear Part No. 5-P-1100
- (9) Input Gear Part No. 5-P-1135
- (15) Input Gear Part No. 5-P-1364
- (34) Input Gear Part No. 5-P-285
- (4) Input Gear Part No. 5-P-1101
- (10) Input Gear Part No. 5-P-1242
- (16) Input Gear Part No. 5-P-1385
- (35) Input Gear Part No. 5-P-325
- (5) Input Gear Part No. 5-P-1102
- (11) Input Gear Part No. 5-P-1246
- (17) Input Gear Part No. 5-P-1395
- (40) Input Gear Part No. 5-P-721
- (6) Input Gear Part No. 5-P-1103
- (12) Input Gear Part No. 5-P-1280
- (18) Input Gear Part No. 5-P-1441
- (41) Input Gear Part No. 5-P-971

FR-11210B FR-12210B FR-13210B FR-14210B FR-15210B FR-9210 FR-9210B FRF-9210B	FRM-15210B (Thrustshaft use BJ mounting) FRW-15210B
BOTTOM SIDE ONLY	RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

0.8050" (20.4470MM)

TRANSMISSION GEAR DATA:R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (29)	300 C	Opp	44	328481G	Furnished	272GAAJX-*3 (29)	300 C	Opp	42				Furnished
282GBAJX-*3 (20)	300 C	Opp	54	8-A-032	Furnished	272GBAJX-*3 (30)	300 C	Opp	51				Furnished
282GCAJX-*3 (21)	300 C	Opp	65	8-A-032	Furnished	272GCAJX-*3 (31)	300 C	Opp	62				Furnished
282GDAX-*3 (22)	300 C	Opp	78	8-A-032	Furnished	272GDAX-*3 (32)	300 C	Opp	74				Furnished
282GGAJX-*3 (23)	300 C	Opp	92	8-A-032	Furnished	272GGAJX-*3 (33)	300 C	Opp	88				Furnished
282GKAJX-*3 (24)	300 C	Opp	103	8-A-032	Furnished	272GKAJX-*3 (34)	300 C	Opp	99				Furnished
282GMAJX-*3 (25)	300 C	Opp	115	8-A-032	Furnished	272GMAJX-*3 (35)	300 C	Opp	110				Furnished
282GPAX-*3 (26)	300 C	Opp	129	8-A-032	Furnished	272GPAX-*3 (36)	300 C	Opp	123				Furnished
282GSAJX-*3 (27)	300 C	Opp	144	8-A-032	Furnished	272GSAJX-*3 (37)	300 C	Opp	138				Furnished
282GTAJX-*3 (28)	300 C	Opp	161	8-A-032	Furnished								

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885GBAHX-*3 (3)	500 I	Opp	54		Furnished								
885GGAHX-*3 (9)	500 I	Opp	69		Furnished								
885GJAHX-*3 (5)	500 I	Opp	81		Furnished								
885GMAHX-*3 (6)	500 I	Opp	95		Furnished								

ONE SPEED - FORWARD & REVERSE

348GFAHX-*5 (38)	200 I	Opp	69	72	Furnished	340GFAHX-*5 (38)	200 I	Opp	66	69	7-A-140(43)		Furnished
863GBAHX-*5	500 I	Opp	54	66	Furnished								

GEARED ADAPTERS

628GAHX-3AH	250 I	Eng		Furnished	626GAHX-3AH	250 I	Eng						Furnished
					630GAHX-3AH	250 I	Eng						Furnished

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION:** Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 lb-ft [1017 Nm]. All torque limits on this application page reflect the 750 lb-ft [1017 Nm] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100 (21) Input Gear Part No. 5-P-1510-12X (26) Input Gear Part No. 5-P-1510-17X (31) Input Gear Part No. 5-P-1510-3X (36) Input Gear Part No. 5-P-1510-8X
 (5) Input Gear Part No. 5-P-1102 (22) Input Gear Part No. 5-P-1510-13X (27) Input Gear Part No. 5-P-1510-18X (32) Input Gear Part No. 5-P-1510-4X (37) Input Gear Part No. 5-P-1510-9X
 (6) Input Gear Part No. 5-P-1103 (23) Input Gear Part No. 5-P-1510-14X (28) Input Gear Part No. 5-P-1510-19X (33) Input Gear Part No. 5-P-1510-5X (38) Input Gear Part No. 5-P-581
 (9) Input Gear Part No. 5-P-1135 (24) Input Gear Part No. 5-P-1510-15X (29) Input Gear Part No. 5-P-1510-1X (34) Input Gear Part No. 5-P-1510-6X (43) Filler block furnished with PTO
 (20) Input Gear Part No. 5-P-1510-11X (25) Input Gear Part No. 5-P-1510-16X (30) Input Gear Part No. 5-P-1510-2X (35) Input Gear Part No. 5-P-1510-7X

FLR-90

EATON FULLER

CHELSEA®

FR-11210B
FR-12210B
FR-13210B
FR-14210B
FR-15210B
FR-9210
FR-9210B
FRF-9210B

FRM-15210B (Thrushaft use BJ mounting)
FRW-15210B

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd Rev					I/C [†]	Rot	Fwd Rev			

REAR MOUNT - MECHANICAL SHIFT (10 SPEED TRANSMISSIONS)

541-LBJ-** (39)	400 I	Eng	63	Furnished
541-MBJ-** (38)	350 I	Eng	81	Furnished
541-NBJ-** (37)	300 I	Eng	92	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 lb-ft [1017 Nm]. All torque limits on this application page reflect the 750 lb-ft [1017 Nm] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

(37) Input Gear Part No. 5-P-716
(38) Input Gear Part No. 5-P-717
(39) Input Gear Part No. 5-P-718

FRO-11210B
FRO-12210B
FRO-13210B
FRO-14210B
FRO-15210B
FRO-16210B

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4470MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5590MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	76	7-A-032(49)	328564G	Furnished	442GAAHX-*3 (12)	250 I	Opp	64			Furnished
221ZEAHX-*3	250 I	Opp	87		328564G	Furnished	442GCAHX-*3 (13)	250 I	Opp	81			Furnished
489GAAHX-*5 (12)	250 I	Opp	66			Furnished	442GFAHX-*3 (2)	250 I	Opp	101			Furnished
489GCAHX-*5 (13)	250 I	Opp	85			Furnished	442GHAX-*3 (15)	250 I	Opp	117			Furnished
489GFAHX-*5 (2)	250 I	Opp	105			Furnished	442GLAHX-*3 (1)	250 I	Opp	130			Furnished
489GHAX-*5 (15)	250 I	Opp	122			Furnished	442GQAHX-*3 (1)	225 I	Opp	140			Furnished
489GLAHX-*5 (1)	250 I	Opp	136			Furnished	442GRAHX-*3 (1)	225 I	Opp	162			Furnished
489GQAHX-*5 (1)	225 I	Opp	146			Furnished	442GSAHX-*3 (1)	200 I	Opp	193			Furnished
489GRAHX-*5 (1)	225 I	Opp	170			Furnished	660GFAHX-*3 (10)	375 I	Opp	101			Furnished
489GSAHX-*5 (1)	200 I	Opp	202			Furnished	660GHAX-*3 (15)	375 I	Opp	117			Furnished
489GUAHX-*5 (1)	195 I	Opp	241			Furnished	660GQAHX-*3 (11)	375 I	Opp	140			Furnished
489GWAHX-*5 (1)	175 I	Opp	283			Furnished	660GRAHX-*3 (18)	350 I	Opp	162			Furnished
680GFAHX-*3 (10)	375 I	Opp	105			Furnished	660GSAHX-*3 (14)	336 I	Opp	193			Furnished
680GHAHX-*3 (19)	375 I	Opp	122			Furnished							
680GQAHX-*3 (11)	375 I	Opp	146			Furnished							
680GRAHX-*3 (18)	350 I	Opp	170			Furnished							
680GSAHX-*3 (14)	322 I	Opp	202			Furnished							
823GTKTX-*3 (17)	305 I	Opp	213	8-A-165(48)		Furnished							
823GBAHX-*3 (39)	750 I	Opp	71			Furnished							
823GDAHX-*3 (46)	750 I	Opp	85			Furnished							
823GGAHX-*3 (47)	705 I	Opp	92			Furnished							
823GJAHX-*3 (40)	599 I	Opp	108			Furnished							
823GMAHX-*3 (38)	511 I	Opp	127			Furnished							
823GRAHX-*3 (45)	370 I	Opp	176			Furnished							
880GBAHX-*3 (3)	500 I	Opp	72			Furnished							
880GDAHX-*3 (4)	500 I	Opp	85			Furnished							
880GGAHX-*3 (9)	500 I	Opp	92			Furnished							
880GJAHX-*3 (5)	500 I	Opp	108			Furnished							
880GMAHX-*3 (6)	500 I	Opp	127			Furnished							
880GQAHX-*3 (16)	435 I	Opp	149			Furnished							
880GRAHX-*3 (7)	370 I	Opp	176			Furnished							
880GTAHX-*3 (8)	287 I	Opp	226			Furnished							

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 lb-ft [1017 Nm]. All torque limits on this application page reflect the 750 lb-ft [1017 Nm] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (7) Input Gear Part No. 5-P-1104
- (13) Input Gear Part No. 5-P-1287
- (19) Input Gear Part No. 5-P-1494
- (47) Input Gear Part No. 5-P-980
- (2) Input Gear Part No. 5-P-1077
- (8) Input Gear Part No. 5-P-1105
- (14) Input Gear Part No. 5-P-1322
- (38) Input Gear Part No. 5-P-283
- (48) Filler block furnished with PTO
- (3) Input Gear Part No. 5-P-1100
- (9) Input Gear Part No. 5-P-1135
- (15) Input Gear Part No. 5-P-1364
- (39) Input Gear Part No. 5-P-285
- (49) Furnished, but not required
- (4) Input Gear Part No. 5-P-1101
- (10) Input Gear Part No. 5-P-1242
- (16) Input Gear Part No. 5-P-1385
- (40) Input Gear Part No. 5-P-325
- (5) Input Gear Part No. 5-P-1102
- (11) Input Gear Part No. 5-P-1246
- (17) Input Gear Part No. 5-P-1395
- (45) Input Gear Part No. 5-P-721
- (6) Input Gear Part No. 5-P-1103
- (12) Input Gear Part No. 5-P-1280
- (18) Input Gear Part No. 5-P-1441
- (46) Input Gear Part No. 5-P-971

FRO-11210B
FRO-12210B
FRO-13210B
FRO-14210B
FRO-15210B
FRO-16210B

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4470MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5590MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (29)	300 C	Opp	58	328481G	Furnished	272GAAJX-*3 (29)	300 C	Opp	56				Furnished
282GBAJX-*3 (20)	300 C	Opp	72	8-A-032	Furnished	272GBAJX-*3 (30)	300 C	Opp	69				Furnished
282GCAJX-*3 (21)	300 C	Opp	87	8-A-032	Furnished	272GCAJX-*3 (31)	300 C	Opp	83				Furnished
282GDAJX-*3 (22)	300 C	Opp	104	8-A-032	Furnished	272GDAJX-*3 (32)	300 C	Opp	99				Furnished
282GGAJX-*3 (23)	300 C	Opp	123	8-A-032	Furnished	272GGAJX-*3 (33)	300 C	Opp	118				Furnished
282GKAJX-*3 (24)	300 C	Opp	138	8-A-032	Furnished	272GKAJX-*3 (34)	300 C	Opp	132				Furnished
282GMAJX-*3 (25)	300 C	Opp	154	8-A-032	Furnished	272GMAJX-*3 (35)	300 C	Opp	148				Furnished
282GP AJX-*3 (26)	300 C	Opp	172	8-A-032	Furnished	272GP AJX-*3 (36)	300 C	Opp	165				Furnished
282GS AJX-*3 (27)	300 C	Opp	193	8-A-032	Furnished	272GS AJX-*3 (37)	300 C	Opp	184				Furnished
282GTAJX-*3 (28)	300 C	Opp	215	8-A-032	Furnished								

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885GBAHX-*3 (3)	500 I	Opp	72		Furnished								
885GGAHX-*3 (9)	500 I	Opp	92		Furnished								
885GJAHX-*3 (5)	500 I	Opp	108		Furnished								
885GMAHX-*3 (6)	500 I	Opp	127		Furnished								

ONE SPEED - FORWARD & REVERSE

348GFAHX-*5 (41)	200 I	Opp	92	96	Furnished	340GFAHX-*5 (41)	200 I	Opp	88	92	7-A-140(49)		Furnished
863GBAHX-*5	500 I	Opp	72	89	Furnished								

GEARED ADAPTERS

628GAHX-3AH	250 I	Eng		Furnished	626GAHX-3AH	250 I	Eng						Furnished
					630GAHX-3AH	250 I	Eng						Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 lb-ft [1017 Nm]. All torque limits on this application page reflect the 750 lb-ft [1017 Nm] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

(3) Input Gear Part No. 5-P-1100 (21) Input Gear Part No. 5-P-1510-12X (26) Input Gear Part No. 5-P-1510-17X (31) Input Gear Part No. 5-P-1510-3X (36) Input Gear Part No. 5-P-1510-8X
 (5) Input Gear Part No. 5-P-1102 (22) Input Gear Part No. 5-P-1510-13X (27) Input Gear Part No. 5-P-1510-18X (32) Input Gear Part No. 5-P-1510-4X (37) Input Gear Part No. 5-P-1510-9X
 (6) Input Gear Part No. 5-P-1103 (23) Input Gear Part No. 5-P-1510-14X (28) Input Gear Part No. 5-P-1510-19X (33) Input Gear Part No. 5-P-1510-5X (41) Input Gear Part No. 5-P-581
 (9) Input Gear Part No. 5-P-1135 (24) Input Gear Part No. 5-P-1510-15X (29) Input Gear Part No. 5-P-1510-1X (34) Input Gear Part No. 5-P-1510-6X (49) Furnished, but not required
 (20) Input Gear Part No. 5-P-1510-11X (25) Input Gear Part No. 5-P-1510-16X (30) Input Gear Part No. 5-P-1510-2X (35) Input Gear Part No. 5-P-1510-7X

FRO-11210B
FRO-12210B
FRO-13210B
FRO-14210B
FRO-15210B
FRO-16210B

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (10 SPEED TRANSMISSIONS)

541-LBJ-*-* (44)	400 I	Eng	84	Furnished
541-MBJ-*-* (43)	350 I	Eng	108	Furnished
541-NBJ-*-* (42)	300 I	Eng	123	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 lb-ft [1017 Nm]. All torque limits on this application page reflect the 750 lb-ft [1017 Nm] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

(42) Input Gear Part No. 5-P-716
(43) Input Gear Part No. 5-P-717
(44) Input Gear Part No. 5-P-718

FLR-92

EATON FULLER

CHELSEA®

F-5405B-DM3 (UltraShift HV)	FO-8406A-ASX
F-6405B-DM3 (UltraShift HV)	FO-8406A-AW3
FO-5406B-DM3 (UltraShift HV)	FSO-5406A
FO-6406A-ASW	FSO-6406A (Eaton Brazil)
FO-6406A-ASX	FSO-8406A (Eaton Brazil)
FO-6406A-AW3	
FO-6406B-DM3 (UltraShift HV)	
FO-8406A-ASW	

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 06-BOLT Opening Gear FORWARD of Centerline 48 Teeth - R.H. HELIX	TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 48 Teeth - R.H. HELIX
PITCH LINE TO APERTURE FACE: 0.4900" (12.4460MM)	PITCH LINE TO APERTURE FACE: 0.4900" (12.4460MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			
ONE SPEED - TWO GEAR - MECHANICAL SHIFT													
442KLJKX-*5 (1)	250 I	Opp	99	7-A-500	7170-5X	442KLJKX-*3 (1)	250 I	Opp	99	7-A-500	7170-5X		
442KQJKX-*5 (1)	225 I	Opp	106	7-A-500	7170-5X	442KQJKX-*3 (1)	225 I	Opp	106	7-A-500	7170-5X		
442KRJKX-*5 (1)	225 I	Opp	123	7-A-500	7170-5X	442KRJKX-*3 (1)	225 I	Opp	123	7-A-500	7170-5X		
442KSJKX-*5 (1)	200 I	Opp	146	7-A-500	7170-5X	442KSJKX-*3 (1)	200 I	Opp	146	7-A-500	7170-5X		
442KUJKX-*5 (1)	195 I	Opp	174	7-A-500	7170-5X	442KUJKX-*3 (1)	195 I	Opp	174	7-A-500	7170-5X		
442KWJKX-*5 (1)	175 I	Opp	205	7-A-500	7170-5X	442KWJKX-*3 (1)	175 I	Opp	205	7-A-500	7170-5X		
442KXJKX-*5 (1)	140 I	Opp	242	7-A-500	7170-5X	442KXJKX-*3 (1)	140 I	Opp	242	7-A-500	7170-5X		

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)													
272KAJKX-*5 (3)	300 C	Opp	50	7-A-240	7170-3X	272KAJKX-*3 (3)	300 C	Opp	50	7-A-240	7170-3X		
272KBJKX-*5 (4)	300 C	Opp	62	7-A-240	7170-3X	272KBJKX-*3 (4)	300 C	Opp	62	7-A-240	7170-3X		
272KCJKX-*5 (5)	300 C	Opp	74	7-A-240	7170-3X	272KCJKX-*3 (5)	300 C	Opp	74	7-A-240	7170-3X		
272KDJKX-*5 (6)	300 C	Opp	89	7-A-240	7170-3X	272KDJKX-*3 (6)	300 C	Opp	89	7-A-240	7170-3X		
272KGJKX-*5 (7)	276 C	Opp	106	7-A-240	7170-3X	272KGJKX-*3 (7)	276 C	Opp	106	7-A-240	7170-3X		
272KKJKX-*5 (8)	246 C	Opp	118	7-A-240	7170-3X	272KKJKX-*3 (8)	246 C	Opp	118	7-A-240	7170-3X		
272KMJKX-*5 (9)	220 C	Opp	132	7-A-240	7170-3X	272KMJKX-*3 (9)	220 C	Opp	132	7-A-240	7170-3X		
272KPJKX-*5 (10)	197 C	Opp	148	7-A-240	7170-3X	272KPJKX-*3 (10)	197 C	Opp	148	7-A-240	7170-3X		
272KSJKX-*5 (11)	176 C	Opp	165	7-A-240	7170-3X	272KSJKX-*3 (11)	176 C	Opp	165	7-A-240	7170-3X		

GEARED ADAPTERS													
626KJKX-4JL (2)	250 I	Eng	7-A-500	7170-5X	626KJKX-3JL (2)	250 I	Eng	7-A-500	7170-5X				
630KJKX-4JL (2)	250 I	Eng	7-A-500	7170-5X	630KJKX-3JL (2)	250 I	Eng	7-A-500	7170-5X				
645KJKX-4JL (2)	250 I	Eng	7-A-500	7170-5X	645KJKX-3JL (2)	250 I	Eng	7-A-500	7170-5X				

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: INPUT SIGNAL REQUIRED - The Eaton ASW, AW3, ASX & DM transmissions must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, REFER to Eaton publication "TRIG-2600" for complete wiring information. INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

- (1) Input Gear Part No. 5-P-1261
- (6) Input Gear Part No. 5-P-1513-4X
- (11) Input Gear Part No. 5-P-1513-9X
- (2) Input Gear Part No. 5-P-1262
- (7) Input Gear Part No. 5-P-1513-5X
- (3) Input Gear Part No. 5-P-1513-1X
- (8) Input Gear Part No. 5-P-1513-6X
- (4) Input Gear Part No. 5-P-1513-2X
- (9) Input Gear Part No. 5-P-1513-7X
- (5) Input Gear Part No. 5-P-1513-3X
- (10) Input Gear Part No. 5-P-1513-8X

CHELSEA®**EATON FULLER****FLR-92Hy**

EH-8E306A-UP (Hybrid Electric System)
 EH-8E306A-CD (Hybrid Electric System)
 EH-8E306A-UPG (Hybrid Electric System)
 EH-8E406A-CDR (Hybrid Electric System)
 EH-8E406A-P (Hybrid Electric System)
 EH-8E406A-T (Hybrid Electric System)
 EH-8E406A-UP (Hybrid Electric System)
 EH-8E406A-UPG (Hybrid Electric System)

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear FORWARD of Centerline

48 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

0.4900" (12.4460MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442KLJKX-*5 (1)	250 I	Opp	99	7-A-500		7170-5X
442KQJKX-*5 (1)	225 I	Opp	106	7-A-500		7170-5X
442KRJKX-*5 (1)	225 I	Opp	123	7-A-500		7170-5X
442KSJKX-*5 (1)	200 I	Opp	146	7-A-500		7170-5X
442KUJKX-*5 (1)	195 I	Opp	174	7-A-500		7170-5X
442KWJKX-*5 (1)	175 I	Opp	205	7-A-500		7170-5X
442KXJKX-*5 (1)	140 I	Opp	242	7-A-500		7170-5X

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272KAJKX-*5 (3)	300 C	Opp	50	7-A-240		7170-5X
272KBJKX-*5 (4)	300 C	Opp	62	7-A-240		7170-5X
272KCJKX-*5 (5)	300 C	Opp	74	7-A-240		7170-5X
272KDJKX-*5 (6)	300 C	Opp	89	7-A-240		7170-5X
272KGJKX-*5 (7)	276 C	Opp	106	7-A-240		7170-5X
272KKJKX-*5 (8)	246 C	Opp	118	7-A-240		7170-5X
272KMJKX-*5 (9)	220 C	Opp	132	7-A-240		7170-5X
272KPJKX-*5 (10)	197 C	Opp	148	7-A-240		7170-5X
272KSJKX-*5 (11)	176 C	Opp	165	7-A-240		7170-5X

ONE SPEED - FORWARD & REVERSE

352KSJKX-*5 (1)	140 I	Opp	148	192	7-A-500(T)		7170-5X
-----------------	-------	-----	-----	-----	------------	--	---------

GEARED ADAPTERS

626KJKX-4JL (2)	250 I	Eng		7-A-500		7170-5X
630KJKX-4JL (2)	250 I	Eng		7-A-500		7170-5X
645KJKX-4JL (2)	250 I	Eng		7-A-500		7170-5X

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1261
- (6) Input Gear Part No. 5-P-1513-4X
- (11) Input Gear Part No. 5-P-1513-9X
- (2) Input Gear Part No. 5-P-1262
- (7) Input Gear Part No. 5-P-1513-5X
- (3) Input Gear Part No. 5-P-1513-1X
- (8) Input Gear Part No. 5-P-1513-6X
- (4) Input Gear Part No. 5-P-1513-2X
- (9) Input Gear Part No. 5-P-1513-7X
- (5) Input Gear Part No. 5-P-1513-3X
- (10) Input Gear Part No. 5-P-1513-8X

FSB-5406B
FSB-6406B
FSB-6206A

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
38 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.0850" (27.5590MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
38 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.0850" (27.5590MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442XFESX-*5 (2)	250 I	Opp	53	7-A-062	Furnished	442XFESX-*3 (2)	250 I	Opp	53	7-A-062	Furnished
442XLESX-*5 (1)	250 I	Opp	69	7-A-062	Furnished	442XLESX-*3 (1)	250 I	Opp	69	7-A-062	Furnished
442XQESX-*5 (1)	225 I	Opp	74	7-A-062	Furnished	442XQESX-*3 (1)	225 I	Opp	74	7-A-062	Furnished
442XRESX-*5 (1)	225 I	Opp	85	7-A-062	Furnished	442XRESX-*3 (1)	225 I	Opp	85	7-A-062	Furnished
442XSESX-*5 (1)	200 I	Opp	102	7-A-062	Furnished	442XSESX-*3 (1)	200 I	Opp	102	7-A-062	Furnished
442XUESX-*5 (1)	195 I	Opp	121	7-A-062	Furnished	442XUESX-*3 (1)	195 I	Opp	121	7-A-062	Furnished
442XWESX-*5 (1)	175 I	Opp	143	7-A-062	Furnished	442XWESX-*3 (1)	175 I	Opp	143	7-A-062	Furnished
442XXESX-*5 (1)	140 I	Opp	169	7-A-062	Furnished	442XXESX-*3 (1)	140 I	Opp	169	7-A-062	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAESX-*5 (3)	300 C	Opp	32	Furnished	272XAESX-*3 (3)	300 C	Opp	32	Furnished
272XBESX-*5 (4)	300 C	Opp	39	Furnished	272XBESX-*3 (4)	300 C	Opp	39	Furnished
272XCESX-*5 (5)	300 C	Opp	47	Furnished	272XCESX-*3 (5)	300 C	Opp	47	Furnished
272XDESX-*5 (6)	300 C	Opp	57	Furnished	272XDESX-*3 (6)	300 C	Opp	57	Furnished
272XGESX-*5 (7)	300 C	Opp	67	Furnished	272XGESX-*3 (7)	300 C	Opp	67	Furnished
272XKESX-*5 (8)	300 C	Opp	75	Furnished	272XKESX-*3 (8)	300 C	Opp	75	Furnished
272XMESX-*5 (9)	300 C	Opp	84	Furnished	272XMESX-*3 (9)	300 C	Opp	84	Furnished
272XPESX-*5 (10)	286 C	Opp	94	Furnished	272XPESX-*3 (10)	286 C	Opp	94	Furnished
272XSESX-*5 (11)	256 C	Opp	105	Furnished	272XSESX-*3 (11)	256 C	Opp	105	Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MAESX-*5 (3)	300 C	Opp	32	Furnished	272MAESX-*3 (3)	300 C	Opp	32	Furnished
272MBESX-*5 (4)	300 C	Opp	39	Furnished	272MBESX-*3 (4)	300 C	Opp	39	Furnished
272MCESX-*5 (5)	300 C	Opp	47	Furnished	272MCESX-*3 (5)	300 C	Opp	47	Furnished
272MDESX-*5 (6)	300 C	Opp	57	Furnished	272MDESX-*3 (6)	300 C	Opp	57	Furnished
272MGESX-*5 (7)	300 C	Opp	67	Furnished	272MGESX-*3 (7)	300 C	Opp	67	Furnished
272MKESX-*5 (8)	300 C	Opp	75	Furnished	272MKESX-*3 (8)	300 C	Opp	75	Furnished
272MMESX-*5 (9)	300 C	Opp	84	Furnished	272MMESX-*3 (9)	300 C	Opp	84	Furnished
272MPESX-*5 (10)	286 C	Opp	94	Furnished	272MPESX-*3 (10)	286 C	Opp	94	Furnished
272MSESX-*5 (11)	256 C	Opp	105	Furnished	272MSESX-*3 (11)	256 C	Opp	105	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1059
- (6) Input Gear Part No. 5-P-1512-4X
- (11) Input Gear Part No. 5-P-1512-9X
- (2) Input Gear Part No. 5-P-1092
- (7) Input Gear Part No. 5-P-1512-5X
- (3) Input Gear Part No. 5-P-1512-1X
- (8) Input Gear Part No. 5-P-1512-6X
- (4) Input Gear Part No. 5-P-1512-2X
- (9) Input Gear Part No. 5-P-1512-7X
- (5) Input Gear Part No. 5-P-1512-3X
- (10) Input Gear Part No. 5-P-1512-8X

FSB-5406B
FSB-6406B
FSB-6206A

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
38 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.0850" (27.5590MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
38 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.0850" (27.5590MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - FORWARD & REVERSE

340XFESX-*5 (12)	200 I	Opp	48	51	7-A-093 7-A-140(13)	328170-76X	340XFESX-*5 (12)	200 I	Opp	48	51	7-A-093 7-A-140(13)	328170-76X
------------------	-------	-----	----	----	------------------------	------------	------------------	-------	-----	----	----	------------------------	------------

GEARED ADAPTERS

626XESX-4HL	250 I	Eng	7-A-062	Furnished	626XESX-3HL	250 I	Eng	7-A-062	Furnished
630XESX-4HL	250 I	Eng	7-A-062	Furnished	630XESX-3HL	250 I	Eng	7-A-062	Furnished
645XESX-4HL	250 I	Eng	7-A-062	Furnished	645XESX-3HL	250 I	Eng	7-A-062	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

(12) Input Gear Part No. 5-P-884
(13) Furnished, but not required

FLR-95

EATON FULLER

CHELSEA®

FRLO-16410C-T2
FRLO-14410C-T2
FRLO-15410C-T2
FRLO-14410C
FRLO-15410C
FRLO-16410C

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
51 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.0850" (27.5590MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
51 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.0850" (27.5590MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442GAJAX*5 (1)	250 I	Opp	43	Furnished	442GAJAX*3 (1)	250 I	Opp	43	Furnished	442GAJAX*3 (1)	250 I	Opp	43
442GCJAX-*5 (8)	250 I	Opp	54	Furnished	442GCJAX-*3 (8)	250 I	Opp	54	Furnished	442GCJAX-*3 (8)	250 I	Opp	54
442GFJAX-*5 (3)	250 I	Opp	67	Furnished	442GFJAX-*3 (3)	250 I	Opp	67	Furnished	442GFJAX-*3 (3)	250 I	Opp	67
442GHJAX-*5 (4)	250 I	Opp	78	Furnished	442GHJAX-*3 (4)	250 I	Opp	78	Furnished	442GHJAX-*3 (4)	250 I	Opp	78
442GLJAX-*5 (1)	250 I	Opp	87	Furnished	442GLJAX-*3 (1)	250 I	Opp	87	Furnished	442GLJAX-*3 (1)	250 I	Opp	87
442GQJAX-*5 (1)	225 I	Opp	94	Furnished	442GQJAX-*3 (1)	225 I	Opp	94	Furnished	442GQJAX-*3 (1)	225 I	Opp	94
442GRJAX-*5 (1)	225 I	Opp	109	Furnished	442GRJAX-*3 (1)	225 I	Opp	109	Furnished	442GRJAX-*3 (1)	225 I	Opp	109
442GSJAX-*5 (1)	200 I	Opp	130	Furnished	442GSJAX-*3 (1)	200 I	Opp	130	Furnished	442GSJAX-*3 (1)	200 I	Opp	130
442GUJAX-*5 (1)	195 I	Opp	155	Furnished	442GUJAX-*3 (1)	195 I	Opp	155	Furnished	442GUJAX-*3 (1)	195 I	Opp	155
442GWJAX-*5 (1)	175 I	Opp	182	Furnished	442GWJAX-*3 (1)	175 I	Opp	182	Furnished	442GWJAX-*3 (1)	175 I	Opp	182
442GXJAX-*5 (1)	140 I	Opp	215	Furnished	442GXJAX-*3 (1)	140 I	Opp	215	Furnished	442GXJAX-*3 (1)	140 I	Opp	215
660GFJAX-*5 (5)	375 I	Opp	67	Furnished	660GFJAX-*3 (5)	375 I	Opp	67	Furnished	660GFJAX-*3 (5)	375 I	Opp	67
660GQJAX-*5 (6)	330 I	Opp	94	Furnished	660GQJAX-*3 (6)	330 I	Opp	94	Furnished	660GQJAX-*3 (6)	330 I	Opp	94
660GSJAX-*5 (7)	240 I	Opp	130	Furnished	660GSJAX-*3 (7)	240 I	Opp	130	Furnished	660GSJAX-*3 (7)	240 I	Opp	130

GEARED ADAPTERS

626GJAX-4JC (2)	250 I	Eng	Furnished	626GJAX-3JC (2)	250 I	Eng	Furnished
630GJAX-4JC (2)	250 I	Eng	Furnished	630GJAX-3JC (2)	250 I	Eng	Furnished

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 lb-ft [678 Nm]. All torque limits on this application page reflect the 750 lb-ft [678 Nm] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front section of this catalog for complete torque limit information.

CAUTION: Do not use geared adapters with 442 A and C ratios.

(1) Input Gear Part No. 5-P-1243
(2) Input Gear Part No. 5-P-1247
(3) Input Gear Part No. 5-P-1340
(4) Input Gear Part No. 5-P-1342
(5) Input Gear Part No. 5-P-1345

(6) Input Gear Part No. 5-P-1346
(7) Input Gear Part No. 5-P-1347
(8) Input Gear Part No. 5-P-1368

FSO-8209A (Left Side Forward Opening)
FSO-6109A (Left Forward)**LEFT SIDE ONLY****TRANSMISSION GEAR DATA:**L.F. 06-BOLT Opening Gear NON-STANDARD of Centerline
43 Teeth - R.H. HELIX**PITCH LINE TO APERTURE FACE:**

2.9730" (75.5142MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442XFAHX-*5 (2)	250 I	Eng	113	329182-1X	Furnished
442XHAHX-*5 (3)	250 I	Eng	131	329182-1X	Furnished
442XLAHX-*5 (1)	250 I	Eng	146	329182-1X	Furnished
442XQAHX-*5 (1)	225 I	Eng	157	329182-1X	Furnished
442XRAXH-*5 (1)	225 I	Eng	182	329182-1X	Furnished
442XSAXH-*5 (1)	200 I	Eng	217	329182-1X	Furnished
442XUAHX-*5 (1)	195 I	Eng	258	329182-1X	Furnished
442XWAHX-*5 (1)	175 I	Eng	304	329182-1X	Furnished
442XXAHX-*5 (1)	140 I	Eng	359	329182-1X	Furnished
660XHAHX-*5 (3)	375 I	Eng	131	329182-1X	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*5 (4)	300 C	Eng	84	329182X	Furnished
272XBAJX-*5 (5)	300 C	Eng	104	329182X	Furnished
272XCAJX-*5 (6)	300 C	Eng	125	329182X	Furnished
272XGAJX-*5 (7)	300 C	Eng	178	329182X	Furnished
272XKAJX-*5 (8)	300 C	Eng	199	329182X	Furnished
272XMAJX-*5 (9)	300 C	Eng	223	329182X	Furnished
272XPAJX-*5 (10)	300 C	Eng	249	329182X	Furnished
272XSAJX-*5 (11)	300 C	Eng	278	329182X	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1510-3X
- (11) Input Gear Part No. 5-P-1510-9X
- (2) Input Gear Part No. 5-P-1077
- (7) Input Gear Part No. 5-P-1510-5X
- (3) Input Gear Part No. 5-P-1364
- (8) Input Gear Part No. 5-P-1510-6X
- (4) Input Gear Part No. 5-P-1510-1X
- (9) Input Gear Part No. 5-P-1510-7X
- (5) Input Gear Part No. 5-P-1510-2X
- (10) Input Gear Part No. 5-P-1510-8X

FS-6406N
FS-5406N
F-5405-DM3
F-8406N-ASW
F-6406N-ASW
F-6406N-AW3
FO-6406N-AW3
F-6406N-ASX

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.1600" (29.4640MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.1600" (29.4640MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442XFJWX-*5 (2)	250 I	Opp	51	Furnished	442XFJWX-*3 (2)	250 I	Opp	51	Furnished	442XLJWX-*3 (1)	250 I	Opp	66
442XLJWX-*5 (1)	250 I	Opp	66	Furnished	442XLJWX-*3 (1)	250 I	Opp	66	Furnished	442XLJWX-*3 (1)	250 I	Opp	66
442XQJWX-*5 (1)	225 I	Opp	71	Furnished	442XQJWX-*3 (1)	225 I	Opp	71	Furnished	442XQJWX-*3 (1)	225 I	Opp	71
442XRJWX-*5 (1)	225 I	Opp	83	Furnished	442XRJWX-*3 (1)	225 I	Opp	83	Furnished	442XRJWX-*3 (1)	225 I	Opp	83
442XSJWX-*5 (1)	200 I	Opp	98	Furnished	442XSJWX-*3 (1)	200 I	Opp	98	Furnished	442XSJWX-*3 (1)	200 I	Opp	98
442XUJWX-*5 (1)	195 I	Opp	117	Furnished	442XUJWX-*3 (1)	195 I	Opp	117	Furnished	442XUJWX-*3 (1)	195 I	Opp	117
442XWJWX-*5 (1)	175 I	Opp	138	Furnished	442XWJWX-*3 (1)	175 I	Opp	138	Furnished	442XWJWX-*3 (1)	175 I	Opp	138
442XXJWX-*5 (1)	140 I	Opp	163	Furnished	442XXJWX-*3 (1)	140 I	Opp	163	Furnished	442XXJWX-*3 (1)	140 I	Opp	163

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272ZAJWX-*5 (4)	300 C	Opp	32	Furnished	272ZAJWX-*3 (4)	300 C	Opp	32	Furnished	272ZAJWX-*3 (4)	300 C	Opp	32
272ZBJWTX-*5 (5)	300 C	Opp	40	Furnished	272ZBJWTX-*3 (5)	300 C	Opp	40	Furnished	272ZBJWTX-*3 (5)	300 C	Opp	40
272ZCJWTX-*5 (6)	300 C	Opp	48	Furnished	272ZCJWTX-*3 (6)	300 C	Opp	48	Furnished	272ZCJWTX-*3 (6)	300 C	Opp	48
272ZDJWX-*5 (7)	300 C	Opp	57	Furnished	272ZDJWX-*3 (7)	300 C	Opp	57	Furnished	272ZDJWX-*3 (7)	300 C	Opp	57
272ZGJWX-*5 (8)	300 C	Opp	68	Furnished	272ZGJWX-*3 (8)	300 C	Opp	68	Furnished	272ZGJWX-*3 (8)	300 C	Opp	68
272ZKJWX-*5 (9)	300 C	Opp	76	Furnished	272ZKJWX-*3 (9)	300 C	Opp	76	Furnished	272ZKJWX-*3 (9)	300 C	Opp	76
272ZMJWTX-*5 (10)	300 C	Opp	85	Furnished	272ZMJWTX-*3 (10)	300 C	Opp	85	Furnished	272ZMJWTX-*3 (10)	300 C	Opp	85
272ZPJWTX-*5 (11)	279 C	Opp	95	Furnished	272ZPJWTX-*3 (11)	279 C	Opp	95	Furnished	272ZPJWTX-*3 (11)	279 C	Opp	95
272ZSJWTX-*5 (12)	250 C	Opp	107	Furnished	272ZSJWTX-*3 (12)	250 C	Opp	107	Furnished	272ZSJWTX-*3 (12)	250 C	Opp	107

ONE SPEED - FORWARD & REVERSE

340XFJWX-*5 (3)	200 I	Opp	46	49	Furnished	340XFJWX-*5 (3)	200 I	Opp	46	49	Furnished
-----------------	-------	-----	----	----	-----------	-----------------	-------	-----	----	----	-----------

GEARED ADAPTERS

626XJWX-4KB	250 I	Eng	Furnished	626XJWX-3KB	250 I	Eng	Furnished
630XJWX-4KB	250 I	Eng	Furnished	630XJWX-3KB	250 I	Eng	Furnished
645XJWX-4KB	250 I	Eng	Furnished	645XJWX-3KB	250 I	Eng	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: The Eaton ASW, AW3, ASX & DM transmissions must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, REFER to Eaton publication "TRIG-2600" for complete wiring information. INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

- (1) Input Gear Part No. 5-P-1319
- (2) Input Gear Part No. 5-P-1320
- (3) Input Gear Part No. 5-P-1404
- (4) Input Gear Part No. 5-P-1514-1X
- (5) Input Gear Part No. 5-P-1514-2X
- (6) Input Gear Part No. 5-P-1514-3X
- (7) Input Gear Part No. 5-P-1514-4X
- (8) Input Gear Part No. 5-P-1514-5X
- (9) Input Gear Part No. 5-P-1514-6X
- (10) Input Gear Part No. 5-P-1514-7X
- (11) Input Gear Part No. 5-P-1514-8X
- (12) Input Gear Part No. 5-P-1514-9X

RTO-10910B-DM2 (UltraShift) RTO-12910B-DM2 (UltraShift) RTO-14910B-DM2 (UltraShift) RTO-16910B-DM2 (UltraShift) RTO-10910B-DM3 (UltraShift) RTO-12910B-DM3 (UltraShift) RTO-14910B-DM3 (UltraShift) RTO-16910B-DM3 (UltraShift)	RTOM-16910B-DM3 (UltraShift)
BOTTOM SIDE ONLY	RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	82	7-A-032(P)(43)	328564X	Furnished	221XCAHX-*3	250 I	Opp	79	7-A-032(43)	Furnished
221ZEAHX-*3	250 I	Opp	95		328564X	Furnished	221XEAHX-*3	250 I	Opp	91		Furnished
489XAAHX-*5 (12)	250 I	Opp	72			Furnished	442XAAHX-*3 (12)	250 I	Opp	69		Furnished
489XCAHX-*5 (13)	250 I	Opp	93			Furnished	442XBAHX-*3 (18)	250 I	Eng	69		Furnished
489XFAXH-*5 (2)	250 I	Opp	114			Furnished	442XCAHX-*3 (13)	250 I	Opp	89		Furnished
489XHAHX-*5 (15)	250 I	Opp	132			Furnished	442XFAHX-*3 (2)	250 I	Opp	110		Furnished
489XLAHX-*5 (1)	222 I	Opp	148			Furnished	442XHAHX-*3 (15)	250 I	Opp	127		Furnished
489XQAHX-*5 (1)	206 I	Opp	160			Furnished	442XLAHX-*3 (1)	233 I	Opp	142		Furnished
489XRAXH-*5 (1)	178 I	Opp	185			Furnished	442XQAHX-*3 (1)	216 I	Opp	153		Furnished
489XSAXH-*5 (1)	150 I	Opp	220			Furnished	442XRAHX-*3 (1)	187 I	Opp	177		Furnished
489XUAHX-*5 (1)	126 I	Opp	262			Furnished	442XSAHX-*3 (1)	156 I	Opp	211		Furnished
489XWAHX-*5 (1)	107 I	Opp	308			Furnished	442XUAHX-*3 (1)	132 I	Opp	251		Furnished
489XXAHX-*5 (1)	91 I	Opp	365			Furnished	442XWAHX-*3 (1)	112 I	Opp	295		Furnished
680XFAHX-*3 (10)	288 I	Opp	114			Furnished	442XXAHX-*3 (1)	94 I	Opp	349		Furnished
680XHAHX-*3 (20)	249 I	Opp	132			Furnished	660XFAHX-*3 (10)	301 I	Opp	110		Furnished
680XQAHX-*3 (11)	206 I	Opp	160			Furnished	660XHAHX-*3 (15)	260 I	Opp	127		Furnished
680XRAHX-*3 (19)	178 I	Opp	185			Furnished	660XQAHX-*3 (11)	216 I	Opp	153		Furnished
680XSAHX-*3 (14)	150 I	Opp	220			Furnished	660XRAHX-*3 (19)	187 I	Opp	177		Furnished
823XBAHX-*3 (37)	423 I	Opp	78			Furnished	660XSAHX-*3 (14)	156 I	Opp	211		Furnished
823XDAHX-*3 (41)	357 I	Opp	92			Furnished						
823XGAHX-*3 (42)	329 I	Opp	100			Furnished						
823XJAHX-*3 (38)	279 I	Opp	118			Furnished						
823XMAHX-*3 (36)	238 I	Opp	139			Furnished						
823XRAHX-*3 (40)	172 I	Opp	191			Furnished						
823XTKTX-*3 (17)	142 I	Opp	231			Furnished						
880XBAHX-*3 (3)	423 I	Opp	78			Furnished						
880XDAHX-*3 (4)	357 I	Opp	92			Furnished						
880XGAHX-*3 (9)	329 I	Opp	100			Furnished						
880XJAHX-*3 (5)	279 I	Opp	118			Furnished						
880XMAHX-*3 (6)	238 I	Opp	139			Furnished						
880XQAHX-*3 (16)	203 I	Opp	162			Furnished						

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION:** Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.**CAUTION:** DO NOT use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1103
- (9) Input Gear Part No. 5-P-1135
- (13) Input Gear Part No. 5-P-1287
- (18) Input Gear Part No. 5-P-1418
- (38) Input Gear Part No. 5-P-325
- (2) Input Gear Part No. 5-P-1077
- (10) Input Gear Part No. 5-P-1242
- (14) Input Gear Part No. 5-P-1322
- (19) Input Gear Part No. 5-P-1441
- (40) Input Gear Part No. 5-P-721
- (3) Input Gear Part No. 5-P-1100
- (11) Input Gear Part No. 5-P-1246
- (15) Input Gear Part No. 5-P-1364
- (20) Input Gear Part No. 5-P-1494
- (41) Input Gear Part No. 5-P-971
- (4) Input Gear Part No. 5-P-1101
- (12) Input Gear Part No. 5-P-1280
- (16) Input Gear Part No. 5-P-1385
- (36) Input Gear Part No. 5-P-283
- (42) Input Gear Part No. 5-P-980
- (5) Input Gear Part No. 5-P-1102
- (17) Input Gear Part No. 5-P-1395
- (37) Input Gear Part No. 5-P-285
- (43) Filler block furnished with PTO

FLR-100

EATON FULLER

CHELSEA®

RTO-10910B-DM2 (UltraShift)	RTOM-16910B-DM3 (UltraShift)
RTO-12910B-DM2 (UltraShift)	
RTO-14910B-DM2 (UltraShift)	
RTO-16910B-DM2 (UltraShift)	
RTO-10910B-DM3 (UltraShift)	
RTO-12910B-DM3 (UltraShift)	
RTO-14910B-DM3 (UltraShift)	
RTO-16910B-DM3 (UltraShift)	

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XRAHX-*3 (7)	172 I	Opp	191	Furnished
880XTAHX-*3 (8)	134 I	Opp	246	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (30)	300 C	Opp	64	328481X	Furnished	272XAAJX-*3 (30)	300 C	Opp	61	Furnished
282XBAJX-*3 (21)	300 C	Opp	78	8-A-032	Furnished	272XBAJX-*3 (31)	300 C	Opp	75	Furnished
282XCAJX-*3 (22)	300 C	Opp	94	8-A-032	Furnished	272XCAJX-*3 (32)	300 C	Opp	90	Furnished
282XDAJX-*3 (23)	293 C	Opp	113	8-A-032	Furnished	272XDAJX-*3 (33)	300 C	Opp	108	Furnished
282XGAJX-*3 (24)	246 C	Opp	134	8-A-032	Furnished	272XGAJX-*3 (34)	257 C	Opp	128	Furnished
282XKAJX-*3 (25)	220 C	Opp	150	8-A-032	Furnished	272XKAJX-*3 (35)	230 C	Opp	144	Furnished
282XMAJX-*3 (26)	197 C	Opp	168	8-A-032	Furnished	272XMAJX-*3 (36)	206 C	Opp	161	Furnished
282XPAJX-*3 (27)	176 C	Opp	180	8-A-032	Furnished	272XPAJX-*3 (37)	184 C	Opp	180	Furnished
282XSAJX-*3 (28)	158 C	Opp	210	8-A-032	Furnished	272XSAJX-*3 (38)	165 C	Opp	201	Furnished
282XTAJX-*3 (29)	141 C	Opp	235	8-A-032	Furnished					

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	423 I	Opp	78	Furnished
885XGAHX-*3 (9)	329 I	Opp	100	Furnished
885XJAHX-*3 (5)	279 I	Opp	118	Furnished
885XMAHX-*3 (6)	238 I	Opp	139	Furnished

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (39)	200 I	Opp	100	105	Furnished	340XFAHX-*5 (39)	200 I	Opp	96	101	7-A-140(43)	Furnished
863XBAHX-*5	423 I	Opp	78	97	Furnished							

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng	8-A-032	Furnished	626XAHX-3AH	250 I	Eng					Furnished
					630-02	250 I	Eng					Furnished
					630XAHX-3AH	250 I	Eng					Furnished
					645XAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: DO NOT use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (21) Input Gear Part No. 5-P-1510-11X
- (27) Input Gear Part No. 5-P-1510-17X
- (33) Input Gear Part No. 5-P-1510-4X
- (38) Input Gear Part No. 5-P-1510-9X
- (5) Input Gear Part No. 5-P-1102
- (22) Input Gear Part No. 5-P-1510-12X
- (28) Input Gear Part No. 5-P-1510-18X
- (34) Input Gear Part No. 5-P-1510-5X
- (39) Input Gear Part No. 5-P-581
- (6) Input Gear Part No. 5-P-1103
- (23) Input Gear Part No. 5-P-1510-13X
- (29) Input Gear Part No. 5-P-1510-19X
- (35) Input Gear Part No. 5-P-1510-6X
- (43) Filler block furnished with PTO
- (7) Input Gear Part No. 5-P-1104
- (24) Input Gear Part No. 5-P-1510-14X
- (30) Input Gear Part No. 5-P-1510-1X
- (36) Input Gear Part No. 5-P-1510-7X
- (37) Input Gear Part No. 5-P-1510-8X
- (8) Input Gear Part No. 5-P-1105
- (25) Input Gear Part No. 5-P-1510-15X
- (31) Input Gear Part No. 5-P-1510-2X
- (38) Input Gear Part No. 5-P-1510-9X
- (9) Input Gear Part No. 5-P-1135
- (26) Input Gear Part No. 5-P-1510-16X
- (32) Input Gear Part No. 5-P-1510-3X

CHELSEA®**EATON FULLER****FLR-100**

RTO-10910B-DM2 (UltraShift)
 RTO-12910B-DM2 (UltraShift)
 RTO-14910B-DM2 (UltraShift)
 RTO-16910B-DM2 (UltraShift)
 RTO-10910B-DM3 (UltraShift)
 RTO-12910B-DM3 (UltraShift)
 RTO-14910B-DM3 (UltraShift)
 RTO-16910B-DM3 (UltraShift)

RTOM-16910B-DM3 (UltraShift)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

REAR MOUNT - "AU" MOUNTING OPTION

541-LAU-*-*	400 I	Eng	91	Furnished
541-MAU-*-*	350 I	Eng	117	Furnished
541-NAU-*-*	300 I	Eng	133	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 lb-ft [475 Nm] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 lb-ft [1017 Nm] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 lb-ft [475 Nm] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: DO NOT use geared adapters with 442 A and C ratios.

Eaton Fuller

FLR-105

EATON FULLER

CHELSEA®

FA-11810B (Advantage Series) ThruShaft use AV mounting	FAF-13810B (Advantage Series) ThruShaft use AV mounting	FAMF-14810B (Advantage Series) ThruShaft use AV mounting
FA-12810B (Advantage Series) ThruShaft use AV mounting	FAF-14810B (Advantage Series) ThruShaft use AV mounting	FAMF-15810B (Advantage Series) ThruShaft use AV mounting
FA-13810B (Advantage Series) ThruShaft use AV mounting	FAF-15810B (Advantage Series) ThruShaft use AV mounting	
FA-14810B (Advantage Series) ThruShaft use AV mounting	FAF-9810B (Advantage Series) ThruShaft use AV mounting	
FA-15810B (Advantage Series) ThruShaft use AV mounting	FAM-14810B (Advantage Series) ThruShaft use AV mounting	
FA-9810B (Advantage Series) ThruShaft use AV mounting	FAM-14810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting	
FAF-11810B (Advantage Series) ThruShaft use AV mounting	FAM-15810B (Advantage Series) ThruShaft use AV mounting	
FAF-12810B (Advantage Series) ThruShaft use AV mounting	FAM-15810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting	

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	61	7-A-032(P)(46)	328564X	Furnished	221XCAHX-*3	250 I	Opp	58	7-A-032(46)	Furnished
221ZEAHX-*3	250 I	Opp	70		328564X	Furnished	221XEAHX-*3	250 I	Opp	67		Furnished
489XAAHX-*5 (12)	250 I	Opp	54			Furnished	442XAAHX-*3 (12)	250 I	Opp	51		Furnished
489XCAHX-*5 (13)	250 I	Opp	69			Furnished	442XBAHX-*3 (18)	250 I	Eng	51		REQUIRED
489XFAHX-*5 (2)	250 I	Opp	85			Furnished	442XCAHX-*3 (13)	250 I	Opp	66		Furnished
489XHAHX-*5 (15)	250 I	Opp	99			Furnished	442XFAHX-*3 (2)	250 I	Opp	81		Furnished
489XLAHX-*5 (1)	250 I	Opp	110			Furnished	442XHAHX-*3 (15)	250 I	Opp	94		Furnished
489XQAHX-*5 (1)	225 I	Opp	118			Furnished	442XLAHX-*3 (1)	250 I	Opp	105		Furnished
489XRAHX-*5 (1)	225 I	Opp	137			Furnished	442XQAHX-*3 (1)	225 I	Opp	113		Furnished
489XSAHX-*5 (1)	200 I	Opp	163			Furnished	442XRAHX-*3 (1)	225 I	Opp	131		Furnished
489XUAHX-*5 (1)	195 I	Opp	194			Furnished	442XSAHX-*3 (1)	200 I	Opp	156		Furnished
489XWAHX-*5 (1)	175 I	Opp	229			Furnished	442XUAHX-*3 (1)	195 I	Opp	186		Furnished
489XXAHX-*5 (1)	140 I	Opp	271			Furnished	442XWAHX-*3 (1)	175 I	Opp	219		Furnished
680XFAHX-*3 (10)	375 I	Opp	85			Furnished	442XXAHX-*3 (1)	140 I	Opp	259		Furnished
680XHAHX-*3 (20)	375 I	Opp	99			Furnished	660XFAHX-*3 (10)	375 I	Opp	81		Furnished
680XQAHX-*3 (11)	375 I	Opp	118			Furnished	660XHAHX-*3 (15)	375 I	Opp	94		Furnished
680XRAHX-*3 (19)	350 I	Opp	137			Furnished	660XQAHX-*3 (11)	375 I	Opp	113		Furnished
680XSQAHX-*3 (14)	322 I	Opp	163			Furnished	660XRAHX-*3 (19)	350 I	Opp	131		Furnished
823XBAHX-*3 (44)	750 I	Opp	58			Furnished	660XSQAHX-*3 (14)	336 I	Opp	156		Furnished
823XDAHX-*3 (40)	750 I	Opp	69			Furnished						
823XGAHX-*3 (45)	705 I	Opp	74			Furnished						
823XJAHX-*3 (41)	599 I	Opp	88			Furnished						
823XMAHX-*3 (39)	511 I	Opp	103			Furnished						
823XRAHX-*3 (43)	370 I	Opp	142			Furnished						
823XTKTX-*3 (17)	305 I	Opp	172	8-A-165(46)		Furnished						
880XBAHX-*3 (3)	500 I	Opp	58			Furnished						
880XDAHX-*3 (4)	500 I	Opp	69			Furnished						
880XGAHX-*3 (9)	500 I	Opp	74			Furnished						
880XJAHX-*3 (5)	500 I	Opp	88			Furnished						
880XMAHX-*3 (6)	500 I	Opp	103			Furnished						
880XQAHX-*3 (16)	435 I	Opp	120			Furnished						

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION: INPUT SIGNAL REQUIRED:** In any case a PTO is used, regardless of PTO style, the transmission must have an input signal from the PTO when it is active. Eaton requires the OEM to provide a "PTO Active" input connection to the transmission ECU. Refer to the Vehicle OEM for wire connection information and to EATON TRIG2600 for Transmission/PTO Operations.**CAUTION: DO NOT use geared adapters with 442 A and C ratios.**

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1103
- (13) Input Gear Part No. 5-P-1287
- (18) Input Gear Part No. 5-P-1418
- (41) Input Gear Part No. 5-P-325
- (2) Input Gear Part No. 5-P-1077
- (9) Input Gear Part No. 5-P-1135
- (14) Input Gear Part No. 5-P-1322
- (19) Input Gear Part No. 5-P-1441
- (43) Input Gear Part No. 5-P-721
- (3) Input Gear Part No. 5-P-1100
- (10) Input Gear Part No. 5-P-1242
- (15) Input Gear Part No. 5-P-1364
- (20) Input Gear Part No. 5-P-1494
- (44) Input Gear Part No. 5-P-971
- (4) Input Gear Part No. 5-P-1101
- (11) Input Gear Part No. 5-P-1246
- (16) Input Gear Part No. 5-P-1385
- (39) Input Gear Part No. 5-P-283
- (45) Input Gear Part No. 5-P-980
- (5) Input Gear Part No. 5-P-1102
- (12) Input Gear Part No. 5-P-1280
- (17) Input Gear Part No. 5-P-1395
- (40) Input Gear Part No. 5-P-285
- (46) Filler block furnished with PTO

CHELSEA®**EATON FULLER****FLR-105**

FA-11810B (Advantage Series) ThruShaft use AV mounting FA-12810B (Advantage Series) ThruShaft use AV mounting FA-13810B (Advantage Series) ThruShaft use AV mounting FA-14810B (Advantage Series) ThruShaft use AV mounting FA-15810B (Advantage Series) ThruShaft use AV mounting FA-9810B (Advantage Series) ThruShaft use AV mounting FAF-11810B (Advantage Series) ThruShaft use AV mounting FAF-12810B (Advantage Series) ThruShaft use AV mounting	FAF-13810B (Advantage Series) ThruShaft use AV mounting FAF-14810B (Advantage Series) ThruShaft use AV mounting FAF-15810B (Advantage Series) ThruShaft use AV mounting FAF-9810B (Advantage Series) ThruShaft use AV mounting FAM-14810B (Advantage Series) ThruShaft use AV mounting FAM-14810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting FAM-15810B (Advantage Series) ThruShaft use AV mounting FAM-15810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FAMF-14810B (Advantage Series) ThruShaft use AV mounting FAMF-15810B (Advantage Series) ThruShaft use AV mounting
---	---	--

BOTTOM SIDE ONLY							RIGHT SIDE ONLY						
TRANSMISSION GEAR DATA: BOT 08-BOLT Opening Gear FORWARD of Centerline 47 Teeth - SPUR							TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 45 Teeth - SPUR						
PITCH LINE TO APERTURE FACE: 0.8050" (20.4500MM)							PITCH LINE TO APERTURE FACE: 1.0850" (27.5600MM)						

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XRAHX-*3 (7)	370 I	Opp	142				Furnished						
880XTAHX-*3 (8)	287 I	Opp	183				Furnished						

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (30)	300 C	Opp	47		328481X	Furnished	272XAAJX-*3 (30)	300 C	Opp	45			Furnished
282XBAJX-*3 (21)	300 C	Opp	58	8-A-032		Furnished	272XBAJX-*3 (31)	300 C	Opp	55			Furnished
282XCAJX-*3 (22)	300 C	Opp	70	8-A-032		Furnished	272XCAJX-*3 (32)	300 C	Opp	67			Furnished
282XDAJX-*3 (23)	300 C	Opp	84	8-A-032		Furnished	272XDAJX-*3 (33)	300 C	Opp	80			Furnished
282XGAJX-*3 (24)	300 C	Opp	100	8-A-032		Furnished	272XGAJX-*3 (34)	300 C	Opp	95			Furnished
282XKAJX-*3 (25)	300 C	Opp	111	8-A-032		Furnished	272XKAJX-*3 (35)	300 C	Opp	107			Furnished
282XMAJX-*3 (26)	300 C	Opp	124	8-A-032		Furnished	272XMAJX-*3 (36)	300 C	Opp	119			Furnished
282XPAJX-*3 (27)	300 C	Opp	139	8-A-032		Furnished	272XPAJX-*3 (37)	300 C	Opp	133			Furnished
282XSAJX-*3 (28)	300 C	Opp	156	8-A-032		Furnished	272XSAJX-*3 (38)	300 C	Opp	149			Furnished
282XTAJX-*3 (29)	300 C	Opp	174	8-A-032		Furnished							

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	58				Furnished						
885XGAHX-*3 (9)	500 I	Opp	74				Furnished						
885XJAHX-*3 (5)	500 I	Opp	88				Furnished						
885XMAHX-*3 (6)	500 I	Opp	103				Furnished						

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (42)	200 I	Opp	74	78			Furnished	340XFAHX-*5 (42)	200 I	Opp	71	75	7-A-140(46)	
352ZSAHX-*3 (1)	140 I	Opp	165	214		328564X	Furnished	352ZSAHX-*3 (1)	140 I	Opp	158	205		Furnished
863XBAHX-*5	423 I	Opp	58	72			Furnished							

GEARED ADAPTERS

628XAHX-4AH	250 I	Eng		8-A-032			Furnished	626XAHX-3AH	250 I	Eng				Furnished
								630-02	250 I	Eng				Furnished
								630XAHX-3AH	250 I	Eng				Furnished
								645XAHX-3AH	250 I	Eng				Furnished

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: INPUT SIGNAL REQUIRED: In any case a PTO is used, regardless of PTO style, the transmission must have an input signal from the PTO when it is active. Eaton requires the OEM to provide a "PTO Active" input connection to the transmission ECU. Refer to the Vehicle OEM for wire connection information and to EATON TRIG2600 for Transmission/PTO Operations.

- (1) Input Gear Part No. 5-P-1004
- (9) Input Gear Part No. 5-P-1135
- (26) Input Gear Part No. 5-P-1510-16X
- (32) Input Gear Part No. 5-P-1510-3X
- (38) Input Gear Part No. 5-P-1510-9X
- (3) Input Gear Part No. 5-P-1100
- (21) Input Gear Part No. 5-P-1510-11X
- (27) Input Gear Part No. 5-P-1510-17X
- (33) Input Gear Part No. 5-P-1510-4X
- (42) Input Gear Part No. 5-P-581
- (5) Input Gear Part No. 5-P-1102
- (22) Input Gear Part No. 5-P-1510-12X
- (28) Input Gear Part No. 5-P-1510-18X
- (34) Input Gear Part No. 5-P-1510-5X
- (46) Filler block furnished with PTO
- (6) Input Gear Part No. 5-P-1103
- (23) Input Gear Part No. 5-P-1510-13X
- (29) Input Gear Part No. 5-P-1510-19X
- (35) Input Gear Part No. 5-P-1510-6X
- (7) Input Gear Part No. 5-P-1104
- (24) Input Gear Part No. 5-P-1510-14X
- (30) Input Gear Part No. 5-P-1510-1X
- (36) Input Gear Part No. 5-P-1510-7X
- (8) Input Gear Part No. 5-P-1105
- (25) Input Gear Part No. 5-P-1510-15X
- (31) Input Gear Part No. 5-P-1510-2X
- (37) Input Gear Part No. 5-P-1510-8X

Eaton Fuller

FLR-106

EATON FULLER

CHELSEA®

FO-10E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-11E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-12E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-14E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-16E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-17E308LL-VCS (UltraShift Plus) Thrushaft use BD Mounting

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
 47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot	Fwd					I / C †	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	82	7-A-032(P)(45)	328564X	Furnished	221XCAHX-*3	250 I	Opp	79	7-A-032(45)	Furnished
221ZEAHX-*3	250 I	Opp	95		328564X	Furnished	221XEAHX-*3	250 I	Opp	91		Furnished
489XAAHX-*5 (11)	250 I	Opp	72			Furnished	442XAAHX-*3 (11)	250 I	Opp	69		Furnished
489XCAHX-*5 (12)	250 I	Opp	93			Furnished	442XBAHX-*3 (17)	250 I	Eng	69		Furnished
489XFAHX-*5 (2)	250 I	Opp	114			Furnished	442XCAHX-*3 (12)	250 I	Opp	89		Furnished
489XHAHX-*5 (14)	250 I	Opp	132			Furnished	442XFAHX-*3 (2)	250 I	Opp	110		Furnished
489XLAHX-*5 (1)	250 I	Opp	148			Furnished	442XHAHX-*3 (14)	250 I	Opp	127		Furnished
489XQAHX-*5 (1)	225 I	Opp	160			Furnished	442XLAHX-*3 (1)	250 I	Opp	142		Furnished
489XRAHX-*5 (1)	220 I	Opp	185			Furnished	442XQAHX-*3 (1)	225 I	Opp	153		Furnished
489XSAHX-*5 (1)	155 I	Opp	220			Furnished	442XRAHX-*3 (1)	225 I	Opp	177		Furnished
489XUAHX-*5 (1)	110 I	Opp	262			Furnished	442XSAHX-*3 (1)	170 I	Opp	211		Furnished
489XWAHX-*5 (1)	80 I	Opp	308			Furnished	442XUAHX-*3 (1)	120 I	Opp	251		Furnished
489XXAHX-*5 (1)	55 I	Opp	365			Furnished	442XWAHX-*3 (1)	87 I	Opp	295		Furnished
680XFAHX-*3 (9)	375 I	Opp	114			Furnished	442XXAHX-*3 (1)	62 I	Opp	349		Furnished
680XHAHX-*3 (19)	375 I	Opp	132			Furnished	660XFAHX-*3 (9)	375 I	Opp	110		Furnished
680XQAHX-*3 (10)	295 I	Opp	160			Furnished	660XHAHX-*3 (14)	375 I	Opp	127		Furnished
680XRAHX-*3 (18)	220 I	Opp	185			Furnished	660XQAHX-*3 (10)	320 I	Opp	153		Furnished
680XSAHX-*3 (13)	155 I	Opp	220			Furnished	660XRAHX-*3 (18)	240 I	Opp	177		Furnished
823XBAHX-*3 (39)	750 I	Opp	78			Furnished	660XSAHX-*3 (13)	170 I	Opp	211		Furnished
823XDAHX-*3 (43)	750 I	Opp	92			Furnished						
823XGAHX-*3 (44)	705 I	Opp	100			Furnished						
823XJAHX-*3 (40)	599 I	Opp	118			Furnished						
823XMAHX-*3 (38)	511 I	Opp	139			Furnished						
823XRAHX-*3 (42)	370 I	Opp	191			Furnished						
823XTKTX-*3 (16)	305 I	Opp	231	8-A-165(45)		Furnished						
880XBAHX-*3 (3)	500 I	Opp	78			Furnished						
880XDAHX-*3 (4)	500 I	Opp	92			Furnished						
880XGAHX-*3 (8)	500 I	Opp	100			Furnished						
880XJAHX-*3 (5)	500 I	Opp	118			Furnished						
880XMAHX-*3 (6)	340 I	Opp	139			Furnished						
880XQAHX-*3 (15)	280 I	Opp	162			Furnished						
880XRAHX-*3 (7)	205 I	Opp	191			Furnished						

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift Plus transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

CAUTION: DO NOT use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (7) Input Gear Part No. 5-P-1104
- (13) Input Gear Part No. 5-P-1322
- (19) Input Gear Part No. 5-P-1494
- (44) Input Gear Part No. 5-P-980
- (2) Input Gear Part No. 5-P-1077
- (8) Input Gear Part No. 5-P-1135
- (14) Input Gear Part No. 5-P-1364
- (38) Input Gear Part No. 5-P-283
- (45) Filler block furnished with PTO
- (3) Input Gear Part No. 5-P-1100
- (9) Input Gear Part No. 5-P-1242
- (15) Input Gear Part No. 5-P-1385
- (39) Input Gear Part No. 5-P-285
- (4) Input Gear Part No. 5-P-1101
- (10) Input Gear Part No. 5-P-1246
- (16) Input Gear Part No. 5-P-1395
- (40) Input Gear Part No. 5-P-325
- (5) Input Gear Part No. 5-P-1102
- (11) Input Gear Part No. 5-P-1280
- (17) Input Gear Part No. 5-P-1418
- (42) Input Gear Part No. 5-P-721
- (6) Input Gear Part No. 5-P-1103
- (12) Input Gear Part No. 5-P-1287
- (18) Input Gear Part No. 5-P-1441
- (43) Input Gear Part No. 5-P-971

FO-10E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-11E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-12E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-14E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-16E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-17E308LL-VCS (UltraShift Plus) Thrushaft use BD Mounting

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
 47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (29)	300 C	Opp	64	328481X	Furnished	272XAAJX-*3 (29)	300 C	Opp	61			Furnished
282XBAJX-*3 (20)	300 C	Opp	78	8-A-032	Furnished	272XBAJX-*3 (30)	300 C	Opp	75			Furnished
282XCAJX-*3 (21)	300 C	Opp	94	8-A-032	Furnished	272XCAJX-*3 (31)	300 C	Opp	90			Furnished
282XDAJX-*3 (22)	300 C	Opp	113	8-A-032	Furnished	272XDAJX-*3 (32)	300 C	Opp	108			Furnished
282XGAJX-*3 (23)	300 C	Opp	134	8-A-032	Furnished	272XGAJX-*3 (33)	300 C	Opp	128			Furnished
282XKAJX-*3 (24)	300 C	Opp	150	8-A-032	Furnished	272XKAJX-*3 (34)	300 C	Opp	150			Furnished
282XMAJX-*3 (25)	281 C	Opp	168	8-A-032	Furnished	272XMAJX-*3 (35)	294 C	Opp	161			Furnished
282XPAJX-*3 (26)	252 C	Opp	188	8-A-032	Furnished	272XPAJX-*3 (36)	263 C	Opp	180			Furnished
282XSAXJX-*3 (27)	225 C	Opp	210	8-A-032	Furnished	272XSAXJX-*3 (37)	235 C	Opp	201			Furnished
282XTAJX-*3 (28)	201 C	Opp	235	8-A-032	Furnished							

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	78		Furnished							
885XGAHX-*3 (8)	500 I	Opp	100		Furnished							
885XJAHX-*3 (5)	500 I	Opp	118		Furnished							
885XMAHX-*3 (6)	395 I	Opp	139		Furnished							

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (41)	200 I	Opp	100	105	328564X	Furnished	340XFAHX-*5 (41)	200 I	Opp	96	101	7-A-140(45)	
352ZSAHX-*3 (1)	140 I	Opp	223	288		Furnished	352ZSAHX-*3 (1)	140 I	Opp	213	276		Furnished
863XBAHX-*5	423 I	Opp	78	97		Furnished							

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng	8-A-032		Furnished	626XAHX-3AH	250 I	Eng				Furnished
						630XAHX-3AH	250 I	Eng				Furnished
						645XAHX-3AH	250 I	Eng				Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift Plus transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

CAUTION: DO NOT use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (20) Input Gear Part No. 5-P-1510-11X
- (25) Input Gear Part No. 5-P-1510-16X
- (30) Input Gear Part No. 5-P-1510-2X
- (35) Input Gear Part No. 5-P-1510-7X
- (3) Input Gear Part No. 5-P-1100
- (21) Input Gear Part No. 5-P-1510-12X
- (26) Input Gear Part No. 5-P-1510-17X
- (31) Input Gear Part No. 5-P-1510-3X
- (36) Input Gear Part No. 5-P-1510-8X
- (5) Input Gear Part No. 5-P-1102
- (22) Input Gear Part No. 5-P-1510-13X
- (27) Input Gear Part No. 5-P-1510-18X
- (32) Input Gear Part No. 5-P-1510-4X
- (37) Input Gear Part No. 5-P-1510-9X
- (6) Input Gear Part No. 5-P-1103
- (23) Input Gear Part No. 5-P-1510-14X
- (28) Input Gear Part No. 5-P-1510-19X
- (33) Input Gear Part No. 5-P-1510-5X
- (41) Input Gear Part No. 5-P-581
- (8) Input Gear Part No. 5-P-1135
- (24) Input Gear Part No. 5-P-1510-15X
- (29) Input Gear Part No. 5-P-1510-1X
- (34) Input Gear Part No. 5-P-1510-6X
- (45) Filler block furnished with PTO

FLR-106

EATON FULLER

CHELSEA®

FO-10E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-11E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-12E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-14E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-16E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
 FO-17E308LL-VCS (UltraShift Plus) Thrushaft use BD Mounting

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (10 SPEED TRANSMISSIONS)

541-LBD-*-*	400 I	Eng	91	Furnished
541-MBD-*-*	350 I	Eng	117	Furnished
541-NBD-*-*	300 I	Eng	133	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift Plus transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

CAUTION: DO NOT use geared adapters with 442 A and C ratios.

CHELSEA®**EATON FULLER****FLR-107**

F-14E16B-LSE (UltraShift Plus) F-15E16B-LSE (UltraShift Plus) F-17E16B-LSE (UltraShift Plus) FM-15E16B-LSE (UltraShift Plus) FO-10E309ALL-VMS (UltraShift Plus) Thrushift use BD mounting FO-10E310C-VAS (UltraShift Plus) Thrushift use AT mounting FO-11E309ALL-VMS (UltraShift Plus) Thrushift use BD mounting FO-12E309ALL-VMS (UltraShift Plus) Thrushift use BD mounting	FO-12E310C-VAS (UltraShift Plus) Thrushift use AT mounting FO-14E309ALL-VMS (UltraShift Plus) Thrushift use BD mounting FO-14E310C-LAS (UltraShift Plus) Thrushift use AT mounting FO-14E310C-VAS (UltraShift Plus) Thrushift use AT mounting FO-14E313A-MHP (UltraShift Plus) FO-14E313A-VHP (UltraShift Plus) FO-14E318B-MXP (UltraShift Plus) FO-14E318B-VXP (UltraShift Plus)	FO-16E309ALL-VMS (UltraShift Plus) Thrushift use BD mounting FO-16E310C-LAS (UltraShift Plus) Thrushift use AT mounting FO-16E310C-VAS (UltraShift Plus) Thrushift use AT mounting FO-16E313A-MHP (UltraShift Plus) FO-16E313A-VHP (UltraShift Plus) FO-16E318B-MXP (UltraShift Plus) FO-16E318B-VXP (UltraShift Plus)
---	--	--

BOTTOM SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489XAAHX-*5 (11)	250 I	Opp	61	Furnished	221XCAHX-*3	250 I	Eng	66	7-A-032(P)(44)	329138X	Furnished
489XCAHX-*5 (12)	250 I	Opp	78	Furnished	221XEAHX-*3	250 I	Eng	76		329138X	Furnished
489XFAHX-*5 (2)	250 I	Opp	96	Furnished	442XAAHX-*3 (11)	250 I	Opp	58			Furnished
489XHAHX-*5 (14)	250 I	Opp	111	Furnished	442XBAHX-*3 (17)	250 I	Eng	58			REQUIRED
489XLAHX-*5 (1)	250 I	Opp	124	Furnished	442XCAHX-*3 (12)	250 I	Opp	74			Furnished
489XQAHX-*5 (1)	225 I	Opp	134	Furnished	442XFAHX-*3 (2)	250 I	Opp	92			Furnished
489XRAXH-*5 (1)	225 I	Opp	155	Furnished	442XHAHX-*3 (14)	250 I	Opp	107			Furnished
489XSAXH-*5 (1)	200 I	Opp	184	Furnished	442XLAHX-*3 (1)	250 I	Opp	119			Furnished
680XFAHX-*3 (9)	375 I	Opp	96	Furnished	442XQAHX-*3 (1)	225 I	Opp	128			Furnished
680XHAHX-*3 (19)	375 I	Opp	111	Furnished	442XRAHX-*3 (1)	225 I	Opp	148			Furnished
680XQAHX-*3 (10)	375 I	Opp	134	Furnished	660XFAHX-*3 (9)	375 I	Opp	92			Furnished
680XRAXH-*3 (18)	310 I	Opp	155	Furnished	660XHAHX-*3 (14)	375 I	Opp	107			Furnished
680XSAXH-*3 (13)	220 I	Opp	184	Furnished	660XQAHX-*3 (10)	375 I	Opp	128			Furnished
823XBAHX-*3 (38)	750 I	Opp	65	Furnished	660XRAHX-*3 (18)	340 I	Opp	148			Furnished
823XDAHX-*3 (42)	750 I	Opp	77	Furnished							
823XGAHX-*3 (43)	705 I	Opp	84	Furnished							
823XJAHX-*3 (39)	599 I	Opp	99	Furnished							
823XMAHX-*3 (37)	511 I	Opp	116	Furnished							
823XRAXH-*3 (41)	370 I	Opp	160	Furnished							
823XTKTX-*3 (16)	305 I	Opp	194	8-A-165(44)							
880XBAHX-*3 (3)	500 I	Opp	65	Furnished							
880XDAHX-*3 (4)	500 I	Opp	77	Furnished							
880XGAHX-*3 (8)	500 I	Opp	84	Furnished							
880XJAHX-*3 (5)	500 I	Opp	99	Furnished							
880XMAHX-*3 (6)	500 I	Opp	116	Furnished							
880XQAHX-*3 (15)	435 I	Opp	136	Furnished							
880XRAXH-*3 (7)	370 I	Opp	160	Furnished							

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (29)	300 C	Opp	53	328481X	Furnished	272XAAJX-*3 (29)	300 C	Opp	51		Furnished
282XBAJX-*3 (20)	300 C	Opp	65	8-A-032	Furnished	272XBAJX-*3 (30)	300 C	Opp	63		Furnished
282XCAJX-*3 (21)	300 C	Opp	79	8-A-032	Furnished	272XCAJX-*3 (31)	300 C	Opp	76		Furnished
						272XDAJX-*3 (32)	300 C	Opp	90		Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION: INPUT SIGNAL REQUIRED** - The Eaton UltraShift Plus transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.**CAUTION: DO NOT use geared adapters with 442 A and C ratios.**

- (1) Input Gear Part No. 5-P-1004
- (8) Input Gear Part No. 5-P-1135
- (9) Input Gear Part No. 5-P-1242
- (10) Input Gear Part No. 5-P-1246
- (11) Input Gear Part No. 5-P-1280
- (12) Input Gear Part No. 5-P-1287
- (13) Input Gear Part No. 5-P-1322
- (14) Input Gear Part No. 5-P-1364
- (15) Input Gear Part No. 5-P-1385
- (16) Input Gear Part No. 5-P-1395
- (17) Input Gear Part No. 5-P-1418
- (18) Input Gear Part No. 5-P-1441
- (19) Input Gear Part No. 5-P-1494
- (20) Input Gear Part No. 5-P-1510-11X
- (21) Input Gear Part No. 5-P-1510-12X
- (29) Input Gear Part No. 5-P-1510-1X
- (30) Input Gear Part No. 5-P-1510-2X
- (31) Input Gear Part No. 5-P-1510-3X
- (32) Input Gear Part No. 5-P-1510-4X
- (37) Input Gear Part No. 5-P-283
- (38) Input Gear Part No. 5-P-285
- (39) Input Gear Part No. 5-P-325
- (41) Input Gear Part No. 5-P-721
- (42) Input Gear Part No. 5-P-971
- (43) Input Gear Part No. 5-P-980
- (44) Filler block furnished with PTO

Eaton Fuller

FLR-107

EATON FULLER

CHELSEA®

F-14E16B-LSE (UltraShift Plus)	FO-12E310C-VAS (UltraShift Plus)Thrushift use AT mounting	FO-16E309ALL-VMS (UltraShift Plus)Thrushift use BD mounting
F-15E16B-LSE (UltraShift Plus)	FO-14E309ALL-VMS (UltraShift Plus)Thrushift use BD mounting	FO-16E310C-LAS (UltraShift Plus) Thrushift use AT mounting
F-17E16B-LSE (UltraShift Plus)	FO-14E310C-VAS (UltraShift Plus)Thrushift use AT mounting	FO-16E310C-VAS (UltraShift Plus) Thrushift use AT mounting
FM-15E16B-LSE (UltraShift Plus)	FO-14E310A-MHP (UltraShift Plus)	FO-16E313A-MHP (UltraShift Plus)
FO-10E309ALL-VMS (UltraShift Plus) Thrushift use BD mounting	FO-14E313A-VHP (UltraShift Plus)	FO-16E313A-VHP (UltraShift Plus)
FO-10E310C-VAS (UltraShift Plus) Thrushift use AT mounting	FO-14E318B-MXP (UltraShift Plus)	FO-16E318B-MXP (UltraShift Plus)
FO-11E309ALL-VMS (UltraShift Plus) Thrushift use BD mounting	FO-14E318B-VXP (UltraShift Plus)	FO-16E318B-VXP (UltraShift Plus)
FO-12E309ALL-VMS (UltraShift Plus) Thrushift use BD mounting	FO-14E318B-VXP (UltraShift Plus)	FO-16E318B-VXP (UltraShift Plus)

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot	Fwd					I / C †	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XDAJX-*3 (22)	300 C	Opp	95	8-A-032	Furnished	272XGAJX-*3 (32)	300 C	Opp	108				Furnished
282XGAJX-*3 (23)	300 C	Opp	112	8-A-032	Furnished	272XKAJX-*3 (33)	300 C	Opp	120				Furnished
282XKAJX-*3 (24)	300 C	Opp	126	8-A-032	Furnished	272XMAJX-*3 (34)	294 C	Opp	135				Furnished
282XMAJX-*3 (25)	281 C	Opp	140	8-A-032	Furnished	272XPAJX-*3 (35)	263 C	Opp	150				Furnished
282XPAJX-*3 (26)	252 C	Opp	157	8-A-032	Furnished	272XS AJX-*3 (36)	235 C	Opp	168				Furnished
282XS AJX-*3 (27)	225 C	Opp	176	8-A-032	Furnished								
282XTAJX-*3 (28)	201 C	Opp	188	8-A-032	Furnished								

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	65		Furnished								
885XGAHX-*3 (8)	500 I	Opp	84		Furnished								
885XJAHX-*3 (5)	500 I	Opp	99		Furnished								
885XMAHX-*3 (6)	500 I	Opp	116		Furnished								

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (40)	200 I	Opp	84	88	Furnished	340XFAHX-*5 (40)	200 I	Opp	80	84	7-A-140(44)		Furnished
352ZSAHX-*3 (1)	140 I	Opp	187	241	328564X	352XSAHX-*3 (1)	140 I	Opp	179	231			Furnished
863XBAHX-*5	423 I	Opp	65	81	Furnished								

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng	8-A-032	Furnished	626XAHX-3AH	250 I	Eng						Furnished
					630XAHX-3AH	250 I	Eng						Furnished
					645XAHX-3AH	250 I	Eng						Furnished

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION: INPUT SIGNAL REQUIRED** - The Eaton UltraShift Plus transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.**CAUTION:** DO NOT use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (22) Input Gear Part No. 5-P-1510-13X
- (27) Input Gear Part No. 5-P-1510-18X
- (35) Input Gear Part No. 5-P-1510-8X
- (3) Input Gear Part No. 5-P-1100
- (23) Input Gear Part No. 5-P-1510-14X
- (28) Input Gear Part No. 5-P-1510-19X
- (36) Input Gear Part No. 5-P-1510-9X
- (5) Input Gear Part No. 5-P-1102
- (24) Input Gear Part No. 5-P-1510-15X
- (32) Input Gear Part No. 5-P-1510-5X
- (40) Input Gear Part No. 5-P-581
- (6) Input Gear Part No. 5-P-1103
- (25) Input Gear Part No. 5-P-1510-16X
- (33) Input Gear Part No. 5-P-1510-6X
- (44) Filler block furnished with PTO
- (8) Input Gear Part No. 5-P-1135
- (26) Input Gear Part No. 5-P-1510-17X
- (34) Input Gear Part No. 5-P-1510-7X

CHELSEA®**EATON FULLER****FLR-107**

F-14E16B-LSE (UltraShift Plus) F-15E16B-LSE (UltraShift Plus) F-17E16B-SE (UltraShift Plus) FM-15E16B-LSE (UltraShift Plus) FO-10E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting FO-10E310C-VAS (UltraShift Plus) Thrushaft use AT mounting FO-11E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting FO-12E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting	FO-12E310C-VAS (UltraShift Plus) Thrushaft use AT mounting FO-14E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting FO-14E310C-LAS (UltraShift Plus) Thrushaft use AT mounting FO-14E310C-VAS (UltraShift Plus) Thrushaft use AT mounting FO-14E313A-MHP (UltraShift Plus) FO-14E313A-VHP (UltraShift Plus) FO-14E318B-MXP (UltraShift Plus) FO-14E318B-VXP (UltraShift Plus)	FO-16E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting FO-16E310C-LAS (UltraShift Plus) Thrushaft use AT mounting FO-16E310C-VAS (UltraShift Plus) Thrushaft use AT mounting FO-16E313A-MHP (UltraShift Plus) FO-16E313A-VHP (UltraShift Plus) FO-16E318B-MXP (UltraShift Plus) FO-16E318B-VXP (UltraShift Plus)
--	--	--

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (9 SPEED TRANSMISSIONS)

541-LBD-*-*	400 I	Eng	76	Furnished
541-MBD-*-*	350 I	Eng	98	Furnished
541-NBD-*-*	300 I	Eng	112	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift Plus transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

CAUTION: DO NOT use geared adapters with 442 A and C ratios.

Eaton Fuller

FM-14E310B-LAS (UltraShift Plus) Thrushaft use AT mounting
FM-15E310B-LAS (UltraShift Plus) Thrushaft use AT mounting

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	61	7-A-032(P)(42)	328564X	Furnished	221XCAHX-*3	250 I	Opp	58	7-A-032(42)	Furnished
221ZEAHX-*3	250 I	Opp	70		328564X	Furnished	221XEAHX-*3	250 I	Opp	67		Furnished
489XAAHX-*5 (12)	250 I	Opp	54			Furnished	442XAAHX-*3 (12)	250 I	Opp	51		Furnished
489XCAHX-*5 (13)	250 I	Opp	69			Furnished	442XBAHX-*3 (18)	250 I	Eng	51		Furnished
489XFAHX-*5 (2)	250 I	Opp	85			Furnished	442XCAHX-*3 (13)	250 I	Opp	66		Furnished
489XHAHX-*5 (15)	250 I	Opp	99			Furnished	442XFAHX-*3 (2)	250 I	Opp	81		Furnished
489XLAHX-*5 (1)	250 I	Opp	110			Furnished	442XHAX-*3 (15)	250 I	Opp	94		Furnished
489XQAHX-*5 (1)	225 I	Opp	118			Furnished	442XLAHX-*3 (1)	250 I	Opp	105		Furnished
489XRAHX-*5 (1)	225 I	Opp	137			Furnished	442XQAHX-*3 (1)	225 I	Opp	113		Furnished
489XSAHX-*5 (1)	200 I	Opp	163			Furnished	442XRAHX-*3 (1)	225 I	Opp	131		Furnished
489XUAHX-*5 (1)	195 I	Opp	194			Furnished	442XSAHX-*3 (1)	200 I	Opp	156		Furnished
489XWAHX-*5 (1)	175 I	Opp	229			Furnished	442XUAHX-*3 (1)	195 I	Opp	186		Furnished
489XXAHX-*5 (1)	140 I	Opp	271			Furnished	442XWAHX-*3 (1)	175 I	Opp	219		Furnished
680XFAHX-*3 (10)	375 I	Opp	85			Furnished	442XXAHX-*3 (1)	140 I	Opp	259		Furnished
680XHAHX-*3 (20)	375 I	Opp	99			Furnished	660XFAHX-*3 (10)	375 I	Opp	81		Furnished
680XQAHX-*3 (11)	375 I	Opp	118			Furnished	660XHAX-*3 (15)	375 I	Opp	94		Furnished
680XRAHX-*3 (19)	350 I	Opp	137			Furnished	660XQAHX-*3 (11)	375 I	Opp	113		Furnished
680XSQAHX-*3 (14)	322 I	Opp	163			Furnished	660XRAHX-*3 (19)	350 I	Opp	131		Furnished
823XBAHX-*3 (40)	750 I	Opp	58			Furnished	660XSQAHX-*3 (14)	336 I	Opp	156		Furnished
823XDAHX-*3 (36)	750 I	Opp	69			Furnished						
823XGAHX-*3 (41)	705 I	Opp	74			Furnished						
823XJAHX-*3 (37)	599 I	Opp	88			Furnished						
823XMAHX-*3 (35)	511 I	Opp	103			Furnished						
823XRAHX-*3 (39)	370 I	Opp	142			Furnished						
823XTKTX-*3 (17)	305 I	Opp	172	8-A-165(42)		Furnished						
880XBAHX-*3 (3)	500 I	Opp	58			Furnished						
880XDAHX-*3 (4)	500 I	Opp	69			Furnished						
880XGAHX-*3 (9)	500 I	Opp	74			Furnished						
880XJAHX-*3 (5)	500 I	Opp	88			Furnished						
880XMAHX-*3 (6)	500 I	Opp	103			Furnished						
880XQAHX-*3 (16)	435 I	Opp	120			Furnished						

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

CAUTION: DO NOT use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1103
- (13) Input Gear Part No. 5-P-1287
- (18) Input Gear Part No. 5-P-1418
- (37) Input Gear Part No. 5-P-325
- (2) Input Gear Part No. 5-P-1077
- (9) Input Gear Part No. 5-P-1135
- (14) Input Gear Part No. 5-P-1322
- (19) Input Gear Part No. 5-P-1441
- (39) Input Gear Part No. 5-P-721
- (3) Input Gear Part No. 5-P-1100
- (10) Input Gear Part No. 5-P-1242
- (15) Input Gear Part No. 5-P-1364
- (20) Input Gear Part No. 5-P-1494
- (40) Input Gear Part No. 5-P-971
- (4) Input Gear Part No. 5-P-1101
- (11) Input Gear Part No. 5-P-1246
- (16) Input Gear Part No. 5-P-1385
- (35) Input Gear Part No. 5-P-283
- (41) Input Gear Part No. 5-P-980
- (5) Input Gear Part No. 5-P-1102
- (12) Input Gear Part No. 5-P-1280
- (17) Input Gear Part No. 5-P-1395
- (36) Input Gear Part No. 5-P-285
- (42) Filler block furnished with PTO

FM-14E310B-LAS (UltraShift Plus) Thrushaft use AT mounting
FM-15E310B-LAS (UltraShift Plus) Thrushaft use AT mounting

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XRAHX-*3 (7)	370 I	Opp	142	Furnished
880XTAHX-*3 (8)	287 I	Opp	183	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (30)	300 C	Opp	47	328481X	Furnished	272XAAJX-*3 (30)	300 C	Opp	45	Furnished
282XBAXJ-*3 (21)	300 C	Opp	58	8-A-032	Furnished	272XBAXJ-*3 (31)	300 C	Opp	55	Furnished
282XCAJX-*3 (22)	300 C	Opp	70	8-A-032	Furnished	272XCAJX-*3 (32)	300 C	Opp	67	Furnished
282XDAJX-*3 (23)	300 C	Opp	84	8-A-032	Furnished	272XDAJX-*3 (33)	300 C	Opp	80	Furnished
282XGAJX-*3 (24)	300 C	Opp	100	8-A-032	Furnished	272XGAJX-*3 (34)	300 C	Opp	95	Furnished
282XKAJX-*3 (25)	300 C	Opp	111	8-A-032	Furnished	272XKAJX-*3 (35)	300 C	Opp	107	Furnished
282XMAJX-*3 (26)	300 C	Opp	124	8-A-032	Furnished	272XMAJX-*3 (36)	300 C	Opp	119	Furnished
282XP AJX-*3 (27)	300 C	Opp	139	8-A-032	Furnished	272XP AJX-*3 (37)	300 C	Opp	133	Furnished
282XSAJX-*3 (28)	300 C	Opp	156	8-A-032	Furnished	272XSAJX-*3 (38)	300 C	Opp	149	Furnished
282XTAJX-*3 (29)	300 C	Opp	174	8-A-032	Furnished					

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MDAJX-*3 (32) 300 C Opp 80 Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	58	Furnished
885XGAHX-*3 (9)	500 I	Opp	74	Furnished
885XJAHX-*3 (5)	500 I	Opp	88	Furnished
885XMAHX-*3 (6)	500 I	Opp	103	Furnished

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (39)	200 I	Opp	74	78	Furnished	340XFAHX-*5 (39)	200 I	Opp	71	75	7-A-140(42)	Furnished
863XBAHX-*5	423 I	Opp	58	72	Furnished							

GEARED ADAPTERS

628XAHX-4AH	250 I	Eng	8-A-032	Furnished	626XAHX-3AH	250 I	Eng	630-02	250 I	Eng	Furnished
-------------	-------	-----	---------	-----------	-------------	-------	-----	--------	-------	-----	-----------

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

CAUTION: DO NOT use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (21) Input Gear Part No. 5-P-1510-11X
- (27) Input Gear Part No. 5-P-1510-17X
- (33) Input Gear Part No. 5-P-1510-4X
- (39) Input Gear Part No. 5-P-581
- (5) Input Gear Part No. 5-P-1102
- (22) Input Gear Part No. 5-P-1510-12X
- (28) Input Gear Part No. 5-P-1510-18X
- (34) Input Gear Part No. 5-P-1510-5X
- (42) Filler block furnished with PTO
- (6) Input Gear Part No. 5-P-1103
- (23) Input Gear Part No. 5-P-1510-13X
- (29) Input Gear Part No. 5-P-1510-19X
- (35) Input Gear Part No. 5-P-1510-6X
- (7) Input Gear Part No. 5-P-1104
- (24) Input Gear Part No. 5-P-1510-14X
- (30) Input Gear Part No. 5-P-1510-1X
- (36) Input Gear Part No. 5-P-1510-7X
- (8) Input Gear Part No. 5-P-1105
- (25) Input Gear Part No. 5-P-1510-15X
- (31) Input Gear Part No. 5-P-1510-2X
- (37) Input Gear Part No. 5-P-1510-8X
- (9) Input Gear Part No. 5-P-1135
- (26) Input Gear Part No. 5-P-1510-16X
- (32) Input Gear Part No. 5-P-1510-3X
- (38) Input Gear Part No. 5-P-1510-9X

FM-14E310B-LAS (UltraShift Plus) Thrushaft use AT mounting
 FM-15E310B-LAS (UltraShift Plus) Thrushaft use AT mounting

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
 47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

GEARED ADAPTERS

630XAHX-3AH	250 I	Eng	Furnished
645XAHX-3AH	250 I	Eng	

Furnished
Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

CAUTION: DO NOT use geared adapters with 442 A and C ratios.

CHELSEA®**EATON FULLER****FLR-112**

FAO-11810C (Advantage Series) ThruShaft use AV mounting	FAO-16810S-EN3 (Advantage Series Automated) ThruShaft use AV mounting	FAOM-14810C (Advantage Series) ThruShaft use AV mounting
FAO-12810C (Advantage Series) ThruShaft use AV mounting	FAO-16810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting	FAOM-14810S-EC3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-13810C (Advantage Series) ThruShaft use AV mounting	FAO-11810C (Advantage Series) ThruShaft use AV mounting	FAOM-15810C (Advantage Series) ThruShaft use AV mounting
FAO-14810C (Advantage Series) ThruShaft use AV mounting	FAO-13810C (Advantage Series) ThruShaft use AV mounting	FAOM-15810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-14810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FAO-14810C (Advantage Series) ThruShaft use AV mounting	FAOM-15810S-EN3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-15810C (Advantage Series) ThruShaft use AV mounting	FAO-15810C (Advantage Series) ThruShaft use AV mounting	FAOM-15810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-16810C (Advantage Series) ThruShaft use AV mounting	FAO-16810C (Advantage Series) ThruShaft use AV mounting	FAOM-15810C (Advantage Series) ThruShaft use AV mounting
FAO-16810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FAO-16810C (Advantage Series) ThruShaft use AV mounting	FAOM-16810C (Advantage Series) ThruShaft use AV mounting

BOTTOM SIDE ONLY							RIGHT SIDE ONLY						
TRANSMISSION GEAR DATA:							TRANSMISSION GEAR DATA:						
BOT 08-BOLT Opening Gear FORWARD of Centerline							R.S. 06-BOLT Opening Gear FORWARD of Centerline						
47 Teeth - SPUR							45 Teeth - SPUR						
PITCH LINE TO APERTURE FACE:							PITCH LINE TO APERTURE FACE:						
0.8050" (20.4500MM)							1.0850" (27.5600MM)						

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489XAAHX-*5 (11)	250 I	Opp	61	Furnished	221XCAHX-*3	250 I	Eng	66	7-A-032(P)(45)	329138X	Furnished
489XCAHX-*5 (12)	250 I	Opp	78	Furnished	221XEAHX-*3	250 I	Eng	76		329138X	Furnished
489XFAAHX-*5 (2)	250 I	Opp	96	Furnished	442XAAHX-*3 (11)	250 I	Opp	58			Furnished
489XVAHX-*5 (14)	250 I	Opp	111	Furnished	442XBAHX-*3 (17)	250 I	Eng	58			REQUIRED
489XLAHX-*5 (1)	250 I	Opp	124	Furnished	442XCAHX-*3 (12)	250 I	Opp	74			Furnished
489XQAHX-*5 (1)	225 I	Opp	134	Furnished	442XFAHX-*3 (2)	250 I	Opp	92			Furnished
489XRAHX-*5 (1)	225 I	Opp	155	Furnished	442XVAHX-*3 (14)	250 I	Opp	107			Furnished
489XSAXH-*5 (1)	200 I	Opp	184	Furnished	442XLAHX-*3 (1)	250 I	Opp	119			Furnished
680XFAHX-*3 (9)	375 I	Opp	96	Furnished	442XQAHX-*3 (1)	225 I	Opp	128			Furnished
680XHAHX-*3 (19)	375 I	Opp	111	Furnished	442XRAHX-*3 (1)	225 I	Opp	148			Furnished
680XQAHX-*3 (10)	375 I	Opp	134	Furnished	660XFAHX-*3 (9)	375 I	Opp	92			Furnished
680XRAHX-*3 (18)	350 I	Opp	155	Furnished	660XHAHX-*3 (14)	375 I	Opp	107			Furnished
680XSAXH-*3 (13)	322 I	Opp	184	Furnished	660XQAHX-*3 (10)	375 I	Opp	128			Furnished
823XBAHX-*3 (39)	750 I	Opp	65	Furnished	660XRAHX-*3 (18)	350 I	Opp	148			Furnished
823XDAHX-*3 (43)	750 I	Opp	77	Furnished							
823XGAHX-*3 (44)	705 I	Opp	84	Furnished							
823XJAHX-*3 (40)	599 I	Opp	99	Furnished							
823XMAHX-*3 (38)	511 I	Opp	116	Furnished							
823XRAHX-*3 (42)	370 I	Opp	160	Furnished							
823XTKTX-*3 (16)	305 I	Opp	194	8-A-165(T)(45)							
880XBAHX-*3 (3)	500 I	Opp	65	Furnished							
880XDAHX-*3 (4)	500 I	Opp	77	Furnished							
880XGAHX-*3 (8)	500 I	Opp	84	Furnished							
880XJAHX-*3 (5)	500 I	Opp	99	Furnished							
880XMAHX-*3 (6)	500 I	Opp	116	Furnished							
880XQAHX-*3 (15)	435 I	Opp	136	Furnished							
880XRAHX-*3 (7)	370 I	Opp	160	Furnished							

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (29)	300 C	Opp	53	328481X	Furnished	272XAAJX-*3 (29)	300 C	Opp	51		Furnished
282XBAJX-*3 (20)	300 C	Opp	65	8-A-032	Furnished	272XBAJX-*3 (30)	300 C	Opp	63		Furnished
282XCAJX-*3 (21)	300 C	Opp	79	8-A-032	Furnished	272XCAJX-*3 (31)	300 C	Opp	76		Furnished

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION:** INPUT SIGNAL REQUIRED - In any case a PTO is used, regardless of PTO style, the transmission must have an input signal from the PTO when it is active. EATON requires the OEM to provide a "PTO Active" input connection to the transmission ECU. Refer to the Vehicle OEM for wire connection information and to Eaton TRIG2600 for Transmission/PTO Operations.**CAUTION:** There is adjacent gear interference in the transmission that prevents the 489*U,W,X ratios from being used. 880*T is also affected.**CAUTION:** DO NOT use geared adapters with 442 A and C ratios.

(1) Input Gear Part No. 5-P-1004	(8) Input Gear Part No. 5-P-1135	(15) Input Gear Part No. 5-P-1385	(29) Input Gear Part No. 5-P-1510-1X	(43) Input Gear Part No. 5-P-971
(2) Input Gear Part No. 5-P-1077	(9) Input Gear Part No. 5-P-1242	(16) Input Gear Part No. 5-P-1395	(30) Input Gear Part No. 5-P-1510-2X	(44) Input Gear Part No. 5-P-980
(3) Input Gear Part No. 5-P-1100	(10) Input Gear Part No. 5-P-1246	(17) Input Gear Part No. 5-P-1418	(31) Input Gear Part No. 5-P-1510-3X	(45) Filler block furnished with PTO
(4) Input Gear Part No. 5-P-1101	(11) Input Gear Part No. 5-P-1280	(18) Input Gear Part No. 5-P-1441	(38) Input Gear Part No. 5-P-283	
(5) Input Gear Part No. 5-P-1102	(12) Input Gear Part No. 5-P-1287	(19) Input Gear Part No. 5-P-1494	(39) Input Gear Part No. 5-P-285	
(6) Input Gear Part No. 5-P-1103	(13) Input Gear Part No. 5-P-1322	(20) Input Gear Part No. 5-P-1510-11X	(40) Input Gear Part No. 5-P-325	
(7) Input Gear Part No. 5-P-1104	(14) Input Gear Part No. 5-P-1364	(21) Input Gear Part No. 5-P-1510-12X	(42) Input Gear Part No. 5-P-721	

Eaton Fuller

FLR-112

EATON FULLER

CHELSEA®

FAO-11810C (Advantage Series) ThruShaft use AV mounting	FAO-16810S-EN3 (Advantage Series Automated) ThruShaft use AV mounting	FAOM-14810C (Advantage Series) ThruShaft use AV mounting
FAO-12810C (Advantage Series) ThruShaft use AV mounting	FAO-16810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting	FAOM-14810S-EC3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-13810C (Advantage Series) ThruShaft use AV mounting	FAO-11810C (Advantage Series) ThruShaft use AV mounting	FAOM-15810C (Advantage Series) ThruShaft use AV mounting
FAO-14810C (Advantage Series) ThruShaft use AV mounting	FAO-12810C (Advantage Series) ThruShaft use AV mounting	FAOM-15810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-14810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FAO-13810C (Advantage Series) ThruShaft use AV mounting	FAOM-15810S-EC3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-15810C (Advantage Series) ThruShaft use AV mounting	FAO-14810C (Advantage Series) ThruShaft use AV mounting	FAOM-15810S-EN3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-16810C (Advantage Series) ThruShaft use AV mounting	FAO-15810C (Advantage Series) ThruShaft use AV mounting	FAOM-15810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-16810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FAO-16810C (Advantage Series) ThruShaft use AV mounting	FAOM-16810C (Advantage Series) ThruShaft use AV mounting

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot	Fwd					I / C †	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XDAJX-*3 (22)	300 C	Opp	95	8-A-032	Furnished	272XDAJX-*3 (32)	300 C	Opp	90				Furnished
282XGAJX-*3 (23)	300 C	Opp	112	8-A-032	Furnished	272XGAJX-*3 (33)	300 C	Opp	108				Furnished
282XKAJX-*3 (24)	300 C	Opp	126	8-A-032	Furnished	272XKAJX-*3 (34)	300 C	Opp	120				Furnished
282XMAJX-*3 (25)	300 C	Opp	140	8-A-032	Furnished	272XMAJX-*3 (35)	300 C	Opp	135				Furnished
282XPAJX-*3 (26)	300 C	Opp	157	8-A-032	Furnished	272XPAJX-*3 (36)	300 C	Opp	150				Furnished
282XS AJX-*3 (27)	300 C	Opp	176	8-A-032	Furnished	272XS AJX-*3 (37)	300 C	Opp	168				Furnished
282XTAJX-*3 (28)	300 C	Opp	196	8-A-032	Furnished								

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	65		Furnished								
885XGAHX-*3 (8)	500 I	Opp	84		Furnished								
885XJAHX-*3 (5)	500 I	Opp	99		Furnished								
885XMAHX-*3 (6)	500 I	Opp	116		Furnished								

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (41)	200 I	Opp	84	88	Furnished	340XFAHX-*5 (41)	200 I	Opp	80	84	7-A-140(45)		Furnished
863XBAHX-*5	423 I	Opp	65	81	Furnished								

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng		8-A-032	Furnished	626XAHX-3AH	250 I	Eng					Furnished
						630XAHX-3AH	250 I	Eng					Furnished
						645XAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** INPUT SIGNAL REQUIRED - In any case a PTO is used, regardless of PTO style, the transmission must have an input signal from the PTO when it is active. EATON requires the OEM to provide a "PTO Active" input connection to the transmission ECU. Refer to the Vehicle OEM for wire connection information and to Eaton TRIG2600 for Transmission/PTO Operations.**CAUTION:** There is adjacent gear interference in the transmission that prevents the 489*U,W,X ratios from being used. 880*T is also affected.**CAUTION:** DO NOT use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (23) Input Gear Part No. 5-P-1510-14X
- (28) Input Gear Part No. 5-P-1510-19X
- (36) Input Gear Part No. 5-P-1510-8X
- (5) Input Gear Part No. 5-P-1102
- (24) Input Gear Part No. 5-P-1510-15X
- (32) Input Gear Part No. 5-P-1510-4X
- (37) Input Gear Part No. 5-P-1510-9X
- (6) Input Gear Part No. 5-P-1103
- (25) Input Gear Part No. 5-P-1510-16X
- (33) Input Gear Part No. 5-P-1510-5X
- (41) Input Gear Part No. 5-P-581
- (8) Input Gear Part No. 5-P-1135
- (26) Input Gear Part No. 5-P-1510-17X
- (34) Input Gear Part No. 5-P-1510-6X
- (45) Filler block furnished with PTO
- (22) Input Gear Part No. 5-P-1510-13X
- (27) Input Gear Part No. 5-P-1510-18X
- (35) Input Gear Part No. 5-P-1510-7X

FO-16D313E-LEP (UltraShift)
FOM-16D313E-LEP (UltraShift)
RTLO-16913L-DM3 (UltraShift)
RTLOM-16913L-DM3 (UltraShift)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221XCAHX-*3	250 I	Eng	66	7-A-032(P)(20)	329138X	Furnished
221XEAHX-*3	250 I	Eng	76		329138X	Furnished
221XLAHX-*3	200 I	Eng	102		329138X	Furnished
442XAAHX-*3 (5)	250 I	Opp	58		REQUIRED	Furnished
442XBAHX-*3 (8)	250 I	Eng	58			Furnished
442XCAHX-*3 (6)	250 I	Opp	74			Furnished
442XFAHX-*3 (2)	250 I	Opp	92			Furnished
442XHAHX-*3 (7)	250 I	Opp	107			Furnished
442XLAHX-*3 (1)	250 I	Opp	119			Furnished
442XQAHX-*3 (1)	225 I	Opp	128			Furnished
442XRAHX-*3 (1)	225 I	Opp	148			Furnished
660XFAHX-*3 (3)	375 I	Opp	92			Furnished
660XHAHX-*3 (7)	330 I	Opp	107			Furnished
660XQAHX-*3 (4)	280 I	Opp	128			Furnished
660XRAHX-*3 (9)	235 I	Opp	148			Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (10)	300 C	Opp	51	Furnished
272XBAJX-*3 (11)	300 C	Opp	63	Furnished
272XCAJX-*3 (12)	300 C	Opp	76	Furnished
272XDAJX-*3 (13)	300 C	Opp	90	Furnished
272XGAJX-*3 (14)	257 C	Opp	108	Furnished
272XKAJX-*3 (15)	230 C	Opp	120	Furnished
272XMAJX-*3 (16)	206 C	Opp	135	Furnished
272XPAJX-*3 (17)	184 C	Opp	150	Furnished
272XSAJX-*3 (18)	165 C	Opp	168	Furnished

ONE SPEED - FORWARD & REVERSE

340XFAHX-*5 (19)	200 I	Opp	80	84	7-A-140(20)	Furnished
------------------	-------	-----	----	----	-------------	-----------

GEARED ADAPTERS

626XAHX-3AH	250 I	Eng	Furnished
-------------	-------	-----	-----------

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift Transmissions must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

CAUTION: DO NOT use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (6) Input Gear Part No. 5-P-1287
- (11) Input Gear Part No. 5-P-1510-2X
- (16) Input Gear Part No. 5-P-1510-7X
- (2) Input Gear Part No. 5-P-1077
- (7) Input Gear Part No. 5-P-1364
- (12) Input Gear Part No. 5-P-1510-3X
- (17) Input Gear Part No. 5-P-1510-8X
- (3) Input Gear Part No. 5-P-1242
- (8) Input Gear Part No. 5-P-1418
- (13) Input Gear Part No. 5-P-1510-4X
- (18) Input Gear Part No. 5-P-1510-9X
- (4) Input Gear Part No. 5-P-1246
- (9) Input Gear Part No. 5-P-1441
- (14) Input Gear Part No. 5-P-1510-5X
- (19) Input Gear Part No. 5-P-581
- (5) Input Gear Part No. 5-P-1280
- (10) Input Gear Part No. 5-P-1510-1X
- (15) Input Gear Part No. 5-P-1510-6X
- (20) Filler block furnished with PTO

FLR-113

EATON FULLER

CHELSEA®

FO-16D313E-LEP (UltraShift)
 FOM-16D313E-LEP (UltraShift)
 RTLO-16913L-DM3 (UltraShift)
 RTLOM-16913L-DM3 (UltraShift)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
 R.S. 06-BOLT Opening Gear FORWARD of Centerline
 45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
 1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

GEARED ADAPTERS

630XAHX-3AH	250 I	Eng	Furnished
645XAHX-3AH	250 I	Eng	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift Transmissions must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

CAUTION: DO NOT use geared adapters with 442 A and C ratios.

EDCO-6F107A-P (Precision Series w/ Park Paw)
 EDCO-6F107A-X (Precision Series)
 EDCO-9N107A-P (Precision Series w/ Park Paw)
 EDCO-9N107A-X (Precision Series)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
 23 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

0.963" (24.4602MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 47 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.099" (27.9146MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd	Rev					I / C ↑	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442QLPP-*5 (1)	250 I	Eng	42	Furnished	442GLLP-*3 (2)	250 I	Opp	99	Furnished	442QLLP-*5 (1)	225 I	Eng	45	Furnished	442QLLP-*5 (1)	225 I	Opp	106	Furnished
442QQLPP-*5 (1)	225 I	Eng	45	Furnished	442GQLLP-*3 (2)	225 I	Opp	106	Furnished	442QRLLP-*5 (1)	225 I	Eng	52	Furnished	442QRLLP-*5 (1)	225 I	Opp	123	Furnished
442QRLLP-*5 (1)	225 I	Eng	52	Furnished	442GRLQP-*3 (2)	225 I	Opp	123	Furnished	442QSLPP-*5 (1)	200 I	Eng	62	Furnished	442QSLPP-*5 (1)	200 I	Opp	147	Furnished
442QSLPP-*5 (1)	200 I	Eng	62	Furnished	442GSLQP-*3 (2)	200 I	Opp	147	Furnished	442QULPP-*5 (1)	195 I	Eng	74	Furnished	442GULQP-*3 (2)	195 I	Opp	175	Furnished
442QULPP-*5 (1)	195 I	Eng	74	Furnished	442GULQP-*3 (2)	195 I	Opp	175	Furnished	442QWLPP-*5 (1)	175 I	Eng	87	Furnished	442GWLPQ-*3 (2)	175 I	Opp	205	Furnished
442QWLPP-*5 (1)	175 I	Eng	87	Furnished	442GWLPQ-*3 (2)	175 I	Opp	205	Furnished	442QXLPP-*5 (1)	140 I	Eng	103	Furnished	442GXLPQ-*3 (2)	140 I	Opp	243	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

WARNING: PTO SHIFT OPTIONS - Two PTO shift options available for the Precision, (D) 12V Elec/Air or (E) 12V Elec/Hydraulic. Shift type required to interface with the TCM. The necessary 12VDC wiring harness is provided with PTO.

CAUTION: DO NOT use geared adapters with 442 A and C ratios.

(1) Input Gear Part No. 5-P-1459
 (2) Input Gear Part No. 5-P-1460

FLR-115

EATON FULLER

CHELSEA®

ESO-6106

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
33 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.8" (45.3MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
33 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.8" (45.3MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

290XQLUX-*5 (1) 175 I Opp 94

7-A-700(P)(2)

7170-11X

290XQLUX-*3 (1)

175 I Opp 94

7-A-700(P)(2)

7170-11X

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1521
(2) Furnished, but not required

EE-17F111B (Endurant HD)
 EEO-14F112C (Endurant HD)
 EEO-15F112C (Endurant HD)
 EEO-16F112C (Endurant HD)
 EEO-17F112C (Endurant HD)
 EEO-18F112C (Endurant HD)
 EHD-14F112C-N (Endurant CNG)

BOTTOM SIDE ONLY

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
 42 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.125" (28.575MM)

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0" (0MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489QCLZX-*3 (5)	200 I	Opp	94	Furnished
489QFLZX-*3 (6)	250 I	Opp	116	Furnished
489QHLZX-*3 (7)	250 I	Opp	135	Furnished
489QLLZX-*3 (1)	225 I	Opp	151	Furnished
489QQLZX-*3 (1)	225 I	Opp	162	Furnished
489QRLLZX-*3 (1)	225 I	Opp	188	Furnished
680QFLZX-*3 (8)	375 I	Opp	116	Furnished
680QHLZX-*3 (9)	375 I	Opp	135	Furnished
680QRLLZX-*3 (10)	350 I	Opp	188	Furnished
880QGLZX-*3 (2)	500 I	Opp	107	Furnished
880QJLZX-*3 (3)	500 I	Opp	125	Furnished
880QQLZX-*3 (4)	450 I	Opp	173	Furnished

REAR MOUNT - MECHANICAL SHIFT

511XRLZW-*-*	500 C	Opp	137	Furnished
524XMLZX-*-*	300 C	Eng	142	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

WARNING: SHIFT OPTIONS - Two shift options are available for Endurant HD; (D) 12V Elec / Air installation kit and (V) for no installation kit included. This is for installations where the truck has the PTO prep package factory installed. Both shift types are required to interface with the TSM

CAUTION: The Endurant Transmission Control Module (TCM) must be configured for PTO operation using ServiceRanger software. The default setting for this feature is 'Disabled'. Failure to configure the TCM for PTO operation may result in transmission, PTO, or driven equipment damage. See Eaton PTO Information Guide TRIG2600 EN-US for additional information regarding this and dual (bottom + rear mount) PTO configuration.

- (1) Input Gear Part No. 5-P-1571
- (6) Input Gear Part No. 5-P-1588
- (2) Input Gear Part No. 5-P-1574
- (7) Input Gear Pa No. 5-P-1589
- (3) Input Gear Part No. 5-P-1575
- (8) Input Gear Part No. 5-P-1590
- (4) Input Gear Part No. 5-P-1577
- (9) Input Gear Part No. 5-P-1591
- (5) Input Gear Part No. 5-P-1587
- (10) Input Gear Part No. 5-P-1593

FLR-117

EATON FULLER

CHELSEA®

EA-11109LA

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.097" (27.8638MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.097" (27.8638MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442XQLVX-*3 (1) 225 I Opp 83

Furnished 442XQLVX-*5 (1) 225 I Opp 83

Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1526

CHELSEA®**EATON FULLER****FLR-118**ESO-4106A
ESO-4206A**LEFT SIDE ONLY****TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear FORWARD of Centerline
22 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.669" (42.3926MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

290XULYX-*5 (1) 175 I Opp 66 7-A-700 7170-9X

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1570

Eaton Fuller

EXD-16F118D
EXD-18F118D
EXP-16F118D
EXP-18F118D
EXP-20F118D

BOTTOM SIDE ONLY

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear REAR of Centerline
46 Teeth - Spur

PITCH LINE TO APERTURE FACE:
.8197" (20.8204MM)

TRANSMISSION GEAR DATA:

Rear 4-Bolt Opening Gear NON STANDARD of Centerline
35 Teeth - Spur

PITCH LINE TO APERTURE FACE:
0" (0MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489QAMEX-*6(5)	225I	Opp	70	380711X	Furnished
489QFMEX-*6(1)	225I	Opp	111	380711X	Furnished
489QLMEX-*6(6)	225I	Opp	144	380711X	Furnished
489QQMEX-*6(6)	225I	Opp	155	380711X	Furnished
489QRMEX-*6(6)	225I	Opp	180	380711X	Furnished
680QFMEX-*6(7)	375I	Opp	111	380711X	Furnished
680QHMEX-*6(8)	375I	Opp	129	380711X	Furnished
680QQMEX-*6(9)	375I	Opp	155	380711X	Furnished
880QGMEX-*4(2)	500I	Opp	112		Furnished
880QMMEX-*4(3)	395I	Opp	155		Furnished
880QQMEX-*4(4)	336I	Opp	181		Furnished

REAR MOUNT - MECHANICAL SHIFT

524XMMEX-*-*	300C	Eng	111	Furnished
524XTMEX-*-*	300C	Eng	150	Furnished
524XVMEX-*-*	258C	Eng	200	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: SHIFT OPTIONS - Only shift options for 489 and 680 series are 5 and 6, 12V Elec/Air. Only shift options for 880 series are D and V, 12V Elec/Air. Shift type required to interface with the TCM. The necessary 12V wiring harness is provided with 6 and D shift options.

CAUTION: The Endurant Transmission Control Module (TCM) must be configured for PTO operation using ServiceRanger software. The default setting for this feature is 'Disabled'. Failure to configure the TCM for PTO operation may result in transmission, PTO, or driven equipment damage. See Eaton PTO Information Guide TRIG2600 EN-US for additional information regarding this and dual (bottom + rear mount) PTO configuration.

CAUTION: 489 and 680 series PTO's require the use of 380711X spacer plate for mounting to the transmission. The spacer plate is assembled between the PTO and transmission. See SK-672 for details. The spacer plate is included with the PTO. It does not need to be ordered separately.

CAUTION: Eaton Transmission Division has established a maximum torque limit for the transmission driver gear. For all Endurant XD transmissions the torque limit is as follows: 8-Bolt Bottom Mount - 555 lb-ft (745 Nm) continuous, Rear Mount - 555 lb-ft (745 Nm) continuous, Combined - 555 lb-ft (745 Nm) continuous.

CAUTION: 524 Series - External lubrication is required for this application. Lubrication kit 330085X is furnished with the PTO. Failure to install the lubrication kit prior to PTO start up may cause damage to the PTO and/or transmission. See SK-677 for details

- (1) Input Gear Part No. 5-P-1688
- (2) Input Gear Part No. 5-P-1670
- (3) Input Gear Part No. 5-P-1671
- (4) Input Gear Part No. 5-P-1672
- (5) Input Gear Part No. 5-P-1702

- (6) Input Gear Part No. 5-P-1703
- (7) Input Gear Part No. 5-P-1705
- (8) Input Gear Part No. 5-P-1706
- (9) Input Gear Part No. 5-P-1707

Eaton Fuller Notes

FLR-34

1. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. The 442XBAH must use one of the GEARED ADAPTERS listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-40

1. All PTOs on RH side require assembly arrangement 6 to put output shaft above center. This will clear the bulge in the transmission. A direct mount pump will interfere with the bulge.
2. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

FLR-41

1. All PTOs on R.H. side require assembly arrangement 6 to put output shaft above center. This will clear the bulge in the transmission. A direct mount pump will interfere with the bulge.
2. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

FLR-57

1. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-58

1. The 880 Series T ratio will interfere with the adjacent gear in the transmission on the bottom opening.
2. The 489 Series ratios U, W, & X will interfere with the adjacent gear in the transmission on the bottom opening. The 442 Series ratios S, U, W and X will interfere with the adjacent gear in the transmission on the right opening.
3. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
4. The 442XBAH Must Use One of the Geared Adapters Listed on the Application Page. Direction of Rotation Shown is the Final Output Shaft Rotation w/ Geared Adapter.
5. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-59

1. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-60

1. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTO due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

FLR-64

1. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

Eaton Fuller Notes

FLR-66

1. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-68

1. 511 Rear Mount-The adapter 329748X is furnished with the PTO and does not need to be ordered separately.
2. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only
3. 272 Series PTO cannot be used with a geared adapter on this application page. There is no counter-helical gear to mesh with the adapter.

FLR-69

1. Do not use PTOs that have a sliding Input Driver Gear (i.e. 221, 260)
2. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-75

1. Do not use PTOs that have a sliding Input Driver Gear (i.e. 221, 260)
2. RECOMMENDATION - Use assembly arrangement 5 on RH side. With assembly arrangement 3, there may be interference with the output shaft of the PTO and the rear cover on the transmission.

FLR-77

1. The 442/489 S, U, W, and X ratio gears interfere with the outside diameter of the 78 tooth transmission gear.

FLR-78

1. This application is for model FS-3005A AFTER September, 1988. For applications PRIOR to September, 1988, use application no. FLR-74.
2. Do not use PTOs that have a sliding Input Driver Gear (i.e. 221, 260)

FLR-79

1. This application is for model FS-3005B AFTER September, 1988. For applications PRIOR to September, 1988, use application no. FLR-76.

FLR-84LF

1. 511 Rear Mount - The adapter 329733X is furnished with the PTO
2. There are two SAE 6-Bolt pads on the left side of this transmission.
3. The 272 and 442 Series will mount with the 329182-1X adapter on the front opening only.
4. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-87

1. PTO apertures on these transmissions may be on the left side (vertical installation) or the bottom right (horizontal installation), depending on how the transmission is mounted in the truck. These transmissions have two apertures, the 290 Series will only mount on the front aperture.
2. 511 Rear Mount - The adapter 329768X is furnished with the PTO and does not need to be ordered separately

FLR-88

1. The 442 U, W and X ratios will not mount on the right side and the 489 X ratio will not mount on the bottom opening because the O.D. of the ratio gear hits the O.D. of the adjacent gear in the transmission.
2. 328564G comes with a metric stud kit. The PTO must be fastened to the adapter plate with the standard stud kit that comes with the PTO.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

Eaton Fuller Notes

FLR-90

1. The Fuller C2000 Series (FR Series) transmissions have M10-1.5 threads for the 6-Bolt opening and M12-1.75 threads for the 8-Bolt opening.
2. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-91

1. The Fuller C2000 Series (FR Series) transmissions have M10-1.5 threads for the 6-Bolt opening and M12-1.75 threads for the 8-Bolt opening.
2. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-92

1. The EH Series Transmissions (Hybrid Electric) for Medium-Duty Utility, Telecom and Municipal Applications are Limited by Eaton to only ONE (1) PTO per application. The Right (Curb Side) Transmission PTO Aperture Cover Plate has a Speed Sensor mounted to the plate and can be moved to the Left (Street Side) Transmission PTO Aperture if using the Right Side PTO Aperture. SEE FLR-92HY.
2. FO-8406A-ASX, FO-6406A-ASX and FO-6406A-ASW Left Side not usable due to Inertia Brake mounted to the 6-Bolt opening.
3. The 7-A-187 spacer and 7170-3X stud kit are required to mount the 442 Series to the adapter.
4. 511 Rear Mount - The adapter 329748X is furnished with the PTO and does not need to be ordered separately
5. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-92HY

1. PTO (Battery Driven) Only Available with EH-8E306A-UP and Can Not Be Used In Combination with the Mechanical PTO.
2. Motor RPM During PTO Operation is 1000-1100 RPM Standard. Configurable to 1500 RPM in 100 RPM Increments.
3. Maximum PTO Output Must Not Exceed 13 HP Continuous or 26 HP Peak at 1100 RPM for Maximum Efficiency.
4. All PTO Application Duty Cycles Must be Evaluated for Optimum Efficiency.
5. Mechanical (Engine/Transmission Driven) PTO is Available with EH-8E306A-CD, EH-8E306A-UP, EH8E306A-UPG.
6. Remote Throttle, Remote Transmission, and Start/Stop Controls are Not Approved.
7. The EH Series Transmissions (Hybrid Electric) for Medium-Duty Utility, Telecom and Municipal Applications are Limited by Eaton to only ONE (1) PTO per application. The Right (Curb Side) Transmission PTO Aperture Cover Plate has a Speed Sensor mounted to the plate and can be moved to the Left (Street Side) Transmission PTO Aperture if using the Right Side PTO Aperture.
8. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-94

1. 7-A-062 is required to mount the PTO at standard mounting depth of 1.085" due to the transmission gear tooth thickness that is 0.065" oversize.
2. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-95

1. When using a 626G/630G or 645G adapter on this transmission, put 5-P-1243 gear in the adapter and the 5-P-1247 gear in the 442 Series PTO 7-A-165 spacer is required between the adapter and the 442 Series. Normal backlash will need to be checked between the PTO and the adapter. Use stud kit 7170-3X to mount the 442 Series to the Adapter.

FLR-96LF

1. There are two SAE 6-Bolt pads on the left side of this transmission.
2. The 230 and 442 series will mount with the 329182-1X adapter on the front opening only. The 272 Series will mount with the 329182X adapter on the front opening only.
3. 511 Rear Mount - The adapter 329733X is furnished with the PTO and does not need to be ordered separately
4. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

Eaton Fuller Notes

FLR-97

1. The 626 and 645 Series adapters can not be used with the 442 Series F ratio.
2. The 626/645 Series adapters can be mounted on this transmission by replacing the 5-P-1319 gear in the 442 Series with the 5-P-1321 and putting the 5-P-1319 gear in the adapter assembly. A 7-A-093 spacer is required between the adapter and the PTO to get proper backlash. Use 7170-3X stud kit to mount the PTO to the adapter. Use the stud kit supplied with the adapter to mount it to the transmission.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-100

1. 630-02 - The Eaton Inertia Brake comes standard mounted on the bottom 8-Bolt opening. If the 8-Bolt opening is required for a PTO the Interia Brake can be relocated to the right side 6-Bolt opening. If there is any interference (frame rails, etc.) on the right side when mounting the Inertia Brake, a 630-02 adapter can be used to move the I-Brake away from the interference.
2. Refer to Eaton Installation Guide "TRIG-2600" for proper wiring diagram showing the interface connections between the PTO indicator switch and the terminal connection on the transmission.
3. The 442XBH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
4. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only
5. INPUT SIGNAL REQUIRED - The Eaton UltraShift DM transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, per Eaton spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

FLR-105

1. The 442XBH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
2. Optional front mount oil filter will interfere with 6-Bolt PTO installations. Rear or remote mount filter must be used.
3. All PTO Torque Values Reflect the Higher Torque 750 lb-ft [1017 Nm] Main Transmission Input Bearing for Intermittent Duty Cycles as Standard from Eaton for the Transmissions Listed for this Page. For Continuous Duty Cycles do not exceed 500 lb-ft [678 Nm]. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.
4. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only
5. 630-02 - The Eaton Inertia Brake comes standard mounted on the bottom 8-Bolt opening. If the 8-Bolt opening is required for a PTO, the Inertia Brake can be relocated to the right side 6-Bolt opening. If there is any interference (frame rails, etc.) on the right side when mounting the Inertia Brake, a 630-02 adapter can be used to move the I-Brake away from the interference.

FLR-106

1. All PTO Torque Values Reflect the Higher Torque 750 lb-ft [1017 Nm] Main Transmission Input Bearing for Intermittent Duty Cycles as Standard from Eaton for the Transmissions Listed for this Page. For Continuous Duty Cycles do not exceed 500 lb-ft [678 Nm]. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.
2. 630-02 - The Eaton Inertia Brake comes standard mounted on the bottom 8-Bolt opening. If the 8-Bolt opening is required for a PTO, the Inertia Brake can be relocated to the right side 6-Bolt opening. If there is any interference (frame rails, etc.) on the right side when mounting the Inertia Brake, a 630-02 adapter can be used to move the I-Brake away from the interference.
3. The 442XBH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
4. Eaton Fuller will provide a dump pump bracket (Eaton Part #4306528) as standard on -VCS, -VMS and -VXP transmission models for the bottom 8-Bolt opening and optional on -LAS,-MHP and -MXP model transmissions.
5. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

Eaton Fuller Notes

FLR-107

1. All PTO Torque Values Reflect the Higher Torque 750 lb-ft [1017 Nm] Main Transmission Input Bearing for Intermittent Duty Cycles as Standard from Eaton for the Transmissions Listed for this Page. For Continuous Duty Cycles do not exceed 500 lb-ft [678 Nm]. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.
2. The Eaton UltraShift Plus Transmission Inertia Brake comes standard and is internal to the transmission.
3. Eaton Automated 13 and 18 speeds cannot accept the Thrushaft Power Take-Offs. The bottom left countershaft opening is used for the splitter cylinder and the top right countershaft opening is used for the range.
4. 6-Bolt PTO will interfere with front mount oil filter. Rear or remote mount filter must be used
5. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
6. Eaton Fuller will provide a dump pump bracket (Eaton Part #4306528) as standard on -VCS, -VMS, and -VXP transmission models for the bottom 8-Bolt opening and optional on -LAS, -MHP, and -MXP model transmissions. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.
7. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-111

1. All PTO Torque Values Reflect the Higher Torque 750 lb-ft [1017 Nm] Main Transmission Input Bearing for Intermittent Duty Cycles as Standard from Eaton for the Transmissions Listed for this Page. For Continuous Duty Cycles do not exceed 500 lb-ft [678 Nm] refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.
2. Refer to Eaton Installation Guide “TRIG-2600” for proper wiring diagram showing the interface connections between the PTO indicator switch and the terminal connection on the transmission.
3. 630-02 - The Eaton Inertia Brake comes standard mounted on the bottom 8-Bolt opening. If the 8-Bolt opening is required for a PTO, the Inertia Brake can be relocated to the right side 6-Bolt opening. If there is any interference (frame rails, etc.) on the right side when mounting the Inertia Brake, a 630-02 adapter can be used to move the I-Brake away from the interference.
4. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
5. 6-Bolt PTO will interfere with front mount oil filter. Rear or remote mount filter must be used
6. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-112

1. All PTO Torque Values Reflect the Higher Torque 750 lb-ft [1017 Nm] Main Transmission Input Bearing for Intermittent Duty Cycles as Standard from Eaton for the Transmissions Listed for this Page. For Continuous Duty Cycles do not exceed 500 lb-ft [678 Nm]. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.
2. Eaton Automated 13 and 18 speeds cannot accept the Thrushaft Power Take-Offs. The bottom left countershaft opening is used for the splitter cylinder and the top right countershaft opening is used for the range.
3. Optional front mount oil filter will interfere with 6-Bolt P.T.O installations. Rear or remote mount filter must be used.
4. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
5. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

FLR-113

1. UltraShift 13-Speeds DM3, LHP & LEP: Inertia brake is installed on the 8-Bolt Opening. Interia brake cannot be moved to the 6-Bolt Opening due to gear interference.
2. Eaton Automated 13 and 18 speeds cannot accept the Thrushaft Power Take-Offs. The bottom left countershaft opening is used for the splitter cylinder and the top right countershaft opening is used for the range.
3. 6-Bolt PTO will interfere with front mount oil filter. Rear or remote mount filter must be used
4. The 442XBAH Must Use One of the Geared Adapters Listed on the Application Page. Direction of Rotation Shown is the Final Output Shaft Rotation w/ Geared Adapter.
5. 272 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

Eaton Fuller Notes

FLR-114

1. Percent (%) of Engine Speed shown on page applies to Stationary Mode and Mobile Mode when transmission is in 2nd Gear.
2. Multiply Speed Shown by 0.64 for “Low” Range Values, Low Range applies to Mobile Mode ONLY when transmission is in Reverse or 1st gear.
3. Lube hose and fittings included with PTO.
4. Pressure lubrication of the 442 Series in this application is recommended by Eaton, but not required. Chelsea recommends and encourages the use of pressure lubrication to provide the best performance and service life. Therefore, this application is specified as “P” lube and the hoses are included with the PTO. Low Pressure (LP) lubrication supply port is located on drivers side transmission.
5. PUMP OUTPUT OPTIONS: Chelsea recommends rotatable SAE B options (RA/RB) for the left side opening. An XK will work for a 2-Bolt pump with a modification to the flange. The right side appears to be open.

FLR-116

1. Gaskets are replaced by a custom molded o-ring. No backlash setting required. Special piloting studs are included in lieu of dowel pins.
 2. 880 Series - The D shift option must be used for new applications. A 4-way air valve will be provided with the D-shift option that will supply air to both sides of the shifter. The factory dash switch cannot be used with the 880 since the factory air valve is only a 3-way valve. The V shift option can be used for replacement PTOs.
 3. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
 4. 511 Series - Adapter 329957X Furnished with PTO for this application.
 5. 524 Series - Adapter 329971X Furnished with PTO for this application.
-

FLR-117

1. Inertia Brake located on the transmission left side PTO aperture.

FORD



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

 **WARNING:** This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

FORD TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
10R140 Diesel F250-600; MY2020-Current	FRD-13	10	L46
10R140 Gas F250-600; MY2020-Current	FRD-14	10	L46
5R110 Diesel F350-550; MY2003-2010 (Stationary ONLY)	FRD-9	5	L121
5R110 Gas F350-550; MY2003-2016 (Stationary ONLY)	FRD-9	5	L121
5R110WOJ233 (Ford Mexico)	FRD-9	5	L121
6R140 Diesel F250-550; MY2011-MY2019	FRD-10	6	L52
6R140 Diesel F650/750; MY2016-Current	FRD-10	6	L52
6R140 Gas F250-550; MY2017-MY2019	FRD-12	6	L52
6R140 Gas F650/750; MY2013-2015	FRD-11	6	L52
6R140 Gas F650/750; MY2016-Current	FRD-12	6	L52



*IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US*

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Ford

FRD-9

FORD

CHELSEA®

5R110WOJ233 (Ford Mexico)
 5R110 Diesel F350-550; MY2003-2010 (Stationary ONLY)
 5R110 Gas F350-550; MY2003-2016 (Stationary ONLY)

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear REAR of Centerline
 121 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.3390" (33.7800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

247FMKSP-*2 (1)	120 l	Opp	154	Furnished
247FMKSP-*4 (1)	120 l	Opp	154	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

WARNING: To guarantee full torque capability at the automatic transmission PTO gear, and the PTO, the TorqShift transmission torque converter must be locked (Engine RPM @ 1200 RPM), and hydraulic line pressure to the PTO clutch must be elevated to a minimum of 110 psi. On both Diesel and Gas engines, the Stationary Elevated Idle Control (SEIC) strategy is 1200 RPM. Therefore, for stationary operations, a discrete signal, which is supplied with Chelsea 247 wire harness 329598X, must be used to elevate engine idle to a minimum of 1200 RPM. Battery voltage must be applied to the PTO circuit to begin SEIC strategy for both mobile and stationary applications. Failure to follow these procedures may lead to PTO clutch wear and internal damage to the PTO/Transmission. See Chelsea Owner's/Installation Manual HY25-1FRD-M1/US or Contact Chelsea Technical Services (662-895-1052) for complete details.

(1) Input Gear Part No. 5-P-1387

Ford

CHELSEA®**FORD****FRD-10**

6R140 Diesel F250-550; MY2011-MY2019
6R140 Diesel F650/750; MY2016-Current

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

3.4550" (87.7640MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

249FMLLX-*2 (1)	200 I	Opp	124										
249FMLLX-*4 (1)	200 I	Opp	124										
249FMLLX-*V (1)	200 I	Opp	124										
272FCCLP-*8	300 I	Opp	61										
272FDLLP-*8	300 I	Opp	74										
272FGLLP-*8	300 I	Opp	87										
272FKLLP-*8	300 I	Opp	98										
272FMLLP-*8	274 I	Opp	109										
272FPLLP-*8	246 I	Opp	122										
272FSLLP-*8	220 I	Opp	137										

See next page for more pump options.

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

WARNING: If any Chelsea PTO is purchased without a Chelsea supplied activation switch, warning light, and warning light installation instructions, which are normally included with the PTO, it is the full responsibility of the installer to ensure the PTO is properly installed and electrically interfaced with the OE truck communication system. The installer assumes full responsibility for warning the operator of the truck that the PTO is engaged or disengaged. Failure to adequately warn the operator could result in death, personal injury, and/or property damage.

CAUTION: FORD PTO Driver Gear Torque ratings and HP vary by platform (F250-550 or F650/750), fuel type (Gas or Diesel), and operating mode (Mobile or Stationary). Consult FORD BBAS for the current ratings. The applications on this page are rated for Stationary Mode.

CAUTION: 272 will only fit F650/750 chassis, not for use on F550 and below.

(1) Input Gear Part No. 5-P-1436

Ford

FRD-10

FORD

CHELSEA®

6R140 Diesel F250-550; MY2011-MY2019
6R140 Diesel F650/750; MY2016-Current

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

3.4550" (87.7640MM)

Pump Option Charts

249 Series Gear Pump Options

Chelsea CGP-P11 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline – AD Output)

Order Code w/ PTO (C)	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
16	CGP-P11A016-5GC	0.37	2.15	4.5	16.0	3990	3625	4000	2016	3.6
26	CGP-P11A026-5GC	0.61	3.54	7.5	26.4	3990	3625	3600	2016	5.9
32	CGP-P11A032-5GC	0.73	4.23	9.0	31.6	3990	3625	3500	2016	7.1
37	CGP-P11A037-5GC	0.85	4.93	10.4	36.8	3990	3625	3300	2016	8.3
42	CGP-P11A042-5GC	0.98	5.68	12.0	42.4	3990	3625	3000	2016	9.5
55	CGP-P11A055-5GC	1.28	7.42	14.8	52.1	3480	3410	2800	2016	12.5
61	CGP-P11A061-5GE	1.40	8.12	15.5	54.6	3410	3265	2800	2016	13.6
71	CGP-P11A071-5GE	1.65	9.57	15.4	54.3	2900	2755	2400	1935	15.4
82	CGP-P11A082-5GE	1.89	10.96	15.3	54.0	2465	2395	2300	1855	16.9
87	CGP-P11A087-5GE	2.01	11.65	15.3	54.0	2320	2250	2000	1613	15.7

Chelsea PGP-315 Series Pump Specs for 4 x 2 Vehicles Only (3/4" - 11 Tooth Pump Spline – AD Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
08	CGP-P31B081-5AG	1.86	10.78	20.8	73.3	3300	3300	3000	2016	18.1
09	CGP-P31B094-5AG	2.17	12.58	21.3	75.1	2900	2900	3000	2016	21.1
11	CGP-P31B107-5AG	2.48	14.38	21.0	74.0	2500	2500	3000	2016	24.2

Chelsea P16 Series Pump Specs for 4 x 2 Vehicles Only (7/8" - 13 Tooth Pump Spline – XP Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
15	CGP16-150A-2D1	2.93	16.99	29.7	104.9	3000	3000	2800	2016	28.5

(A) GPM & Pump Input HP @ 1200 Engine RPM (1488 PTO Output RPM - 124% Ratio) & Continuous Pressure Rating with 90% efficiency rating considered.

(B) Max Engine Speed = (Max Pump Speed) / (1.24) for PTO Ratio Increase. Max Speed determined by Max PTO output speed of 2500.

(C) For Pump Codes 61, 71, 82 & 87 - 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X

CAUTION: 249 Gear Pump Options: The PTO drive gear delivers up to 250 lb-ft torque to the aftermarket PTO, and can manage the heat of 60 HP continuously. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required. Ref: Ford Body Builders Manual; TorqShift Automatic Transmission.

FORMULAS:

GPM = Cu. In. x .004329 = G/Rev x 1488 RPMs x .90 efficiency

HP = (GPM x Max PSI) / 1714

Torque = (HP x 5252) / 1488 RPMs

Ford

CHELSEA®**FORD****FRD-10**

6R140 Diesel F250-550; MY2011-MY2019
6R140 Diesel F650/750; MY2016-Current

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.4550" (87.7640MM)

Pump Option Charts**249 Series Gear Pump Options****Chelsea 249V Integral Vane Pump Data for 4 x 2 or 4 x 4 Vehicles**

Option Code w/ PTO	Chelsea Pump Cartridge Number	Displacement in³/rev	GPM (D)	Pump (D) HP	Torque (D) lb-ft	Pressure PSI		Pump Speed RPM		Max Speed RPM
						Intermittent	Continuous	Min.	Max	
08	380418-08	1.61	9.33	19	67	4000	3500	400	2800	2015
10	380418-10	2.08	12.06	25	87	4000	3500	400	2800	2015
12	380418-12	2.26	13.10	27	94	4000	3500	400	2800	2015
14	380418-14	2.81	16.29	33	117	4000	3500	400	2800	2015
17	380418-17	3.56	20.64	42	149	4000	3500	400	2800	2015
20	380418-20	3.89	22.55	46	163	4000	3500	400	2800	2015
22	380418-22	4.29	24.87	51	179	4000	3500	400	2800	2015
25	380418-25	4.84	28.06	57	202	4000	3500	400	2800	2015
157	380418-157					4000	3500	400	2800	2015

(A) GPM & Pump Input HP @ 1200 Engine RPM (1488 PTO Output RPM - 124% Ratio) & Continuous Pressure Rating with 90% efficiency rating considered.

(B) Max Engine Speed = (Max Pump Speed) / (1.24) for PTO Ratio Increase. Max Speed determined by Max PTO output speed of 2500.

(D) GPM & Pump Input HP @ 1200 Engine RPM (1488 PTO Output RPM - 124% Ratio) & 2000 PSI Continuous Pressure Rating.

See leakage chart for additional flow losses at other pressures.

CAUTION: 249V Pump Options: The PTO drive gear delivers up to 250 lb-ft torque to the aftermarket PTO, and can manage the heat of 40 HP continuously. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required. Ref: Ford Body Builders Manual; TorqShift Automatic Transmission.

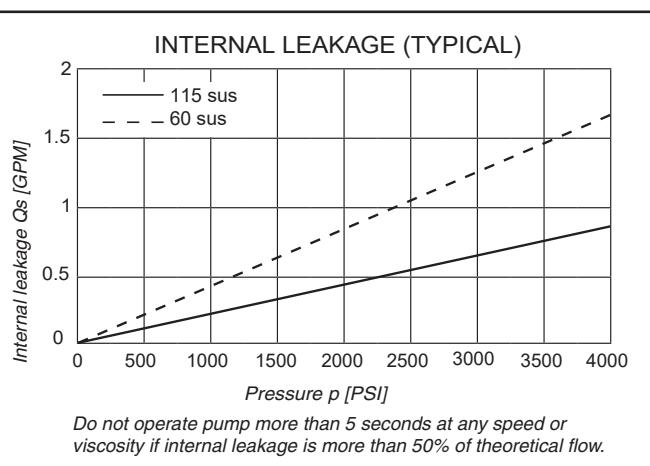
NOTE: Refer to Chelsea Owner's Manual HY25-1FRD-M1/US for complete vane pump information.

FORMULAS:

$$\text{GPM} = \text{Cu. In.} \times .004329 = \text{G/Rev} \times 1488 \text{ RPMs} \times .90 \text{ efficiency}$$

$$\text{HP} = (\text{GPM} \times \text{Max PSI}) / 1714$$

$$\text{Torque} = (\text{HP} \times 5252) / 1488 \text{ RPMs}$$



Ford

FRD-11

FORD

CHELSEA®

6R140 Gas F650/750; MY2013-2015

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

3.4550" (87.7640MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

249GMLLX-*2 (1)	200 I	Opp	124	Furnished
249GMLLX-*V (1)	200 I	Opp	124	Furnished
272JCLLP-*8	300 I	Opp	61	Furnished
272JDLLP-*8	300 I	Opp	74	Furnished
272JGLLP-*8	300 I	Opp	87	Furnished
272JKLLP-*8	300 I	Opp	98	Furnished
272JMLLP-*8	274 I	Opp	109	Furnished
272JPMLP-*8	246 I	Opp	122	Furnished
272JSLLP-*8	220 I	Opp	137	Furnished

See next page for more pump options.

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

WARNING: If any Chelsea PTO is purchased without a Chelsea supplied activation switch, warning light, and warning light installation instructions, which are normally included with the PTO, it is the full responsibility of the installer to ensure the PTO is properly installed and electrically interfaced with the OE truck communication system. The installer assumes full responsibility for warning the operator of the truck that the PTO is engaged or disengaged. Failure to adequately warn the operator could result in death, personal injury, and/or property damage.

CAUTION: FORD PTO Driver Gear Torque ratings and HP vary by platform (F250-550 or F650/750), fuel type (Gas or Diesel), and operating

(1) Input Gear Part No. 5-P-1436

6R140 Gas F650/750; MY2013-2015

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.4550" (87.7640MM)

Pump Option Charts**249 Series Gear Pump Options**

Chelsea CGP-P11 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline – AD Output)										
Order Code w/ PTO (C)	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
16	CGP-P11A016-5GC	0.37	2.15	4.5	16.0	3990	3625	4000	2016	3.6
26	CGP-P11A026-5GC	0.61	3.54	7.5	26.4	3990	3625	3600	2016	5.9
32	CGP-P11A032-5GC	0.73	4.23	9.0	31.6	3990	3625	3500	2016	7.1
37	CGP-P11A037-5GC	0.85	4.93	10.4	36.8	3990	3625	3300	2016	8.3
42	CGP-P11A042-5GC	0.98	5.68	12.0	42.4	3990	3625	3000	2016	9.5
55	CGP-P11A055-5GC	1.28	7.42	14.8	52.1	3480	3410	2800	2016	12.5
61	CGP-P11A061-5GE	1.40	8.12	15.5	54.6	3410	3265	2800	2016	13.6
71	CGP-P11A071-5GE	1.65	9.57	15.4	54.3	2900	2755	2400	1935	15.4
82	CGP-P11A082-5GE	1.89	10.96	15.3	54.0	2465	2395	2300	1855	16.9
87	CGP-P11A087-5GE	2.01	11.65	15.3	54.0	2320	2250	2000	1613	15.7

Chelsea PGP-315 Series Pump Specs for 4 x 2 Vehicles Only (3/4" - 11 Tooth Pump Spline – AD Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
08	CGP-P31B081-5AG	1.86	10.78	20.8	73.3	3300	3300	3000	2016	18.1
09	CGP-P31B094-5AG	2.17	12.58	21.3	75.1	2900	2900	3000	2016	21.1
11	CGP-P31B107-5AG	2.48	14.38	21.0	74.0	2500	2500	3000	2016	24.2

Chelsea P16 Series Pump Specs for 4 x 2 Vehicles Only (7/8" - 13 Tooth Pump Spline – XP Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
15	CGP16-150A-2D1	2.93	16.99	29.7	104.9	3000	3000	2800	2016	28.5

(A) GPM & Pump Input HP @ **1200 Engine RPM (1488 PTO Output RPM - 124% Ratio)** & Continuous Pressure Rating with **90% efficiency rating** considered.

(B) Max Engine Speed = (Max Pump Input HP) / (1.24) for PTO Ratio Increase. Max Speed determined by Max PTO output speed of 2500.

(C) For Pump Codes 61, 71, 82 & 87 - 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X

CAUTION: 249 Gear Pump Options: The PTO drive gear delivers up to 250 lb-ft torque to the aftermarket PTO, and can manage the heat of 60 HP continuously. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required. Ref: Ford Body Builders Manual; TorqShift Automatic Transmission.

FORMULAS:

GPM = Cu. In. x .004329 = G/Rev x 1488 RPMs x .90 efficiency

HP = (GPM x Max PSI) / 1714

Torque = (HP x 5252) / 1488 RPMs

FRD-11

FORD

CHELSEA®

6R140 Gas F650/750; MY2013-2015

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

3.4550" (87.7640MM)

Pump Option Charts

249 Series Vane Pump Options

Chelsea 249V Integral Vane Pump Data for 4 x 2 or 4 x 4 Vehicles

Option Code w/ PTO	Chelsea Pump Cartridge Number	Displacement in³/rev	GPM (D)	Pump (D) HP	Torque (D) lb-ft	Pressure PSI		Pump Speed RPM		Max Speed RPM
						Intermittent	Continuous	Min.	Max	
08	380418-08	1.61	9.33	19	67	4000	3500	400	2800	2015
10	380418-10	2.08	12.06	25	87	4000	3500	400	2800	2015
12	380418-12	2.26	13.10	27	94	4000	3500	400	2800	2015
14	380418-14	2.81	16.29	33	117	4000	3500	400	2800	2015
17	380418-17	3.56	20.64	42	149	4000	3500	400	2800	2015
20	380418-20	3.89	22.55	46	163	4000	3500	400	2800	2015
22	380418-22	4.29	24.87	51	179	4000	3500	400	2800	2015
25	380418-25	4.84	28.06	57	202	4000	3500	400	2800	2015
157	380418-157					4000	3500	400	2800	2015

(A) GPM & Pump Input HP @ 1200 Engine RPM (1488 PTO Output RPM - 124% Ratio) & Continuous Pressure Rating with 90% efficiency rating considered.

(B) Max Engine Speed = (Max Pump Speed) / (1.24) for PTO Ratio Increase. Max Speed determined by Max PTO output speed of 2500.

(D) GPM & Pump Input HP @ 1200 Engine RPM (1488 PTO Output RPM - 124% Ratio) & 2000 PSI Continuous Pressure Rating.

See leakage chart for additional flow losses at other pressures.

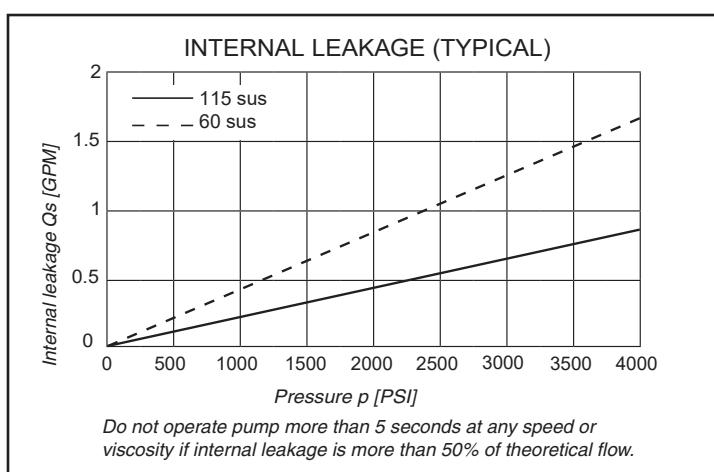
CAUTION: 249V Pump Options: The PTO drive gear delivers up to 250 lb-ft torque to the aftermarket PTO, and can manage the heat of 40 HP continuously. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required. Ref: Ford Body Builders Manual; TorqShift Automatic Transmission.**NOTE:** Refer to Chelsea Owner's Manual HY25-1FRD-M1/US for complete vane pump information.

FORMULAS:

GPM = Cu. In. x .004329 = G/Rev x 1488 RPMs x .90 efficiency

HP = (GPM x Max PSI) / 1714

Torque = (HP x 5252) / 1488 RPMs



Ford

CHELSEA®**FORD****FRD-12**

6R140 Gas F250-550; MY2017-MY2019
6R140 Gas F650/750; MY2016-Current

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

3.4550" (87.7640MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

249HMLLX-*2 (1)	200 I	Opp	124										
249HMLLX-*4 (1)	200 I	Opp	124										
249HMLLX-*V (1)	200 I	Opp	124										
272HCCLP-*8	300 I	Opp	61										
272HDLLP-*8	300 I	Opp	74										
272HGLLP-*8	300 I	Opp	87										
272HKLLP-*8	300 I	Opp	98										
272HMLLP-*8	274 I	Opp	109										
272HPLLP-*8	246 I	Opp	122										
272HSLLP-*8	220 I	Opp	137										

See next page for more pump options.

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

WARNING: If any Chelsea PTO is purchased without a Chelsea supplied activation switch, warning light, and warning light installation instructions, which are normally included with the PTO, it is the full responsibility of the installer to ensure the PTO is properly installed and electrically interfaced with the OE truck communication system. The installer assumes full responsibility for warning the operator of the truck that the PTO is engaged or disengaged. Failure to adequately warn the operator could result in death, personal injury, and/or property damage.

CAUTION: FORD PTO Driver Gear Torque ratings and HP vary by platform (F250-550 or F650/750), fuel type (Gas or Diesel), and operating

(1) Input Gear Part No. 5-P-1436

Ford

FRD-12

FORD

CHELSEA®

6R140 Gas F250-550; MY2017-MY2019
6R140 Gas F650/750; MY2016-Current

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

3.4550" (87.7640MM)

Pump Option Charts

249 Series Gear Pump Options

Chelsea CGP-P11 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline – AD Output)

Order Code w/ PTO (C)	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
16	CGP-P11A016-5GC	0.37	2.15	4.5	16.0	3990	3625	4000	2016	3.6
26	CGP-P11A026-5GC	0.61	3.54	7.5	26.4	3990	3625	3600	2016	5.9
32	CGP-P11A032-5GC	0.73	4.23	9.0	31.6	3990	3625	3500	2016	7.1
37	CGP-P11A037-5GC	0.85	4.93	10.4	36.8	3990	3625	3300	2016	8.3
42	CGP-P11A042-5GC	0.98	5.68	12.0	42.4	3990	3625	3000	2016	9.5
55	CGP-P11A055-5GC	1.28	7.42	14.8	52.1	3480	3410	2800	2016	12.5
61	CGP-P11A061-5GE	1.40	8.12	15.5	54.6	3410	3265	2800	2016	13.6
71	CGP-P11A071-5GE	1.65	9.57	15.4	54.3	2900	2755	2400	1935	15.4
82	CGP-P11A082-5GE	1.89	10.96	15.3	54.0	2465	2395	2300	1855	16.9
87	CGP-P11A087-5GE	2.01	11.65	15.3	54.0	2320	2250	2000	1613	15.7

Chelsea PGP-315 Series Pump Specs for 4 x 2 Vehicles Only (3/4" - 11 Tooth Pump Spline – AD Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
08	CGP-P31B081-5AG	1.86	10.78	20.8	73.3	3300	3300	3000	2016	18.1
09	CGP-P31B094-5AG	2.17	12.58	21.3	75.1	2900	2900	3000	2016	21.1
11	CGP-P31B107-5AG	2.48	14.38	21.0	74.0	2500	2500	3000	2016	24.2

Chelsea P16 Series Pump Specs for 4 x 2 Vehicles Only (7/8" - 13 Tooth Pump Spline – XP Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
15	CGP16-150A-2D1	2.93	16.99	29.7	104.9	3000	3000	2800	2016	28.5

(A) GPM & Pump Input HP @ 1200 Engine RPM (1488 PTO Output RPM - 124% Ratio) & Continuous Pressure Rating with 90% efficiency rating considered.

(B) Max Engine Speed = (Max Pump Speed) / (1.24) for PTO Ratio Increase. Max Speed determined by Max PTO output speed of 2500.

(C) For Pump Codes 61, 71, 82 & 87 - 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X

CAUTION: 249 Gear Pump Options: The PTO drive gear delivers up to 250 lb-ft torque to the aftermarket PTO, and can manage the heat of 60 HP continuously. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required. Ref: Ford Body Builders Manual; TorqShift Automatic Transmission.

FORMULAS:

GPM = Cu. In. x .004329 = G/Rev x 1488 RPMs x .90 efficiency

HP = (GPM x Max PSI) / 1714

Torque = (HP x 5252) / 1488 RPMs

Ford

CHELSEA®**FORD**

6R140 Gas F250-550; MY2017-MY2019
6R140 Gas F650/750; MY2016-Current

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.4550" (87.7640MM)

Pump Option Charts**249 Series Vane Pump Options****Chelsea 249V Integral Vane Pump Data for 4 x 2 or 4 x 4 Vehicles**

Option Code w/ PTO	Chelsea Pump Cartridge Number	Displacement in³/rev	GPM (D)	Pump (D) HP	Torque (D) lb-ft	Pressure PSI		Pump Speed RPM		Max Speed RPM
						Intermittent	Continuous	Min.	Max	
08	380418-08	1.61	9.33	19	67	4000	3500	400	2800	2015
10	380418-10	2.08	12.06	25	87	4000	3500	400	2800	2015
12	380418-12	2.26	13.10	27	94	4000	3500	400	2800	2015
14	380418-14	2.81	16.29	33	117	4000	3500	400	2800	2015
17	380418-17	3.56	20.64	42	149	4000	3500	400	2800	2015
20	380418-20	3.89	22.55	46	163	4000	3500	400	2800	2015
22	380418-22	4.29	24.87	51	179	4000	3500	400	2800	2015
25	380418-25	4.84	28.06	57	202	4000	3500	400	2800	2015
157	380418-157					4000	3500	400	2800	2015

(A) GPM & Pump Input HP @ 1200 Engine RPM (1488 PTO Output RPM - 124% Ratio) & Continuous Pressure Rating with 90% efficiency rating considered.

(B) Max Engine Speed = (Max Pump Speed) / (1.24) for PTO Ratio Increase. Max Speed determined by Max PTO output speed of 2500.

(D) GPM & Pump Input HP @ 1200 Engine RPM (1488 PTO Output RPM - 124% Ratio) & 2000 PSI Continuous Pressure Rating.

See leakage chart for additional flow losses at other pressures.

CAUTION: 249V Pump Options: The PTO drive gear delivers up to 250 lb-ft torque to the aftermarket PTO, and can manage the heat of 40 HP continuously. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required. Ref: Ford Body Builders Manual; TorqShift Automatic Transmission.

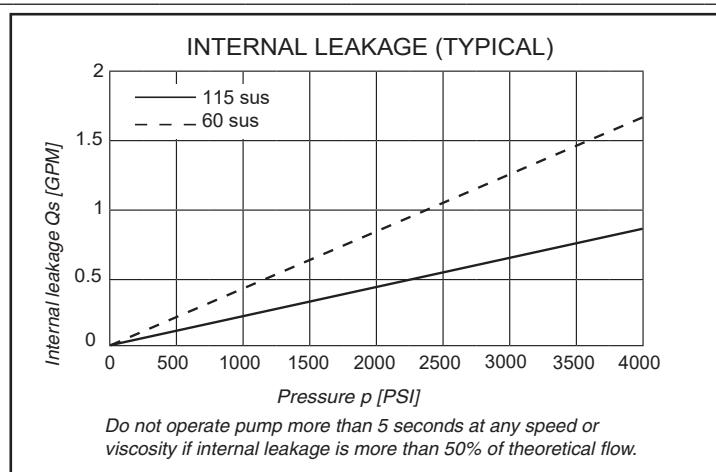
NOTE: Refer to Chelsea Owner's Manual HY25-1FRD-M1/US for complete vane pump information.

FORMULAS:

GPM = Cu. In. x .004329 = G/Rev x 1488 RPMs x .90 efficiency

HP = (GPM x Max PSI) / 1714

Torque = (HP x 5252) / 1488 RPMs



Ford

FRD-13

FORD

CHELSEA®

10R140 Diesel F250-600; MY2020-Current

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerlinee

46 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.75" (44.45MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

210FMMFP-*2 (1)	235 l	Opp	144	Furnished
210FMMFP-*4 (1)	235 l	Opp	144	Furnished

See next page for more pump options.

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

WARNING: If any Chelsea PTO is purchased without a Chelsea supplied activation switch, warning light, and warning light installation instructions, which are normally included with the PTO, it is the full responsibility of the installer to ensure the PTO is properly installed and electrically interfaced with the OE truck communication system. The installer assumes full responsibility for warning the operator of the truck that the PTO is engaged or disengaged. Failure to adequately warn the operator could result in death, personal injury, and/or property damage.

CAUTION: The applications on this page are rated for a diesel engine in stationary mode (based on 300 lbs-ft at transmission PTO gear).

(1) Input Gear Part No. 5-P-1597

10R140 Diesel F250-600; MY2020-Current

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 10-BOLT Opening Gear FORWARD of Centerlinee

46 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.75"" (44.45MM)

Pump Option Charts**210 Series Gear Pump Options****Chelsea CGP-P11 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline – AD Output)**

Order Code w/ PTO (C)	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM	Rear Pump Ports	
						Intermittent	Continuous	Pump	Engine (B)		Inlet	Outlet
21	CGP-P11A021-5AC	0.49	3.30	7.0	24.6	3988	3625	4000	1728	4.8	SAE 12	SAE 10
26	CGP-P11A026-5AC	0.61	4.11	8.7	30.7	3988	3625	3600	1728	5.9	SAE 12	SAE 10
32	CGP-P11A032-5AC	0.73	4.91	10.4	36.7	3988	3625	3500	1728	7.1	SAE 12	SAE 10
37	CGP-P11A037-5AC	0.85	5.72	12.1	42.7	3988	3625	3300	1728	8.3	SAE 12	SAE 10
42	CGP-P11A042-5AC	0.98	6.60	14.0	49.3	3988	3625	3000	1728	9.5	SAE 12	SAE 10
50	CGP-P11A050-5AC	1.16	7.81	16.5	58.3	3770	3625	3000	1728	11.3	SAE 12	SAE 10
55	CGP-P11A055-5AP	1.28	8.62	17.1	60.5	3480	3410	2800	1728	12.5	SAE 16	SAE 12
61	CGP-P11A061-5AP	1.40	9.43	18.0	63.4	3408	3265	2800	1728	13.6	SAE 16	SAE 12
71	CGP-P11A071-5AP	1.65	11.11	17.9	63.0	2900	2755	2300	1597	14.8	SAE 16	SAE 12
82	CGP-P11A082-5AP	1.89	12.72	17.8	62.8	2465	2395	2300	1597	16.9	SAE 16	SAE 12
87	CGP-P11A087-5AP	2.01	13.53	17.8	62.7	2320	2250	2000	1389	15.7	SAE 16	SAE 12

Chelsea PGP-315 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline – AD Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM	Rear Pump Ports	
						Intermittent	Continuous	Pump	Engine (B)		Inlet	Outlet
8	CGP-P31B081-5AG	1.86	12.52	24.1	85.1	3300	3300	3000	1728	18.1	SAE 16	SAE 16
9	CGP-P31B094-5AG	2.17	14.61	24.7	87.2	2900	2900	3000	1728	21.1	SAE 16	SAE 16
11	CGP-P31B107-5AG	2.48	16.70	24.4	86.0	2500	2500	3000	1728	24.2	SAE 16	SAE 16

Chelsea P16 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (7/8" - 13 Tooth Pump Spline – XP Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM	Rear Pump Ports	
						Intermittent	Continuous	Pump	Engine (B)		Inlet	Outlet
15	CGP16-150A-2D1	2.93	19.73	34.5	121.9	3000	3000	2800	1728	28.5	SAE 20	SAE 16
18	CGP16-180A-2D1	3.51	23.63	30.3	107.1	2200	2200	2500	1728	34.2	SAE 20	SAE 16
20	CGP16-200A-2D1	3.90	26.26	30.6	108.1	2000	2000	2200	1528	33.4	SAE 20	SAE 16

(A) GPM & Pump Input HP @ **1200 Engine RPM (1728 PTO Output RPM - 144% Ratio)** & Continuous Pressure Rating with **90% efficiency rating** considered.

(B) Max Engine Speed = Minimum of (1) (Max Pump Speed) / 1.44 PTO Ratio and (2) 2500 RPM maximum PTO output speed. PTO output speeds above 2500 RPM requires application approval from Parker Chelsea.

NOTE: Minimum ideal engine speed for Ford Super Duty in stationary mode is 900 RPM (Diesel) and 700 RPM (Gas). Consult fordbbas.com

NOTE: Ford's 10R140 transmission delivers up to 300 lb-ft to PTO. Consult fordbbas.com for power and torque limitations based on vehicle configuration.

FORMULAS:

GPM = Cu. In. x .004329 = G/Rev x 1728 RPMs x .90 efficiency

HP = (GPM x Max PSI) / 1714

Torque = (HP x 5252) / 1728 RPMs

Ford

FRD-14

FORD

CHELSEA®

10R140 Gas F250-600; MY2020-Current

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline

46 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.75" (44.45MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

210GMMFP-*2 (1) 235 I Opp 144

Furnished
Furnished

210GMMFP-*4 (1) 235 I Opp 144

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

WARNING: If any Chelsea PTO is purchased without a Chelsea supplied activation switch, warning light, and warning light installation instructions, which are normally included with the PTO, it is the full responsibility of the installer to ensure the PTO is properly installed and electrically interfaced with the OE truck communication system. The installer assumes full responsibility for warning the operator of the truck that the PTO is engaged or disengaged. Failure to adequately warn the operator could result in death, personal injury, and/or property damage.

CAUTION: The applications on this page are rated for a diesel engine in stationary mode (based on 300 lbs-ft at transmission PTO gear).

(1) Input Gear Part No. 5-P-1597

10R140 Gas F250-600; MY2020-Current

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 10-BOLT Opening Gear FORWARD of Centerline
46 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.75" (44.45MM)

Pump Option Charts**210 Series Gear Pump Options****Chelsea CGP-P11 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline – AD Output)**

Order Code w/ PTO (C)	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM	Rear Pump Ports	
						Intermittent	Continuous	Pump	Engine (B)		Inlet	Outlet
21	CGP-P11A021-5AC	0.49	3.30	7.0	24.6	3988	3625	4000	1728	4.8	SAE 12	SAE 10
26	CGP-P11A026-5AC	0.61	4.11	8.7	30.7	3988	3625	3600	1728	5.9	SAE 12	SAE 10
32	CGP-P11A032-5AC	0.73	4.91	10.4	36.7	3988	3625	3500	1728	7.1	SAE 12	SAE 10
37	CGP-P11A037-5AC	0.85	5.72	12.1	42.7	3988	3625	3300	1728	8.3	SAE 12	SAE 10
42	CGP-P11A042-5AC	0.98	6.60	14.0	49.3	3988	3625	3000	1728	9.5	SAE 12	SAE 10
50	CGP-P11A050-5AC	1.16	7.81	16.5	58.3	3770	3625	3000	1728	11.3	SAE 12	SAE 10
55	CGP-P11A055-5AP	1.28	8.62	17.1	60.5	3480	3410	2800	1728	12.5	SAE 16	SAE 12
61	CGP-P11A061-5AP	1.40	9.43	18.0	63.4	3408	3265	2800	1728	13.6	SAE 16	SAE 12
71	CGP-P11A071-5AP	1.65	11.11	17.9	63.0	2900	2755	2300	1597	14.8	SAE 16	SAE 12
82	CGP-P11A082-5AP	1.89	12.72	17.8	62.8	2465	2395	2300	1597	16.9	SAE 16	SAE 12
87	CGP-P11A087-5AP	2.01	13.53	17.8	62.7	2320	2250	2000	1389	15.7	SAE 16	SAE 12

Chelsea PGP-315 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline – AD Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM	Rear Pump Ports	
						Intermittent	Continuous	Pump	Engine (B)		Inlet	Outlet
8	CGP-P31B081-5AG	1.86	12.52	24.1	85.1	3300	3300	3000	1728	18.1	SAE 16	SAE 16
9	CGP-P31B094-5AG	2.17	14.61	24.7	87.2	2900	2900	3000	1728	21.1	SAE 16	SAE 16
11	CGP-P31B107-5AG	2.48	16.70	24.4	86.0	2500	2500	3000	1728	24.2	SAE 16	SAE 16

Chelsea P16 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (7/8" - 13 Tooth Pump Spline – XP Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) lb-ft	Pressure PSI		Max Speed RPM		Max Pump Flow GPM	Rear Pump Ports	
						Intermittent	Continuous	Pump	Engine (B)		Inlet	Outlet
15	CGP16-150A-2D1	2.93	19.73	34.5	121.9	3000	3000	2800	1728	28.5	SAE 20	SAE 16
18	CGP16-180A-2D1	3.51	23.63	30.3	107.1	2200	2200	2500	1728	34.2	SAE 20	SAE 16
20	CGP16-200A-2D1	3.90	26.26	30.6	108.1	2000	2000	2200	1528	33.4	SAE 20	SAE 16

(A) GPM & Pump Input HP @ **1200 Engine RPM (1728 PTO Output RPM - 144% Ratio)** & Continuous Pressure Rating with **90% efficiency rating** considered.

(B) Max Engine Speed = Minimum of (1) (Max Pump Speed) / 1.44 PTO Ratio and (2) 2500 RPM maximum PTO output speed. PTO output speeds above 2500 RPM requires application approval from Parker Chelsea.

NOTE: Minimum ideal engine speed for Ford Super Duty in stationary mode is 900 RPM (Diesel) and 700 RPM (Gas). Consult fordbbas.com

NOTE: Ford's 10R140 transmission delivers up to 300 lb-ft to PTO. Consult fordbbas.com for power and torque limitations based on vehicle configuration.

FORMULAS:

GPM = Cu. In. x .004329 = G/Rev x 1728 RPMs x .90 efficiency

HP = (GPM x Max PSI) / 1714

Torque = (HP x 5252) / 1728 RPMs

Ford

Ford Notes

FRD-9

1. Standard Parker PGP-P17 pumps may interfere with the transmission shift lever, order Chelsea FGP-P17 Series pumps to assure shifter clearance.
2. The PTO mounting gasket (22-P-120) is supplied with the PTO. It is the correct thickness and material so that the customer does not have to set backlash. DO NOT use gasket supplied with the transmission under the 6-Bolt cover plate.
3. 247FMKSP-*2 -- 4 x 2 applications: all output options and all pumps listed in the pump chart are available.
4. 247FMKSP-*4 -- 4 x 4 applications will only work with a modified PGP-P11 (CGP-P11) pump. Use one of the following output option codes when ordering: 16, 26, 37, 42, 55, 61, 71, 82, 86 (See Pump Chart).
5. Ford provides an option for the use of one of the "Upfitter" Switches to be used as a PTO switch. Chelsea does not recommend the use of the UNPROTECTED switch for PTO function, but if required, contact Chelsea Technical Services for assistance (662-895-1052).
6. The 272-FORD does not have noise dampening technology incorporated into the PTO like the 249 Series. Therefore, a gear clatter noise will be present during idle with no load on the PTO.

FRD-10

1. Mobile and Stationary Mode Operations are supported. The maximum load (Torque) allowable for Mobile Mode is 150 lbs-ft at the transmission PTO driver gear. If the PTO feature is used for extended periods of time without vehicle movement it is recommended to switch to Stationary Mode. In Stationary Mode maximum load (Torque) is 250 lb-ft at the transmission PTO driver gear.
2. Ford provides an option for the use of one of the "Upfitter" Switches to be used as a PTO switch. Chelsea does not recommend the use of the UNPROTECTED switch for PTO function, but if required, contact Chelsea Technical Services for assistance (662-895-1052).
3. 249FMLLX-*2 -- 4 x 2 applications, all output options and all gear pumps listed in the pump chart are available.
4. 249FMLLX-*4 -- 4 x 4 applications only and will come with a modified PGP-P11 (CGP-P11) gear pump with the PTO from the factory when one of the following output option codes is ordered; 16, 26, 32, 37, 42, 55, 61, 71, 82, 87 (See Pump Chart). Or one of the following output shafts XD, XP or AD.
5. For Pump Codes 61, 71, 82 & 87 - 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X in addition to the PTO.
6. 249FMLLX-*V-- Both 4 x 2 and 4 x 4 applications. 249 Series with integral vane pump options (See Pump Chart).
7. The 272-FORD does not have noise dampening technology incorporated into the PTO like the 249 Series. Therefore, a gear clatter noise will be present during idle with no load on the PTO.

FRD-11

1. Only Stationary Mode Operations are supported for this application page. The Maximum Load (Torque) in Stationary Mode is 250 lbs-ft at the transmission PTO driver gear and 200 lbs-ft at the PTO output.
2. Ford Does Not Recommend PTO Operation At or Below 900 RPM for the 6.8L Gas Engine. Minimum Engine Speed 910 RPM and Maximum 2400 RPM. Reference Ford Bulletin Q-215 for Latest Information.
3. For MY2013 Ford F-650 4 x 2 w/Gas engine will come with a 6R140 transmission. This will require a heat shield (329931X) to protect the PTO from the exhaust. It is included with the PTO when ordering the 249 G mounting option.
4. 249GMLLX-*2 - 4 x 2 applications, all output options and all pumps listed in the pump chart are available.
5. Ford provides an option for the use of one of the "Upfitter" Switches to be used as a PTO switch. Chelsea does not recommend the use of the UNPROTECTED switch for PTO function, but if required, contact Chelsea Technical Services for assistance (662-895-1052).
6. For Pump Codes 61, 71, 82 & 87 - 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X in addition to the PTO.
7. PTO Pressure Switch - if the PTO pressure switch needs to be re-indexed due to interference, use P/N 380451 90 degree fitting.

FRD-12

1. MY2016 F650/750 is only operable in Stationary Mode. Mobile Mode is supported for 2017 F250-750 and the Torque to the Transmission gear is reduced to 125 lb-ft and 100 lb-ft to the PTO output.
2. 249HMLLX-*2 -- 4 x 2 applications, all output options and all gear pumps listed in the pump chart are available.
3. Ford Does Not Recommend PTO Operation At or Below 900 RPM for the 6.8L Gas Engine. Minimum Engine Speed 910 RPM and Maximum 2400 RPM. Reference Ford Bulletin Q-215 for Latest Information.
4. FORD Gas applications require a Heat Shield Kit (329931X) that will be provided with the PTO to protect the PTO and its related components from the extreme temperatures near the exhaust pipes.
5. Ford provides Upfitter Switches that can be used as a PTO switch. Chelsea only recommends the use of protected circuits for PTO operations. Ensure the switch is protected by a fuse before use.
6. For Pump Codes 61, 71, 82 & 87 - 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X in addition to the PTO.
7. PTO Pressure Switch - if the PTO pressure switch needs to be re-indexed due to interference, use P/N 380451 90 degree fitting.

Ford Notes

FRD-13

1. Mobile and Stationary Mode Operations are supported and vary based on vehicle configuration. If the PTO feature is used for extended periods of time without vehicle movement it is recommended to switch to Stationary Mode. For 6.7L Diesel, maximum load (torque) at the transmission gear is 150 lb-ft in mobile mode and 300 lb-ft in stationary. Consult FORD BBAS for the most up to date ratings.
2. All 4x4 compatible pumps MUST be mounted with the bulge toward the transmission.
3. The following output options are 4 x 2 only: SD Smart Start driveshaft, 18 gear pump and 20 gear pump.

FRD-14

1. Mobile and Stationary Mode Operations are supported and vary based on vehicle configuration. If the PTO feature is used for extended periods of time without vehicle movement it is recommended to switch to Stationary Mode. For 7.3L Gas, maximum load (torque) at the transmission gear is 125 lb-ft in mobile mode and 250 lb-ft in stationary. For 6.2L Gas, maximum load (torque) at the transmission gear is 115 lbs-ft in mobile mode and 250 lb-ft in stationary. Consult FORD BBAS for the most up to date ratings.
2. All 4x4 compatible pumps MUST be mounted with the bulge toward the transmission.
3. The following output options are 4 x 2 only: SD Smart Start driveshaft, 18 gear pump and 20 gear pump.
4. Thermal sleeving is required for lube hose and pressure switch on Gas applications. See owners manual for details.

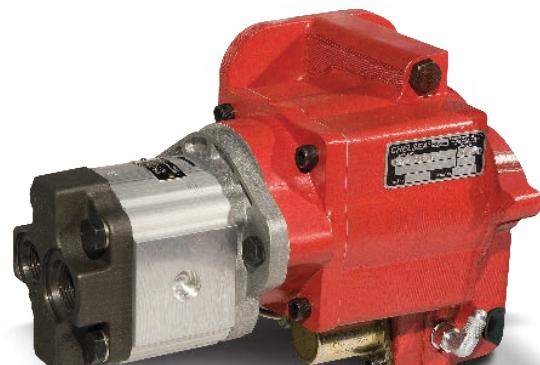
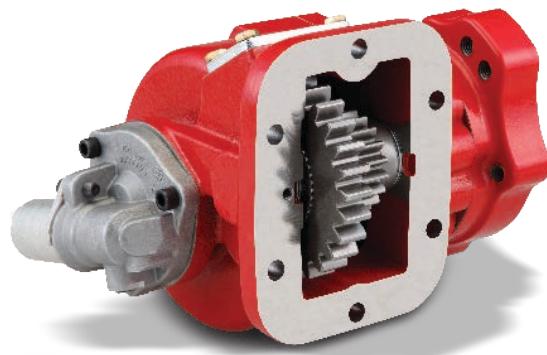
Ford

NOTES



Ford

GM



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
GM 3600 Cab-Chassis	ALL-17	5	R64
CH-465 (Code MM4 1968 to 1990)	CHV-2	4	L36-R36
GM-20	CHV-2	4	L36-R36
M-20	CHV-2	4	L36-R36
SM-465 (GMC) (Code MM4 1968 to 1990)	CHV-2	4	L36-R36
A465 (Low Cab Forward)	AIS-2	6	L69



*IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US*

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershft
For transmissions not listed, contact your authorized Chelsea Distributor.

GM

ALL-17

GM

CHELSEA®

1000 (GM 3600 Cab-Chassis)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0080" (25.6032MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd Rev					I/C [†]	Rot	Fwd Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

252GDHVX-*5 (1)	120 I	Eng	122	Furnished
252GMHVX-*5 (2)	50 I	Eng	178	Furnished

252 Pumps offered in the PGP511 with 5/8" - 9T / SAE A Flange

Option Order Code	Chelsea Pump Model	Displacement in ³ /rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size
1121	CGP-P11C021-1AC	0.49	0.002	3988	4000	5/8" - 9T
1126	CGP-P11C026-1AC	0.61	0.003	3988	3600	5/8" - 9T
1129	CGP-P11C029-1AC	0.67	0.003	3988	3600	5/8" - 9T
1137	CGP-P11C037-1AC	0.85	0.004	3988	3300	5/8" - 9T
1449	CGP-P31C054-1AE	1.24	0.005	3500	3000	5/8" - 9T
1462	CGP-P31C061-1AE	1.40	0.006	3500	3000	5/8" - 9T

252 Pumps offered in the PGP511 with 3/4" - 11T / SAE A Flange

Option Order Code	Chelsea Pump Model	Displacement in ³ /rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size
P37	CGP-P11C037-5AC	0.85	0.004	3988	3300	3/4" - 11T
P42	CGP-P11C042-5AC	0.98	0.004	3988	3000	3/4" - 11T
P71	CGP-P11C071-5AC	1.65	0.007	2900	2400	3/4" - 11T

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal will activate the Variable Modulated Main Pressure and line pressure may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission.

(1) Input Gear Part No. 5-P-1294
(2) Input Gear Part No. 5-P-1386

CH-465 (Code MM4 1968 to 1990)
 GM-20
 M-20
 SM-465 (GMC) (Code MM4 1968 to 1990)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear REAR of Centerline
 36 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
 1.0850" (27.5600MM)**TRANSMISSION GEAR DATA:**

R.S. 06-BOLT Opening Gear REAR of Centerline
 36 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
 1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442KFBQX-*6 (2)	250 I	Opp	35		7170-89X	442KFBQX-*4 (2)	250 I	Opp	35		7170-89X
442KLBQX-*6 (1)	250 I	Opp	45		7170-89X	442KLBQX-*4 (1)	250 I	Opp	45		7170-89X
442KQBQX-*6 (1)	225 I	Opp	48		7170-89X	442KQBQX-*4 (1)	225 I	Opp	48		7170-89X
442KRBOX-*6 (1)	225 I	Opp	56		7170-89X	442KRBOX-*4 (1)	225 I	Opp	56		7170-89X
442KSBQX-*6 (1)	200 I	Opp	67		7170-89X	442KSBQX-*4 (1)	200 I	Opp	67		7170-89X
442KUBQX-*6 (1)	195 I	Opp	80		7170-89X	442KUBQX-*4 (1)	195 I	Opp	80		7170-89X
442KWBQX-*6 (1)	175 I	Opp	94		7170-89X	442KWBQX-*4 (1)	175 I	Opp	94		7170-89X
442KXBQX-*6 (1)	140 I	Opp	111		7170-89X	442KXBQX-*4 (1)	140 I	Opp	111		7170-89X

ONE SPEED - FORWARD & REVERSE

340XFBQX-*4 (3)	200 I	Opp	32	33	7-A-140(4)	328170-76X	340XFBQX-*4 (3)	200 I	Opp	32	33	7-A-140(4)	328170-76X
-----------------	-------	-----	----	----	------------	------------	-----------------	-------	-----	----	----	------------	------------

GEARED ADAPTERS

626KBQX-3BP	250 I	Eng		7170-89X	626KBQX-4BP	250 I	Eng		7170-89X
630KBQX-3BP	250 I	Eng		7170-89X	630KBQX-4BP	250 I	Eng		7170-89X
645KBQX-3BP	250 I	Eng		7170-89X	645KBQX-4BP	250 I	Eng		7170-89X

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1023
- (2) Input Gear Part No. 5-P-1084
- (3) Input Gear Part No. 5-P-720
- (4) Filler block furnished with PTO

GM

AIS-2

GM

CHELSEA®

A465 (Isuzu Number for MY600)
 MO36A6 (Mitsubishi/Fuso Number for MY600)
 MY600

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear FORWARD of Centerline
 69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272AAKUP-*5 (1)	158	C	Eng	69	Furnished
272ABKUP-*5 (2)	129	C	Eng	84	Furnished
272ACKUP-*5 (3)	106	C	Eng	102	Furnished
272ADKUP-*5 (4)	89	C	Eng	122	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1515-1X
- (2) Input Gear Part No. 5-P-1515-2X
- (3) Input Gear Part No. 5-P-1515-3X
- (4) Input Gear Part No. 5-P-1515-4X

GM Notes

ALL-17

1. For MY2015 GM has changed the engine exhaust design. The exhaust pipe can not be removed as in previous model years. This is causing issues with PTO installation. Contact GM Upfitter Integration for assistance on PTO installation.
2. There is torque converter lock up feature available with the 1000 series transmission. The torque converter lock up feature comes on and is controlled by the Transmission Control Module (TCM) at 1100 RPM transmission turbine speed when a signal is provided to the "PTO Enable" circuit of the TCM by the PTO switch. This equates to 1200-1250 RPM or higher engine speed, depending on PTO load. Lock up will only come on in the "PARK" position. The lock up clutch does not come on automatically in "DRIVE" at 1100 RPM. Refer to the appropriate owner's manual for wiring installation.
3. The PTO torque ratings shown are based on the maximum allowable torque of 250 lb-ft at the 64 tooth gear in the transmission with the PTO on one opening only. With PTOs mounted on both openings the maximum allowable torque at the 64 tooth gear in the transmission is 200 lb-ft. For a more precise evaluation of your PTO application refer to the Allison Body Builders Book, Section F, PTO Systems Provisions.
4. The 252 Series for MY2015 and later GM C/K series Cab/Chassis order wiring harness part number 75-P-33. For 2007-2014 order Chelsea part number 329620X. This harness must be ordered separately and is required for proper PTO to Engine interface operation. Refer to GM UI Bulletin #80.
5. Only the 12V B option shifter can be used on this application.
6. The left PTO aperture opening on this application is not usable due to engine fuel lines blocking the opening.

AIS-2

1. The A465 (MY600) transmissions in Isuzu trucks started TCC Lock-up in PTO Mode in MY2010. The transmission build start dates were June 2010. The vehicle code for MY2010 is "VN60."
2. The A460 (MY400) and A465 (MY600) share the same transmission housing and both have a "shelf" in the aperture that interferes with the ratio gear of the 272, starting with the K ratio. The older 270 series fit with higher ratios because the input ratio gear was not as wide.

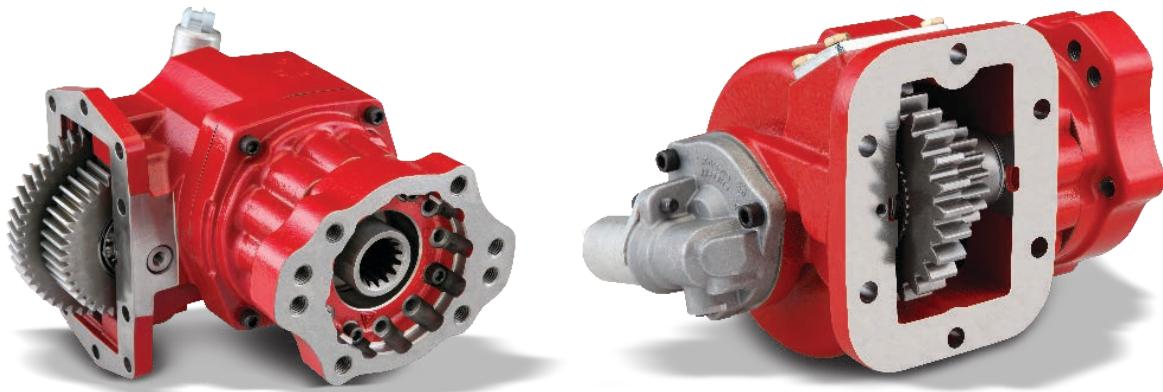
GM

NOTES



GM

ONIH



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
A465	AIS-2	6	L69
2200 RDS (Hino L6 Series)	ALL-15	5	L64-R64
2500 RDS (Hino L6 Series)	ALL-15	5	L64-R64
2500 RDS (Hino L7 Series)	ALL-15	5	L64-R64
3000 RDS (Hino L7 Series)	ALL-13	6	L64-R64
3000 RDS (Hino XL7 Series)	ALL-13	6	L68-R68
3000 RDS (Hino XL8 Series)	ALL-13	6	L68-R68
3500 RDS (Hino XL7 Series)	ALL-13	6	L68-R68
3500 RDS (Hino XL8 Series)	ALL-13	6	L68-R68

Hino



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

AIS-2

HINO

CHELSEA®

A465 (Isuzu Number for MY600)
 MO36A6 (Mitsubishi/Fuso Number for MY600)
 MY600

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
 69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272AAKUP-*5 (1)	158 C	Eng	69	Furnished
272ABKUP-*5 (2)	129 C	Eng	84	Furnished
272ACKUP-*5 (3)	106 C	Eng	102	Furnished
272ADKUP-*5 (4)	89 C	Eng	122	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1515-1X
- (2) Input Gear Part No. 5-P-1515-2X
- (3) Input Gear Part No. 5-P-1515-3X
- (4) Input Gear Part No. 5-P-1515-4X

3000 RDS (L7, XL7 and XL8 Series)
3500 RDS (XL7 and XL8 Series)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline

68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

R.S. 10-BOLT Opening Gear FORWARD of Centerline

68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (4)	402 I	Eng	72	Furnished	267SBFJP-*3 (4)	402 I	Eng	72	Furnished	267SBFJP-*3 (3)	390 I	Eng	87
267SDFJP-*5 (3)	390 I	Eng	87	Furnished	267SDFJP-*3 (3)	390 I	Eng	87	Furnished	267SDFJP-*3 (2)	360 I	Eng	103
267SGFJP-*5 (2)	360 I	Eng	103	Furnished	267SGFJP-*3 (5)	318 I	Eng	129	Furnished	267SGFJP-*3 (5)	318 I	Eng	129
267SMFJP-*5 (5)	318 I	Eng	129	Furnished	267SSFJP-*3 (1)	265 I	Eng	161	Furnished	267SSFJP-*3 (1)	265 I	Eng	161
267SSFJP-*5 (1)	265 I	Eng	161	Furnished	267XBFJP-*3 (26)	335 I	Eng	72	Furnished	267XBFJP-*3 (26)	335 I	Eng	72
267XBFJP-*5 (26)	335 I	Eng	72	Furnished	267XDFJP-*3 (27)	325 I	Eng	87	Furnished	267XDFJP-*3 (27)	325 I	Eng	87
267XDFJP-*5 (27)	325 I	Eng	87	Furnished	267XGFJP-*3 (28)	300 I	Eng	103	Furnished	267XGFJP-*3 (28)	300 I	Eng	103
267XGFJP-*5 (28)	300 I	Eng	103	Furnished	267XMFJP-*3 (29)	265 I	Eng	129	Furnished	267XMFJP-*3 (29)	265 I	Eng	129
267XMFJP-*5 (29)	265 I	Eng	129	Furnished	267XSFJP-*3 (1)	250 I	Eng	161	Furnished	267XSFJP-*3 (1)	250 I	Eng	161
267XSFJP-*5 (1)	250 I	Eng	161	Furnished	287GBFPJP-*5 (17)	300 C	Eng	60	Furnished	287GBFPJP-*3 (17)	300 C	Eng	60
287GBFPJP-*5 (17)	300 C	Eng	60	Furnished	287GBFPJP-*8 (17)	300 C	Eng	56	Furnished	287GBFPJP-*8 (17)	300 C	Eng	56
287GBFPJP-*8 (17)	300 C	Eng	56	Furnished	287GCFJP-*5 (18)	390 C	Eng	72	Furnished	287GCFJP-*5 (18)	390 C	Eng	72
287GCFJP-*5 (18)	390 C	Eng	72	Furnished	287GCFJP-*8 (18)	390 C	Eng	68	Furnished	287GCFJP-*8 (18)	390 C	Eng	68
287GCFJP-*8 (18)	390 C	Eng	68	Furnished	287GDFJP-*5 (19)	390 C	Eng	87	Furnished	287GDFJP-*3 (19)	390 C	Eng	87
287GDFJP-*5 (19)	390 C	Eng	87	Furnished	287GDFJP-*8 (19)	390 C	Eng	81	Furnished	287GDFJP-*8 (19)	390 C	Eng	81
287GDFJP-*8 (19)	390 C	Eng	81	Furnished	287GGFPJP-*5 (20)	360 C	Eng	103	Furnished	287GGFPJP-*3 (20)	360 C	Eng	103
287GGFPJP-*5 (20)	360 C	Eng	103	Furnished	287GGFPJP-*8 (20)	360 C	Eng	96	Furnished	287GGFPJP-*8 (20)	360 C	Eng	96
287GGFPJP-*8 (20)	360 C	Eng	96	Furnished	287GKFJP-*5 (21)	340 C	Eng	115	Furnished	287GKFJP-*3 (21)	340 C	Eng	115
287GKFJP-*5 (21)	340 C	Eng	115	Furnished	287GMFPJP-*5 (22)	318 C	Eng	129	Furnished	287GMFPJP-*3 (22)	318 C	Eng	129
287GMFPJP-*5 (22)	318 C	Eng	129	Furnished	287GMFPJP-*8 (22)	318 C	Eng	119	Furnished	287GMFPJP-*8 (22)	318 C	Eng	119
287GPFPJP-*5 (23)	290 C	Eng	144	Furnished	287GPFPJP-*3 (23)	290 C	Eng	144	Furnished	287GPFPJP-*3 (23)	290 C	Eng	144
287GPFPJP-*8 (23)	290 C	Eng	132	Furnished	287GPFPJP-*8 (23)	290 C	Eng	132	Furnished	287GPFPJP-*8 (23)	290 C	Eng	132
287GSFPJP-*5 (24)	265 C	Eng	161	Furnished	287GSFPJP-*3 (24)	265 C	Eng	161	Furnished	287GSFPJP-*3 (24)	265 C	Eng	161
287GSFPJP-*8 (24)	265 C	Eng	147	Furnished	287GSFPJP-*8 (24)	265 C	Eng	147	Furnished	287GSFPJP-*8 (24)	265 C	Eng	147
287GTFPJP-*5 (25)	240 C	Eng	180	Furnished	287GTFPJP-*3 (25)	240 C	Eng	180	Furnished	287GTFPJP-*3 (25)	240 C	Eng	180
287GTFPJP-*8 (16)	240 C	Eng	173	Furnished	287GTFPJP-*8 (16)	240 C	Eng	173	Furnished	287GTFPJP-*8 (16)	240 C	Eng	173
877XAFJP-*5 (7)	591 C	Eng	82	Furnished	877XAFJP-*3 (7)	591 C	Eng	82	Furnished	877XAFJP-*3 (7)	591 C	Eng	82
877XBFPJP-*5 (8)	557 C	Eng	87	Furnished	877XBFPJP-*3 (8)	557 C	Eng	87	Furnished	877XBFPJP-*3 (8)	557 C	Eng	87
877XCFJP-*5 (9)	522 C	Eng	93	Furnished	877XCFJP-*3 (9)	522 C	Eng	93	Furnished	877XCFJP-*3 (9)	522 C	Eng	93
877XDFJP-*5 (10)	490 C	Eng	99	Furnished	877XDFJP-*3 (10)	490 C	Eng	99	Furnished	877XDFJP-*3 (10)	490 C	Eng	99
877XEFPJP-*5 (11)	429 C	Eng	113	Furnished	877XEFPJP-*3 (11)	429 C	Eng	113	Furnished	877XEFPJP-*3 (11)	429 C	Eng	113

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

Hino

ALL-13

HINO

CHELSEA®

3000 RDS (L7, XL7 and XL8 Series)
 3500 RDS (XL7 and XL8 Series)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
 68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

R.S. 10-BOLT Opening Gear FORWARD of Centerline
 68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]							I/C [†]					

ONE SPEED - TWO GEAR - CONSTANT MESH

877XFFJP-*5 (12)	379 C	Eng	128	Furnished	877XFFJP-*3 (12)	379 C	Eng	128	Furnished					
877XGFJP-*5 (13)	334 C	Eng	145	Furnished	877XGFJP-*3 (13)	334 C	Eng	145	Furnished					
877XHFJP-*5 (14)	315 C	Eng	154	Furnished	877XHFJP-*3 (14)	315 C	Eng	154	Furnished					
877XJFJP-*5 (15)	295 C	Eng	164	Furnished	877XJFJP-*3 (15)	295 C	Eng	164	Furnished					
877XKFJP-*5 (6)	357 C	Eng	136	Furnished	877XKFJP-*3 (6)	357 C	Eng	136	Furnished					

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

280GBFJP-*5 (17)	300 C	Eng	60	Furnished	280GBFJP-*3 (17)	300 C	Eng	60	Furnished					
280GBFJP-*8 (17)	300 C	Eng	56	Furnished	280GBFJP-*8 (17)	300 C	Eng	56	Furnished					
280GCFJP-*5 (18)	390 C	Eng	72	Furnished	280GCFJP-*3 (18)	390 C	Eng	72	Furnished					
280GCFJP-*8 (18)	390 C	Eng	68	Furnished	280GCFJP-*8 (18)	390 C	Eng	68	Furnished					
280GDFJP-*5 (19)	390 C	Eng	87	Furnished	280GDFJP-*3 (19)	390 C	Eng	87	Furnished					
280GDFJP-*8 (19)	390 C	Eng	81	Furnished	280GDFJP-*8 (19)	390 C	Eng	81	Furnished					
280GGFJP-*5 (20)	360 C	Eng	103	Furnished	280GGFJP-*3 (20)	360 C	Eng	103	Furnished					
280GGFJP-*8 (20)	360 C	Eng	96	Furnished	280GGFJP-*8 (20)	360 C	Eng	96	Furnished					
280GKFP-*5 (21)	340 C	Eng	115	Furnished	280GKFP-*3 (21)	340 C	Eng	115	Furnished					
280GMFJP-*5 (22)	318 C	Eng	129	Furnished	280GMFJP-*3 (22)	318 C	Eng	129	Furnished					
280GMFJP-*8 (22)	318 C	Eng	119	Furnished	280GMFJP-*8 (22)	318 C	Eng	119	Furnished					
280GPFP-*5 (23)	290 C	Eng	144	Furnished	280GPFP-*3 (23)	290 C	Eng	144	Furnished					
280GPFP-*8 (23)	290 C	Eng	132	Furnished	280GPFP-*8 (23)	290 C	Eng	132	Furnished					
280GSFJP-*5 (24)	265 C	Eng	161	Furnished	280GSFJP-*3 (24)	265 C	Eng	161	Furnished					
280GSFJP-*8 (24)	265 C	Eng	147	Furnished	280GSFJP-*8 (24)	265 C	Eng	147	Furnished					
280GTFJP-*5 (25)	240 C	Eng	180	Furnished	280GTFJP-*3 (25)	240 C	Eng	180	Furnished					
280GTFJP-*8 (16)	240 C	Eng	173	Furnished	280GTFJP-*8 (16)	240 C	Eng	173	Furnished					
870XAFJP-*5 (7)	591 C	Eng	82	Furnished	870XAFJP-*3 (7)	591 C	Eng	82	Furnished					
870XBFJP-*5 (8)	557 C	Eng	87	Furnished	870XBFJP-*3 (8)	557 C	Eng	87	Furnished					
870XCFJP-*5 (9)	522 C	Eng	93	Furnished	870XCFJP-*3 (9)	522 C	Eng	93	Furnished					
870XDFJP-*5 (10)	490 C	Eng	99	Furnished	870XDFJP-*3 (10)	490 C	Eng	99	Furnished					
870XEFP-*5 (11)	429 C	Eng	113	Furnished	870XEFP-*3 (11)	429 C	Eng	113	Furnished					
870XFFJP-*5 (12)	379 C	Eng	128	Furnished	870XFFJP-*3 (12)	379 C	Eng	128	Furnished					
870XGFJP-*5 (13)	334 C	Eng	145	Furnished	870XGFJP-*3 (13)	334 C	Eng	145	Furnished					

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

- (6) Input Gear Part No. 5-P-1428-10X
- (12) Input Gear Part No. 5-P-1428-6X
- (18) Input Gear Part No. 5-P-1491-2X
- (24) Input Gear Part No. 5-P-1491-8X
- (7) Input Gear Part No. 5-P-1428-11X
- (13) Input Gear Part No. 5-P-1428-7X
- (19) Input Gear Part No. 5-P-1491-3X
- (25) Input Gear Part No. 5-P-1491-9X
- (8) Input Gear Part No. 5-P-1428-12X
- (14) Input Gear Part No. 5-P-1428-8X
- (20) Input Gear Part No. 5-P-1491-4X
- (9) Input Gear Part No. 5-P-1428-3X
- (15) Input Gear Part No. 5-P-1428-9X
- (21) Input Gear Part No. 5-P-1491-5X
- (10) Input Gear Part No. 5-P-1428-4X
- (16) Input Gear Part No. 5-P-1491-10X
- (22) Input Gear Part No. 5-P-1491-6X
- (11) Input Gear Part No. 5-P-1428-5X
- (17) Input Gear Part No. 5-P-1491-1X
- (23) Input Gear Part No. 5-P-1491-7X

Hino

3000 RDS (L7, XL7 and XL8 Series)
3500 RDS (XL7 and XL8 Series)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C ↑	Rot	Fwd					I/C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

870XHFJP-*5 (14)	315 C	Eng	154	Furnished	870XHFJP-*3 (14)	315 C	Eng	154	Furnished
870XJFJP-*5 (15)	295 C	Eng	164	Furnished	870XJFJP-*3 (15)	295 C	Eng	164	Furnished

ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT

870LAFJW-*5 (7)	591 C	Eng	82	Furnished	870LAFJW-*3 (7)	591 C	Eng	82	Furnished
870LBFW-*5 (8)	557 C	Eng	87	Furnished	870LBFW-*3 (8)	557 C	Eng	87	Furnished
870LCFW-*5 (9)	522 C	Eng	93	Furnished	870LCFW-*3 (9)	522 C	Eng	93	Furnished
870LDFJW-*5 (10)	490 C	Eng	99	Furnished	870LDFJW-*3 (10)	490 C	Eng	99	Furnished
870LEFJW-*5 (11)	429 C	Eng	113	Furnished	870LEFJW-*3 (11)	429 C	Eng	113	Furnished
870LFFJW-*5 (12)	379 C	Eng	128	Furnished	870LFFJW-*3 (12)	379 C	Eng	128	Furnished
870LGFJW-*5 (13)	334 C	Eng	145	Furnished	870LGFJW-*3 (13)	334 C	Eng	145	Furnished
870LHFJW-*5 (14)	315 C	Eng	154	Furnished	870LHFJW-*3 (14)	315 C	Eng	154	Furnished
890LAFJW-*5 (7)	591 C	Eng	82	Furnished	890RAFJW-*5 (7)	591 C	Eng	82	Furnished
890LBFW-*5 (8)	557 C	Eng	87	Furnished	890RBFW-*5 (8)	557 C	Eng	87	Furnished
890LCFW-*5 (9)	522 C	Eng	93	Furnished	890RCFW-*5 (9)	522 C	Eng	93	Furnished
890LDFJW-*5 (10)	490 C	Eng	99	Furnished	890RDFJW-*5 (10)	490 C	Eng	99	Furnished
890LEFJW-*5 (11)	429 C	Eng	113	Furnished	890REFJW-*5 (11)	429 C	Eng	113	Furnished
890LFFJW-*5 (12)	379 C	Eng	128	Furnished	890RFFJW-*5 (12)	379 C	Eng	128	Furnished
890LGFJW-*5 (13)	334 C	Eng	145	Furnished	890RGFJW-*5 (13)	334 C	Eng	145	Furnished
890LHFJW-*5 (14)	315 C	Eng	154	Furnished	890RHFJW-*5 (14)	315 C	Eng	154	Furnished

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

877LAFJW-*5 (7)	591 C	Eng	82	Furnished	877LAFJW-*3 (7)	591 C	Eng	82	Furnished
877LBFW-*5 (8)	557 C	Eng	87	Furnished	877LBFW-*3 (8)	557 C	Eng	87	Furnished
877LCFW-*5 (9)	522 C	Eng	93	Furnished	877LCFW-*3 (9)	522 C	Eng	93	Furnished
877LDFJW-*5 (10)	490 C	Eng	99	Furnished	877LDFJW-*3 (10)	490 C	Eng	99	Furnished
877LEFJW-*5 (11)	429 C	Eng	113	Furnished	877LEFJW-*3 (11)	429 C	Eng	113	Furnished
877LFFJW-*5 (12)	379 C	Eng	128	Furnished	877LFFJW-*3 (12)	379 C	Eng	128	Furnished
877LGFJW-*5 (13)	334 C	Eng	145	Furnished	877LGFJW-*3 (13)	334 C	Eng	145	Furnished
877LHFJW-*5 (14)	315 C	Eng	154	Furnished	877LHFJW-*3 (14)	315 C	Eng	154	Furnished
897LAFJW-*5 (7)	591 C	Eng	82	Furnished	897RAFJW-*5 (7)	591 C	Eng	82	Furnished
897LBFW-*5 (8)	557 C	Eng	87	Furnished	897RBFW-*5 (8)	557 C	Eng	87	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

- (7) Input Gear Part No. 5-P-1428-11X
- (8) Input Gear Part No. 5-P-1428-12X
- (9) Input Gear Part No. 5-P-1428-3X
- (10) Input Gear Part No. 5-P-1428-4X
- (11) Input Gear Part No. 5-P-1428-5X
- (12) Input Gear Part No. 5-P-1428-6X
- (13) Input Gear Part No. 5-P-1428-7X
- (14) Input Gear Part No. 5-P-1428-8X
- (15) Input Gear Part No. 5-P-1428-9X

October 2022

5.8.5

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Hino

ALL-13

HINO

CHELSEA®

3000 RDS (L7, XL7 and XL8 Series)
 3500 RDS (XL7 and XL8 Series)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 10-BOLT Opening Gear FORWARD of Centerline
 68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

R.S. 10-BOLT Opening Gear FORWARD of Centerline
 68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

897LCFJW-*5 (9)	522 C	Eng	93	Furnished	897RCFJW-*5 (9)	522 C	Eng	93	Furnished	897RDFJW-*5 (10)	490 C	Eng	99
897LDFJW-*5 (10)	490 C	Eng	99	Furnished	897RDFJW-*5 (10)	490 C	Eng	99	Furnished	897REFJW-*5 (11)	429 C	Eng	113
897LEFJW-*5 (11)	429 C	Eng	113	Furnished	897REFJW-*5 (11)	429 C	Eng	113	Furnished	897RFFJW-*5 (12)	379 C	Eng	128
897LFFJW-*5 (12)	379 C	Eng	128	Furnished	897RFFJW-*5 (12)	379 C	Eng	128	Furnished	897RGFJW-*5 (13)	334 C	Eng	145
897LGFJW-*5 (13)	334 C	Eng	145	Furnished	897RGFJW-*5 (13)	334 C	Eng	145	Furnished	897RHJFJW-*5 (14)	315 C	Eng	154
897LHFJW-*5 (14)	315 C	Eng	154	Furnished	897RHJFJW-*5 (14)	315 C	Eng	154	Furnished				

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

Hino

CHELSEA®**HINO****ALL-15**2200 RDS (L6 Series)
2500 RDS (L6 Series)**LEFT SIDE ONLY****RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

1.0080" (25.6000MM)

TRANSMISSION GEAR DATA:R.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

1.0080" (25.6032MM)

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442GBHVP-*5 (3)	215 I	Eng	96	Furnished	442GBHVP-*3 (3)	215 I	Eng	96	Furnished
442GBHVPX-*5 (3)	150 I	Eng	96	Furnished	442GBHVPX-*3 (3)	150 I	Eng	96	Furnished
442GFHVP-*5 (2)	165 I	Eng	151	Furnished	442GFHVP-*3 (2)	165 I	Eng	151	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272GAHVP-*5 (5)	294 C	Eng	85	Furnished	272GAHVP-*3 (5)	294 C	Eng	85	Furnished
272GBHVP-*5 (6)	240 C	Eng	104	Furnished	272GBHVP-*3 (6)	240 C	Eng	104	Furnished
272GCHVP-*5 (7)	198 C	Eng	126	Furnished	272GCHVP-*3 (7)	198 C	Eng	126	Furnished
272GDHVP-*5 (8)	166 C	Eng	151	Furnished	272GDHVP-*3 (8)	166 C	Eng	151	Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272NAHVP-*3 (5)	294 C	Eng	85	Furnished	272NAHVP-*5 (5)	294 C	Eng	85	Furnished
272NBHVP-*3 (6)	240 C	Eng	104	Furnished	272NBHVP-*5 (6)	240 C	Eng	104	Furnished
272NCHVP-*3 (7)	198 C	Eng	126	Furnished	272NCHVP-*5 (7)	198 C	Eng	126	Furnished
272NDHVP-*3 (8)	166 C	Eng	151	Furnished	272NDHVP-*5 (8)	166 C	Eng	151	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

252GDHVP-*5 (1)	120 I	Eng	122	Furnished	252GDHVPX-*5 (1)	120 I	Eng	122	Furnished
252GMHVP-*5 (4)	50 I	Eng	178	Furnished	252GMHVPX-*5 (4)	50 I	Eng	178	Furnished

GEARED ADAPTERS

626GHVX-4HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished	626GHVX-3HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished
630GHVX-4HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished	630GHVX-3HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished
645GHVX-4HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished	645GHVX-3HV (2)	250 I	Opp	7-A-140(P)(9)	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO. Failure to provide this signal may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(1) Input Gear Part No. 5-P-1294
(2) Input Gear Part No. 5-P-1300
(3) Input Gear Part No. 5-P-1358
(4) Input Gear Part No. 5-P-1386
(5) Input Gear Part No. 5-P-1516-1X
(6) Input Gear Part No. 5-P-1516-2X

(7) Input Gear Part No. 5-P-1516-3X
(8) Input Gear Part No. 5-P-1516-4X
(9) Filler block furnished with PTO

Hino

Hino Notes

AIS-2

1. The A465 (MY600) transmissions in Isuzu trucks started TCC Lock-up in PTO Mode in MY2010. The transmission build start dates were June 2010. The vehicle code for MY2010 is "VN60."
2. The A460 (MY400) and A465 (MY600) share the same transmission housing and both have a "shelf" in the aperture that interferes with the ratio gear of the 272, starting with the K ratio. The older 270 series fit with higher ratios because the input ratio gear was not as wide.

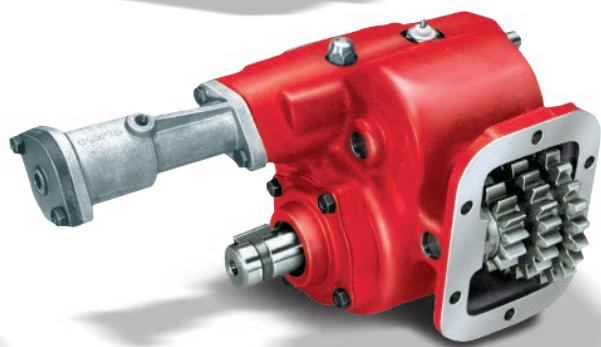
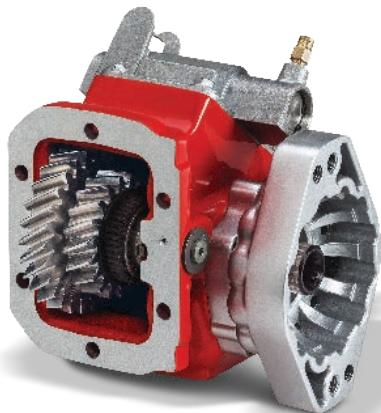
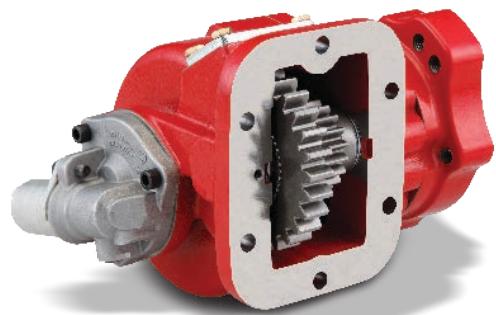
ALL-13

1. 890/897 Series - The Combined Weight of Pump, Fittings and Hoses Should Not Exceed 120 Lbs. Refer to Owner's Manual (HY25-1890- M1/US) for Complete Details.
2. When direct mounting a Parker P2 060 piston pump to a 267 Series PTO on the left (drivers) side opening, the PTO must be ordered as a 3 assembly arrangement for pump clearance.
3. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280/287, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
4. The 267 Series is not available in the 3 arrangement with an XK output due to interference with the pressure lube fitting.
5. Wiring harness 379926 must be used in 2003 GM trucks for the 277, 278 and 859 Series PTOs if the GM provided in-dash PTO switch is used to control PTO operations.
6. Do not use adapter gear assemblies on Allison 3000/4000 Series Automatic Transmissions.
7. Quiet Gear™ input option QT is available on 870/877 and 870L/877L Series PTOs.
8. For an 870-XL and 877-XL (870L and 877L) Extended Shaft PTOs, the transmission bracket (50-P-XXX) and bolt kit (329928-1X) must be ordered separately: Left Side 5 Arrangement use 50-P-162, Left Side 3 Arrangement use 50-P-164, Right Side 5 Arrangement use 50-P-161, Right Side 3 Arrangement use 50-P-157.

ALL-15

1. There is a torque converter lock up feature available with the 1000/2000/2400 series transmissions. The torque converter lock up feature comes on and is controlled by the Transmission Control Module (TCM) when a signal is provided to the "PTO Enable" circuit of the TCM by the PTO switch. Lock up will only come on in the "NEUTRAL" and "PARK" positions at 1100 RPM transmission turbine speed. This equates to 1200-1250 RPM or higher engine speed, depending on PTO load. The lock up clutch does not come on automatically in "DRIVE." Refer to the appropriate owner's manual for wiring installation.
2. If the 442 Series is ordered with Pressure Lube, Hose 328075X is supplied with the PTO A Restrictor Orifice, 379896 (442*FHVP) or 379594 (442*BHVP) is required and is shipped with the PTO.
3. 442*B Ratio - DO NOT USE with Geared Adapter.
4. Geared Adapters - 626/630/645 listed on this application page are for the 442 (F Ratio Only) or 272. 442*F Ratio - Use 442ZFHV with (1) 7-A-140 filler block and (1) 328170-94X stud kit when mounting the PTO to one of the adapters listed. 272 - Use 272L*HV (deep mount) with (1) 7-A-140 and (1) 328170-94X. Use 35-P-41 gasket between transmission and adapter. Use filler block (1) 7-A-140 between the adapter and PTO with 35-P-1 or 2 shim gaskets to obtain .006-012" of backlash between the driver gears.
5. To maintain proper hydraulic pressure to PTO clutch, connect Chelsea specified wire to Allison "PTO Request" circuit wire/pin within transmission TCM. Location of PTO Request wire/pin is dependant on Transmission Location Code. For assistance, contact your local Allison representative or contact AllisonTechnical Assistance at 1-800-252-5283.
6. Limited Ratios - the K Ratio and above will not fit on this transmission due to adjacent interference with the input ratio gear. In some instances the D ratio will not fit either. There seems to be two variations of the transmission case that effect the D ratio, but we have no way to confirm which case is which.
7. A lube T fitting is required in the oil return cooling line to supply low pressure oil to the idler shaft of the 252 (left side), 272, or 442 Series PTO. The 378840 T fitting is for transmission model 1000 with the SAE #3 bell housing, 378970 T fitting is for the transmission model 1000/2000/2400 with the SAE #2 bell housing, or the low pressure return line may be cut with a tube cutter and a compression T fitting may be installed.
8. MY2003 and after GM C/K Series 4500/5500/6500/7500/8500 Trucks - If using the GM provided in-dash switch, use wiring harness 379924 for the 230/231/271/272 Series PTOs. The kits must be ORDERED SEPARATELY.
9. 252 Series PTO - (GM C/K Series 2003-Current) If using the factory provided GM PTO switch, an additional wiring harness is required. MY2003-2006 - Order 329619X; MY2007-2014 - Order 329620X; MY2015-Current - Order 75-P-33. Wiring harnesses must be ordered separately.
10. 272 Low Profile - MY2022+ MACK MD6 chassis has cross-member interference on the driver side and a 272N cannot be used. 272G in a 5 arrangement is recommended if there are no other obstructions.

ISUZU



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
450-43LE (Case Serial # 8D3394 and Later)	IIZU-12	4	L58
A450-43L	IIZU-12	5	L58
A450-43LE	IIZU-12	4	L58
A465 (Isuzu Number for MY600)	AIS-2	6	L69
A465ID	AIS-5	6	L69



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

ISUZU

IZU-12

ISUZU

CHELSEA®

450-43LE (Case Serial # 8D3394 and Later)
 A450-43L
 A455-43-LE

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear FORWARD of Centerline
 58 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

272AAKUP-*5 (1)	199 C	Eng	58	Furnished
272ABKUP-*5 (2)	162 C	Eng	71	Furnished
272ACKUP-*5 (3)	134 C	Eng	86	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1515-1X
- (2) Input Gear Part No. 5-P-1515-2X
- (3) Input Gear Part No. 5-P-1515-3X

CHELSEA®**ISUZU****AIS-2**

A465 (Isuzu Number for MY600)

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272AAKUP-*5 (1)	158 C	Eng	69	Furnished
272ABKUP-*5 (2)	129 C	Eng	84	Furnished
272ACKUP-*5 (3)	106 C	Eng	102	Furnished
272ADKUP-*5 (4)	89 C	Eng	122	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1515-1X
- (2) Input Gear Part No. 5-P-1515-2X
- (3) Input Gear Part No. 5-P-1515-3X
- (4) Input Gear Part No. 5-P-1515-4X

ISUZU

AIS-5

ISUZU

CHELSEA®

A465ID

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**L.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272AAKUP-*5 (1)	196 C	Eng	69	Furnished
272ABKUP-*5 (2)	160 C	Eng	84	Furnished
272ACKUP-*5 (3)	132 C	Eng	102	Furnished
272ADKUP-*5 (4)	111 C	Eng	122	Furnished
272AGKUP-*5 (5)	93 C	Eng	145	Furnished
272AKKUP-*5 (6)	83 C	Eng	162	Furnished
272AMKUP-*5 (7)	74 C	Eng	181	Furnished
272APKUP-*5 (8)	67 C	Eng	203	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1515-1X (6) Input Gear Part No. 5-P-1515-6X
 (2) Input Gear Part No. 5-P-1515-2X (7) Input Gear Part No. 5-P-1515-7X
 (3) Input Gear Part No. 5-P-1515-3X (8) Input Gear Part No. 5-P-1515-8X
 (4) Input Gear Part No. 5-P-1515-4X
 (5) Input Gear Part No. 5-P-1515-5X

Isuzu Notes

IZU-12

1. The torque ratings shown for the 272 Series are based on the maximum allowable torque capacity of the PTO drive gear in the transmission.
2. The PTOs shown on this application page will fit Isuzu NQR model trucks with serial number X7901741 and later only.
3. The PTOs shown on this application page will fit Isuzu NPR model trucks with wheel bases of 109" or 132" and a serial number of X7006763 and later.
4. The PTOs shown on this application page will also fit the same NPR model trucks with wheel bases of 150" and 176" after August of 1998 and serial number of X7006763 and later.
5. The serial number is the last eight digits found on the VIN plate which is located in the cab behind the driver.

AIS-2

1. The A465 (MY600) transmissions in Isuzu trucks started TCC Lock-up in PTO Mode in MY2010. The transmission build start dates were June 2010. The vehicle code for MY2010 is "VN60."
2. The A460 (MY400) and A465 (MY600) share the same transmission housing and both have a "shelf" in the aperture that interferes with the ratio gear of the 272, starting with the K ratio. The older 270 series fit with higher ratios because the input ratio gear was not as wide.

AIS-5

1. The A465ID (Isuzu Diesel) and A465HD (Hino Diesel) transmissions are available for MY20+

ISUZU

NOTES



isuzu

MACK



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
D107	MAK-18	10	L37-R37
D1070	MAK-19	10	L37-R37
DX1070	MAK-16	6	L34-R34
DX1071	MAK-16	6	L34-R34
DX1078	MAK-16	6	L34-R34
DX10780	MAK-16	6	L34-R34
DX10781	MAK-16	6	L34-R34
G1070	MAK-19	7	L37-R37
QL7220	MAK-17	20	L38-R38
T107	MAK-18	6	L37-R37
T1070	MAK-19	12	L37-R37
T1070-B	MAK-19	12	L37-R37
T2050	MAK-25	5	L54-R54
T2050-C	MAK-29	5	L48-R48
T2060	MAK-25	6	L54-R54
T2060-A	MAK-30	6	L40-R40
T2060-C	MAK-29	6	L48-R48
T2070	MAK-25	7	L54-R54
T2070-A (Front Box)	MAK-25	7	L54-R54
T2070-A (Rear Box)	MAK-26	7	L49-R49
T2070-B (Front Box)	MAK-25	7	L54-R54
T2070-B (Rear Box)	MAK-26	7	L49-R49
T2070-C	MAK-29	7	L48-R48
T2070-D (Front Box)	MAK-29	7	L48-R48
T2070-D (Rear Box)	MAK-26	7	L49-R49
T2070-F	MAK-25	7	L54-R54
T2080	MAK-25	8	L54-R54
T2080-B (Front Box)	MAK-25	8	L54-R54
T2080-B (Rear Box)	MAK-26	8	L49-R49
T2080-C	MAK-29	8	L48-R48
T2080-D (Front Box)	MAK-29	8	L48-R48
T2080-D (Rear Box)	MAK-26	8	L49-R49
T2090	MAK-23	9	L54-R54
T2090-L	MAK-23	9	L54-R54
T2100	MAK-24	10	L54-R54
T2110-B (FRONT BOX FOR T2110B)	MAK-24	11	L54-R54



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Mack

MACK TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
T2110-B (REAR BOX FOR T2110B)	MAK-31	11	L49-R49
T2130 (Front Box)	MAK-23	13	L54-R54
T2130 (Rear Box)	MAK-28	13	L49-R49
T2130-B (Front Box)	MAK-23	13	L54-R54
T2130-B (Rear Box)	MAK-28	12	L49-R49
T2180 (Front Box)	MAK-23	18	L54-R54
T2180 (Rear Box)	MAK-27	18	L49-R49
T2180-B (Front Box)	MAK-23	18	L54-R54
T2180-B (Rear Box)	MAK-27	18	L49-R49
T305	MAK-25	5	L54-R54
T306	MAK-25	6	L54-R54
T306G	MAK-30	6	L40-R40
T307	MAK-25	7	L54-R54
T307M (Front Box)	MAK-25	7	L54-R54
T307M (Rear Box)	MAK-26	7	L49-R49
T308	MAK-25	8	L54-R54
T308M (Front Box)	MAK-25	8	L54-R54
T308M (Rear Box)	MAK-26	8	L49-R49
T309	MAK-23	9	L54-R54
T309L	MAK-23	9	L54-R54
T309LR	MAK-23	9	L54-R54
T310 (T310 is a standard 10 speed with no rear box)	MAK-32	10	L53-R53
T310-M (Front Box)	MAK-32	10	L53-R53
T310-M (Rear Box)	MAK-27	10	L49-R49
T310ME (Front box, same as T-310M, output flange extended for rear mount PTO)	MAK-32	10	L53-R53
T310ME (Rear box, same as T310M, output flange extended for rear mount PTO)	MAK-27	10	L49-R49
T310-MLR (Front Box)	MAK-23	10	L54-R54
T310-MLR (Rear Box)	MAK-27	10	L49-R49
T313H (Front Box)	MAK-23	13	L54-R54
T313H (Rear Box)	MAK-28	13	L49-R49
T313L (Front Box)	MAK-23	13	L54-R54
T313L (Rear Box)	MAK-28	13	L49-R49
T313L21 (Front Box)	MAK-23	13	L54-R54
T313L21 (Rear Box)	MAK-28	13	L49-R49
T313LR (Front Box)	MAK-23	13	L54-R54
T313LR (Rear Box)	MAK-28	13	L49-R49

Mack



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
T313LR21 (Front Box)	MAK-23	13	L54-R54
T313LR21 (Rear Box)	MAK-28	13	L49-R49
T318 (Front Box)	MAK-23	18	L54-R54
T318 (Rear Box)	MAK-27	18	L49-R49
T318L (Front Box)	MAK-23	18	L54-R54
T318L (Rear Box)	MAK-27	18	L49-R49
T318L21 (Front Box)	MAK-23	18	L54-R54
T318L21 (Rear Box)	MAK-27	18	L49-R49
T318LR (Front Box)	MAK-23	18	L54-R54
T318LR (Rear Box)	MAK-27	18	L49-R49
T318LR21 (Front Box)	MAK-23	18	L54-R54
T318LR21 (Rear Box)	MAK-27	18	L49-R49
TM308	MAK-33	8	L54-R54
TM308M (Front box)	MAK-23	8	L54-R54
TM308M (Rear Box)	MAK-26	8	L49-R49
TM309	MAK-33	9	L54-R54
TM309M (Front Box)	MAK-23	9	L54-R54
TM309M (Rear Box)	MAK-26	9	L49-R49
TMD12AD (MDrive) High Split Ratio	MAK-34H	12	CS
TMD12AD (MDrive) Low Ratio	MAK-34	12	CS
TMD12AFD (MDrive) High Split Ratio	MAK-34H	12	CS
TMD12AFD (MDrive) Low Ratio	MAK-34	12	CS
TMD12AFD-HD (MDrive) High Split Ratio	MAK-34H	12	CS
TMD12AFD-HD (MDrive) Low Ratio	MAK-34	12	CS
TMD12AFO (MDrive) High Split Ratio	MAK-35H	12	CS
TMD12AFO (MDrive) Low Ratio	MAK-35	12	CS
TMD12AFO-HD (MDrive) High Split Ratio	MAK-35H	12	CS
TMD12AFO-HD (MDrive) Low Ratio	MAK-35	12	CS
TMD12AO (MDrive) Low Ratio	MAK-35	12	CS
TMD12AO (MDrive) High Split Range	MAK-35H	12	CS
TMD13AD (MDrive) High Split Ratio	MAK-34H	13	CS



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Mack

MACK TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
TMD13AO (MDrive) High Split Range	MAK-35H	13	CS
TMD13AO (MDrive) Low Ratio	MAK-35	13	CS
TMD14AFO-HD (MDrive) High Split Range	MAK-35H	14	CS
TMD14AFO-HD (MDrive) Low Ratio	MAK-35	14	CS
TMD14AO (MDrive) High Split Range	MAK-35H	14	CS
TMD14AO (MDrive) Low Ratio	MAK-35	14	CS
TR720-7220	MAK-17	5	L38-R38
TRD7250	MAK-17	10	L38-R38
TRDL107	MAK-18	10	L37-R37
TRDL1070	MAK-19	10	L37-R37
TRDL720-7220	MAK-17	10	L38-R38
TRDLG1070	MAK-19	7	L37-R37
TRDX720-7220	MAK-17	10	L38-R38
TRDXL107	MAK-16	6	L34-R34
TRDXL1070	MAK-16	6	L34-R34
TRDXL1071	MAK-16	6	L34-R34
TRDXL1078	MAK-16	6	L34-R34
TRDXL10780	MAK-16	6	L34-R34
TRDXL10781	MAK-16	6	L34-R34
TRDXT720-7220	MAK-17	10	L38-R38
TRL107	MAK-22	5	L34-R34
TRL1076	MAK-16	5	L34-R34
TRL10760	MAK-20	5	L34-R34
TRL1078	MAK-16	5	L34-R34
TRL10780	MAK-20	5	L34-R34
TRQL7220	MAK-17	20	L38-R38
TRT720-7220	MAK-17	15	L38-R38
TRTL720-7220	MAK-17	15	L38-R38
TRTXL107	MAK-18	12	L37-R37
TRTXL1070	MAK-19	12	L37-R37
TRTXL1070-B	MAK-19	12	L37-R37
TRXL107	MAK-18	6	L37-R37
TRXL1070	MAK-21	6	L37-R37
TRXL1070-A	MAK-21	6	L37-R37
TRXL1071	MAK-18	6	L37-R37
TRXL10710	MAK-21	6	L37-R37

Mack



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
TRXL1071-A	MAK-18	6	L37-R37
TRXL1076	MAK-16	6	L34-R34
TRXL107-A	MAK-18	6	L37-R37
TX2060	MAK-25	7	L54-R54
X107	MAK-18	5	L37-R37
X1070	MAK-21	6	L37-R37
X1070-A	MAK-21	6	L37-R37
X1071	MAK-18	5	L37-R37
X10710	MAK-21	6	L37-R37
X10710-A	MAK-21	6	L37-R37
X1071-A	MAK-18	6	L37-R37
X107-A	MAK-18	6	L37-R37
X2060	MAK-25	7	L54-R54



*IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US*

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Mack

MAK-16

MACK

CHELSEA®

DX1070	TRDXL1078
DX1071	TRDXL10780
DX1078	TRDXL10781
DX10780	TRL1076
DX10781	TRL1078
TRDXL107	TRL1076
TRDXL1070	TRL1076
TRDXL1071	

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 08-BOLT Opening Gear FORWARD of Centerline 34 Teeth - SPUR	TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 34 Teeth - SPUR
PITCH LINE TO APERTURE FACE: 0.8050" (20.4500MM)	PITCH LINE TO APERTURE FACE: 3.0850" (78.3600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot	Fwd					I / C †	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*5	250 I	Opp	32	7-A-032(46)	328564X	Furnished	221XCAHX-*3	250 I	Eng	32	7-A-032(46)	328530-1X	328170-83X
221ZEAHX-*5	250 I	Opp	37		328564X	Furnished	221XEAHX-*3	250 I	Eng	37		328530-1X	328170-83X
489XAAHX-*5 (12)	250 I	Opp	28			Furnished	442KFAHX-*3 (2)	250 I	Eng	45		328530-1X	7170-16X
489XCAHX-*5 (13)	250 I	Opp	36			Furnished	442KFAHX-*3 (15)	250 I	Eng	52		328530-1X	7170-16X
489XFAHX-*5 (2)	250 I	Opp	45			Furnished	442KLAHX-*3 (1)	250 I	Eng	58		328530-1X	7170-16X
489XHAHX-*5 (15)	250 I	Opp	52			Furnished	442KQAHX-*3 (1)	225 I	Eng	62		328530-1X	7170-16X
489XLAHX-*5 (1)	250 I	Opp	58			Furnished	442KRAHX-*3 (1)	225 I	Eng	72		328530-1X	7170-16X
489XQAHX-*5 (1)	225 I	Opp	62			Furnished	442KSAHX-*3 (1)	200 I	Eng	86		328530-1X	7170-16X
489XRAHX-*5 (1)	225 I	Opp	72			Furnished	442KUAHX-*3 (1)	195 I	Eng	102		328530-1X	7170-16X
489XSAHX-*5 (1)	200 I	Opp	86			Furnished	442KWAHX-*3 (1)	175 I	Eng	121		328530-1X	7170-16X
489XUAHX-*5 (1)	195 I	Opp	102			Furnished	442KXAHX-*3 (1)	140 I	Eng	143		328530-1X	7170-16X
489XWAHX-*5 (1)	175 I	Opp	121			Furnished	660KHAHX-*3 (15)	375 I	Eng	52		328530-1X	7170-16X
489XXAHX-*5 (1)	140 I	Opp	143			Furnished							
680XFAHX-*5 (10)	375 I	Opp	45			Furnished							
680XHAHX-*5 (19)	375 I	Opp	52			Furnished							
680XQAHX-*5 (11)	375 I	Opp	62			Furnished							
680XRAHX-*5 (18)	350 I	Opp	72			Furnished							
680XSAHX-*5 (14)	325 I	Opp	86			Furnished							
823XBAHX-*3 (39)	500 I	Opp	30			Furnished							
823XDAHX-*3 (43)	500 I	Opp	36			Furnished							
823XGAHX-*3 (44)	500 I	Opp	36			Furnished							
823XJAHX-*3 (40)	500 I	Opp	46			Furnished							
823XMAHX-*3 (38)	500 I	Opp	54			Furnished							
823XRAHX-*3 (42)	400 I	Opp	75			Furnished							
823XTKTX-*3 (17)	372 I	Opp	90	8-A-165			7170-116X						
880XBAHX-*3 (3)	500 I	Opp	30			Furnished							
880XDAHX-*3 (4)	500 I	Opp	36			Furnished							
880XGAHX-*3 (9)	500 I	Opp	39			Furnished							
880XJAHX-*3 (5)	500 I	Opp	46			Furnished							
880XMAHX-*3 (6)	500 I	Opp	54			Furnished							
880XQAHX-*3 (16)	450 I	Opp	64			Furnished							

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(38) Input Gear Part No. 5-P-283(39) Input Gear Part No. 5-P-285
(40) Input Gear Part No. 5-P-325
(42) Input Gear Part No. 5-P-721
(43) Input Gear Part No. 5-P-971
(44) Input Gear Part No. 5-P-980
(46) Furnished, but not required

CHELSEA®**MACK****MAK-16**

DX1070	TRDXL1078
DX1071	TRDXL10780
DX1078	TRDXL10781
DX10780	TRL1078
DX10781	TRL1078
TRDXL107	TRXL1076
TRDXL1070	TRXL1076
TRDXL1071	TRXL1076

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 08-BOLT Opening Gear FORWARD of Centerline 34 Teeth - SPUR	TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 34 Teeth - SPUR
PITCH LINE TO APERTURE FACE: 0.8050" (20.4500MM)	PITCH LINE TO APERTURE FACE: 3.0850" (78.3600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XRAHX-*3 (7)	400 I	Opp	75	Furnished
880XTAHX-*3 (8)	350 I	Opp	96	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XBAJX-*5 (20)	300 C	Opp	31	8-A-032	Furnished	272KAAJX-*3 (29)	300 C	Eng	25		328530-1X	7170-16X
282XCAJX-*5 (21)	300 C	Opp	37	8-A-032	Furnished	272KBAJX-*3 (30)	300 C	Eng	31		328530-1X	7170-16X
282XDAJX-*5 (22)	300 C	Opp	44	8-A-032	Furnished	272KCAJX-*3 (31)	300 C	Eng	37		328530-1X	7170-16X
282XGAJX-*5 (23)	300 C	Opp	52	8-A-032	Furnished	272KDAJX-*3 (32)	300 C	Eng	42		328530-1X	7170-16X
282XKAJX-*5 (24)	300 C	Opp	59	8-A-032	Furnished	272KG AJX-*3 (33)	300 C	Eng	52		328530-1X	7170-16X
282XMAJX-*5 (25)	300 C	Opp	66	8-A-032	Furnished	272KKAJX-*3 (34)	300 C	Eng	59		328530-1X	7170-16X
282XP AJX-*5 (26)	300 C	Opp	73	8-A-032	Furnished	272KMAJX-*3 (35)	300 C	Eng	66		328530-1X	7170-16X
282XSAJX-*5 (27)	300 C	Opp	82	8-A-032	Furnished	272KPAJX-*3 (36)	300 C	Eng	73		328530-1X	7170-16X
282XTAJX-*5 (28)	300 C	Opp	92	8-A-032	Furnished	272KS AJX-*3 (37)	300 C	Eng	82		328530-1X	7170-16X

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	30	Furnished
885XGAHX-*3 (9)	500 I	Opp	39	Furnished
885XJAHX-*3 (5)	500 I	Opp	46	Furnished
885XMAHX-*3 (6)	500 I	Opp	54	Furnished

ONE SPEED - FORWARD & REVERSE

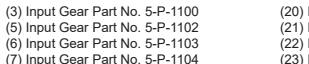
348ZFAHX-*5 (41)	200 I	Opp	39	41	8-A-093(T) 8-A-032(P)	Furnished	340XFAHX-*5 (41)	200 I	Eng	39	41	7-A-140(P)(45)	328530-1X	7170-16X
863XBAHX-*5	500 I	Opp	30	38		Furnished								

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng	Furnished
-------------	-------	-----	-----------

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

October 2022

5.10.7

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Mack

MAK-17

MACK

CHELSEA®

QL7220
TRDL720-7220
TRDXT720-7220
TRDX720-7220
TRD7250
TRQL7220
TRTL720-7220
TRT720-7220

TR720-7220

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear REAR of Centerline
38 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

3.0500" (77.4700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear REAR of Centerline
38 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

3.0500" (77.4700MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot	Fwd	Rev					I / C †	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442KFABX-*6 (2)	250 I	Eng	75	7-A-032(T)	328530-2X	7170-16X	442KFABX-*4 (2)	250 I	Eng	75	7-A-032(T)	328530-2X	7170-16X
442KLABX-*6 (1)	250 I	Eng	97	7-A-032(T)	328530-2X	7170-16X	442KLABX-*4 (1)	250 I	Eng	97	7-A-032(T)	328530-2X	7170-16X
442KQABX-*6 (1)	225 I	Eng	104	7-A-032(T)	328530-2X	7170-16X	442KQABX-*4 (1)	225 I	Eng	104	7-A-032(T)	328530-2X	7170-16X
442KRABX-*6 (1)	225 I	Eng	121	7-A-032(T)	328530-2X	7170-16X	442KRABX-*4 (1)	225 I	Eng	121	7-A-032(T)	328530-2X	7170-16X
442KSABX-*6 (1)	200 I	Eng	144	7-A-032(T)	328530-2X	7170-16X	442KSABX-*4 (1)	200 I	Eng	144	7-A-032(T)	328530-2X	7170-16X
442KUABX-*6 (1)	195 I	Eng	172	7-A-032(T)	328530-2X	7170-16X	442KUABX-*4 (1)	195 I	Eng	172	7-A-032(T)	328530-2X	7170-16X
442KWABX-*6 (1)	175 I	Eng	202	7-A-032(T)	328530-2X	7170-16X	442KWABX-*4 (1)	175 I	Eng	202	7-A-032(T)	328530-2X	7170-16X
442KXABX-*6 (1)	140 I	Eng	239	7-A-032(T)	328530-2X	7170-16X	442KXABX-*4 (1)	140 I	Eng	239	7-A-032(T)	328530-2X	7170-16X

ONE SPEED - FORWARD & REVERSE

340XFABX-*4 (3)	200 I	Eng	68	72	7-A-140(P)(4)	328530-2X	7170-16X	340XFABX-*4 (3)	200 I	Eng	68	72	7-A-140(P)(4)	328530-2X	7170-16X
7-A-032(T)															

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

Mack

- (1) Input Gear Part No. 5-P-1001
- (2) Input Gear Part No. 5-P-1076
- (3) Input Gear Part No. 5-P-579
- (4) Filler block furnished with PTO

CHELSEA®**MACK****MAK-18**

D107 TRDL107 TRTXL107 TRXL107 TRXL107-A TRXL1071 TRXL1071-A T107	X107 X107-A X1071 X1071-A
LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 08-BOLT Opening Gear FORWARD of Centerline 37 Teeth - SPUR	TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 37 Teeth - SPUR
PITCH LINE TO APERTURE FACE: 0.5700" (14.4800MM)	PITCH LINE TO APERTURE FACE: 2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489KAAHX-*5 (12)	250 I	Opp	64	8-A-062 8-A-093	328170-8X	442KFAHX-*3 (2)	250 I	Eng	101	7-A-240(T)	328530-1X	328170-168X
489KCAHX-*5 (13)	250 I	Opp	81	8-A-062 8-A-093	328170-8X	442KHAHX-*3 (15)	250 I	Eng	117	7-A-240(T)	328530-1X	328170-168X
489KFAHX-*5 (2)	250 I	Opp	101	8-A-062 8-A-093	328170-8X	442KLAHX-*3 (1)	250 I	Eng	130	7-A-240(T)	328530-1X	328170-168X
489KHAHX-*5 (15)	250 I	Opp	117	8-A-062 8-A-093	328170-8X	442KQAHX-*3 (1)	225 I	Eng	140	7-A-240(T)	328530-1X	328170-168X
489KLAHX-*5 (1)	250 I	Opp	130	8-A-062 8-A-093	328170-8X	442KRAHX-*3 (1)	225 I	Eng	162	7-A-240(T)	328530-1X	328170-168X
489KQAHX-*5 (1)	225 I	Opp	140	8-A-062 8-A-093	328170-8X	442KSAHX-*3 (1)	200 I	Eng	193	7-A-240(T)	328530-1X	328170-168X
489KRAHX-*5 (1)	225 I	Opp	162	8-A-062 8-A-093	328170-8X	442KUAHX-*3 (1)	195 I	Eng	230	7-A-240(T)	328530-1X	328170-168X
489KSAHX-*5 (1)	200 I	Opp	193	8-A-062 8-A-093	328170-8X	442KWAHX-*3 (1)	175 I	Eng	271	7-A-240(T)	328530-1X	328170-168X
489KUAHX-*5 (1)	195 I	Opp	230	8-A-062 8-A-093	328170-8X	442KXAHX-*3 (1)	140 I	Eng	321	7-A-240(T)	328530-1X	328170-168X
489KWAHX-*5 (1)	175 I	Opp	271	8-A-062 8-A-093	328170-8X	660KHAHX-*3 (15)	375 I	Eng	117	7-A-240(T)	328530-1X	328170-168X
489KXAHX-*5 (1)	140 I	Opp	321	8-A-062 8-A-093	328170-8X							
680KFAHX-*5 (10)	375 I	Opp	101	8-A-062 8-A-093	328170-8X							
680KHAHX-*5 (18)	375 I	Opp	117	8-A-062 8-A-093	328170-8X							
680KQAHX-*5 (11)	375 I	Opp	140	8-A-062 8-A-093	328170-8X							
680KRAHX-*5 (17)	350 I	Opp	162	8-A-062 8-A-093	328170-8X							
680KSAHX-*5 (14)	325 I	Opp	193	8-A-062 8-A-093	328170-8X							

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (2) Input Gear Part No. 5-P-1077
- (10) Input Gear Part No. 5-P-1242
- (11) Input Gear Part No. 5-P-1246
- (12) Input Gear Part No. 5-P-1280
- (13) Input Gear Part No. 5-P-1287

- (14) Input Gear Part No. 5-P-1322
- (15) Input Gear Part No. 5-P-1364
- (17) Input Gear Part No. 5-P-1441
- (18) Input Gear Part No. 5-P-1494

MAK-18

MACK

CHELSEA®

D107	X107
TRDL107	X107-A
TRTXL107	X1071
TRXL107	X1071-A
TRXL107-A	
TRXL1071	
TRXL1071-A	
T107	

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 08-BOLT Opening Gear FORWARD of Centerline 37 Teeth - SPUR	TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 37 Teeth - SPUR
PITCH LINE TO APERTURE FACE: 0.5700" (14.4800MM)	PITCH LINE TO APERTURE FACE: 2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

823XBAHX-*5 (38)	500 I	Opp	69	8-A-190	328170-14X
823XDAHX-*5 (42)	500 I	Opp	81	8-A-190	328170-14X
823XGAHX-*5 (43)	500 I	Opp	88	8-A-190	328170-14X
823XJAHX-*5 (39)	500 I	Opp	104	8-A-190	328170-14X
823XMAHX-*5 (37)	500 I	Opp	122	8-A-190	328170-14X
823XRAHX-*5 (41)	400 I	Opp	168	8-A-190	328170-14X
880KBAHX-*5 (3)	500 I	Opp	69	8-A-190	328170-14X
880KDAHX-*5 (4)	500 I	Opp	81	8-A-190	328170-14X
880KGAHX-*5 (9)	500 I	Opp	88	8-A-190	328170-14X
880KJAHX-*5 (5)	500 I	Opp	104	8-A-190	328170-14X
880KMAHX-*5 (6)	500 I	Opp	122	8-A-190	328170-14X
880KQAHX-*5 (16)	450 I	Opp	142	8-A-190	328170-14X
880KRAHX-*5 (7)	400 I	Opp	168	8-A-190	328170-14X
880KTAHX-*5 (8)	350 I	Opp	217	8-A-190	328170-14X

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282KBAJX-*5 (19)	300 C	Opp	69	8-A-093(P) 8-A-032(T)	328170-8X	272KAAJX-*3 (28)	300 C	Eng	56	7-A-240(T)	328530-1X	328170-168X
282KCAJX-*5 (20)	300 C	Opp	83	8-A-093(P) 8-A-032(T)	328170-8X	272KBAJX-*3 (29)	300 C	Eng	69	7-A-240(T)	328530-1X	328170-168X
282KDAJX-*5 (21)	300 C	Opp	99	8-A-093(P) 8-A-032(T)	328170-8X	272KCAJX-*3 (30)	300 C	Eng	83	7-A-240(T)	328530-1X	328170-168X
282KG AJX-*5 (22)	300 C	Opp	118	8-A-093(P) 8-A-032(T)	328170-8X	272KDAJX-*3 (31)	300 C	Eng	94	7-A-240(T)	328530-1X	328170-168X
282KKAJX-*5 (23)	300 C	Opp	132	8-A-093(P) 8-A-032(T)	328170-8X	272KG AJX-*3 (32)	300 C	Eng	118	7-A-240(T)	328530-1X	328170-8X
282KMAJX-*5 (24)	300 C	Opp	148	8-A-093(P) 8-A-032(T)	328170-8X	272KKAJX-*3 (33)	300 C	Eng	132	7-A-240(T)	328530-1X	328170-8X
282KPAJX-*5 (25)	300 C	Opp	165	8-A-093(P) 8-A-032(T)	328170-8X	2272KMAJX-*3 (34)	300 C	Eng	148	7-A-240(T)	328530-1X	328170-8X

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105(9) Input Gear Part No. 5-P-1135
(16) Input Gear Part No. 5-P-1385
(19) Input Gear Part No. 5-P-1510-11X
(20) Input Gear Part No. 5-P-1510-12X
(21) Input Gear Part No. 5-P-1510-13X
(22) Input Gear Part No. 5-P-1510-14X(23) Input Gear Part No. 5-P-1510-15X
(24) Input Gear Part No. 5-P-1510-16X
(25) Input Gear Part No. 5-P-1510-17X
(28) Input Gear Part No. 5-P-1510-1X
(29) Input Gear Part No. 5-P-1510-2X
(30) Input Gear Part No. 5-P-1510-3X(31) Input Gear Part No. 5-P-1510-4X
(32) Input Gear Part No. 5-P-1510-5X
(33) Input Gear Part No. 5-P-1510-6X
(34) Input Gear Part No. 5-P-1510-7X
(37) Input Gear Part No. 5-P-283
(38) Input Gear Part No. 5-P-285(39) Input Gear Part No. 5-P-325
(41) Input Gear Part No. 5-P-721
(42) Input Gear Part No. 5-P-971
(43) Input Gear Part No. 5-P-980

CHELSEA®**MACK****MAK-18**

D107	X107
TRDL107	X107-A
TRTXL107	X1071
TRXL107	X1071-A
TRXL107-A	
TRXL1071	
TRXL1071-A	
T107	

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**L.S. 08-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**
0.5700" (14.4800MM)**TRANSMISSION GEAR DATA:**R.S. 06-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**
2.8340" (71.9800MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282KSAJX-*5 (26)	271 C	Opp	184	8-A-093(P) 8-A-032(T)	328170-8X	272KPAJX-*3 (35)	300 C	Eng	165	7-A-240(T)	328530-1X	328170-168X
282KTAJX-*5 (27)	242 C	Opp	206	8-A-093(P) 8-A-032(T)	328170-8X	272KSAJX-*3 (36)	271 C	Eng	184	7-A-240(T)	328530-1X	328170-168X

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*5 (3)	500 I	Opp	69	8-A-190	328170-14X
885XGAHX-*5 (9)	500 I	Opp	88	8-A-190	328170-14X
885XJAHX-*5 (5)	500 I	Opp	104	8-A-190	328170-14X
885XMAHX-*5 (6)	500 I	Opp	122	8-A-190	328170-14X

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (40)	200 I	Opp	88	92	8-A-190(T)	328170-8X	340XFAHX-*5 (40)	200 I	Eng	88	92 7-A-140(P)(44)328530-1X	328170-168X
863XBAHX-*5	500 I	Opp	69	85	8-A-190	328170-15X					7-A-240(T)	

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng	8-A-190	328170-8X
-------------	-------	-----	---------	-----------

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (5) Input Gear Part No. 5-P-1102
- (6) Input Gear Part No. 5-P-1103
- (9) Input Gear Part No. 5-P-1135
- (26) Input Gear Part No. 5-P-1510-18X
- (27) Input Gear Part No. 5-P-1510-19X

- (35) Input Gear Part No. 5-P-1510-8X
- (36) Input Gear Part No. 5-P-1510-9X
- (40) Input Gear Part No. 5-P-581
- (44) Filler block furnished with PTO

Mack

MAK-19

MACK

CHELSEA®

D1070
G1070
TRDLG1070
TRDL1070
TRTXL1070
TRTXL1070-B
T1070
T1070-B

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear REAR of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.3750" (9.5200MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear REAR of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †							I / C †					
ONE SPEED - TWO GEAR - MECHANICAL SHIFT													

489KFAHX-*6 (2)	250 I	Opp	129	8-A-062 8-A-093	328170-8X	442KFAHX-*4 (2)	250 I	Eng	129	7-A-240(T)	328530-1X	328170-168X
489KHAHX-*6 (13)	250 I	Opp	150	8-A-062 8-A-093	328170-8X	442KHAHX-*4 (13)	250 I	Eng	150	7-A-240(T)	328530-1X	328170-168X
489KLAHX-*6 (1)	250 I	Opp	168	8-A-062 8-A-093	328170-8X	442KLAHX-*4 (1)	250 I	Eng	168	7-A-240(T)	328530-1X	328170-168X
489KQAHX-*6 (1)	225 I	Opp	180	8-A-062 8-A-093	328170-8X	442KQAHX-*4 (1)	225 I	Eng	180	7-A-240(T)	328530-1X	328170-168X
489KRAHX-*6 (1)	225 I	Opp	209	8-A-062 8-A-093	328170-8X	442KRAHX-*4 (1)	225 I	Eng	209	7-A-240(T)	328530-1X	328170-168X
489KSAHX-*6 (1)	200 I	Opp	249	8-A-062 8-A-093	328170-8X	442KSAHX-*4 (1)	200 I	Eng	249	7-A-240(T)	328530-1X	328170-168X
489KUAHX-*6 (1)	195 I	Opp	296	8-A-062 8-A-093	328170-8X	442KUAHX-*4 (1)	195 I	Eng	296	7-A-240(T)	328530-1X	328170-168X
489KWAHX-*6 (1)	175 I	Opp	349	8-A-062 8-A-093	328170-8X	442KWAHX-*4 (1)	175 I	Eng	349	7-A-240(T)	328530-1X	328170-168X
489KXAHX-*6 (1)	140 I	Opp	412	8-A-062 8-A-093	328170-8X	442KXAHX-*4 (1)	140 I	Eng	412	7-A-240(T)	328530-1X	328170-168X
680KHAHX-*6 (16)	375 I	Opp	150	8-A-062 8-A-093	328170-8X	660KHAHX-*4 (13)	375 I	Eng	150	7-A-240(T)	328530-1X	328170-168X
680XFAHX-*6 (10)	375 I	Opp	129	8-A-062 8-A-093	328170-8X							
680XQAHX-*6 (11)	375 I	Opp	180	8-A-062 8-A-093	328170-8X							
680XRAXH-*6 (15)	350 I	Opp	209	8-A-062 8-A-093	328170-8X							
680XSAAHX-*6 (12)	325 I	Opp	249	8-A-062 8-A-093	328170-8X							
823XBAHX-*6 (18)	500 I	Opp	88	8-A-190	328170-14X							
823XDAHX-*6 (22)	500 I	Opp	104	8-A-190	328170-14X							
823XGAHX-*6 (23)	500 I	Opp	113	8-A-190	328170-14X							
823XJAHX-*6 (19)	500 I	Opp	133	8-A-190	328170-14X							

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

Mack

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1322
(13) Input Gear Part No. 5-P-1364

(15) Input Gear Part No. 5-P-1441
(16) Input Gear Part No. 5-P-1494
(18) Input Gear Part No. 5-P-285
(19) Input Gear Part No. 5-P-325
(22) Input Gear Part No. 5-P-971
(23) Input Gear Part No. 5-P-980

D1070
G1070
TRDLG1070
TRDL1070
TRTXL1070
TRTXL1070-B
T1070
T1070-B

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear REAR of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.3750" (9.5200MM)**TRANSMISSION GEAR DATA:**

R.S. 06-BOLT Opening Gear REAR of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

823XMAHX-*6 (17)	500 I	Opp	157	8-A-190	328170-14X
823XRAHX-*6 (21)	400 I	Opp	216	8-A-190	328170-14X
880XBAHX-*6 (3)	500 I	Opp	88	8-A-190	328170-14X
880XDAHX-*6 (4)	500 I	Opp	104	8-A-190	328170-14X
880XGAHX-*6 (9)	500 I	Opp	113	8-A-190	328170-14X
880XJAHX-*6 (5)	500 I	Opp	133	8-A-190	328170-14X
880XMAHX-*6 (6)	500 I	Opp	157	8-A-190	328170-14X
880XQAHX-*6 (14)	450 I	Opp	183	8-A-190	328170-14X
880XRAHX-*6 (7)	400 I	Opp	216	8-A-190	328170-14X
880XTAHX-*6 (8)	350 I	Opp	279	8-A-190	328170-14X

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XGAHX-*6 (9)	500 I	Opp	113	8-A-190	328170-14X
885XJAHX-*6 (5)	500 I	Opp	133	8-A-190	328170-14X
885XMAHX-*6 (6)	500 I	Opp	157	8-A-190	328170-14X

ONE SPEED - FORWARD & REVERSE

348XFAHX-*4 (20)	200 I	Opp	113	119	8-A-190(T)	328170-8X	340XFAHX-*4 (20)	200 I	Eng	113	119	7-A-140(P)(24)	328530-1X	328170-168X
863XBAHX-*4	500 I	Opp	88	109	8-A-190	328170-15X								7-A-240(T)

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng	8-A-190	328170-8X
-------------	-------	-----	---------	-----------

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (4) Input Gear Part No. 5-P-1101
- (5) Input Gear Part No. 5-P-1102
- (6) Input Gear Part No. 5-P-1103
- (7) Input Gear Part No. 5-P-1104
- (8) Input Gear Part No. 5-P-1105
- (9) Input Gear Part No. 5-P-1135
- (14) Input Gear Part No. 5-P-1385
- (17) Input Gear Part No. 5-P-283
- (20) Input Gear Part No. 5-P-581
- (21) Input Gear Part No. 5-P-721
- (24) Filler block furnished with PTO

Mack

MAK-20

MACK

CHELSEA®

TRL10760
TRL10780

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

3.0850" (78.3600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489XAAHX-*5 (12)	250 I	Opp	46	Furnished	442KFAHX-*3 (2)	250 I	Eng	73				328530-1X	7170-16X
489XCAHX-*5 (13)	250 I	Opp	59	Furnished	442KHAHX-*3 (15)	250 I	Eng	85				328530-1X	7170-16X
489XFAHX-*5 (2)	250 I	Opp	73	Furnished	442KLAHX-*3 (1)	250 I	Eng	95				328530-1X	7170-16X
489XHAX-*5 (15)	250 I	Opp	85	Furnished	442KQAHX-*3 (1)	225 I	Eng	102				328530-1X	7170-16X
489XLAHX-*5 (1)	250 I	Opp	95	Furnished	442KRAHX-*3 (1)	225 I	Eng	119				328530-1X	7170-16X
489XQAHX-*5 (1)	225 I	Opp	102	Furnished	442KSAHX-*3 (1)	200 I	Eng	141				328530-1X	7170-16X
489XRAHX-*5 (1)	225 I	Opp	119	Furnished	442KUAHX-*3 (1)	195 I	Eng	168				328530-1X	7170-16X
489XSAHX-*5 (1)	200 I	Opp	141	Furnished	442KWAHX-*3 (1)	175 I	Eng	198				328530-1X	7170-16X
489XUAHX-*5 (1)	195 I	Opp	168	Furnished	442KXAHX-*3 (1)	140 I	Eng	234				328530-1X	7170-16X
489XWAHX-*5 (1)	175 I	Opp	198	Furnished	660KHAHX-*3 (15)	375 I	Eng	85				328530-1X	7170-16X
489XXAHX-*5 (1)	140 I	Opp	234	Furnished									
680XFAHX-*5 (10)	375 I	Opp	73	Furnished									
680XHAX-*5 (19)	375 I	Opp	85	Furnished									
680XQAHX-*5 (11)	375 I	Opp	102	Furnished									
680XRAHX-*5 (18)	350 I	Opp	119	Furnished									
680XSAHX-*5 (14)	325 I	Opp	141	Furnished									
823XBAHX-*3 (39)	500 I	Opp	50	Furnished									
823XDAHX-*3 (43)	500 I	Opp	60	Furnished									
823XGAHX-*3 (44)	500 I	Opp	65	Furnished									
823XJAHX-*3 (40)	500 I	Opp	76	Furnished									
823XMAHX-*3 (38)	500 I	Opp	89	Furnished									
823XRAHX-*3 (42)	400 I	Opp	123	Furnished									
823XTKTX-*5 (17)	350 I	Opp	149	8-A-165(45)	Furnished								
880XBAHX-*5 (3)	500 I	Opp	50	Furnished									
880XDAHX-*5 (4)	500 I	Opp	59	Furnished									
880XGAHX-*5 (9)	500 I	Opp	64	Furnished									
880XJAHX-*5 (5)	500 I	Opp	76	Furnished									
880XMAHX-*5 (6)	500 I	Opp	89	Furnished									
880XQAHX-*5 (16)	450 I	Opp	104	Furnished									
880XRAHX-*5 (7)	400 I	Opp	123	Furnished									
880XTAHX-*5 (8)	350 I	Opp	158	Furnished									

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

Mack

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1441(19) Input Gear Part No. 5-P-1494
(38) Input Gear Part No. 5-P-283
(39) Input Gear Part No. 5-P-285
(40) Input Gear Part No. 5-P-325
(42) Input Gear Part No. 5-P-721
(43) Input Gear Part No. 5-P-971

(44) Input Gear Part No. 5-P-980

(45) Filler block furnished with PTO

October 2022
5.10.14Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

TRL10760
TRL10780

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPURPITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM))

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPURPITCH LINE TO APERTURE FACE:
3.0850" (78.3600MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XBAJX-*5 (20)	300 C	Opp	50	8-A-032	Furnished	272KAAJX-*3 (29)	300 C	Eng	41		328530-1X	7170-16X
282XCAJX-*5 (21)	300 C	Opp	61	8-A-032	Furnished	272KBAJX-*3 (30)	300 C	Eng	50		328530-1X	7170-16X
282XDAJX-*5 (22)	300 C	Opp	72	8-A-032	Furnished	272KCAJX-*3 (31)	300 C	Eng	61		328530-1X	7170-16X
282XGAJX-*5 (23)	300 C	Opp	86	8-A-032	Furnished	272KDAJX-*3 (32)	300 C	Eng	72		328530-1X	7170-16X
282XKAJX-*5 (24)	300 C	Opp	96	8-A-032	Furnished	272KGAJX-*3 (33)	300 C	Eng	86		328530-1X	7170-16X
282XMAJX-*5 (25)	300 C	Opp	108	8-A-032	Furnished	272KKAJX-*3 (34)	300 C	Eng	96		328530-1X	7170-16X
282XPAJX-*5 (26)	300 C	Opp	120	8-A-032	Furnished	272KPAJX-*3 (35)	300 C	Eng	108		328530-1X	7170-16X
282XSAXJX-*5 (27)	300 C	Opp	135	8-A-032	Furnished	272KPSAJX-*3 (36)	300 C	Eng	120		328530-1X	7170-16X
282XTAJX-*5 (28)	300 C	Opp	151	8-A-032	Furnished	272KSAJX-*3 (37)	300 C	Eng	135		328530-1X	7170-16X

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	50		Furnished
885XGAHX-*5 (9)	500 I	Opp	64		Furnished
885XJAHX-*3 (5)	500 I	Opp	76		Furnished
885XMAHX-*3 (6)	500 I	Opp	89		Furnished

ONE SPEED - FORWARD & REVERSE

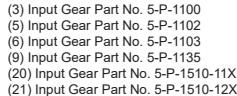
340SFAHX-*5 (41)	200 I	Opp	64	67	310778X	Furnished	340XFAHX-*5 (41)	200 I	Eng	64	67	7-A-140(P)(45)	328530-1X	7170-16X	
863XBAHX-*5	500 I	Opp	50	62		Furnished									

GEARED ADAPTERS

628XAHX-4AH	250 I	Eng		Furnished
-------------	-------	-----	--	-----------

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

(3) Input Gear Part No. 5-P-1100
 (5) Input Gear Part No. 5-P-1102
 (6) Input Gear Part No. 5-P-1103
 (9) Input Gear Part No. 5-P-1135
 (20) Input Gear Part No. 5-P-1510-11X
 (21) Input Gear Part No. 5-P-1510-12X

(22) Input Gear Part No. 5-P-1510-13X
 (23) Input Gear Part No. 5-P-1510-14X
 (24) Input Gear Part No. 5-P-1510-15X
 (25) Input Gear Part No. 5-P-1510-16X
 (26) Input Gear Part No. 5-P-1510-17X
 (27) Input Gear Part No. 5-P-1510-18X

(28) Input Gear Part No. 5-P-1510-19X
 (29) Input Gear Part No. 5-P-1510-1X
 (30) Input Gear Part No. 5-P-1510-2X
 (31) Input Gear Part No. 5-P-1510-3X
 (32) Input Gear Part No. 5-P-1510-4X
 (33) Input Gear Part No. 5-P-1510-5X

(34) Input Gear Part No. 5-P-1510-6X
 (35) Input Gear Part No. 5-P-1510-7X
 (36) Input Gear Part No. 5-P-1510-8X
 (37) Input Gear Part No. 5-P-1510-9X
 (41) Input Gear Part No. 5-P-581
 (45) Filler block furnished with PTO

MAK-21

MACK

CHELSEA®

TRXL1070
TRXL1070-A
TRXL1070
X1070
X1070-A
X10710
X10710-A

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.5700" (14.4800MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †							I / C †					

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221XCAHX-*5	250 I	Opp	72	7-A-032(P)(44)	328564X	Furnished	221XCAHX-*3	250 I	Eng	72	7-A-032(P)(44)	328530-1X	328170-32X
221XEAHX-*5	250 I	Opp	84		328564X	Furnished	221XEAHX-*3 (3)	250 I	Eng	84	7-A-240(T)	328530-1X	328170-32X
489KAAHX-*5 (12)	250 I	Opp	64	8-A-062 8-A-093	328170-8X	442KFAHX-*3 (2)	250 I	Eng	101	7-A-240(T)	328530-1X	328170-168X	
489KCAHX-*5 (13)	250 I	Opp	81	8-A-062 8-A-093	328170-8X	442KHAHX-*3 (15)	250 I	Eng	117	7-A-240(T)	328530-1X	328170-168X	
489KFAHX-*5 (2)	250 I	Opp	101	8-A-062 8-A-093	328170-8X	442KLAHX-*3 (1)	250 I	Eng	130	7-A-240(T)	328530-1X	328170-168X	
489KHAHX-*5 (15)	250 I	Opp	117	8-A-062 8-A-093	328170-8X	442KQAHX-*3 (1)	225 I	Eng	140	7-A-240(T)	328530-1X	328170-168X	
489KLAHX-*5 (1)	250 I	Opp	130	8-A-062 8-A-093	328170-8X	442KRAHX-*3 (1)	225 I	Eng	162	7-A-240(T)	328530-1X	328170-168X	
489KQAHX-*5 (1)	225 I	Opp	140	8-A-062 8-A-093	328170-8X	442KSAHX-*3 (1)	200 I	Eng	193	7-A-240(T)	328530-1X	328170-168X	
489KRAHX-*5 (1)	225 I	Opp	162	8-A-062 8-A-093	328170-8X	442KUAHX-*3 (1)	195 I	Eng	230	7-A-240(T)	328530-1X	328170-168X	
489KSAHX-*5 (1)	200 I	Opp	193	8-A-062 8-A-093	328170-8X	442KWAHX-*3 (1)	175 I	Eng	271	7-A-240(T)	328530-1X	328170-168X	
489KUAHX-*5 (1)	195 I	Opp	230	8-A-062 8-A-093	328170-8X	442KXAHX-*3 (1)	140 I	Eng	321	7-A-240(T)	328530-1X	328170-168X	
489KWAHX-*5 (1)	175 I	Opp	271	8-A-062 8-A-093	328170-8X	660KHAHX-*3 (15)	375 I	Eng	117	7-A-240(T)	328530-1X	328170-168X	
489KXAHX-*5 (1)	140 I	Opp	321	8-A-062 8-A-093	328170-8X								
680KHAHX-*5 (18)	375 I	Opp	117	8-A-062 8-A-093	328170-8X								
680XFAHX-*5 (10)	375 I	Opp	101	8-A-062 8-A-093	328170-8X								
680XQAHX-*5 (11)	375 I	Opp	140	8-A-062 8-A-093	328170-8X								

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

Mack

- (1) Input Gear Part No. 5-P-1004
- (2) Input Gear Part No. 5-P-1077
- (10) Input Gear Part No. 5-P-1242
- (11) Input Gear Part No. 5-P-1246
- (12) Input Gear Part No. 5-P-1280
- (13) Input Gear Part No. 5-P-1287

- (15) Input Gear Part No. 5-P-1364
- (18) Input Gear Part No. 5-P-1494
- (44) Filler block furnished with PTO

TRXL1070
TRXL1070-A
TRXL10710
X1070
X1070-A
X10710
X10710-A

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.5700" (14.4800MM)**TRANSMISSION GEAR DATA:**

R.S. 06-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C ↑	Rot	Fwd					I/C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

680XRAHX-*5 (17)	350 I	Opp	162	8-A-062 8-A-093			328170-8X						
680XSAHX-*5 (14)	325 I	Opp	193	8-A-062 8-A-093			328170-8X						
823XBAHX-*3 (38)	500 I	Opp	69	8-A-190			328170-14X						
823XDAHX-*3 (42)	500 I	Opp	81	8-A-190			328170-14X						
823XGAHX-*3 (43)	500 I	Opp	88	8-A-190			328170-14X						
823XJAHX-*3 (39)	500 I	Opp	104	8-A-190			328170-14X						
823XMAHX-*3 (37)	500 I	Opp	122	8-A-190			328170-14X						
823XRAXH-*3 (41)	400 I	Opp	168	8-A-190			328170-14X						
880XBAHX-*3 (3)	500 I	Opp	69	8-A-190			328170-14X						
880XDAHX-*3 (4)	500 I	Opp	81	8-A-190			328170-14X						
880XGAHX-*3 (9)	500 I	Opp	88	8-A-190			328170-14X						
880XJAHX-*3 (5)	500 I	Opp	104	8-A-190			328170-14X						
880XMAHX-*3 (6)	500 I	Opp	122	8-A-190			328170-14X						
880XQAHX-*3 (16)	450 I	Opp	142	8-A-190			328170-14X						
880XRAHX-*3 (7)	400 I	Opp	168	8-A-190			328170-14X						
880XTAHX-*3 (8)	350 I	Opp	217	8-A-190			328170-14X						

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282KBAJX-*5 (19)	300 C	Opp	69	8-A-062(T) 8-A-032	328170-8X	272KAAJX-*3 (28)	300 C	Eng	56	7-A-240(T)	328530-1X	328170-168X
282KCAJX-*5 (20)	300 C	Opp	83	8-A-062(T) 8-A-032	328170-8X	272KBAJX-*3 (29)	300 C	Eng	69	7-A-240(T)	328530-1X	328170-168X
282KDAJX-*5 (21)	300 C	Opp	99	8-A-062(T) 8-A-032	328170-8X	272KCAJX-*3 (30)	300 C	Eng	83	7-A-240(T)	328530-1X	328170-168X
282KG AJX-*5 (22)	300 C	Opp	118	8-A-062(T) 8-A-032	328170-8X	272KDAJX-*3 (31)	300 C	Eng	99	7-A-240(T)	328530-1X	328170-168X
282KKAJX-*5 (23)	300 C	Opp	132	8-A-062(T) 8-A-032	328170-8X	272KG AJX-*3 (32)	300 C	Eng	118	7-A-240(T)	328530-1X	328170-168X
282KMAJX-*5 (24)	300 C	Opp	148	8-A-062(T) 8-A-032	328170-8X	272KKAJX-*3 (33)	300 C	Eng	132	7-A-240(T)	328530-1X	328170-168X

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105

(9) Input Gear Part No. 5-P-1135
(14) Input Gear Part No. 5-P-1322
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1510-11X
(20) Input Gear Part No. 5-P-1510-12X

(21) Input Gear Part No. 5-P-1510-13X
(22) Input Gear Part No. 5-P-1510-14X
(23) Input Gear Part No. 5-P-1510-15X
(24) Input Gear Part No. 5-P-1510-16X
(28) Input Gear Part No. 5-P-1510-1X
(29) Input Gear Part No. 5-P-1510-2X

(30) Input Gear Part No. 5-P-1510-3X
(31) Input Gear Part No. 5-P-1510-4X
(32) Input Gear Part No. 5-P-1510-5X
(33) Input Gear Part No. 5-P-1510-6X
(37) Input Gear Part No. 5-P-283
(38) Input Gear Part No. 5-P-285

(39) Input Gear Part No. 5-P-325
(41) Input Gear Part No. 5-P-721
(42) Input Gear Part No. 5-P-971
(43) Input Gear Part No. 5-P-980

Mack

MAK-21

MACK

CHELSEA®

TRXL1070
TRXL1070-A
TRXL1070
X1070
X1070-A
X10710
X10710-A

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.5700" (14.4800MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †							Fwd					

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282KPAJX-*5 (25)	300 C	Opp	165	8-A-062(T) 8-A-032	328170-8X	272KMAJX-*3 (34)	300 C	Eng	148	7-A-240(T)	328530-1X	328170-168X
282KSAJX-*5 (26)	271 C	Opp	184	8-A-062(T) 8-A-032	328170-8X	272KPAJX-*3 (35)	300 C	Eng	165	7-A-240(T)	328530-1X	328170-168X
282KTAJX-*5 (27)	242 C	Opp	206	8-A-062(T) 8-A-032	328170-8X	272KSAJX-*3 (36)	271 C	Eng	184	7-A-240(T)	328530-1X	328170-168X

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	69	8-A-190	328170-14X
885XGAHX-*3 (9)	500 I	Opp	88	8-A-190	328170-14X
885XJAHX-*3 (5)	500 I	Opp	104	8-A-190	328170-14X
885XMAHX-*3 (6)	500 I	Opp	122	8-A-190	328170-14X

ONE SPEED - FORWARD & REVERSE

340XFAHX-*5 (40)	200 I	Opp	88	92	7-A-140(P)(44)	328564X	Furnished	340XFAHX-*5 (40)	200 I	Eng	88	92	7-A-140(P)(44) 328530-1X 328170-168X 7-A-240(T)	
863XBAHX-*5	500 I	Opp	69	85	8-A-190	328170-15X								

GEARED ADAPTERS

628XAHX-4AH	250 I	Eng	8-A-190	328170-8X
-------------	-------	-----	---------	-----------

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

TRL107

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.6250" (15.8800MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.0850" (78.3600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*5	250 I	Opp	32	7-A-032(P)(43)	328564X	Furnished	221XCAHX-*3	250 I	Eng	32	7-A-032(P)(43)	328530-1X	328170-83X
221ZEAHX-*5	250 I	Opp	37		328564X	Furnished	221XEAHX-*3	250 I	Eng	37		328530-1X	328170-83X
489XAAHX-*5 (10)	250 I	Opp	28			Furnished	442KFAHX-*3 (2)	250 I	Eng	45		328530-1X	7170-16X
489XCAHX-*5 (11)	250 I	Opp	36			Furnished	442KHAHX-*3 (13)	250 I	Eng	72		328530-1X	7170-16X
489XFAHX-*5 (2)	250 I	Opp	45			Furnished	442KLAHX-*3 (1)	250 I	Eng	58		328530-1X	7170-16X
489XHAHX-*5 (13)	250 I	Opp	72			Furnished	442KQAHX-*3 (1)	225 I	Eng	62		328530-1X	7170-16X
489XLAHX-*5 (1)	250 I	Opp	58			Furnished	442KRAHX-*3 (1)	225 I	Eng	72		328530-1X	7170-16X
489XQAHX-*5 (1)	225 I	Opp	62			Furnished	442KSAHX-*3 (1)	200 I	Eng	86		328530-1X	7170-16X
489XRAHX-*5 (1)	225 I	Opp	72			Furnished	442KUAHX-*3 (1)	195 I	Eng	102		328530-1X	7170-16X
489XSAXH-*5 (1)	200 I	Opp	86			Furnished	442KWAHX-*3 (1)	175 I	Eng	121		328530-1X	7170-16X
489XUAHX-*5 (1)	195 I	Opp	102			Furnished	442KXAHX-*3 (1)	140 I	Eng	143		328530-1X	7170-16X
489XWAHX-*5 (1)	175 I	Opp	121			Furnished	660KHAHX-*3 (13)	375 I	Eng	72		328530-1X	7170-16X
489XXAHX-*5 (1)	140 I	Opp	143			Furnished							
680XFAHX-*5 (8)	375 I	Opp	45			Furnished							
680XHAHX-*5 (17)	375 I	Opp	72			Furnished							
680XQAHX-*5 (9)	375 I	Opp	62			Furnished							
680XRAHX-*5 (16)	350 I	Opp	72			Furnished							
680XSAXH-*5 (12)	325 I	Opp	86			Furnished							
823XBAHX-*3 (37)	500 I	Opp	30			Furnished							
823XDAHX-*3 (41)	500 I	Opp	36			Furnished							
823XGAHX-*3 (42)	500 I	Opp	39			Furnished							
823XJAHX-*3 (38)	500 I	Opp	46			Furnished							
823XMAHX-*3 (36)	500 I	Opp	54			Furnished							
823XRAHX-*3 (40)	400 I	Opp	75			Furnished							
823XTKTX-*3 (15)	350 I	Opp	90			Furnished							
880XBAHX-*3 (3)	500 I	Opp	30			Furnished							
880XJAHX-*3 (4)	500 I	Opp	46			Furnished							
880XMAHX-*3 (5)	500 I	Opp	54			Furnished							
880XQAHX-*3 (14)	450 I	Opp	64			Furnished							
880XRAHX-*3 (6)	400 I	Opp	75			Furnished							
880XTAHX-*3 (7)	350 I	Opp	96			Furnished							
				8-A-165(43)									

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

MAK-22

MACK

CHELSEA®

TRL107

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.6250" (15.8800MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

3.0850" (78.3600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	
	I / C †							Fwd						
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)														
282XBAJX-*5 (18)	300 C	Opp	31	8-A-032	Furnished	272KAAJX-*3 (27)	300 C	Eng	25			328530-1X	7170-16X	
282XCAJX-*5 (19)	300 C	Opp	37	8-A-032	Furnished	272KBAJX-*3 (28)	300 C	Eng	31			328530-1X	7170-16X	
282XDAJX-*5 (20)	300 C	Opp	44	8-A-032	Furnished	272KCAJX-*3 (29)	300 C	Eng	37			328530-1X	7170-16X	
282XGAJX-*5 (21)	300 C	Opp	52	8-A-032	Furnished	272KDAJX-*3 (30)	300 C	Eng	44			328530-1X	7170-16X	
282XKAJX-*5 (22)	300 C	Opp	59	8-A-032	Furnished	272KGAJX-*3 (31)	300 C	Eng	52			328530-1X	7170-16X	
282XMAJX-*5 (23)	300 C	Opp	66	8-A-032	Furnished	272KKAJX-*3 (32)	300 C	Eng	59			328530-1X	7170-16X	
282XPAJX-*5 (24)	300 C	Opp	73	8-A-032	Furnished	272KMAJX-*3 (33)	300 C	Eng	66			328530-1X	7170-16X	
282XSAJX-*5 (25)	300 C	Opp	82	8-A-032	Furnished	272KPAJX-*3 (34)	300 C	Eng	73			328530-1X	7170-16X	
282XTAJX-*5 (26)	300 C	Opp	92	8-A-032	Furnished	272KSAJX-*3 (35)	300 C	Eng	82			328530-1X	7170-16X	

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	30	Furnished
885XJAHX-*3 (4)	500 I	Opp	46	Furnished
885XMAHX-*3 (5)	500 I	Opp	54	Furnished

ONE SPEED - FORWARD & REVERSE

340SFAHX-*5 (39)	200 I	Opp	39	41	310778X	Furnished	340XFAHX-*5 (39)	200 I	Eng	39	41	7-A-140(P)(43)	328530-1X	7170-16X	
863XBAHX-*5	500 I	Opp	30	38		Furnished									

GEARED ADAPTERS

628XAHH-4AH	250 I	Eng	Furnished
-------------	-------	-----	-----------

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

Mack

(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1102
(5) Input Gear Part No. 5-P-1103
(18) Input Gear Part No. 5-P-1510-11X
(19) Input Gear Part No. 5-P-1510-12X
(20) Input Gear Part No. 5-P-1510-13X(21) Input Gear Part No. 5-P-1510-14X
(22) Input Gear Part No. 5-P-1510-15X
(23) Input Gear Part No. 5-P-1510-16X
(24) Input Gear Part No. 5-P-1510-17X
(25) Input Gear Part No. 5-P-1510-18X
(26) Input Gear Part No. 5-P-1510-19X(27) Input Gear Part No. 5-P-1510-1X
(28) Input Gear Part No. 5-P-1510-2X
(29) Input Gear Part No. 5-P-1510-3X
(30) Input Gear Part No. 5-P-1510-4X
(31) Input Gear Part No. 5-P-1510-5X
(32) Input Gear Part No. 5-P-1510-6X(33) Input Gear Part No. 5-P-1510-7X
(34) Input Gear Part No. 5-P-1510-8X
(35) Input Gear Part No. 5-P-1510-9X
(39) Input Gear Part No. 5-P-581
(43) Filler block furnished with PTO

T2090	T309LR	T318L (Front Box)
T2090-L	T310-MLR (Front Box)	T318L21 (Front Box)
T2130 (Front Box)	T313H (Front Box)	T318LR (Front Box)
T2130-B (Front Box)	T313L (Front Box)	T318LR21 (Front Box)
T2180 (Front Box)	T313L21 (Front Box)	TM308M (Front box)
T2180-B (Front Box)	T313LR (Front Box)	TM309M (Front Box)
T309	T313LR21 (Front Box)	
T309L	T318 (Front Box)	

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 08-BOLT Opening Gear FORWARD of Centerline 54 Teeth - SPUR	TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 54 Teeth - SPUR
PITCH LINE TO APERTURE FACE: 0.8100" (20.5700MM)	PITCH LINE TO APERTURE FACE: 1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torque	Dir Rot	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torque	Dir Rot	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑							I / C ↑					

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCDAX-*5	250 I	Opp	68	328564X	Furnished	221XCAHX-*3	250 I	Eng	67	7-A-032(P)(38) 328554-2X	Furnished
221ZEDAX-*5	250 I	Opp	75	328564X	Furnished	221XCDAH-*3	250 I	Opp	68		Furnished
489ZDAX-*5 (10)	250 I	Opp	59	Furnished	221XEAHX-*3	250 I	Eng	77		328554-2X	Furnished
489ZCDAH-*5 (11)	250 I	Opp	76	Furnished	221XEDAX-*3	250 I	Opp	75			Furnished
489ZFDAX-*5 (4)	250 I	Opp	94	Furnished	442XFAHX-*3 (3)	250 I	Eng	93		328554-2X	Furnished
489ZHDAH-*5 (15)	250 I	Opp	109	Furnished	442XHAHX-*3 (15)	250 I	Eng	109		328554-2X	Furnished
489ZLDAH-*5 (2)	250 I	Opp	121	Furnished	442XLAHX-*3 (1)	250 I	Eng	120		328554-2X	Furnished
489ZQDAX-*5 (2)	225 I	Opp	130	Furnished	442XQAHX-*3 (1)	225 I	Eng	130		328554-2X	Furnished
489ZRDAH-*5 (2)	225 I	Opp	151	Furnished	442XRAHX-*3 (1)	225 I	Eng	150		328554-2X	Furnished
489ZSDAX-*5 (2)	200 I	Opp	180	Furnished	442XSAXH-*3 (1)	200 I	Eng	179		328554-2X	Furnished
489ZUDAX-*5 (2)	195 I	Opp	214	Furnished	442XUAHX-*3 (1)	195 I	Eng	213		328554-2X	Furnished
489ZWDAH-*5 (2)	175 I	Opp	252	Furnished	442XWAHX-*3 (1)	175 I	Eng	250		328554-2X	Furnished
489ZDXDAH-*5 (2)	140 I	Opp	298	Furnished	442XXAHX-*3 (1)	140 I	Eng	296		328554-2X	Furnished
680ZFDAH-*5 (12)	375 I	Opp	94	Furnished	442ZADAX-*3 (10)	250 I	Opp	59	7-A-062		Furnished
680ZQDAX-*5 (13)	375 I	Opp	130	Furnished	442ZCDAH-*3 (11)	250 I	Opp	76	7-A-062		Furnished
680ZSDAX-*5 (14)	325 I	Opp	180	Furnished	442ZFDAX-*3 (4)	250 I	Opp	94	7-A-062		Furnished
823XBDAX-*5 (35)	500 I	Opp	61	Furnished	442ZHDAX-*3 (15)	250 I	Opp	109	7-A-062		Furnished
823XMDAX-*5 (36)	500 I	Opp	108	Furnished	442ZLDAX-*3 (2)	250 I	Opp	121	7-A-062		Furnished
823XRDAH-*5 (37)	400 I	Opp	150	Furnished	442ZQDAX-*3 (2)	225 I	Opp	130	7-A-062		Furnished
880XBDAH-*5 (5)	500 I	Opp	61	Furnished	442ZRDAX-*3 (2)	225 I	Opp	151	7-A-062		Furnished
880XGDAH-*5 (9)	500 I	Opp	78	Furnished	442ZSDAX-*3 (2)	200 I	Opp	180	7-A-062		Furnished
880XMDAX-*5 (6)	500 I	Opp	108	Furnished	442ZUDAX-*3 (2)	195 I	Opp	214	7-A-062		Furnished
880XRDAH-*5 (7)	400 I	Opp	150	Furnished	442ZWDAH-*3 (2)	175 I	Opp	252	7-A-062		Furnished
880XTDAH-*5 (8)	350 I	Opp	193	Furnished	442ZXDAX-*3 (2)	140 I	Opp	298	7-A-062		Furnished
					660XHAHX-*3 (15)	375 I	Eng	109		328554-2X	Furnished
					660ZFDAX-*3 (12)	375 I	Opp	94	7-A-062		Furnished
					660ZQDAX-*3 (13)	375 I	Opp	130	7-A-062		Furnished
					660ZSDAX-*3 (14)	325 I	Opp	180	7-A-062		Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XBDAX-*5 (16)	300 C	Opp	62	Furnished	272XADAX-*3 (25)	300 C	Opp	50		Furnished
282XCDAX-*5 (17)	300 C	Opp	75	Furnished	272XBDAX-*3 (26)	300 C	Opp	62		Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

MAK-23

MACK

CHELSEA®

T2090	T309LR	T318L (Front Box)
T2090-L	T310-MLR (Front Box)	T318L21 (Front Box)
T2130 (Front Box)	T313H (Front Box)	T318LR (Front Box)
T2130-B (Front Box)	T313L (Front Box)	T318LR21 (Front Box)
T2180 (Front Box)	T313L21 (Front Box)	TM308M (Front box)
T2180-B (Front Box)	T313LR (Front Box)	TM309M (Front Box)
T309	T313LR21 (Front Box)	
T309L	T318 (Front Box)	

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8100" (20.5700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot	Fwd					I / C †	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XDDAX-*5 (18)	300 C	Opp	89	Furnished	272XCDAX-*3 (27)	300 C	Opp	75					Furnished
282XGDAX-*5 (19)	300 C	Opp	106	Furnished	272XDDAX-*3 (28)	300 C	Opp	89					Furnished
282XKDAX-*5 (20)	300 C	Opp	119	Furnished	272XGDX-*3 (29)	300 C	Opp	106					Furnished
282XMDAX-*5 (21)	300 C	Opp	133	Furnished	272XKDAX-*3 (30)	300 C	Opp	119					Furnished
282XPDAX-*5 (22)	300 C	Opp	148	Furnished	272XMDAX-*3 (31)	300 C	Opp	133					Furnished
282XSDAX-*5 (23)	300 C	Opp	166	Furnished	272XPDAX-*3 (32)	300 C	Opp	148					Furnished
282XTDAX-*5 (24)	269 C	Opp	186	Furnished	272XSDAX-*3 (33)	300 C	Opp	166					Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MADAX-*3 (25)	300 C	Opp	50										Furnished
272MBDAX-*3 (26)	300 C	Opp	62										Furnished
272MCDAX-*3 (27)	300 C	Opp	75										Furnished
272MDDAX-*3 (28)	300 C	Opp	89										Furnished
272MGDAX-*3 (29)	300 C	Opp	106										Furnished
272MKDAX-*3 (30)	300 C	Opp	119										Furnished
272MMDAX-*3 (31)	300 C	Opp	133										Furnished
272MPDAX-*3 (32)	300 C	Opp	148										Furnished
272MSDAX-*3 (33)	300 C	Opp	166										Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBDAX-*5 (5)	500 I	Opp	61	Furnished									
885XGDAX-*5 (9)	500 I	Opp	78	Furnished									
885XMDAX-*5 (6)	500 I	Opp	108	Furnished									

ONE SPEED - FORWARD & REVERSE

348ZFDAX-*5 (34)	200 I	Opp	85	90	Furnished	340SFDAX-*5 (34)	200 I	Opp	85	90			Furnished
863XBDAX-*5	500 I	Opp	61	75	Furnished								

GEARED ADAPTERS

628ZDAX-3DA	250 I	Eng		Furnished	626ZDAX-3DA	250 I	Eng		7-A-062				Furnished
					630ZDAX-3DA	250 I	Eng		7-A-062				Furnished
					645ZDAX-3DA	250 I	Eng		7-A-062				Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (5) Input Gear Part No. 5-P-1120
- (6) Input Gear Part No. 5-P-1121
- (8) Input Gear Part No. 5-P-1174
- (18) Input Gear Part No. 5-P-1511-13X
- (19) Input Gear Part No. 5-P-1511-14X
- (20) Input Gear Part No. 5-P-1511-15X
- (21) Input Gear Part No. 5-P-1511-16X
- (22) Input Gear Part No. 5-P-1511-17X
- (23) Input Gear Part No. 5-P-1511-18X
- (24) Input Gear Part No. 5-P-1511-19X
- (25) Input Gear Part No. 5-P-1511-1IX
- (26) Input Gear Part No. 5-p-1511-2X
- (27) Input Gear Part No. 5-P-1511-3X
- (28) Input Gear Part No. 5-P-1511-4X
- (29) Input Gear Part No. 5-P-1511-5X
- (30) Input Gear Part No. 5-P-1511-6X
- (31) Input Gear Part No. 5-P-1511-7X
- (32) Input Gear Part No. 5-P-1511-8X
- (33) Input Gear Part No. 5-P-1511-9X
- (34) Input Gear Part No. 5-P-634

T2100
T2110-B (FRONT BOX FOR T2110B)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8100" (20.5700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCDAX-*5	250 I	Opp	63	328564X	Furnished	221XCAHX-*3	250 I	Eng	62	7-A-032(P)(38)	328554-2X	Furnished
221ZEDAX-*5	250 I	Opp	70	328564X	Furnished	221XCDAH-*3	250 I	Opp	63			Furnished
489ZDAX-*5 (10)	250 I	Opp	55	Furnished	221XEAHX-*3	250 I	Eng	72		328554-2X	Furnished	
489ZDAX-*5 (11)	250 I	Opp	70	Furnished	221XEDAX-*3	250 I	Opp	70			Furnished	
489ZFDAX-*5 (4)	250 I	Opp	87	Furnished	442XFAHX-*3 (3)	250 I	Eng	86		328554-2X	Furnished	
489ZHDAX-*5 (15)	250 I	Opp	101	Furnished	442XHAHX-*3 (15)	250 I	Eng	101		328554-2X	Furnished	
489ZLDAH-*5 (2)	250 I	Opp	113	Furnished	442XLAHX-*3 (1)	250 I	Eng	112		328554-2X	Furnished	
489ZQDAH-*5 (2)	225 I	Opp	121	Furnished	442XQAHX-*3 (1)	225 I	Eng	120		328554-2X	Furnished	
489ZRDAX-*5 (2)	225 I	Opp	140	Furnished	442XRAHX-*3 (1)	225 I	Eng	139		328554-2X	Furnished	
489ZSDAX-*5 (2)	200 I	Opp	167	Furnished	442XSAHX-*3 (1)	200 I	Eng	166		328554-2X	Furnished	
489ZUDAX-*5 (2)	195 I	Opp	199	Furnished	442XUAHX-*3 (1)	195 I	Eng	198		328554-2X	Furnished	
489ZWDAH-*5 (2)	175 I	Opp	234	Furnished	442XWAHX-*3 (1)	175 I	Eng	233		328554-2X	Furnished	
489ZXDAH-*5 (2)	140 I	Opp	277	Furnished	442XXAHX-*3 (1)	140 I	Eng	275		328554-2X	Furnished	
680ZFDAX-*5 (12)	375 I	Opp	87	Furnished	442ZADAX-*3 (10)	250 I	Opp	55	7-A-062		Furnished	
680ZQDAH-*5 (13)	375 I	Opp	121	Furnished	442ZCDAH-*3 (11)	250 I	Opp	70	7-A-062		Furnished	
680ZSDAX-*5 (14)	325 I	Opp	167	Furnished	442ZFDAX-*3 (4)	250 I	Opp	87	7-A-062		Furnished	
823XBDAX-*5 (35)	500 I	Opp	57	Furnished	442ZHDAX-*3 (15)	250 I	Opp	101	7-A-062		Furnished	
823XMDAX-*5 (36)	500 I	Opp	101	Furnished	442ZLDAX-*3 (2)	250 I	Opp	113	7-A-062		Furnished	
823XRDAH-*5 (37)	400 I	Opp	139	Furnished	442ZQDAH-*3 (2)	225 I	Opp	121	7-A-062		Furnished	
880XBDAH-*5 (5)	500 I	Opp	57	Furnished	442ZRDAX-*3 (2)	225 I	Opp	140	7-A-062		Furnished	
880XGDAH-*5 (9)	500 I	Opp	73	Furnished	442ZSDAX-*3 (2)	200 I	Opp	167	7-A-062		Furnished	
880XMMDAX-*5 (6)	500 I	Opp	101	Furnished	442ZUDAX-*3 (2)	195 I	Opp	199	7-A-062		Furnished	
880XRDAH-*5 (7)	400 I	Opp	139	Furnished	442ZWDAH-*3 (2)	175 I	Opp	234	7-A-062		Furnished	
880XTDAH-*5 (8)	350 I	Opp	179	Furnished	442ZXDAX-*3 (2)	140 I	Opp	277	7-A-062		Furnished	
					660XAHX-*3 (15)	375 I	Eng	101		328554-2X	Furnished	
					660ZFDAX-*3 (12)	375 I	Opp	87	7-A-062		Furnished	
					660ZQDAH-*3 (13)	375 I	Opp	121	7-A-062		Furnished	
					660ZSDAX-*3 (14)	325 I	Opp	167	7-A-062		Furnished	

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XBDAX-*5 (16)	300 I	Opp	57	Furnished	272XADAX-*3 (25)	300 C	Opp	47			Furnished
282XCDAX-*5 (17)	300 I	Opp	69	Furnished	272XBDAX-*3 (26)	300 C	Opp	57			Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CCAUTION: Do not use geared adapters with 442 A and C ratios.

Mack

MAK-24

MACK

CHELSEA®

T2100
T2110-B (FRONT BOX FOR T2110B)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8100" (20.5700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq		Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq		Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Fwd							I / C †	Fwd					

ONE SPEED - TWO GEAR - POWERSHIFT (AIR OR HYDRAULIC)

282XDDAX-*5 (18)	300	C	Opp	83	Furnished	272XCDAX-*3 (27)	300	C	Opp	69	Furnished
282XGDAX-*5 (19)	300	C	Opp	99	Furnished	272XDDAX-*3 (28)	300	C	Opp	83	Furnished
282XKDAX-*5 (20)	300	C	Opp	110	Furnished	272XGDX-*3 (29)	300	C	Opp	99	Furnished
282XMDAX-*5 (21)	300	C	Opp	123	Furnished	272XKDX-*3 (30)	300	C	Opp	110	Furnished
282XPDX-*5 (22)	300	C	Opp	138	Furnished	272XMDAX-*3 (31)	300	C	Opp	123	Furnished
282XSDAX-*5 (23)	300	C	Opp	154	Furnished	272XPDX-*3 (32)	300	C	Opp	138	Furnished
282XTDAX-*5 (24)	290	C	Opp	172	Furnished	272XSDX-*3 (33)	300	C	Opp	154	Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MBDAX-*3 (25)	300	C	Opp	47	Furnished
272MBDAX-*3 (26)	300	C	Opp	57	Furnished
272MCDAK-*3 (27)	300	C	Opp	69	Furnished
272MDDAX-*3 (28)	300	C	Opp	83	Furnished
272MGDAX-*3 (29)	300	C	Opp	99	Furnished
272MKDAX-*3 (30)	300	C	Opp	110	Furnished
272MMDAK-*3 (31)	300	C	Opp	123	Furnished
272MPDAX-*3 (32)	300	C	Opp	138	Furnished
272MSDAX-*3 (33)	300	C	Opp	154	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBDAX-*5 (5)	500	I	Opp	57	Furnished
885XGDAX-*5 (9)	500	I	Opp	73	Furnished
885XMDAX-*5 (6)	500	I	Opp	101	Furnished

ONE SPEED - FORWARD & REVERSE

348ZFDAX-*5 (34)	200	I	Opp	79	83	Furnished	340SFDAX-*5 (34)	200	I	Opp	79	83	Furnished
863XBDAX-*5	500	I	Opp	57	70	Furnished							

GEARED ADAPTERS

628ZDAX-5DA	250	I	Eng	Furnished	626ZDAX-3DA	250	I	Eng	7-A-062	Furnished
					630ZDAX-3DA	250	I	Eng	7-A-062	Furnished
					645ZDAX-3DA	250	I	Eng	7-A-062	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

(5) Input Gear Part No. 5-P-1120
(6) Input Gear Part No. 5-P-1121
(8) Input Gear Part No. 5-P-1174
(18) Input Gear Part No. 5-P-1511-13X
(19) Input Gear Part No. 5-P-1511-14X
(20) Input Gear Part No. 5-P-1511-15X

(21) Input Gear Part No. 5-P-1511-16X
(22) Input Gear Part No. 5-P-1511-17X
(23) Input Gear Part No. 5-P-1511-18X
(24) Input Gear Part No. 5-P-1511-19X
(25) Input Gear Part No. 5-P-1511-1IX
(26) Input Gear Part No. 5-p-1511-2X

(27) Input Gear Part No. 5-P-1511-3X
(28) Input Gear Part No. 5-P-1511-4X
(29) Input Gear Part No. 5-P-1511-5X
(30) Input Gear Part No. 5-P-1511-6X
(31) Input Gear Part No. 5-P-1511-7X
(32) Input Gear Part No. 5-P-1511-8X

(33) Input Gear Part No. 5-P-1511-9X
(34) Input Gear Part No. 5-P-634

CHELSEA®**MACK****MAK-25**

T2050	T305
T2060	T306
T2070	T307
T2070-A (Front Box)	T307M (Front Box)
T2070-B (Front Box)	T308
T2070-F	T308M (Front Box)
T2080	TX2060
T2080-B (Front Box)	X2060

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 08-BOLT Opening Gear FORWARD of Centerline 54 Teeth - SPUR	TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 54 Teeth - SPUR
PITCH LINE TO APERTURE FACE: 0.8100" (20.5700MM)	PITCH LINE TO APERTURE FACE: 1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCDAX-*5	250 I	Opp	81	328564X	Furnished	221XCDAX-*3	250 I	Opp	81				Furnished
221ZEDAX-*5	250 I	Opp	90	328564X	Furnished	221XEDAX-*3	250 I	Opp	90				Furnished
489ZDAX-*5 (8)	250 I	Opp	71		Furnished	4422ZDAX-*3 (8)	250 I	Opp	71	7-A-062			Furnished
489ZCDAK-*5 (9)	250 I	Opp	90		Furnished	4422ZCDAK-*3 (9)	250 I	Opp	90	7-A-062			Furnished
489ZFDAK-*5 (2)	250 I	Opp	112		Furnished	4422ZFDAK-*3 (2)	250 I	Opp	112	7-A-062			Furnished
489ZHDAK-*5 (13)	250 I	Opp	130		Furnished	4422ZHDAK-*3 (13)	250 I	Opp	130	7-A-062			Furnished
489ZLDAK-*5 (1)	250 I	Opp	144		Furnished	4422ZLDAK-*3 (1)	250 I	Opp	144	7-A-062			Furnished
489ZQDAK-*5 (1)	225 I	Opp	156		Furnished	4422ZQDAK-*3 (1)	225 I	Opp	156	7-A-062			Furnished
489ZRDAK-*5 (1)	225 I	Opp	180		Furnished	4422ZRDAK-*3 (1)	225 I	Opp	180	7-A-062			Furnished
489ZSDAK-*5 (1)	200 I	Opp	214		Furnished	4422ZSDAK-*3 (1)	200 I	Opp	214	7-A-062			Furnished
489ZUDAK-*5 (1)	195 I	Opp	255		Furnished	4422ZUDAK-*3 (1)	195 I	Opp	255	7-A-062			Furnished
489ZWDAK-*5 (1)	175 I	Opp	301		Furnished	4422ZWDAK-*3 (1)	175 I	Opp	301	7-A-062			Furnished
489ZXDAK-*5 (1)	140 I	Opp	356		Furnished	4422ZXDAK-*3 (1)	140 I	Opp	356	7-A-062			Furnished
680ZFDAX-*5 (10)	375 I	Opp	112		Furnished	6602ZFDAX-*3 (10)	375 I	Opp	112	7-A-062			Furnished
680ZQDAK-*5 (11)	375 I	Opp	156		Furnished	6602ZQDAK-*3 (11)	375 I	Opp	156	7-A-062			Furnished
680ZSDAK-*5 (12)	325 I	Opp	214		Furnished	6602ZSDAK-*3 (12)	325 I	Opp	214	7-A-062			Furnished
823XMDAX-*5 (33)	500 I	Opp	73		Furnished								
823XMDAX-*5 (34)	500 I	Opp	129		Furnished								
823XRDAK-*5 (35)	400 I	Opp	178		Furnished								
880XBDAK-*5 (3)	500 I	Opp	73		Furnished								
880XGDAK-*5 (7)	500 I	Opp	94		Furnished								
880XMDAX-*5 (4)	500 I	Opp	129		Furnished								
880XRDAX-*5 (5)	400 I	Opp	178		Furnished								
880XTDAK-*5 (6)	350 I	Opp	230		Furnished								

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XBDAX-*5 (15)	300 C	Opp	74		Furnished	272XADAX-*3 (24)	300 C	Opp	60				Furnished
282XCDAX-*5 (16)	300 C	Opp	89		Furnished	272XBDAX-*3 (25)	300 C	Opp	74				Furnished
282XDDAX-*5 (17)	300 C	Opp	107		Furnished	272XCDAX-*3 (26)	300 C	Opp	89				Furnished
282XGDAK-*5 (18)	300 C	Opp	127		Furnished	272XDDAX-*3 (14)	300 C	Opp	107				Furnished
282XKDAK-*5 (19)	300 C	Opp	142		Furnished	272XGDAK-*3 (27)	300 C	Opp	127				Furnished
282XMDAX-*5 (20)	300 C	Opp	158		Furnished	272XKDAK-*3 (28)	300 C	Opp	142				Furnished

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** 272*S Ratio - Contact Chelsea Engineering for Application approval for continuous duty applications.**CCAUCTION:** Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1037
- (7) Input Gear Part No. 5-P-1174
- (13) Input Gear Part No. 5-P-1365
- (19) Input Gear Part No. 5-P-1511-15X
- (28) Input Gear Part No. 5-P-1511-6X
- (2) Input Gear Part No. 5-P-1085
- (8) Input Gear Part No. 5-P-1284
- (14) Input Gear Part No. 5-P-1510-4X
- (20) Input Gear Part No. 5-P-1511-16X
- (33) Input Gear Part No. 5-P-636
- (3) Input Gear Part No. 5-P-1120
- (9) Input Gear Part No. 5-P-1291
- (15) Input Gear Part No. 5-P-1511-11X
- (24) Input Gear Part No. 5-P-1511-1X
- (34) Input Gear Part No. 5-P-637
- (4) Input Gear Part No. 5-P-1121
- (10) Input Gear Part No. 5-P-1330
- (16) Input Gear Part No. 5-P-1511-12X
- (25) Input Gear Part No. 5-P-1511-2X
- (35) Input Gear Part No. 5-P-808
- (5) Input Gear Part No. 5-P-1122
- (11) Input Gear Part No. 5-P-1331
- (17) Input Gear Part No. 5-P-1511-13X
- (26) Input Gear Part No. 5-P-1511-3X
- (6) Input Gear Part No. 5-P-1123
- (12) Input Gear Part No. 5-P-1332
- (18) Input Gear Part No. 5-P-1511-14X
- (27) Input Gear Part No. 5-P-1511-5X



October 2022

5.10.25

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Mack

MAK-25

MACK

CHELSEA®

T2050	T305
T2060	T306
T2070	T307
T2070-A (Front Box)	T307M (Front Box)
T2070-B (Front Box)	T308
T2070-F	T308M (Front Box)
T2080	TX2060
T2080-B (Front Box)	X2060

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8100" (20.5700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XPDAx-*5 (21)	283 C	Opp	177	Furnished	272XMDAX-*3 (29)	300 C	Opp	158	Furnished
282XSDAX-*5 (22)	253 C	Opp	198	Furnished	272XPDAx-*3 (30)	283 C	Opp	177	Furnished
282XTDAX-*5 (23)	226 C	Opp	221	Furnished	272XSDAX-*3 (31)	253 C	Opp	198	Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MADAX-*3 (24)	300 C	Opp	60	Furnished
272MBDAX-*3 (25)	300 C	Opp	74	Furnished
272MCDAx-*3 (26)	300 C	Opp	89	Furnished
272MDDAX-*3 (14)	300 C	Opp	107	Furnished
272MGDAX-*3 (27)	300 C	Opp	127	Furnished
272MKDAX-*3 (28)	300 C	Opp	142	Furnished
272MMDAX-*3 (29)	300 C	Opp	158	Furnished
272MPDAX-*3 (30)	283 C	Opp	177	Furnished
272MSDAX-*3 (31)	253 C	Opp	198	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBDAX-*5 (3)	500 I	Opp	73	Furnished
885XGDAX-*5 (7)	500 I	Opp	94	Furnished
885XMDAX-*5 (4)	500 I	Opp	129	Furnished

ONE SPEED - FORWARD & REVERSE

348ZFDAX-*5 (32)	200 I	Opp	102	107	Furnished	340SFDAX-*5 (32)	200 I	Opp	102	107	Furnished
863XBDAX-*5	500 I	Opp	73	90	Furnished						

GEARED ADAPTERS

628ZDAX-3DA	250 I	Eng	Furnished	626ZDAX-3DA	250 I	Eng	7-A-062	Furnished
				630ZDAX-3DA	250 I	Eng	7-A-062	Furnished
				645ZDAX-3DA	250 I	Eng	7-A-062	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: 272*S Ratio - Contact Chelsea Engineering for Application approval for continuous duty applications.

CAUTION: Do not use geared adapters with 442 A and C ratios.

(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(7) Input Gear Part No. 5-P-1174
(14) Input Gear Part No. 5-P-1510-4X
(21) Input Gear Part No. 5-P-1511-17X
(22) Input Gear Part No. 5-P-1511-18X

(23) Input Gear Part No. 5-P-1511-19X
(24) Input Gear Part No. 5-P-1511-1X
(25) Input Gear Part No. 5-p-1511-2X
(26) Input Gear Part No. 5-P-1511-3X
(27) Input Gear Part No. 5-P-1511-5X
(28) Input Gear Part No. 5-P-1511-6X

(29)

Input Gear Part No. 5-P-1511-7X
(30) Input Gear Part No. 5-P-1511-8X
(31) Input Gear Part No. 5-P-1511-9X
(32) Input Gear Part No. 5-P-634

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

CHELSEA®**MACK****MAK-26**

T2070-A (Rear Box) T2070-B (Rear Box) T2070-D (Rear Box) T2080-B (Rear Box) T2080-D (Rear Box) T307M (Rear Box) T308M (Rear Box) TM308M (Rear Box)	TM309M (Rear Box)
---	-------------------

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 08-BOLT Opening Gear FORWARD of Centerline 49 Teeth - SPUR	TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 49 Teeth - SPUR
PITCH LINE TO APERTURE FACE: 0.6670" (16.9400MM)	PITCH LINE TO APERTURE FACE: 1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCDAX-*5	250 I	Opp	90	7-A-062(P)	328564X	Furnished	221XCDAX-*3	250 I	Opp	90	7-A-032	Furnished
221ZEDAX-*5	250 I	Opp	100	7-A-062(P)	328564X	Furnished	221XEDAX-*3	250 I	Opp	100	7-A-032	Furnished
489ZDAX-*5 (8)	250 I	Opp	78	8-A-062	328170-190X	442ZDAX-*3 (8)	250 I	Opp	78	7-A-140	Furnished	
489ZCDAX-*5 (9)	250 I	Opp	100	8-A-062	328170-190X	442ZCDAX-*3 (9)	250 I	Opp	100	7-A-140	Furnished	
489ZFDAX-*5 (2)	250 I	Opp	124	8-A-062	328170-190X	442ZFDAX-*3 (2)	250 I	Opp	124	7-A-140	Furnished	
489ZHDAK-*5 (13)	250 I	Opp	144	8-A-062	328170-190X	442ZHDAK-*3 (13)	250 I	Opp	144	7-A-140	Furnished	
489ZLDAK-*5 (1)	250 I	Opp	161	8-A-062	328170-190X	442ZLDAK-*3 (1)	250 I	Opp	161	7-A-140	Furnished	
489ZQDAX-*5 (1)	225 I	Opp	173	8-A-062	328170-190X	442ZQDAX-*3 (1)	225 I	Opp	173	7-A-140	Furnished	
489ZRDAK-*5 (1)	225 I	Opp	200	8-A-062	328170-190X	442ZRDAK-*3 (1)	225 I	Opp	200	7-A-140	Furnished	
489ZSDAX-*5 (1)	200 I	Opp	238	8-A-062	328170-190X	442ZSDAX-*3 (1)	200 I	Opp	238	7-A-140	Furnished	
489ZUDAX-*5 (1)	195 I	Opp	284	8-A-062	328170-190X	442ZUDAX-*3 (1)	195 I	Opp	284	7-A-140	Furnished	
489ZWDAK-*5 (1)	175 I	Opp	334	8-A-062	328170-190X	442ZWDAK-*3 (1)	175 I	Opp	334	7-A-140	Furnished	
489ZXDAK-*5 (1)	140 I	Opp	395	8-A-062	328170-190X	442ZXDAK-*3 (1)	140 I	Opp	395	7-A-140	Furnished	
680ZFDAK-*5 (10)	375 I	Opp	124	8-A-062	328170-190X	660ZFDAK-*3 (10)	375 I	Opp	124	7-A-140	Furnished	
680ZQDAK-*5 (11)	375 I	Opp	173	8-A-062	328170-190X	660ZQDAK-*3 (11)	375 I	Opp	173	7-A-140	Furnished	
680ZSDAK-*5 (12)	325 I	Opp	238	8-A-062	328170-190X	660ZSDAK-*3 (12)	325 I	Opp	238	7-A-140	Furnished	
823XBDAK-*5 (32)	500 I	Opp	81		Furnished							
823XMDAX-*5 (33)	500 I	Opp	143		Furnished							
823XRDAK-*5 (34)	400 I	Opp	198		Furnished							
880XBDAK-*5 (3)	500 I	Opp	81		Furnished							
880XGDAK-*5 (7)	500 I	Opp	104		Furnished							
880XMDAK-*5 (4)	500 I	Opp	143		Furnished							
880XRDAK-*5 (5)	400 I	Opp	198		Furnished							
880XTDAK-*5 (6)	350 I	Opp	255		Furnished							

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XBDAK-*5 (14)	300 C	Opp	82	8-A-062	328170-190X	272XADAX-*3 (23)	300 C	Opp	67	7-A-032	Furnished
282XCDAX-*5 (15)	300 C	Opp	99	8-A-062	328170-190X	272XBDAX-*3 (24)	300 C	Opp	82	7-A-032	Furnished
282XDDAX-*5 (16)	300 C	Opp	118	8-A-062	328170-190X	272XCDAX-*3 (25)	300 C	Opp	99	7-A-032	Furnished
282XGDAK-*5 (17)	300 C	Opp	141	8-A-062	328170-190X	272XGDAK-*3 (26)	300 C	Opp	141	7-A-032	Furnished
282XKDAK-*5 (18)	300 C	Opp	157	8-A-062	328170-190X	272XKDAK-*3 (27)	300 C	Opp	157	7-A-032	Furnished
282XMDAX-*5 (19)	284 C	Opp	176	8-A-062	328170-190X	272XMDAX-*3 (28)	284 C	Opp	176	7-A-032	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** 272*S Ratio - Contact Chelsea Engineering for application approval for continuous duty applications.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1037
- (7) Input Gear Part No. 5-P-1174
- (13) Input Gear Part No. 5-P-1365
- (19) Input Gear Part No. 5-P-1511-16X
- (28) Input Gear Part No. 5-P-1511-7X
- (2) Input Gear Part No. 5-P-1085
- (8) Input Gear Part No. 5-P-1284
- (14) Input Gear Part No. 5-P-1511-11X
- (23) Input Gear Part No. 5-P-1511-1X
- (32) Input Gear Part No. 5-P-636
- (3) Input Gear Part No. 5-P-1120
- (9) Input Gear Part No. 5-P-1291
- (15) Input Gear Part No. 5-P-1511-12X
- (24) Input Gear Part No. 5-P-1511-2X
- (33) Input Gear Part No. 5-P-637
- (4) Input Gear Part No. 5-P-1121
- (10) Input Gear Part No. 5-P-1330
- (16) Input Gear Part No. 5-P-1511-13X
- (25) Input Gear Part No. 5-P-1511-3X
- (34) Input Gear Part No. 5-P-808
- (5) Input Gear Part No. 5-P-1122
- (11) Input Gear Part No. 5-P-1331
- (17) Input Gear Part No. 5-P-1511-14X
- (26) Input Gear Part No. 5-P-1511-5X
- (6) Input Gear Part No. 5-P-1123
- (12) Input Gear Part No. 5-P-1332
- (18) Input Gear Part No. 5-P-1511-15X
- (27) Input Gear Part No. 5-P-1511-6X



October 2022

5.10.27

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Mack

MAK-26

MACK

CHELSEA®

T2070-A (Rear Box)
 T2070-B (Rear Box)
 T2070-D (Rear Box)
 T2080-B (Rear Box)
 T2080-D (Rear Box)
 T307M (Rear Box)
 T308M (Rear Box)
 TM308M (Rear Box)

TM309M (Rear Box)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
 49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.6670" (16.9400MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot	Fwd					I / C †	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XPDAX-*5 (20)	254 C	Opp	197	8-A-062	328170-190X	272XPDAX-*3 (29)	254 C	Opp	197	7-A-032	Furnished
282XSDAX-*5 (21)	227 C	Opp	200	8-A-062	328170-190X	272XSDAX-*3 (30)	227 C	Opp	220	7-A-032	Furnished
282XTDAX-*5 (22)	203 C	Opp	246	8-A-062	328170-190X						

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MADAX-*3 (23)	300 C	Opp	67	7-A-032	Furnished
272MBDAX-*3 (24)	300 C	Opp	82	7-A-032	Furnished
272MCDAX-*3 (25)	300 C	Opp	99	7-A-032	Furnished
272MGDAX-*3 (26)	300 C	Opp	141	7-A-032	Furnished
272MKDAX-*3 (27)	300 C	Opp	157	7-A-032	Furnished
272MMDAX-*3 (28)	284 C	Opp	176	7-A-032	Furnished
272MPDAX-*3 (29)	254 C	Opp	197	7-A-032	Furnished
272MSDAX-*3 (30)	227 C	Opp	220	7-A-032	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBDAX-*5 (3)	500 I	Opp	81	Furnished
885XGDAX-*5 (7)	500 I	Opp	104	Furnished
885XMDAX-*5 (4)	500 I	Opp	143	Furnished

ONE SPEED - FORWARD & REVERSE

348ZFDAX-*5 (31)	200 I	Opp	113	119	8-A-062	328170-190X	340SFDAX-*5 (31)	200 I	Opp	113	119	7-A-062	Furnished
863XBDAX-*5	500 I	Opp	81	100		Furnished							

GEARED ADAPTERS

628ZDAX-5DA	250 I	Eng	Furnished	626ZDAX-3DA	250 I	Eng	7-A-062	Furnished
645ZDAX-3DA	250 I	Eng	Furnished	630ZDAX-3DA	250 I	Eng	7-A-062	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: 272*S Ratio - Contact Chelsea Engineering for application approval for continuous duty applications.

CAUTION: Do not use geared adapters with 442 A and C ratios.

(3) Input Gear Part No. 5-P-1120
 (4) Input Gear Part No. 5-P-1121
 (7) Input Gear Part No. 5-P-1174
 (20) Input Gear Part No. 5-P-1511-17X
 (21) Input Gear Part No. 5-P-1511-18X
 (22) Input Gear Part No. 5-P-1511-19X

(23) Input Gear Part No. 5-P-1511-1X
 (24) Input Gear Part No. 5-p-1511-2X
 (25) Input Gear Part No. 5-P-1511-3X
 (26) Input Gear Part No. 5-P-1511-5X
 (27) Input Gear Part No. 5-P-1511-6X
 (28) Input Gear Part No. 5-P-1511-7X

(29) Input Gear Part No. 5-P-1511-8X
 (30) Input Gear Part No. 5-P-1511-9X
 (31) Input Gear Part No. 5-P-634

CHELSEA®**MACK****MAK-27**

T2180 (Rear Box) T2180-B (Rear Box) T318LR (Rear Box) T318L (Rear Box) T318LR21 (Rear Box) T318L21 (Rear Box) T310-M (Rear Box) T310-MLR (Rear Box)	T310ME (Rear box, same as T310M, output flange extended for rear mount PTO) T318 (Rear Box)
---	--

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 08-BOLT Opening Gear FORWARD of Centerline 49 Teeth - SPUR	TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 49 Teeth - SPUR
PITCH LINE TO APERTURE FACE: 0.6670" (16.9400MM)	PITCH LINE TO APERTURE FACE: 1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCDAX-*5	250 I	Opp	54	7-A-062(P)	328564X	Furnished	221XCDAX-*3	250 I	Opp	54	7-A-032	Furnished
221ZEDAX-*5	250 I	Opp	59	7-A-062(P)	328564X	Furnished	221XEDAX-*3	250 I	Opp	59	7-A-032	Furnished
489ZDAX-*5 (8)	250 I	Opp	47	8-A-062	328170-190X	4422ZDAX-*3 (8)	250 I	Opp	47	7-A-140	Furnished	
489ZCDAK-*5 (9)	250 I	Opp	60	8-A-062	328170-190X	4422ZCDAK-*3 (9)	250 I	Opp	60	7-A-140	Furnished	
489ZFDAX-*5 (2)	250 I	Opp	74	8-A-062	328170-190X	4422ZFDAX-*3 (2)	250 I	Opp	74	7-A-140	Furnished	
489ZHDAK-*5 (13)	250 I	Opp	86	8-A-062	328170-190X	4422ZHDAK-*3 (13)	250 I	Opp	86	7-A-140	Furnished	
489ZLDAK-*5 (1)	250 I	Opp	96	8-A-062	328170-190X	4422ZLDAK-*3 (1)	250 I	Opp	96	7-A-140	Furnished	
489ZQDAX-*5 (1)	225 I	Opp	103	8-A-062	328170-190X	4422ZQDAX-*3 (1)	225 I	Opp	103	7-A-140	Furnished	
489ZRDAK-*5 (1)	225 I	Opp	120	8-A-062	328170-190X	4422ZRDAK-*3 (1)	225 I	Opp	120	7-A-140	Furnished	
489ZSDAX-*5 (1)	200 I	Opp	142	8-A-062	328170-190X	4422ZSDAX-*3 (1)	200 I	Opp	142	7-A-140	Furnished	
489ZUDAX-*5 (1)	195 I	Opp	169	8-A-062	328170-190X	4422ZUDAX-*3 (1)	195 I	Opp	169	7-A-140	Furnished	
489ZWDAK-*5 (1)	175 I	Opp	199	8-A-062	328170-190X	4422ZWDAK-*3 (1)	175 I	Opp	199	7-A-140	Furnished	
489ZXDAK-*5 (1)	140 I	Opp	236	8-A-062	328170-190X	4422ZXDAK-*3 (1)	140 I	Opp	236	7-A-140	Furnished	
680ZFDAX-*5 (10)	375 I	Opp	74	8-A-062	328170-190X	6602ZFDAX-*3 (10)	375 I	Opp	74	7-A-140	Furnished	
680ZQDAX-*5 (11)	375 I	Opp	103	8-A-062	328170-190X	6602ZQDAX-*3 (11)	375 I	Opp	103	7-A-140	Furnished	
680ZSDAX-*5 (12)	325 I	Opp	142	8-A-062	328170-190X	6602ZSDAX-*3 (12)	325 I	Opp	142	7-A-140	Furnished	
823XBDAX-*5	500 I	Opp	48			Furnished						
823XMDAX-*5 (33)	500 I	Opp	86			Furnished						
823XRDAK-*5 (34)	400 I	Opp	118			Furnished						
880XBDAK-*5 (3)	500 I	Opp	48			Furnished						
880XGDAK-*5 (7)	500 I	Opp	62			Furnished						
880XMDAK-*5 (4)	500 I	Opp	86			Furnished						
880XRDAK-*5 (5)	400 I	Opp	118			Furnished						
880XTDAK-*5 (6)	350 I	Opp	152			Furnished						

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XBDAX-*5 (15)	300 C	Opp	49	8-A-062		Furnished	272XADAX-*3 (24)	300 C	Opp	40	7-A-032	Furnished
282XCDAX-*5 (16)	300 C	Opp	59	8-A-062		Furnished	272XCDAX-*3 (26)	300 C	Opp	59	7-A-032	Furnished
282XDDAX-*5 (17)	300 C	Opp	71	8-A-062		Furnished	272XDAJX-*3 (14)	300 C	Opp	71	7-A-032	Furnished
282XGDAK-*5 (18)	300 C	Opp	84	8-A-062		Furnished	272XGDAK-*3 (27)	300 C	Opp	84	7-A-032	Furnished
282XKDAK-*5 (19)	300 C	Opp	94	8-A-062		Furnished	272XKDAK-*3 (28)	300 C	Opp	94	7-A-032	Furnished
282XMDAX-*5 (20)	300 C	Opp	105	8-A-062		Furnished	272XMDAX-*3 (29)	300 C	Opp	105	7-A-032	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.**CAUTION:** Mack Does Not approve PTO operations with the Range Selector in the "HI" position. Damage to the transmission synchronizers may occur. Refer to Mack operator's manual for correct PTO operation.October 2022
5.10.29Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Mack

MAK-27

MACK

CHELSEA®

T2180 (Rear Box)
 T2180-B (Rear Box)
 T318LR (Rear Box)
 T318L (Rear Box)
 T318LR21 (Rear Box)
 T318L21 (Rear Box)
 T310-M (Rear Box)
 T310-MLR (Rear Box)

T310ME (Rear box, same as T310M, output flange extended for rear mount PTO)
 T318 (Rear Box)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
 49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.6670" (16.9400MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq		Dir Rot	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq		Dir Rot	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C	C							Fwd	Rev					

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XPDAX-*5 (21)	300 C	Opp	117	8-A-062	Furnished	272XPDAX-*3 (30)	300 C	Opp	117	7-A-032	Furnished
282XSDAX-*5 (22)	300 C	Opp	131	8-A-062	Furnished	272XSDAX-*3 (31)	300 C	Opp	131	7-A-032	Furnished
282XTDAX-*5 (23)	300 C	Opp	147	8-A-062	Furnished						

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MADAX-*3 (24)	300 C	Opp	40	7-A-032	Furnished
272MBDAX-*3 (25)	300 C	Opp	49	7-A-032	Furnished
272MCDAKX-*3 (26)	300 C	Opp	59	7-A-032	Furnished
272MDAJX-*3 (14)	300 C	Opp	71	7-A-032	Furnished
272MGDAX-*3 (27)	300 C	Opp	84	7-A-032	Furnished
272MKDAX-*3 (28)	300 C	Opp	94	7-A-032	Furnished
272MMMDAX-*3 (29)	300 C	Opp	105	7-A-032	Furnished
272MPDAX-*3 (30)	300 C	Opp	117	7-A-032	Furnished
272MSDAX-*3 (31)	300 C	Opp	131	7-A-032	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBDAX-*5 (3)	500 I	Opp	48	Furnished
885XGDAKX-*5 (7)	500 I	Opp	62	Furnished
885XMDAX-*5 (4)	500 I	Opp	86	Furnished

ONE SPEED - FORWARD & REVERSE

348ZFDAX-*5 (32)	200 I	Opp	68	71	8-A-062	328170-190X	340SFDAX-*5 (32)	200 I	Opp	68	71	7-A-062	Furnished
863XBDAX-*5	500 I	Opp	48	60	Furnished								

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

CAUTION: Mack Does Not approve PTO operations with the Range Selector in the "HI" position. Damage to the transmission synchronizers may occur. Refer to Mack operator's manual for correct PTO operation.

(3) Input Gear Part No. 5-P-1120
 (4) Input Gear Part No. 5-P-1121
 (7) Input Gear Part No. 5-P-1174
 (14) Input Gear Part No. 5-P-1510-4X
 (21) Input Gear Part No. 5-P-1511-17X
 (22) Input Gear Part No. 5-P-1511-18X

(23) Input Gear Part No. 5-P-1511-19X
 (24) Input Gear Part No. 5-P-1511-1X
 (25) Input Gear Part No. 5-p-1511-2X
 (26) Input Gear Part No. 5-P-1511-3X
 (27) Input Gear Part No. 5-P-1511-5X
 (28) Input Gear Part No. 5-P-1511-6X

(29) Input Gear Part No. 5-P-1511-7X
 (30) Input Gear Part No. 5-P-1511-8X
 (31) Input Gear Part No. 5-P-1511-9X
 (32) Input Gear Part No. 5-P-634

CHELSEA®**MACK****MAK-27**

T2180 (Rear Box)
 T2180-B (Rear Box)
 T318LR (Rear Box)
 T318L (Rear Box)
 T318LR21 (Rear Box)
 T318L21 (Rear Box)
 T310-M (Rear Box)
 T310-MLR (Rear Box)

T310ME (Rear box, same as T310M, output flange extended for rear mount PTO)
 T318 (Rear Box)

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**

L.S. 08-BOLT Opening Gear FORWARD of Centerline
 49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
 0.6670" (16.9400MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
 1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

GEARED ADAPTERS

628ZDAX-5DA	250 I	Eng	8-A-062	328170-190X	626ZDAX-3DA 645ZDAX-3DA	250 I	Eng	7-A-140	7-A-140	Furnished Furnished
-------------	-------	-----	---------	-------------	----------------------------	-------	-----	---------	---------	------------------------

Available PTO Output Shaft Speeds with Rear Box in Neutral

Transmission Shifter & Selection Location			Multiplication Factor	Transmission Shifter & Selection Location			Multiplication Factor
LO	LO	LO	0.2755	5	HI	HI	0.5146
LO	HI	LO	0.3250	6	LO	HI	0.6097
1	LO	LO	0.4363	6	HI	HI	0.7197
1	HI	LO	0.5146	7	LO	HI	0.8482
2	LO	LO	0.6097	7	HI	HI	1.0000
2	HI	LO	0.7197	8	LO	HI	1.1910
3	LO	LO	0.8482	8	HI	HI	1.4040
3	HI	LO	1.0000	REV	HI	HI	0.1547
4	LO	LO	1.1910	REV	LO	HI	0.1305
4	HI	LO	1.4040	REV	LO	LO	0.1547
5	LO	HI	0.4363	REV	HI	LO	0.1305

EXAMPLE: Main Box in 4 HI LO with 442ZQDAX on Rear Box with output speed of 103% x 1.404 = 144.6%

CAUTION: PTO operations not permitted by Mack in "HI" range position (shaded area).

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

CAUTION: Mack Does Not approve PTO operations with the Range Selector in the "HI" position. Damage to the transmission synchronizers may occur. Refer to Mack operator's manual for correct PTO operation.

Mack

MAK-28

MACK

CHELSEA®

T2130 (Rear Box)
 T2130-B (Rear Box)
 T313LR (Rear Box)
 T313L (Rear Box)
 T313L21 (Rear Box)
 T313LR21 (Rear Box)
 T313H (Rear Box)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
 49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.6670" (16.9400MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot	Fwd					I / C †	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCDAX-*5	250 I	Opp	45	7-A-062(P)	328564X	Furnished	221XEDAX-*3	250 I	Opp	45	7-A-032	Furnished
221ZEDAX-*5	250 I	Opp	50	7-A-062(P)	328564X	Furnished	221XEDAX-*3	250 I	Opp	50	7-A-032	Furnished
489ZDAX-*5 (8)	250 I	Opp	40	8-A-062	328170-190X	442ZDAX-*3 (8)	250 I	Opp	40	7-A-140	Furnished	
489ZCDAK-*5 (9)	250 I	Opp	51	8-A-062	328170-190X	442ZCDAK-*3 (9)	250 I	Opp	51	7-A-140	Furnished	
489ZFDAX-*5 (2)	250 I	Opp	63	8-A-062	328170-190X	442ZFDAX-*3 (2)	250 I	Opp	63	7-A-140	Furnished	
489ZHDAK-*5 (13)	250 I	Opp	73	8-A-062	328170-190X	442ZHDAK-*3 (13)	250 I	Opp	73	7-A-140	Furnished	
489ZLDAK-*5 (1)	250 I	Opp	81	8-A-062	328170-190X	442ZLDAK-*3 (1)	250 I	Opp	81	7-A-140	Furnished	
489ZQDAK-*5 (1)	225 I	Opp	88	8-A-062	328170-190X	442ZQDAK-*3 (1)	225 I	Opp	88	7-A-140	Furnished	
489ZRDAX-*5 (1)	225 I	Opp	101	8-A-062	328170-190X	442ZRDAX-*3 (1)	225 I	Opp	101	7-A-140	Furnished	
489ZSDAX-*5 (1)	200 I	Opp	121	8-A-062	328170-190X	442ZSDAX-*3 (1)	200 I	Opp	121	7-A-140	Furnished	
489ZUDAX-*5 (1)	195 I	Opp	144	8-A-062	328170-190X	442ZUDAX-*3 (1)	195 I	Opp	144	7-A-140	Furnished	
489ZWDAX-*5 (1)	175 I	Opp	169	8-A-062	328170-190X	442ZWDAX-*3 (1)	175 I	Opp	169	7-A-140	Furnished	
489ZXDAX-*5 (1)	140 I	Opp	200	8-A-062	328170-190X	442ZXDAX-*3 (1)	140 I	Opp	200	7-A-140	Furnished	
680ZFDAX-*5 (10)	375 I	Opp	63	8-A-062	328170-190X	660ZFDAX-*3 (10)	375 I	Opp	63	7-A-140	Furnished	
680ZQDAK-*5 (11)	375 I	Opp	88	8-A-062	328170-190X	660ZQDAK-*3 (11)	375 I	Opp	88	7-A-140	Furnished	
680ZSDAX-*5 (12)	325 I	Opp	121	8-A-062	328170-190X	660ZSDAX-*3 (12)	325 I	Opp	121	7-A-140	Furnished	
823XBDAX-*5 (33)	500 I	Opp	41		Furnished							
823XMDAX-*5 (34)	500 I	Opp	73		Furnished							
823XRDAK-*5 (35)	400 I	Opp	100		Furnished							
880XBDAX-*5 (3)	500 I	Opp	41		Furnished							
880XGDAK-*5 (7)	500 I	Opp	53		Furnished							
880XMDAX-*5 (4)	500 I	Opp	73		Furnished							
880XRDAX-*5 (5)	400 I	Opp	100		Furnished							
880XTDAK-*5 (6)	350 I	Opp	129		Furnished							

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282KBDAX-*5 (15)	300 C	Opp	41	8-A-062	Furnished	272XADAX-*3 (24)	300 C	Opp	34	7-A-032	Furnished
282KCDAX-*5 (16)	300 C	Opp	50	8-A-062	Furnished	272XBDAX-*3 (25)	300 C	Opp	41	7-A-032	Furnished
282KDDAX-*5 (17)	300 C	Opp	60	8-A-062	Furnished	272XCDAK-*3 (26)	300 C	Opp	50	7-A-032	Furnished
282KGDAK-*5 (18)	300 C	Opp	71	8-A-062	Furnished	272XDAJX-*3 (14)	300 C	Opp	60	7-A-032	Furnished
282KKDAX-*5 (19)	300 C	Opp	80	8-A-062	Furnished	272XGDAK-*3 (27)	300 C	Opp	71	7-A-032	Furnished
282KKDAX-*5 (19)	300 C	Opp	89	8-A-062	Furnished	272XKDAX-*3 (28)	300 C	Opp	80	7-A-032	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

(1) Input Gear Part No. 5-P-1037
 (2) Input Gear Part No. 5-P-1085
 (3) Input Gear Part No. 5-P-1120
 (4) Input Gear Part No. 5-P-1121
 (5) Input Gear Part No. 5-P-1122
 (6) Input Gear Part No. 5-P-1123(7) Input Gear Part No. 5-P-1174
 (8) Input Gear Part No. 5-P-1284
 (9) Input Gear Part No. 5-P-1291
 (10) Input Gear Part No. 5-P-1330
 (11) Input Gear Part No. 5-P-1331
 (12) Input Gear Part No. 5-P-1332(13) Input Gear Part No. 5-P-1365
 (14) Input Gear Part No. 5-P-1510-4X
 (15) Input Gear Part No. 5-P-1511-11X
 (16) Input Gear Part No. 5-P-1511-12X
 (17) Input Gear Part No. 5-P-1511-13X
 (18) Input Gear Part No. 5-P-1511-14X(19) Input Gear Part No. 5-P-1511-15X
 (20) Input Gear Part No. 5-P-1511-16X
 (21) Input Gear Part No. 5-P-1511-17X
 (22) Input Gear Part No. 5-P-1511-2X
 (23) Input Gear Part No. 5-P-1511-3X
 (24) Input Gear Part No. 5-P-1511-5X(28) Input Gear Part No. 5-P-1511-6X
 (33) Input Gear Part No. 5-P-636
 (34) Input Gear Part No. 5-P-637
 (35) Input Gear Part No. 5-P-808

CHELSEA®**MACK****MAK-28**

T2130 (Rear Box)
 T2130-B (Rear Box)
 T313L (Rear Box)
 T313L21 (Rear Box)
 T313LR21 (Rear Box)
 T313H (Rear Box)

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**

L.S. 08-BOLT Opening Gear FORWARD of Centerline
 49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
 0.6670" (16.9400MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
 1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282KPDAX-*5 (21)	300 C	Opp	100	8-A-062	Furnished	272XMDAX-*3 (29)	300 C	Opp	89	7-A-032	Furnished
282KSDAX-*5 (22)	300 C	Opp	111	8-A-062	Furnished	272XPDAX-*3 (30)	300 C	Opp	100	7-A-032	Furnished
282KTDX-*5 (23)	300 C	Opp	125	8-A-062	Furnished	272XSDAX-*3 (31)	300 C	Opp	111	7-A-032	Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MADAX-*3 (24)	300 C	Opp	34	7-A-032	Furnished
272MBDAX-*3 (25)	300 C	Opp	41	7-A-032	Furnished
272MCDAKX-*3 (26)	300 C	Opp	50	7-A-032	Furnished
272MDAJX-*3 (14)	300 C	Opp	60	7-A-032	Furnished
272MGDAX-*3 (27)	300 C	Opp	71	7-A-032	Furnished
272MKDAX-*3 (28)	300 C	Opp	80	7-A-032	Furnished
272MMDAKX-*3 (29)	300 C	Opp	89	7-A-032	Furnished
272MPDAX-*3 (30)	300 C	Opp	100	7-A-032	Furnished
272MSDAX-*3 (31)	300 C	Opp	111	7-A-032	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBDAX-*5 (3)	500 I	Opp	41	Furnished
885XGDAX-*5 (7)	500 I	Opp	53	Furnished
885XMDAX-*5 (4)	500 I	Opp	73	Furnished

ONE SPEED - FORWARD & REVERSE

348ZFDAX-*5 (32)	200 I	Opp	57	60	8-A-032	328170-190X	340SFDAKX-*5 (32)	200 I	Opp	57	60	7-A-062	Furnished
863XBDAX-*5	500 I	Opp	41	51	Furnished								

GEARED ADAPTERS

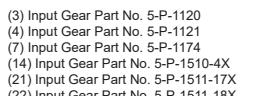
628ZDAX-5DA	250 I	Eng	8-A-062	328170-190X	626ZDAX-3DA	250 I	Eng	7-A-140	Furnished
					645ZDAX-3DA	250 I	Eng	7-A-140	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.



MAK-29

MACK

CHELSEA®

T2050-C
T2060-C
T2070-D (Front Box)
T2070-C
T2080-D (Front Box)
T2080-C

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.9770" (24.8200MM)

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.2520" (31.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]							I / C [†]					

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

823ZBAHX-*3 (28)	500 I	Opp	71	8-A-700	328170-133X	221ZCAHX-*3	250 I	Opp	75	7-A-062	Furnished
823ZDAHX-*3 (31)	500 I	Opp	84	8-A-700	328170-133X	221ZEAHX-*3	250 I	Opp	86	7-A-032	Furnished
823ZGAHX-*3 (32)	500 I	Opp	91	8-A-700	328170-133X	442ZAAHX-*3 (12)	250 I	Opp	66	7-A-032	Furnished
823ZJAHX-*3 (29)	500 I	Opp	107	8-A-700	328170-133X	442ZCAHX-*3 (13)	250 I	Opp	84	7-A-032	Furnished
823ZMAHX-*3 (27)	500 I	Opp	126	8-A-700	328170-133X	442ZFAHX-*3 (2)	250 I	Opp	104	7-A-032	Furnished
823ZRRAHX-*3 (30)	400 I	Opp	173	8-A-700	328170-133X	442ZHAHX-*3 (15)	250 I	Opp	121	7-A-032	Furnished
880ZBAHX-*3 (3)	500 I	Opp	71	8-A-700	328170-133X	442ZLAHX-*3 (1)	250 I	Opp	134	7-A-032	Furnished
880ZDAHX-*3 (4)	500 I	Opp	84	8-A-700	328170-133X	442ZQAHX-*3 (1)	225 I	Opp	145	7-A-032	Furnished
880ZGAHX-*3 (9)	500 I	Opp	91	8-A-700	328170-133X	442ZRAHX-*3 (1)	225 I	Opp	167	7-A-032	Furnished
880ZJAHX-*3 (5)	500 I	Opp	107	8-A-700	328170-133X	442ZSAHX-*3 (1)	200 I	Opp	199	7-A-032	Furnished
880ZMAHX-*3 (6)	500 I	Opp	126	8-A-700	328170-133X	442ZUAHX-*3 (1)	195 I	Opp	237	7-A-032	Furnished
880ZQAHX-*3 (16)	450 I	Opp	147	8-A-700	328170-133X	442ZWAHX-*3 (1)	175 I	Opp	279	7-A-032	Furnished
880ZRAHX-*3 (7)	400 I	Opp	173	8-A-700	328170-133X	442ZXAHX-*3 (1)	140 I	Opp	330	7-A-032	Furnished
880ZTAHX-*3 (8)	350 I	Opp	223	8-A-700	328170-133X	660ZFAHX-*3 (10)	375 I	Opp	104	7-A-032	Furnished
						660ZHAHX-*3 (15)	375 I	Opp	121	7-A-032	Furnished
						660ZQAHX-*3 (11)	375 I	Opp	145	7-A-032	Furnished
						660ZRAHX-*3 (17)	350 I	Opp	167	7-A-032	Furnished
						660ZSAHX-*3 (14)	325 I	Opp	199	7-A-032	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272ZAAJX-*5 (18)	300 C	Opp	53	7-A-032	328481X	Furnished	272ZAAJX-*3 (18)	300 C	Opp	53	7-A-032	Furnished
272ZBAJX-*5 (19)	300 C	Opp	65	7-A-032	328481X	Furnished	272ZBAJX-*3 (19)	300 C	Opp	65	7-A-032	Furnished
272ZCAJX-*5 (20)	300 C	Opp	79	7-A-032	328481X	Furnished	272ZCAJX-*3 (20)	300 C	Opp	79	7-A-032	Furnished
272ZDAJX-*5 (21)	300 C	Opp	95	7-A-032	328481X	Furnished	272ZDAJX-*3 (21)	300 C	Opp	95	7-A-032	Furnished
272ZGAJX-*5 (22)	300 C	Opp	113	7-A-032	328481X	Furnished	272ZGAJX-*3 (22)	300 C	Opp	113	7-A-032	Furnished
272ZKAJX-*5 (23)	300 C	Opp	126	7-A-032	328481X	Furnished	272ZKAJX-*3 (23)	300 C	Opp	126	7-A-032	Furnished
272ZMAJX-*5 (24)	300 C	Opp	141	7-A-032	328481X	Furnished	272ZMAJX-*3 (24)	300 C	Opp	141	7-A-032	Furnished
272ZPAJX-*5 (25)	300 C	Opp	157	7-A-032	328481X	Furnished	272ZPAJX-*3 (25)	300 C	Opp	157	7-A-032	Furnished
272ZSAJX-*5 (26)	284 C	Opp	176	7-A-032	328481X	Furnished	272ZSAJX-*3 (26)	284 C	Opp	176	7-A-032	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104

(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322

(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1441
(18) Input Gear Part No. 5-P-1510-1X
(19) Input Gear Part No. 5-P-1510-2X
(20) Input Gear Part No. 5-P-1510-3X
(21) Input Gear Part No. 5-P-1510-4X

(22) Input Gear Part No. 5-P-1510-5X
(23) Input Gear Part No. 5-P-1510-6X
(24) Input Gear Part No. 5-P-1510-7X
(25) Input Gear Part No. 5-P-1510-8X
(26) Input Gear Part No. 5-P-1510-9X
(27) Input Gear Part No. 5-P-283
(28) Input Gear Part No. 5-P-285

(29) Input Gear Part No. 5-P-325
(30) Input Gear Part No. 5-P-721
(31) Input Gear Part No. 5-P-971
(32) Input Gear Part No. 5-P-980
(33) Furnished, but not required

CHELSEA®**MACK****MAK-29**

T2050-C
T2060-C
T2070-D (Front Box)
T2070-C
T2080-D (Front Box)
T2080-C

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**

L.S. 08-BOLT Opening Gear FORWARD of Centerline
48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.9770" (24.8200MM)**TRANSMISSION GEAR DATA:**

R.S. 06-BOLT Opening Gear FORWARD of Centerline
48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.2520" (31.8000MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885ZBAHX-*3 (3)	500 I	Opp	71	8-A-700	328170-133X
885ZGAHX-*3 (9)	500 I	Opp	91	8-A-700	328170-133X
885ZJAHX-*3 (5)	500 I	Opp	107	8-A-700	328170-133X
885ZMAHX-*3 (6)	500 I	Opp	126	8-A-700	328170-133X

GEARED ADAPTERS

626ZDAX-3DA	250 I	Eng	7-A-032	Furnished
630ZDAX-3DA	250 I	Eng	7-A-032	Furnished
645ZDAX-3DA	250 I	Eng	7-A-032	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135

Mack

MAK-30

MACK

CHELSEA®

T2060-A
T306G

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:L.S. 08-BOLT Opening Gear FORWARD of Centerline
40 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

1.9280" (48.9700MM)

TRANSMISSION GEAR DATA:RS. 06-BOLT Opening Gear FORWARD of Centerline
40 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

2.2040" (55.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
290KFHUX-*5 (1)	180	I	Opp	80	7-A-093(5)	328564X	7170-3X	290KFHUX-*3 (1)	180	I	Opp	80	7-A-270	7170-4X	
290KLHUX-*5 (2)	180	I	Opp	94	7-A-093	328564X	7170-3X	290KLHUX-*3 (2)	180	I	Opp	94	7-A-270	7170-4X	
290KQHUX-*5 (3)	180	I	Opp	124	7-A-093	328564X	7170-3X	290KQHUX-*3 (3)	180	I	Opp	124	7-A-270	7170-4X	
290KUHUX-*5 (4)	180	I	Opp	149	7-A-093	328564X	7170-3X	290KUHUX-*3 (4)	180	I	Opp	149	7-A-270	7170-4X	

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

Mack

- (1) Input Gear Part No. 5-P-1221
- (2) Input Gear Part No. 5-P-1222
- (3) Input Gear Part No. 5-P-1223
- (4) Input Gear Part No. 5-P-1224
- (5) Filler block furnished with PTO

T2110-B (REAR BOX FOR T2110B)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.6670" (16.9400MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0550" (26.7970MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCDAKX-*5 (32)	250 I	Opp	54	7-A-062(P)	328564X	Furnished	221XCDAX-*3 (32)	250 I	Opp	54	7-A-032	Furnished
221ZEDAX-*5 (32)	250 I	Opp	59	7-A-062(P)	328564X	Furnished	221XEDAX-*3 (32)	250 I	Opp	59	7-A-032	Furnished
489ZFDAX-*5 (2)	250 I	Opp	74	8-A-062	328170-190X	4422ZDAX-*3 (8)	250 I	Opp	47	7-A-140	Furnished	
489ZHDAKX-*5 (13)	250 I	Opp	86	8-A-062	328170-190X	4422ZCDAX-*3 (9)	250 I	Opp	60	7-A-140	Furnished	
489ZLDAKX-*5 (1)	250 I	Opp	96	8-A-062	328170-190X	4422ZFDAX-*3 (2)	250 I	Opp	74	7-A-140	Furnished	
489ZQDAKX-*5 (1)	225 I	Opp	103	8-A-062	328170-190X	4422ZHDAX-*3 (13)	250 I	Opp	86	7-A-140	Furnished	
489ZRDAKX-*5 (1)	225 I	Opp	120	8-A-062	328170-190X	4422ZLDAKX-*3 (1)	250 I	Opp	96	7-A-140	Furnished	
489ZSDAX-*5 (1)	200 I	Opp	142	8-A-062	328170-190X	4422ZQDAKX-*3 (1)	225 I	Opp	103	7-A-140	Furnished	
489ZUDAX-*5 (1)	195 I	Opp	169	8-A-062	328170-190X	4422ZRDAX-*3 (1)	225 I	Opp	120	7-A-140	Furnished	
489ZWDAKX-*5 (1)	175 I	Opp	199	8-A-062	328170-190X	4422ZSDAX-*3 (1)	200 I	Opp	142	7-A-140	Furnished	
489ZXDAKX-*5 (1)	140 I	Opp	236	8-A-062	328170-190X	4422ZUDAX-*3 (1)	195 I	Opp	169	7-A-140	Furnished	
680ZFDAX-*5 (10)	375 I	Opp	74	8-A-062	328170-190X	4422ZWDAX-*3 (1)	175 I	Opp	199	7-A-140	Furnished	
680ZQDAKX-*5 (11)	375 I	Opp	103	8-A-062	328170-190X	4422ZXDAX-*3 (1)	140 I	Opp	236	7-A-140	Furnished	
680ZSDAX-*5 (12)	325 I	Opp	142	8-A-062	328170-190X	6602ZFDAX-*3 (10)	375 I	Opp	74	7-A-140	Furnished	
823XBDAKX-*5	500 I	Opp	48			Furnished	6602ZQDAKX-*3 (11)	375 I	Opp	103		Furnished
823XMDAX-*5 (34)	500 I	Opp	86			Furnished	6602ZSDAX-*3 (12)	325 I	Opp	142		Furnished
823XRDAKX-*5 (35)	400 I	Opp	118			Furnished						
880XBDAKX-*5 (3)	500 I	Opp	48			Furnished						
880XGDAKX-*5 (7)	500 I	Opp	62			Furnished						
880XMDAKX-*5 (4)	500 I	Opp	86			Furnished						
880XRDAKX-*5 (5)	400 I	Opp	118			Furnished						
880XTDAKX-*5 (6)	350 I	Opp	152			Furnished						

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XBDAX-*5 (14)	300 C	Opp	49	8-A-062(P)	Furnished	272XADAX-*3 (23)	300 C	Opp	40	7-A-032	Furnished
282ZCDAKX-*5 (15)	300 C	Opp	59	8-A-062(P)	Furnished	272XBDAX-*3 (24)	300 C	Opp	49	7-A-032	Furnished
282XDDAX-*5 (16)	300 C	Opp	71	8-A-062(P)	Furnished	272XCDAKX-*3 (25)	300 C	Opp	59	7-A-032	Furnished
282XGDAKX-*5 (17)	300 C	Opp	84	8-A-062(P)	Furnished	272XDDAX-*3 (26)	300 C	Opp	71	7-A-032	Furnished
282XKDAX-*5 (18)	300 C	Opp	94	8-A-062(P)	Furnished	272XGDAKX-*3 (27)	300 C	Opp	84	7-A-032	Furnished
282XMDAX-*5 (19)	300 C	Opp	105	8-A-062	Furnished	272XKDAX-*3 (28)	300 C	Opp	94	7-A-032	Furnished
282XPDAKX-*5 (20)	300 C	Opp	117	8-A-062(P)	Furnished	272XMDAX-*3 (29)	300 C	Opp	105	7-A-032	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

MAK-31

MACK

CHELSEA®

T2110-B (REAR BOX FOR T2110B)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.6670" (16.9400MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0550" (26.7970MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †							Fwd					

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XSDAX-*5 (21)	300 C	Opp	131	8-A-062(P)	Furnished	272XPDAX-*3 (30)	300 C	Opp	117	7-A-032	Furnished
282XTDAX-*5 (22)	300 C	Opp	147	8-A-062(P)	Furnished	272XSDAX-*3 (31)	300 C	Opp	131	7-A-032	Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MADAX-*3 (23)	300 C	Opp	40	7-A-032	Furnished
272MBDAX-*3 (24)	300 C	Opp	49	7-A-032	Furnished
272MCDAK-*3 (25)	300 C	Opp	59	7-A-032	Furnished
272MDDAX-*3 (26)	300 C	Opp	71	7-A-032	Furnished
272MGDAX-*3 (27)	300 C	Opp	84	7-A-032	Furnished
272MKDAX-*3 (28)	300 C	Opp	94	7-A-032	Furnished
272MMMDAX-*3 (29)	300 C	Opp	105	7-A-032	Furnished
272MPDAX-*3 (30)	300 C	Opp	117	7-A-032	Furnished
272MSDAX-*3 (31)	300 C	Opp	131	7-A-032	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBDAX-*5 (3)	500 I	Opp	48	Furnished
885XGDAX-*5 (7)	500 I	Opp	62	Furnished
885XMDAX-*5 (4)	500 I	Opp	86	Furnished

ONE SPEED - FORWARD & REVERSE

348ZFDAX-*5 (33)	200 I	Eng	68	71	8-A-062	328170-190X	340SFDAX-*3 (33)	200 I	Opp	68	71	7-A-062	Furnished
863XBDAX-*5	500 I	Opp	48	60		Furnished							

GEARED ADAPTERS

626ZDAX-5DA	250 I	Eng	8-A-062	328170-190X	626ZDAX-3DA	250 I	Eng	7-A-140	Furnished
					630ZDAX-3DA	250 I	Eng	7-A-140	Furnished
					645ZDAX-3DA	250 I	Eng	7-A-140	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(7) Input Gear Part No. 5-P-1174
(21) Input Gear Part No. 5-P-1511-18X
(22) Input Gear Part No. 5-P-1511-19X
(23) Input Gear Part No. 5-P-1511-1X(24) Input Gear Part No. 5-p-1511-2X
(25) Input Gear Part No. 5-P-1511-3X
(26) Input Gear Part No. 5-P-1511-4X
(27) Input Gear Part No. 5-P-1511-5X
(28) Input Gear Part No. 5-P-1511-6X
(29) Input Gear Part No. 5-P-1511-7X(30) Input Gear Part No. 5-P-1511-8X
(31) Input Gear Part No. 5-P-1511-9X
(33) Input Gear Part No. 5-P-634

CHELSEA®**MACK****MAK-32**

T310 (T310 is a standard 10 speed with no rear box)
 T310-M (Front Box)
 T310ME (Front box, same as T-310M, output flange extended for rear mount PTO)

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**

L.S. 08-BOLT Opening Gear FORWARD of Centerline
 53 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8100" (20.5700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 53 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0800" (27.4320MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCDAX-*5	250 I	Opp	66	328564X	Furnished	221XCAHX-*3	250 I	Eng	65	7-A-032(P)(35) 328554-2X	Furnished
221ZEDAX-*5	250 I	Opp	73	328564X	Furnished	221XCDAH-*3	250 I	Opp	66		Furnished
489ZDAX-*5 (8)	250 I	Opp	57	Furnished	221XEAHX-*3	250 I	Eng	75		328554-2X	Furnished
489ZCDAH-*5 (9)	250 I	Opp	74	Furnished	221XEDAX-*3	250 I	Opp	73			Furnished
489ZFDAX-*5 (2)	250 I	Opp	92	Furnished	442ZDAX-*3 (8)	250 I	Opp	57	7-A-093		Furnished
489ZHDAH-*5 (13)	250 I	Opp	107	Furnished	442ZCDAH-*3 (9)	250 I	Opp	74	7-A-093		Furnished
489ZLDAH-*5 (1)	250 I	Opp	119	Furnished	442ZFDAX-*3 (2)	250 I	Opp	92	7-A-093		Furnished
489ZQDAH-*5 (1)	225 I	Opp	128	Furnished	442ZHDAX-*3 (13)	250 I	Opp	107	7-A-093		Furnished
489ZRDAX-*5 (1)	225 I	Opp	149	Furnished	442ZLDAX-*3 (1)	250 I	Opp	119	7-A-093		Furnished
489ZSDAX-*5 (1)	200 I	Opp	178	Furnished	442ZQDAH-*3 (1)	225 I	Opp	128	7-A-093		Furnished
489ZUDAX-*5 (1)	195 I	Opp	212	Furnished	442ZRDAX-*3 (1)	225 I	Opp	149	7-A-093		Furnished
489ZWDAH-*5 (1)	175 I	Opp	250	Furnished	442ZSDAX-*3 (1)	200 I	Opp	178	7-A-093		Furnished
489ZVDAH-*5 (1)	140 I	Opp	296	Furnished	442ZUDAX-*3 (1)	195 I	Opp	212	7-A-093		Furnished
680ZFDAH-*5 (10)	375 I	Opp	92	Furnished	442ZWDAX-*3 (1)	175 I	Opp	250	7-A-093		Furnished
680ZQDAH-*5 (11)	375 I	Opp	128	Furnished	442ZXDAH-*3 (1)	140 I	Opp	296	7-A-093		Furnished
680ZSDAX-*5 (12)	325 I	Opp	178	Furnished	660ZFDAX-*3 (10)	375 I	Opp	92	7-A-062		Furnished
823XBDAH-*5	500 I	Opp	59	Furnished	660ZQDAH-*3 (11)	375 I	Opp	128	7-A-062		Furnished
823XMMDAX-*5 (33)	500 I	Opp	106	Furnished	660ZSDAX-*3 (12)	325 I	Opp	178	7-A-062		Furnished
823XRDAH-*5 (34)	400 I	Opp	148	Furnished							
880XBDAH-*5 (3)	500 I	Opp	59	Furnished							
880XGDAH-*5 (7)	500 I	Opp	76	Furnished							
880XMMDAX-*5 (4)	500 I	Opp	106	Furnished							
880XRDAH-*5 (5)	400 I	Opp	148	Furnished							
880XTDAH-*5 (6)	350 I	Opp	191	Furnished							

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

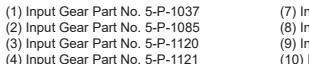
282XBDAH-*5 (14)	300 C	Opp	61	Furnished	272XADAX-*3 (23)	300 C	Opp	49		Furnished
282XCDAX-*5 (15)	300 C	Opp	73	Furnished	272XBDAX-*3 (24)	300 C	Opp	61		Furnished
282XDDAX-*5 (16)	300 C	Opp	88	Furnished	272XCDAX-*3 (25)	300 C	Opp	73		Furnished
282XGDAH-*5 (17)	300 C	Opp	104	Furnished	272XDDAX-*3 (26)	300 C	Opp	88		Furnished
282XKDAH-*5 (18)	300 C	Opp	117	Furnished	272XGDAH-*3 (27)	300 C	Opp	104		Furnished
282XMDAX-*5 (19)	300 C	Opp	130	Furnished	272XKDAH-*3 (28)	300 C	Opp	117		Furnished

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.



October 2022
 5.10.39

Parker Hannifin Corporation
 Chelsea Products Division
 Olive Branch, MS 38654 USA

Mack

MAK-32

MACK

CHELSEA®

T310 (T310 is a standard 10 speed with no rear box)
 T310-M (Front Box)
 T310ME (Front box, same as T-310M, output flange extended for rear mount PTO)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
 53 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8100" (20.5700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 53 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0800" (27.4320MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XPDAX-*5 (20)	300 C	Opp	146	Furnished	272XMDAX-*3 (29)	300 C	Opp	130	Furnished
282XSDAX-*5 (21)	300 C	Opp	163	Furnished	272XPDAX-*3 (30)	300 C	Opp	146	Furnished
282XTDAX-*5 (22)	274 C	Opp	182	Furnished	272XSDAX-*3 (31)	300 C	Opp	163	Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MADAX-*3 (23)	300 C	Opp	49	Furnished
272MBDAX-*3 (24)	300 C	Opp	61	Furnished
272MCDAX-*3 (25)	300 C	Opp	73	Furnished
272MDDAX-*3 (26)	300 C	Opp	88	Furnished
272MGDAX-*3 (27)	300 C	Opp	104	Furnished
272MKDAX-*3 (28)	300 C	Opp	117	Furnished
272MMMDAX-*3 (29)	300 C	Opp	130	Furnished
272MPDAX-*3 (30)	300 C	Opp	146	Furnished
272MSDAX-*3 (31)	300 C	Opp	163	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBDAX-*5 (3)	500 I	Opp	59	Furnished
885XGDAX-*5 (7)	500 I	Opp	76	Furnished
885XMDAX-*5 (4)	500 I	Opp	106	Furnished

ONE SPEED - FORWARD & REVERSE

348ZFDAX-*5 (32)	200 I	Opp	83	90	Furnished	340SFDAX-*5 (32)	200 I	Opp	83	90	Furnished
863XBDAX-*5	500 I	Opp	59	75	Furnished						

GEARED ADAPTERS

628ZDAX-5DA	250 I	Eng	Furnished	626ZDAX-3DA	250 I	Eng	7-A-062	Furnished
				630ZDAX-3DA	250 I	Eng	7-A-062	Furnished
				645ZDAX-3DA	250 I	Eng	7-A-062	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

(3) Input Gear Part No. 5-P-1120
 (4) Input Gear Part No. 5-P-1121
 (7) Input Gear Part No. 5-P-1174
 (20) Input Gear Part No. 5-P-1511-17X
 (21) Input Gear Part No. 5-P-1511-18X
 (22) Input Gear Part No. 5-P-1511-19X

(23) Input Gear Part No. 5-P-1511-1X
 (24) Input Gear Part No. 5-p-1511-2X
 (25) Input Gear Part No. 5-P-1511-3X
 (26) Input Gear Part No. 5-P-1511-4X
 (27) Input Gear Part No. 5-P-1511-5X
 (28) Input Gear Part No. 5-P-1511-6X

(29) Input Gear Part No. 5-P-1511-7X
 (30) Input Gear Part No. 5-P-1511-8X
 (31) Input Gear Part No. 5-P-1511-9X
 (32) Input Gear Part No. 5-P-634

TM308
TM309

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPURPITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPURPITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442ZFDAX-*6 (2)	250 I	Opp	94	7-A-062(P)	328481X	Furnished	442ZFDAX-*4 (2)	250 I	Opp	94	7-A-062	Furnished
442ZHDAX-*6 (10)	250 I	Opp	109	7-A-062(P)	328481X	Furnished	442ZHDAX-*4 (10)	250 I	Opp	109	7-A-062	Furnished
442ZLDAX-*6 (1)	250 I	Opp	121	7-A-062(P)	328481X	Furnished	442ZLDAX-*4 (1)	250 I	Opp	121	7-A-062	Furnished
442ZQDAX-*6 (1)	225 I	Opp	130	7-A-062(P)	328481X	Furnished	442ZQDAX-*4 (1)	225 I	Opp	130	7-A-062	Furnished
489ZFDAX-*6 (2)	250 I	Opp	94			Furnished	660ZFDAX-*4 (8)	375 I	Opp	94	7-A-062	Furnished
489ZHDAX-*6 (10)	250 I	Opp	109			Furnished	660ZQDAX-*4 (9)	375 I	Opp	130	7-A-062	Furnished
489ZLDAX-*6 (1)	250 I	Opp	121			Furnished						
489ZQDAX-*6 (1)	225 I	Opp	130			Furnished						
680ZFDAX-*6 (8)	375 I	Opp	94			Furnished						
680ZQDAX-*6 (9)	375 I	Opp	130			Furnished						
880XBDAK-*6 (3)	500 I	Opp	61			Furnished						
880XGDAK-*6 (7)	500 I	Opp	78			Furnished						
880XMDAX-*6 (4)	500 I	Opp	108			Furnished						
880XRDAK-*6 (5)	400 I	Opp	150			Furnished						
880XTDAK-*6 (6)	350 I	Opp	193			Furnished						

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBDAK-*6 (3)	500 I	Opp	61		Furnished
885XGDAK-*6 (7)	500 I	Opp	78		Furnished
885XMDAX-*6 (4)	500 I	Opp	108		Furnished

ONE SPEED - FORWARD & REVERSE

348ZFDAX-*4 (11)	200 I	Opp	85	90	Furnished	340SFDAX-*4 (11)	200 I	Opp	85	90	Furnished
863XBDAK-*4 (12)	500 I	Opp	61	75	Furnished						

GEARED ADAPTERS

628ZDAX-6DA	250 I	Eng	Furnished	626ZDAX-4DA	250 I	Eng	7-A-062	Furnished
				630ZDAX-4DA	250 I	Eng	7-A-062	Furnished
				645ZDAX-4DA	250 I	Eng	7-A-062	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.**CAUTION:** Do not install any PTO models with a sliding input gear, the input gear will not shift completely out of mesh.

MAK-34

MACK

CHELSEA®

TMD12AD (MDrive) Low Ratio
 TMD12AFD (MDrive) Low Ratio
 TMD12AFD-HD (MDrive) Low Ratio
 TMD13AD (MDrive) Low Ratio
 TMD13AFD-HD (MDrive) Low Ratio

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd	Rev					I/C [†]	Rot	Fwd	Rev			

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

512XRASW-V-XY	258 C	Opp	70	Furnished
512XRASX-V-XK	258 C	Opp	70	Furnished
512XRASX-V-XV	258 C	Opp	70	Furnished
524XTASX-V-*	300 C	Eng	93	Furnished
524XVASX-V-*	258 C	Eng	126	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

Mack

CHELSEA®**MACK****MAK-34H**

TMD12AD (MDrive) High Split Ratio
 TMD12AFD (MDrive) High Split Ratio
 TMD12AFD-HD (MDrive) High Split Ratio
 TMD13AD (MDrive) High Split Ratio
 TMD13AFD-HD (MDrive) High Split Ratio

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

512XRASW-V-XY	258	C	Opp	90									
512XRASX-V-XK	258	C	Opp	90									
512XRASX-V-XV	258	C	Opp	90									
524XTASX-V-*	300	C	Eng	119									
524XVASX-V-*	258	C	Eng	161									

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

Mack

MAK-35

MACK

CHELSEA®

TMD12AFO (MDrive) Low Ratio
 TMD12AFO-HD (MDrive) Low Ratio
 TMD12AO (MDrive) Low Ratio
 TMD13AFO-HD (MDrive) Low Ratio
 TMD13AO (MDrive) Low Ratio
 TMD14AFO-HD (MDrive) Low Ratio
 TMD14AO (MDrive) Low Ratio

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

512XRASW-V-XY	258	C	Opp	90											
512XRASX-V-XK	258	C	Opp	90											
512XRASX-V-XV	258	C	Opp	90											
524XTASX-V-*	300	C	Eng	120											
524XVASX-V-*	258	C	Eng	162											

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CHELSEA®**MACK****MAK-35H**

TMD12AFO (MDrive) High Split Ratio
 TMD12AFO-HD (MDrive) High Split Ratio
 TMD12AO (MDrive) High Split Range
 TMD13AFO-HD (MDrive) High Split Range
 TMD13AO (MDrive) High Split Range
 TMD14AFO-HD (MDrive) High Split Range
 TMD14AO (MDrive) High Split Range

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

512XRASW-V-XY	258 C	Opp	115	Furnished
512XRASX-V-XK	258 C	Opp	115	Furnished
512XRASX-V-XV	258 C	Opp	115	Furnished
524XTASX-V-*	300 C	Eng	154	Furnished
524XVASX-V-*	258 C	Eng	207	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

Mack

Mack Notes**MAK-16**

1. With gear selector lever in low range for the front portion of compound transmissions, multiply speeds shown by the factor listed for the transmission: TRDXL-107, DX-107 multiply by .595; TRDXL-1071, DX-1071 multiply by .350. This feature can cause insufficient PTO speed, particularly in spreading applications.
2. With gear selector lever in high range for the front portion of compound transmissions, multiply speed shown by the factor listed for the transmission: TRDXL-1070, DX-1070, TRDXL-10780, DX-10780 multiply by 1.62. This feature can cause excessive PTO speeds.
3. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
4. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

MAK-18

1. All speeds shown are with transmission in 5th speed. For PTO speeds with the main transmission in all other gears, multiply speeds shown by the following: for 1st - .116, 2nd - .200, 3rd - .353, 4th - .603.
2. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

MAK-19

1. All speeds shown are with transmission in 5th speed. For PTO speeds with the main transmission in all other gears, multiply speeds shown by the following: for 1st - .116, 2nd - .200, 3rd - .353, 4th - .603.
2. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
3. The 812 Series PTO will not mount on this transmission because the output shaft interferes with the reverse idler buldge.
4. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

MAK-20

1. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

MAK-21

1. All speeds figured with transmission in 4th speed direct. For PTO speeds in other transmission gears, multiply speeds shown by following:
1st. = .1907, 2nd. = .3282, 3rd. = .5780, 5th. = 1.6744.
2. 489 Series - The AK & XK output flanges can not be used with the A & C ratios due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

MAK-22

1. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

MAK-23

1. Using the 328554-2X adapter will permit PTO installation on trucks with set back front axle.
2. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

MAK-24

1. Using the 328554-2X adapter will permit PTO installation on trucks with set back front axle.
2. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

Mack Notes**MAK-25**

1. Using the 328554-2X adapter will permit PTO installation on trucks with set back front axle.
 2. All the applications shown are for the front box.
 3. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
 4. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only
-

MAK-26

1. On the R.H. side the 328554-2X adapter can be used with an AH PTO to change rotation.
 2. All speeds shown are with the main transmission in 5th speed. For PTO speeds with the main transmission in all other gears, divide the speeds shown by the following percentages: 1st. = 8.76, 2nd. = 5.995, 3rd. = 2.895, 4th. = 1.674, Reverse = 8.99
 3. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
 4. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only
-

MAK-27

1. This application is for the rear box only. For front box applications, see application no. MAK-23.
 2. With main box in reverse, the direction of rotation on the PTO output shaft will change.
 3. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
 4. All speeds shown are with the transmission in 7th speed, or direct, and rear box in neutral. For speeds with main box in all the gear positions available, see the PTO speed chart on last MAK-27 page.
 5. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only
-

MAK-28

1. All speeds shown are with the main transmission in 4th.,10th.,or 11th speed, and rear box in neutral. For speeds with main transmission in other gears, multiply speeds shown as follows: 1st. = .323; 2nd.,6th. & 7th. = .515; 3rd.,8th., & 9th. = .720; 5th.,12th., & 13th = 1.405.
 2. With main box in reverse the direction of rotation on the PTO output shaft will change.
 3. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
 4. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only
-

MAK-29

1. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only
-

MAK-30

1. The XK flange cannot be used with the L and U ratio because of interference with the transmission.
-

MAK-31

1. For PTO output speeds on the T2110B Main Section, see Mack application MAK-24.
 2. The Rear Section PTO speeds are shown with the Main Section in 5th gear or Direct and the Rear Section in Neutral.
 3. For all other Main Section gear shift positions use the following multiplication factors to determine your PTO output speeds: 1st gear = .255, 2nd & 7th gear = .450, 3rd & 8th gear = .590, 4th & 9th gear = .629 and 6th & 11th gear = 1.067.
 4. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only
-

MAK-32

1. Using the 328554-2X adapter will permit PTO installation on trucks with set back front axle.
2. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

Mack

Mack Notes

MAK-33

1. The 54 tooth gear in the transmission is located rearward of the vertical center line by .320.
2. The 442/489 R, S, U, W, X ratios and 880 R and T ratios cannot be mounted on this transmission because the OD of the ratio gear will interfere with the OD of the 54 tooth PTO drive gear in the transmission.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

MAK-34

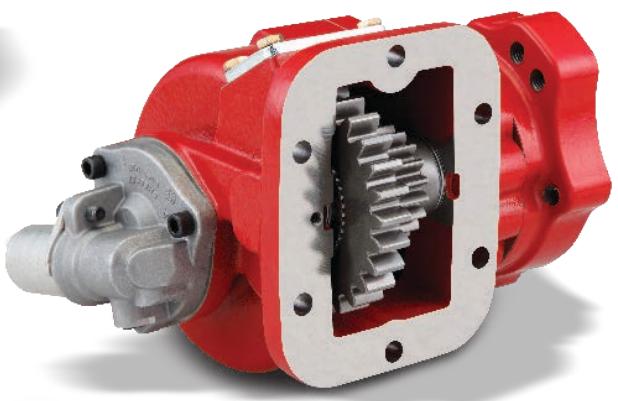
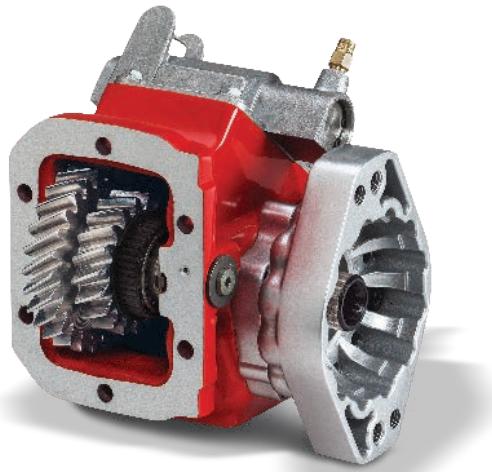
1. Connection to Volvo/Mack system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package. Vehicle ECU must be programmed by dealer for PTO operation.
2. PTO must be ordered with the V shift option and use the OE factory supplied in-dash PTO switch.
3. 511/523 Rear Mount - The Adapter 329735X is furnished with the PTO.
4. 524 Rear Mount - The adapter 329980X is furnished with the PTO

MAK-34H

1. Connection to Volvo/Mack system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package.
2. PTO must be ordered with the V shift option and use the OE factory supplied in-dash PTO switch.
3. 511/523 Rear Mount - The Adapter 329735X is furnished with the PTO.
4. 524 Rear Mount - The adapter 329980X is furnished with the PTO

Mack

MERCEDES/DAIMLER/DETROIT



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

MERCEDES/DAIMLER/DETROIT TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
AMT3-660-60A (Automated Manual)	M/B-6	6	R53
ATM3-520-6DA (Automated Manual)	M/B-5	6	R45
DT12-DH (DT12-DA, G 281-12)	M/B-11A	12	CS
DT12-DHE (DT12-DC, G 271-12)	M/B-13	12	CS-B30
DT12-DHL (DT12-DB, G 211-12)	M/B-11B	12	CS
DT12-DV (DT12-DC, G 271-12)	M/B-13	12	CS-B30
DT12-OH (DT12-OA, G 330-12)	M/B-10A	12	CS
DT12-OHE (DT12-OC, G 320-12)	M/B-12	12	CS-B39
DT12-OHL (DT12-OB, G 230-12)	M/B-10B	12	CS
DT12-OV (DT12-OC, G 320-12)	M/B-12	12	CS-B39
DT12-OVX (DT12-OD, G 340-12)	M/B-14	12	CS-B40
G33	M/B-7	5	R43
G56 (See DDG-2 for Dodge/Sterling/RAM Trucks)	M/B-8	6	L52
G85	M/B-6	6	R53
MBT520-6DA (AGS - Automated Gear Shift)	M/B-5	6	R45
MBT520S-6D	M/B-5	6	R45
MBT660-60A (AGS - Automated Gear Shift)	M/B-6	6	R53
MBT660S-60	M/B-6	6	R53



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershift
For transmissions not listed, contact your authorized Chelsea Distributor.

M/B-5

MERCEDES/DAIMLER/DETROIT

CHELSEA®

ATM3-520-6DA (Automated Manual)
 MBT520-6DA (AGS - Automated Gear Shift)
 MBT520S-6D

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear REAR of Centerline
 45 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
 1.4240" (36.1696MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442ZLJGX-*4 (1)	250 I	Opp	54	7170-72X
442LQJGX-*4 (1)	225 I	Opp	58	7170-72X
442LRJGX-*4 (1)	225 I	Opp	67	7170-72X
442LSJGX-*4 (1)	200 I	Opp	79	7170-72X
442ZUJGX-*4 (1)	195 I	Opp	95	7170-72X
442ZWJGX-*4 (1)	175 I	Opp	111	7170-72X
442ZXJGX-*4 (1)	140 I	Opp	132	7170-72X

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CHELSEA®**MERCEDES/DAIMLER/DETROIT****M/B-6**

AMT3-660-60A (Automated Manual)
G85
MBT660-60A (AGS - Automated Gear Shift)
MBT660S-60

RIGHT SIDE ONLY**TRANSMISSION GEAR DATA:**

R.S. 06-BOLT Opening Gear REAR of Centerline
53 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.3380" (33.9852MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442GLJHX-*4 (1)	250 I	Opp	84	Furnished
442GQJHX-*4 (1)	225 I	Opp	90	Furnished
442GRJHX-*4 (1)	225 I	Opp	104	Furnished
442GSJHX-*4 (1)	200 I	Opp	124	Furnished
442GUJHX-*4 (1)	195 I	Opp	148	Furnished
442GWJHX-*4 (1)	175 I	Opp	174	Furnished
442GXJHX-*4 (1)	140 I	Opp	206	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1257

Mercedes/Daimler/Detroit

M/B-7

MERCEDES/DAIMLER/DETROIT

CHELSEA®

G33

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
 R.S. 06-BOLT Opening Gear FORWARD of Centerline
 43 Teeth - R.H. HELIX
PITCH LINE TO APERTURE FACE:
 0.9589" (24.3600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442KLKCX-*3 (1)	250 I	Opp	56	7-A-165(T)	7170-79X
442KQKCX-*3 (1)	225 I	Opp	60	7-A-165(T)	7170-79X
442KRKCX-*3 (1)	225 I	Opp	69	7-A-165(T)	7170-79X
442KSKCX-*3 (1)	200 I	Opp	83	7-A-165(T)	7170-79X
442KUKCX-*3 (1)	195 I	Opp	98	7-A-165(T)	7170-79X
442KWKCX-*3 (1)	175 I	Opp	116	7-A-165(T)	7170-79X
442KXKCX-*3 (1)	140 I	Opp	137	7-A-165(T)	7170-79X

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1341

CHELSEA®**MERCEDES/DAIMLER/DETROIT****M/B-8**

G56 (See DDG-2 for Dodge/Sterling/RAM Trucks)

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**L.S. 06-BOLT Opening Gear REAR of Centerline
52 Teeth - R.H. HELIX**PITCH LINE TO APERTURE FACE:**
1.3760" (35.0000MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd	Rev					I / C ↑	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442LLKHX-*6 (1)	250 I	Opp	67	7170-72X
442LQKHX-*6 (1)	225 I	Opp	72	7170-72X
442LRKHX-*6 (1)	225 I	Opp	84	7170-72X
442LSKHX-*6 (1)	200 I	Opp	100	7170-72X
442LUKHX-*6 (1)	195 I	Opp	119	7170-72X
442LWKHX-*6 (1)	175 I	Opp	140	7170-72X
442LXKHX-*6 (1)	140 I	Opp	165	7170-72X

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1343

Mercedes/Daimler/Detroit

M/B-10A

MERCEDES/DAIMLER/DETROIT

CHELSEA®

DT12-OH (DT12-OA, G 330-12)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

0" (0MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT

524XMDAX-*.***	300	Eng	103	Furnished	Furnished
524XTDAX-*.***	300	Eng	135	Furnished	Furnished
524XUDAX-*.***	300	Eng	149	Furnished	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: The default data code for the DT12 PTO is "split low" upon PTO activation. Speeds are shown in Low Split. For High Split multiply speed shown by 1.289.

CAUTION: Included shims for 330025X input adapter kit are required for installation.

CAUTION: Maximum allowable yoke swing diameter is 180 mm. There is suitable clearance between the 524 Series PTO and the Meritor RPL35 flange however the RPL25 yoke prohibits mounting a 524 PTO. 524 Series PTOs for this application ship with a sculpted housing.

CAUTION: The maximum allowable bending moment for direct mounted pumps is 354 lb-inch (29.5 lb-ft) [40 Nm] w/o bracket. Refer to DT12 PTO Installation Guide DDC-ENG-MAN-0001.

CHELSEA®**MERCEDES/DAIMLER/DETROIT****M/B-10B**

DT12-OHL (DT12-OB, G 230-12)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

0" (0MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			
REAR MOUNT - MECHANICAL SHIFT													
							524XMDBX-*_*	300	Eng	103		Furnished	Furnished
							524XTDBX-*_*	300	Eng	135		Furnished	Furnished
							524XUDBX-*_*	300	Eng	148		Furnished	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: The default data code for the DT12 PTO is "split low" upon PTO activation. Speeds are shown in Low Split. For High Split multiply speed shown by 1.289.

CAUTION: Included shims for 330003X input adapter kit are required for installation.

CAUTION: Maximum allowable yoke swing diameter is 180 mm. There is suitable clearance between the 524 Series PTO and the Meritor RPL35 flange however the RPL25 yoke prohibits mounting a 524 PTO. 524 Series PTOs for this application ship with a sculpted housing.

CAUTION: The maximum allowable bending moment for direct mounted pumps is 354 lb-inch (29.5 lb-ft) [40 Nm] w/o bracket. Refer to DT12 PTO Installation Guide DDC-ENG-MAN-0001.

Mercedes/Daimler/Detroit

M/B-11A

MERCEDES/DAIMLER/DETROIT

CHELSEA®

DT12-DH (DT12-DA, G 281-12)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT OpeningPITCH LINE TO APERTURE FACE:
0" (0MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			
REAR MOUNT - MECHANICAL SHIFT													
524XMDAX-*-* ^{**}					300	Eng	81					Furnished	Furnished
524XTDAX-*-* ^{**}					300	Eng	106					Furnished	Furnished
524XUDAX-*-* ^{**}					300	Eng	116					Furnished	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** The default data code for the DT12 PTO is "split low" upon PTO activation. Speeds are shown in Low Split. For High Split multiply speed shown by 1.289.**CAUTION:** Included shims for 330025X input adapter kit are required for installation.**CAUTION:** Maximum allowable yoke swing diameter is 180 mm. There is suitable clearance between the 524 Series PTO and the Meritor RPL35 flange however the RPL25 yoke prohibits mounting a 524 PTO. 524 Series PTOs for this application ship with a sculpted housing.**CAUTION:** The maximum allowable bending moment for direct mounted pumps is 354 lb-inch (29.5 lb-ft) [40 Nm] w/o bracket. Refer to DT12 PTO Installation Guide DDC-ENG-MAN-0001.

CHELSEA®**MERCEDES/DAIMLER/DETROIT****M/B-11B**

DT12-DHL (DT12-DB, G 211-12)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

0" (0MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			
REAR MOUNT - MECHANICAL SHIFT													
							524XMDBX-*,**	300	Eng	81		Furnished	Furnished
							524XTDBX-*,**	300	Eng	106		Furnished	Furnished
							524XUDBX-*,**	300	Eng	116		Furnished	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: The default data code for the DT12 PTO is "split low" upon PTO activation. Speeds are shown in Low Split. For High Split multiply speed shown by 1.289.

CAUTION: Included shims for 330003X input adapter kit are required for installation.

CAUTION: Maximum allowable yoke swing diameter is 180 mm. There is suitable clearance between the 524 Series PTO and the Meritor RPL35 flange however the RPL25 yoke prohibits mounting a 524 PTO. 524 Series PTOs for this application ship with a sculpted housing.

CAUTION: The maximum allowable bending moment for direct mounted pumps is 354 lb-inch (29.5 lb-ft) [40 Nm] w/o bracket. Refer to DT12 PTO Installation Guide DDC-ENG-MAN-0001.

Mercedes/Daimler/Detroit

M/B-12

MERCEDES/DAIMLER/DETROIT

CHELSEA®

DT12-OHE (DT12-OC, G 320-12)
DT12-OV (DT12-OC, G 320-12)

BOTTOM SIDE ONLY

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear REAR of Centerline

39 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

5.2" (132.000MM)

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

0" (0MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot	Fwd					I / C †	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489DAMAX-*6 (2)	250 I	Opp	70	Furnished	Furnished
489DFMAX-*6 (3)	250 I	Opp	111	Furnished	Furnished
489DLMAX-*6 (1)	250 I	Opp	143	Furnished	Furnished
489DQMAX-*6 (1)	225 I	Opp	154	Furnished	Furnished
489DRMAX-*6 (1)	225 I	Opp	179	Furnished	Furnished
680DFMAX-*6 (10)	375 I	Opp	111	Furnished	Furnished
823DGMAX-*6 (7)	750 I	Opp	97	Furnished	Furnished
823DMMAX-*6 (8)	750 I	Opp	135	Furnished	Furnished
823DRMAX-*6 (9)	550 I	Opp	186	Furnished	Furnished
880DGMAX-*6 (4)	500 I	Opp	97	Furnished	Furnished
880DMMAX-*6 (5)	500 I	Opp	135	Furnished	Furnished
880DRMAX-*6 (6)	400 I	Opp	186	Furnished	Furnished

REAR MOUNT - MECHANICAL SHIFT

524XMDDX-*...**	300	Eng	95	Furnished	Furnished
524XTDDX-*...**	300	Eng	126	Furnished	Furnished
524XVDDX-*...**	258	Eng	170	Furnished	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION:** Effective August 2021, 489 / 680 Series with a 5 shift option (double-acting shifter) are approved for all applications.**CAUTION:** For rear mount applications only, the default data code for the DT12 PTO is "split low" upon PTO activation. Speeds are shown in Low Split. For High Split multiply speed shown by 1.289.**CAUTION:** DD inputs requires usage of supplied PTO lube kit (330057X). Failure to install this kit will result in PTO and/or transmission damage.

- (1) Input Gear Part No. 5-P-1596
- (6) Input Gear Part No. 5-P-1623
- (2) Input Gear Part No. 5-P-1605
- (7) Input Gear Part No. 5-P-1638
- (3) Input Gear Part No. 5-P-1607
- (8) Input Gear Part No. 5-P-1640
- (4) Input Gear Part No. 5-P-1619
- (9) Input Gear Part No. 5-P-1641
- (5) Input Gear Part No. 5-P-1621
- (10) Input Gear Part No. 5-P-1678

CHELSEA®**MERCEDES/DAIMLER/DETROIT****M/B-13**DT12-DHE (DT12-DC, G 271-12)
DT12-DV (DT12-DC, G 271-12)**BOTTOM SIDE ONLY****REAR SIDE ONLY****TRANSMISSION GEAR DATA:**BOT 08-BOLT Opening Gear REAR of Centerline
30 Teeth - L.H. HELIX**PITCH LINE TO APERTURE FACE:**
6" (152.143MM)**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:
0" (0MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489DCMBX-*6 (2)	250 I	Opp	69	Furnished	Furnished
489DLMBX-*6 (1)	250 I	Opp	110	Furnished	Furnished
489DQMBX-*6 (1)	225 I	Opp	119	Furnished	Furnished
489DRMBX-*6 (1)	225 I	Opp	138	Furnished	Furnished
489DSMBX-*6 (1)	200 I	Opp	164	Furnished	Furnished
489DUMBX-*6 (1)	195 I	Opp	195	Furnished	Furnished
680DQMBX-*6 (9)	375 I	Opp	119	Furnished	Furnished
823DMMBX-*6 (5)	750 I	Opp	103	Furnished	Furnished
823DRMBX-*6 (6)	550 I	Opp	143	Furnished	Furnished
823DTMBX-*6 (7)	500 I	Opp	184	Furnished	Furnished
880DMMBX-*6 (3)	500 I	Opp	103	Furnished	Furnished
880DQMBX-*6 (4)	450 I	Opp	121	Furnished	Furnished
880DTMBX-*6 (8)	350 I	Opp	184	Furnished	Furnished

REAR MOUNT - MECHANICAL SHIFT

524XMDDX-* [†] **	300	Eng	86	Furnished	Furnished
524XTDDX-* [†] **	300	Eng	114	Furnished	Furnished
524XVDDX-* [†] **	258	Eng	154	Furnished	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION:** Effective August 2021, 489 / 680 Series with a 5 shift option (double-acting shifter) are approved for all applications.**CAUTION:** For rear mount applications only, the default data code for the DT12 PTO is "split low" upon PTO activation. Speeds are shown in Low Split. For High Split multiply speed shown by 1.289.**CAUTION:** DD inputs requires usage of supplied PTO lube kit (330057X). Failure to install this kit will result in PTO and/or transmission damage.

- (1) Input Gear Part No. 5-P-1599
- (6) Input Gear Part No. 5-P-1648
- (2) Input Gear Part No. 5-P-1610
- (7) Input Gear Part No. 5-P-1649
- (3) Input Gear Part No. 5-P-1627
- (8) Input Gear Part No. 5-P-1658
- (4) Input Gear Part No. 5-P-1628
- (9) Input Gear Part No. 5-P-1679
- (5) Input Gear Part No. 5-P-1647

Mercedes/Daimler/Detroit

M/B-14

MERCEDES/DAIMLER/DETROIT

CHELSEA®

DT12-OVX (DT12-OD, G 340-12)

BOTTOM SIDE ONLY

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear REAR of Centerline
40 Teeth - L.H. HELIXPITCH LINE TO APERTURE FACE:
5.2" (131.068MM)

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:
0" (0MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489DAMCX-*6 (2)	250 I	Opp	68	Furnished	Furnished
489DFMCX-*6 (3)	250 I	Opp	108	Furnished	Furnished
489DLMCX-*6 (1)	250 I	Opp	140	Furnished	Furnished
489DQMCX-*6 (1)	225 I	Opp	151	Furnished	Furnished
489DRMCX-*6 (1)	225 I	Opp	175	Furnished	Furnished
489DSMCX-*6 (1)	200 I	Opp	208	Furnished	Furnished
680DFMCX-*6 (10)	375 I	Opp	108	Furnished	Furnished
823DGMCX-*6 (7)	750 I	Opp	97	Furnished	Furnished
823DMMCX-*6 (8)	750 I	Opp	133	Furnished	Furnished
823DRMCX-*6 (9)	550 I	Opp	184	Furnished	Furnished
880DGMCX-*6 (4)	500 I	Opp	97	Furnished	Furnished
880DMMCX-*6 (5)	500 I	Opp	133	Furnished	Furnished
880DRMCX-*6 (6)	400 I	Opp	184	Furnished	Furnished

REAR MOUNT - MECHANICAL SHIFT

524XMDDX-* ^{**}	300	Eng	97	Furnished	Furnished
524XTDDX-* ^{**}	300	Eng	129	Furnished	Furnished
524XVDDX-* ^{**}	258	Opp	175	Furnished	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Effective August 2021, 489 / 680 Series with a 5 shift option (double-acting shifter) are approved for all applications.**CAUTION:** For rear mount applications only, the default data code for the DT12 PTO is "split low" upon PTO activation. Speeds are shown in Low Split. For High Split multiply speed shown by 1.289.**CAUTION:** DD inputs requires usage of supplied PTO lube kit (330057X). Failure to install this kit will result in PTO and/or transmission damage.

- (1) Input Gear Part No. 5-P-1601
- (6) Input Gear Part No. 5-P-1635
- (2) Input Gear Part No. 5-P-1613
- (7) Input Gear Part No. 5-P-1652
- (3) Input Gear Part No. 5-P-1615
- (8) Input Gear Part No. 5-P-1654
- (4) Input Gear Part No. 5-P-1631
- (9) Input Gear Part No. 5-P-1655
- (5) Input Gear Part No. 5-P-1633
- (10) Input Gear Part No. 5-P-1680

Mercedes/Daimler/Detroit Notes

M/B-5

1. PTO Right Side Only for transmission models AMT3-520-6DA, MBT520-6DA and MBT520-6D. No Rear Mount Option.

M/B-6

1. PTO Right Side Only for transmission models AMT3-660-6OA, MBTT660-6OA and MBT660S-6O. No Rear Mount Option.

M/B-10B

1. 524 Series DB input option includes 330003X input adapter kit.
2. Rear mount provisions must be ordered from factory and enabled for the chassis.

M/B-10A

1. 524 Series DA input option includes 330025X input adapter kit.
2. Rear mount provisions must be ordered from factory and enabled for the chassis.

M/B-11A

1. 524 Series DA input option includes 330025X input adapter kit.
2. Rear mount provisions must be ordered from factory and enabled for the chassis.

M/B-11B

1. 524 Series DB input option includes 330003X input adapter kit.
2. Rear mount provisions must be ordered from factory and enabled for the chassis.

M/B-12

1. 489 Series MA input option includes 329932X input adapter kit.
2. 680, 880, and 823 Series MA input option includes 330032X input adapter kit.
3. 524 Series DD input option includes 330061X input adapter kit.
4. Included shims for 330061X input adapter kit are NOT REQUIRED for installation.
5. Rear mount provisions must be ordered from factory and enabled for the chassis.
6. For simultaneous operation of dual PTOs refer to DT12 PTO Installation Guide DDC-ENG-MAN-0001.

M/B-13

1. 489 Series MB input option includes 329954X input adapter kit.
2. 680, 880 and 823 Series MB input option includes 330033X input adapter kit.
3. 524 Series DD input option includes 330061X input adapter kit.
4. Included shims for 330061X input adapter kit are NOT REQUIRED for installation.
5. Rear mount provisions must be ordered from factory and enabled for the chassis.
6. For simultaneous operation of dual PTOs refer to DT12 PTO Installation Guide DDC-ENG-MAN-0001.

M/B-14

1. 489 Series MC input option includes 329955X input adapter kit.
2. 680, 880 and 823 Series MC input option includes 330034X input adapter kit.
3. 524 Series DD input option includes 330061X input adapter kit.
4. Included shims for 330061X input adapter kit are NOT REQUIRED for installation.
5. Rear mount provisions must be ordered from factory and enabled for the chassis.
6. For simultaneous operation of dual PTOs refer to DT12 PTO Installation Guide DDC-ENG-MAN-0001.

NOTES



MERITOR/ROCKWELL



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

 **WARNING:** This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
M-11F10A-E11	RKW-1	10	R45-B45
M-11F10A-S11	RKW-1	10	R45-B45
M-11F9A-E11	RKW-1	9	R45-B45
M-11F9A-S11	RKW-1	9	R45-B45
M-11G10A-D11	RKW-1	10	R45-B45
M-11G10A-E11	RKW-1	10	R45-B45
M-11G10A-M11	RKW-1	10	R45-B45
M-11G10A-S11	RKW-1	10	R45-B45
M-11G9A-D11	RKW-1	9	R45-B45
M-11G9A-E11	RKW-1	9	R45-B45
M-11G9A-M11	RKW-1	9	R45-B45
M-11G9A-S11	RKW-1	9	R45-B45
M-12F10A-E12	RKW-1	10	R45-B45
M-12F10A-S12	RKW-1	10	R45-B45
M-12F9A-E12	RKW-1	9	R45-B45
M-12F9A-S12	RKW-1	9	R45-B45
M-12G10A-D12	RKW-1	10	R45-B45
M-12G10A-E12	RKW-1	10	R45-B45
M-12G10A-M12	RKW-1	10	R45-B45
M-12G10A-S12	RKW-1	10	R45-B45
M-12G9A-D12	RKW-1	9	R45-B45
M-12G9A-E12	RKW-1	9	R45-B45
M-12G9A-M12	RKW-1	9	R45-B45
M-12G9A-S12	RKW-1	9	R45-B45
M-13F10A-E13	RKW-1	10	R45-B45
M-13F10A-S13	RKW-1	10	R45-B45
M-13F9A-E13	RKW-1	9	R45-B45
M-13F9A-S13	RKW-1	9	R45-B45
M-13G10A-D13	RKW-1	10	R45-B45
M-13G10A-E13	RKW-1	10	R45-B45
M-13G10A-M13	RKW-1	10	R45-B45
M-13G10A-S13	RKW-1	10	R45-B45
M-13G9A-D13	RKW-1	9	R45-B45
M-13G9A-E13	RKW-1	9	R45-B45
M-13G9A-M13	RKW-1	9	R45-B45
M-13G9A-S13	RKW-1	9	R45-B45



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Meritor/Rockwell

MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
M-13Z12A-A13 (Rear Mount PTO)	ZFM-5	12	CS
M-13Z12A-A14 (Rear Mount PTO)	ZFM-5	12	CS
M-14F10A-E14	RKW-1	10	R45-B45
M-14F10A-M16	RKW-1	10	R45-B45
M-14F10A-S14	RKW-1	10	R45-B45
M-14F10A-S15	RKW-1	10	R45-B45
M-14F9A-E14	RKW-1	9	R45-B45
M-14F9A-S14	RKW-1	9	R45-B45
M-14G10A-D14	RKW-1	10	R45-B45
M-14G10A-E14	RKW-1	10	R45-B45
M-14G10A-E16	RKW-1	10	R45-B45
M-14G10A-M14	RKW-1	10	R45-B45
M-14G10A-M16	RKW-1	10	R45-B45
M-14G10A-S14	RKW-1	10	R45-B45
M-14G9A-D14	RKW-1	9	R45-B45
M-14G9A-E14	RKW-1	9	R45-B45
M-14G9A-M14	RKW-1	9	R45-B45
M-14G9A-S14	RKW-1	9	R45-B45
M-14Z12A-A14 (Rear Mount PTO)	ZFM-5	12	CS
M-15F10A-E15	RKW-1	10	R45-B45
M-15F10A-S15	RKW-1	10	R45-B45
M-15G10A-D15	RKW-1	10	R45-B45
M-15G10A-E15	RKW-1	10	R45-B45
M-15G10A-M15	RKW-1	10	R45-B45
M-15G10A-S15	RKW-1	10	R45-B45
MO-11F10A-S11	RKW-2	10	R45-B45
MO-11F10C-E11	RKW-4	10	R45-B45
MO-11F10C-S11	RKW-4	10	R45-B45
MO-11F9B-E11	RKW-3	9	R45-B45
MO-11F9B-S11	RKW-3	9	R45-B45
MO-11G10A-D11	RKW-2	10	R45-B45
MO-11G10A-E11	RKW-2	10	R45-B45
MO-11G10A-M11	RKW-2	10	R45-B45
MO-11G10A-S11	RKW-2	10	R45-B45
MO-11G10C-D11	RKW-4	10	R45-B45
MO-11G10C-E11	RKW-4	10	R45-B45



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
MO-11G10C-M11	RKW-4	10	R45-B45
MO-11G10C-S11	RKW-4	10	R45-B45
MO-11G9B-D11	RKW-3	9	R45-B45
MO-11G9B-E11	RKW-3	9	R45-B45
MO-11G9B-M11	RKW-3	9	R45-B45
MO-11G9B-S11	RKW-3	9	R45-B45
MO-12F10A-E12	RKW-2	10	R45-B45
MO-12F10A-S12	RKW-2	10	R45-B45
MO-12F10C-E12	RKW-4	10	R45-B45
MO-12F10C-S12	RKW-4	10	R45-B45
MO-12F9A-E12	RKW-2	9	R45-B45
MO-12F9A-S12	RKW-2	9	R45-B45
MO-12F9B-E12	RKW-3	9	R45-B45
MO-12F9B-S12	RKW-3	9	R45-B45
MO-12G10A-D12	RKW-2	10	R45-B45
MO-12G10A-E12	RKW-2	10	R45-B45
MO-12G10A-M12	RKW-2	10	R45-B45
MO-12G10A-S12	RKW-2	10	R45-B45
MO-12G10C-D12	RKW-4	10	R45-B45
MO-12G10C-E12	RKW-4	10	R45-B45
MO-12G10C-M12	RKW-4	10	R45-B45
MO-12G10C-S12	RKW-4	10	R45-B45
MO-12G9A-D12	RKW-2	9	R45-B45
MO-12G9A-E12	RKW-2	9	R45-B45
MO-12G9A-M12	RKW-2	9	R45-B45
MO-12G9A-S12	RKW-2	9	R45-B45
MO-12G9B-D12	RKW-3	9	R45-B45
MO-12G9B-E12	RKW-3	9	R45-B45
MO-12G9B-M12	RKW-3	9	R45-B45
MO-12G9B-S12	RKW-3	9	R45-B45
MO-13F10A-E13	RKW-2	10	R45-B45
MO-13F10A-S13	RKW-2	10	R45-B45
MO-13F10C-E13	RKW-4	10	R45-B45
MO-13F10C-S13	RKW-4	10	R45-B45
MO-13F9A-E13	RKW-2	9	R45-B45
MO-13F9A-S13	RKW-2	9	R45-B45



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Meritor/Rockwell

MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
MO-13F9B-E13	RKW-3	9	R45-B45
MO-13F9B-S13	RKW-3	9	R45-B45
MO-13G10A-D13	RKW-2	10	R45-B45
MO-13G10A-E13	RKW-2	10	R45-B45
MO-13G10A-M13	RKW-2	10	R45-B45
MO-13G10A-S13	RKW-2	10	R45-B45
MO-13G10C-D13	RKW-4	10	R45-B45
MO-13G10C-E13	RKW-4	10	R45-B45
MO-13G10C-M13	RKW-4	10	R45-B45
MO-13G10C-S13	RKW-4	10	R45-B45
MO-13G9A-D13	RKW-2	9	R45-B45
MO-13G9A-E13	RKW-2	9	R45-B45
MO-13G9A-M13	RKW-2	9	R45-B45
MO-13G9A-S13	RKW-2	9	R45-B45
MO-13G9B-D13	RKW-3	9	R45-B45
MO-13G9B-E13	RKW-3	9	R45-B45
MO-13G9B-M13	RKW-3	9	R45-B45
MO-13G9B-S13	RKW-3	9	R45-B45
MO-13Z12A-A13 (Rear Mount PTO)	ZFM-6	12	CS
MO-13Z12A-A14 (Rear Mount PTO)	ZFM-6	12	CS
MO-13Z16A-A13 (Rear Mount PTO)	ZFM-7	16	CS
MO-13Z16A-A14 (Rear Mount PTO)	ZFM-7	16	CS
MO-14F10A-E14	RKW-2	10	R45-B45
MO-14F10A-E16	RKW-2	10	R45-B45
MO-14F10A-M16	RKW-2	10	R45-B45
MO-14F10A-S14	RKW-2	10	R45-B45
MO-14F10A-S16	RKW-2	10	R45-B45
MO-14F10C-E14	RKW-4	10	R45-B45
MO-14F10C-E16	RKW-4	10	R45-B45
MO-14F10C-M16	RKW-4	10	R45-B45
MO-14F10C-S14	RKW-4	10	R45-B45
MO-14F10C-S16	RKW-4	10	R45-B45
MO-14F9A-E14	RKW-2	9	R45-B45
MO-14F9A-S14	RKW-2	9	R45-B45
MO-14F9B-E14	RKW-3	9	R45-B45
MO-14F9B-S14	RKW-3	9	R45-B45



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
MO-14G10A-D14	RKW-2	10	R45-B45
MO-14G10A-E14	RKW-2	10	R45-B45
MO-14G10A-E16	RKW-2	10	R45-B45
MO-14G10A-M14	RKW-2	10	R45-B45
MO-14G10A-M16	RKW-2	10	R45-B45
MO-14G10A-S14	RKW-2	10	R45-B45
MO-14G10A-S16	RKW-2	10	R45-B45
MO-14G10C-D14	RKW-4	10	R45-B45
MO-14G10C-E14	RKW-4	10	R45-B45
MO-14G10C-E16	RKW-4	10	R45-B45
MO-14G10C-M14	RKW-4	10	R45-B45
MO-14G10C-M16	RKW-4	10	R45-B45
MO-14G10C-S14	RKW-4	10	R45-B45
MO-14G10C-S16	RKW-4	10	R45-B45
MO-14G9A-D14	RKW-2	9	R45-B45
MO-14G9A-E14	RKW-2	9	R45-B45
MO-14G9A-M14	RKW-2	9	R45-B45
MO-14G9A-S14	RKW-2	9	R45-B45
MO-14G9B-D14	RKW-3	9	R45-B45
MO-14G9B-E14	RKW-3	9	R45-B45
MO-14G9B-M14	RKW-3	9	R45-B45
MO-14G9B-S14	RKW-3	9	R45-B45
MO-14Z12A-A14 (Rear Mount PTO)	ZFM-6	12	CS
MO-14Z12A-A16 (Rear Mount PTO)	ZFM-6	12	CS
MO-14Z16A-A14 (Rear Mount PTO)	ZFM-7	16	CS
MO-14Z16A-A16 (Rear Mount PTO)	ZFM-7	16	CS
MO-15F10A-E15	RKW-2	10	R45-B45
MO-15F10A-S15	RKW-2	10	R45-B45
MO-15F10C-E15	RKW-4	10	R45-B45
MO-15F10C-S15	RKW-4	10	R45-B45
MO-15F9B-E15	RKW-3	9	R45-B45
MO-15F9B-S15	RKW-3	9	R45-B45
MO-15G10A-D15	RKW-2	10	R45-B45
MO-15G10A-E15	RKW-2	10	R45-B45
MO-15G10A-M15	RKW-2	10	R45-B45
MO-15G10A-S15	RKW-2	10	R45-B45



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Meritor/Rockwell

MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
MO-15G10C-D15	RKW-4	10	R45-B45
MO-15G10C-E15	RKW-4	10	R45-B45
MO-15G10C-M15	RKW-4	10	R45-B45
MO-15G10C-S15	RKW-4	10	R45-B45
MO-15G9B-D15	RKW-3	9	R45-B45
MO-15G9B-E15	RKW-3	9	R45-B45
MO-15G9B-M15	RKW-3	9	R45-B45
MO-15G9B-S15	RKW-3	9	R45-B45
MO-15Z12A-A15 (Rear Mount PTO)	ZFM-6	12	CS
MO-15Z12A-A16 (Rear Mount PTO)	ZFM-6	12	CS
MO-15Z16A-A15 (Rear Mount PTO)	ZFM-7	16	CS
MO-15Z16A-A16 (Rear Mount PTO)	ZFM-7	16	CS
MO-16F10A-E16	RKW-2	10	R45-B45
MO-16F10A-S16	RKW-2	10	R45-B45
MO-16F10C-E16	RKW-4	10	R45-B45
MO-16F10C-E18	RKW-4	10	R45-B45
MO-16F10C-M18	RKW-4	10	R45-B45
MO-16F10C-S16	RKW-4	10	R45-B45
MO-16F10C-S18	RKW-4	10	R45-B45
MO-16G10A-D16	RKW-2	10	R45-B45
MO-16G10A-E16	RKW-2	10	R45-B45
MO-16G10A-M16	RKW-2	10	R45-B45
MO-16G10A-S16	RKW-2	10	R45-B45
MO-16G10C-D16	RKW-4	10	R45-B45
MO-16G10C-E16	RKW-4	10	R45-B45
MO-16G10C-E18	RKW-4	10	R45-B45
MO-16G10C-M16	RKW-4	10	R45-B45
MO-16G10C-M18	RKW-4	10	R45-B45
MO-16G10C-S16	RKW-4	10	R45-B45
MO-16G10C-S18	RKW-4	10	R45-B45
MO-16Z12A-A16 (Rear Mount PTO)	ZFM-6	12	CS
MO-16Z16A-A16 (Rear Mount PTO)	ZFM-7	16	CS
RD10-145A	RKW-1	10	R45-B45
RE10-115A	RKW-1	10	R45-B45
RE10-125A	RKW-1	10	R45-B45
RE10-135A	RKW-1	10	R45-B45



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RE10-145A	RKW-1	10	R45-B45
RE10-155A	RKW-1	10	R45-B45
RE9-115A	RKW-1	9	R45-B45
RE9-125A	RKW-1	9	R45-B45
RE9-135A	RKW-1	9	R45-B45
RE9-145A	RKW-1	9	R45-B45
RE9-155A	RKW-1	9	R45-B45
REO9-115B	RKW-3	9	R45-B45
REO9-125A	RKW-2	9	R45-B45
REO9-125B	RKW-3	9	R45-B45
REO9-135A	RKW-2	9	R45-B45
REO9-135B	RKW-3	9	R45-B45
REO9-145A	RKW-2	9	R45-B45
REO9-145B	RKW-3	9	R45-B45
REO9-155B	RKW-3	9	R45-B45
REX10-115A	RKW-2	10	R45-B45
REX10-115C	RKW-4	10	R45-B45
REX10-125A	RKW-2	10	R45-B45
REX10-125C	RKW-4	10	R45-B45
REX10-135A	RKW-2	10	R45-B45
REX10-135C	RKW-4	10	R45-B45
REX10-145A	RKW-2	10	R45-B45
REX10-145C	RKW-4	10	R45-B45
REX10-155A	RKW-2	10	R45-B45
REX10-155C	RKW-4	10	R45-B45
REX10-165A	RKW-2	10	R45-B45
REX10-165C	RKW-4	10	R45-B45
REX9-115B	RKW-3	9	R45-B45
REX9-115R	RKW-3	9	R45-B45
REX9-125A	RKW-2	9	R45-B45
REX9-125B	RKW-3	9	R45-B45
REX9-125R	RKW-3	9	R45-B45
REX9-135A	RKW-2	9	R45-B45
REX9-135B	RKW-3	9	R45-B45
REX9-135R	RKW-3	9	R45-B45
REX9-145A	RKW-2	9	R45-B45



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Meritor/Rockwell

MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
REX9-145B	RKW-3	9	R45-B45
REX9-145R	RKW-3	9	R45-B45
REX9-155B	RKW-3	9	R45-B45
RM10-115A	RKW-1	10	R45-B45
RM10-125A	RKW-1	10	R45-B45
RM10-135A	RKW-1	10	R45-B45
RM10-145A	RKW-1	10	R45-B45
RM10-155A	RKW-1	10	R45-B45
RM9-115A	RKW-1	9	R45-B45
RM9-125A	RKW-1	9	R45-B45
RM9-135A	RKW-1	9	R45-B45
RM9-145A	RKW-1	9	R45-B45
RM9-155A	RKW-1	9	R45-B45
RMO13-145A	RKW-1	13	R45-B45
RMO9-115A	RKW-2	9	R45-B45
RMO9-115B	RKW-3	9	R45-B45
RMO9-125A	RKW-2	9	R45-B45
RMO9-125B	RKW-3	9	R45-B45
RMO9-135A	RKW-2	9	R45-B45
RMO9-135B	RKW-3	9	R45-B45
RMO9-145A	RKW-2	9	R45-B45
RMO9-145B	RKW-3	9	R45-B45
RMO9-155B	RKW-3	9	R45-B45
RMX10-115A	RKW-2	10	R45-B45
RMX10-115C	RKW-4	10	R45-B45
RMX10-125A	RKW-2	10	R45-B45
RMX10-125C	RKW-4	10	R45-B45
RMX10-135A	RKW-2	10	R45-B45
RMX10-135C	RKW-4	10	R45-B45
RMX10-145A	RKW-2	10	R45-B45
RMX10-145C	RKW-4	10	R45-B45
RMX10-155A	RKW-2	10	R45-B45
RMX10-155C	RKW-4	10	R45-B45
RMX10-165A	RKW-2	10	R45-B45
RMX10-165C	RKW-4	10	R45-B45
RMX9-115B	RKW-3	9	R45-B45



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RMX9-115R	RKW-2	9	R45-B45
RMX9-125A	RKW-2	9	R45-B45
RMX9-125B	RKW-3	9	R45-B45
RMX9-125R	RKW-2	9	R45-B45
RMX9-135A	RKW-2	9	R45-B45
RMX9-135B	RKW-3	9	R45-B45
RMX9-135R	RKW-2	9	R45-B45
RMX9-145A	RKW-2	9	R45-B45
RMX9-145B	RKW-3	9	R45-B45
RMX9-145R	RKW-2	9	R45-B45
RMX9-155B	RKW-3	9	R45-B45
RS10-115A	RKW-1	10	R45-B45
RS10-125A	RKW-1	10	R45-B45
RS10-135A	RKW-1	10	R45-B45
RS10-145A	RKW-1	10	R45-B45
RS10-155A	RKW-1	10	R45-B45
RS9-115A	RKW-1	9	R45-B45
RS9-125A	RKW-1	9	R45-B45
RS9-135A	RKW-1	9	R45-B45
RS9-145A	RKW-1	9	R45-B45
RS9-155A	RKW-1	9	R45-B45
RSO9-115B	RKW-3	9	R45-B45
RSO9-125B	RKW-3	9	R45-B45
RSO9-135B	RKW-3	9	R45-B45
RSO9-145B	RKW-3	9	R45-B45
RSO9-155B	RKW-3	9	R45-B45
RSX10-115A	RKW-2	10	R45-B45
RSX10-115C	RKW-4	10	R45-B45
RSX10-125A	RKW-2	10	R45-B45
RSX10-125C	RKW-4	10	R45-B45
RSX10-135A	RKW-2	10	R45-B45
RSX10-135C	RKW-4	10	R45-B45
RSX10-145A	RKW-2	10	R45-B45
RSX10-145C	RKW-4	10	R45-B45
RSX10-155A	RKW-2	10	R45-B45
RSX10-155C	RKW-4	10	R45-B45



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Meritor/Rockwell

MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RSX10-165A	RKW-2	10	R45-B45
RSX10-165C	RKW-4	10	R45-B45
RSX9-115B	RKW-3	9	R45-B45
RSX9-115C	RKW-3	9	R45-B45
RSX9-115R	RKW-3	9	R45-B45
RSX9-125A	RKW-2	9	R45-B45
RSX9-125B	RKW-3	9	R45-B45
RSX9-125C	RKW-3	9	R45-B45
RSX9-125R	RKW-2	9	R45-B45
RSX9-135A	RKW-2	9	R45-B45
RSX9-135B	RKW-3	9	R45-B45
RSX9-135C	RKW-3	9	R45-B45
RSX9-135R	RKW-2	9	R45-B45
RSX9-145A	RKW-2	9	R45-B45
RSX9-145B	RKW-3	9	R45-B45
RSX9-145C	RKW-3	9	R45-B45
RSX9-145R	RKW-2	9	R45-B45
RSX9-155B	RKW-3	9	R45-B45
RSX9-155C	RKW-3	9	R45-B45
RSX9-165C	RKW-3	9	R45-B45



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

CHELSEA®**MERITOR/ROCKWELL****RKW-1**

M-11F10A-E11	M-11G9A-D11	M-12G10A-D12
M-11F10A-S11	M-11G9A-E11	M-12G10A-E12
M-11F9A-E11	M-11G9A-M11	M-12G10A-M12
M-11F9A-S11	M-11G9A-S11	M-12G10A-S12
M-11G10A-D11	M-12F10A-E12	M-12G9A-D12
M-11G10A-E11	M-12F10A-S12	M-12G9A-E12
M-11G10A-M11	M-12F9A-E12	M-12G9A-M12
M-11G10A-S11	M-12F9A-S12	M-12G9A-S12

BOTTOM SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

0.8100" (20.5740MM)

TRANSMISSION GEAR DATA:R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	63	7-A-032(P)(46)	328564X	Furnished	221XCAHX-*3	250 I	Opp	63	7-A-032(46)	Furnished
221ZEAHX-*3	250 I	Opp	73		328564X	Furnished	221XEAHX-*3	250 I	Opp	73		Furnished
489XAAHX-*5 (12)	250 I	Opp	56			Furnished	442XAAHX-*3 (12)	250 I	Opp	56		Furnished
489XCAHX-*5 (13)	250 I	Opp	71			Furnished	442XBAHX-*3 (18)	250 I	Eng	56		Furnished
489XFAHX-*5 (2)	250 I	Opp	88			Furnished	442XCAHX-*3 (13)	250 I	Opp	71		Furnished
489XHAHX-*5 (15)	250 I	Opp	102			Furnished	442XFAHX-*3 (2)	250 I	Opp	88		Furnished
489XLAHX-*5 (1)	250 I	Opp	114			Furnished	442XHAHX-*3 (15)	250 I	Opp	102		Furnished
489XQAHX-*5 (1)	225 I	Opp	123			Furnished	442XLAHX-*3 (1)	250 I	Opp	114		Furnished
489XRAHX-*5 (1)	225 I	Opp	142			Furnished	442XQAHX-*3 (1)	225 I	Opp	123		Furnished
489XSAHX-*5 (1)	200 I	Opp	169			Furnished	442XRAHX-*3 (1)	225 I	Opp	142		Furnished
489XUAHX-*5 (1)	195 I	Opp	202			Furnished	442XSAHX-*3 (1)	200 I	Opp	169		Furnished
489XWAHX-*5 (1)	175 I	Opp	237			Furnished	442XUAHX-*3 (1)	195 I	Opp	201		Furnished
489XXAHX-*5 (1)	140 I	Opp	281			Furnished	442XWAHX-*3 (1)	175 I	Opp	237		Furnished
680XFAHX-*3 (10)	375 I	Opp	88			Furnished	442XXAHX-*3 (1)	140 I	Opp	280		Furnished
680XHAHX-*3 (20)	375 I	Opp	102			Furnished	660XFAHX-*3 (10)	375 I	Opp	88		Furnished
680XQAHX-*3 (11)	375 I	Opp	123			Furnished	660XHAHX-*3 (15)	375 I	Opp	102		Furnished
680XRAHX-*3 (19)	350 I	Opp	142			Furnished	660XQAHX-*3 (11)	375 I	Opp	123		Furnished
680XSAHX-*3 (14)	325 I	Opp	169			Furnished	660XRAHX-*3 (19)	350 I	Opp	142		Furnished
823XBAHX-*3 (40)	500 I	Opp	60			Furnished	660XSAHX-*3 (14)	325 I	Opp	169		Furnished
823XDAHX-*3 (44)	500 I	Opp	71			Furnished						
823XGAHX-*3 (45)	500 I	Opp	77			Furnished						
823XJAHX-*3 (41)	500 I	Opp	91			Furnished						
823XMAHX-*3 (39)	500 I	Opp	107			Furnished						
823XRAHX-*3 (43)	400 I	Opp	147			Furnished						
823XTKTX-*3 (17)	350 I	Opp	177	8-A-165(46)		Furnished						
880XBAHX-*3 (3)	500 I	Opp	60			Furnished						
880XDAHX-*3 (4)	500 I	Opp	71			Furnished						
880XGAHX-*3 (9)	500 I	Opp	77			Furnished						
880XJAHX-*3 (5)	500 I	Opp	91			Furnished						
880XMAHX-*3 (6)	500 I	Opp	107			Furnished						
880XQAHX-*3 (16)	450 I	Opp	125			Furnished						

Continued on Next Page

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.



RKW-1

MERITOR/ROCKWELL

CHELSEA®

M-11F10A-E11 M-11F10A-S11 M-11F9A-E11 M-11F9A-S11 M-11G10A-D11 M-11G10A-E11 M-11G10A-M11 M-11G10A-S11	M-11G9A-D11 M-11G9A-E11 M-11G9A-M11 M-11G9A-S11 M-12F10A-E12 M-12F10A-S12 M-12F9A-E12 M-12F9A-S12	M-12G10A-D12 M-12G10A-E12 M-12G10A-M12 M-12G10A-S12 M-12G9A-D12 M-12G9A-E12 M-12G9A-M12 M-12G9A-S12
--	--	--

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XRAHX-*3 (7)	400 I	Opp	147	Furnished
880XTAHX-*3 (8)	350 I	Opp	189	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (30)	250 C	Opp	49	328481X	Furnished	272XAAJX-*3 (30)	250 C	Opp	49	Furnished
282XBAJX-*3 (21)	250 C	Opp	60	8-A-032	Furnished	272XBAJX-*3 (31)	250 C	Opp	60	Furnished
282XCAJX-*3 (22)	250 C	Opp	73	8-A-032	Furnished	272XCAJX-*3 (32)	250 C	Opp	73	Furnished
282XDAJX-*3 (23)	250 C	Opp	87	8-A-032	Furnished	272XDAJX-*3 (33)	250 C	Opp	87	Furnished
282XGAJX-*3 (24)	250 C	Opp	103	8-A-032	Furnished	272XGAJX-*3 (34)	250 C	Opp	103	Furnished
282XKAJX-*3 (25)	250 C	Opp	115	8-A-032	Furnished	272XMAJX-*3 (36)	250 C	Opp	129	Furnished
282XMAJX-*3 (26)	250 C	Opp	129	8-A-032	Furnished	272XPAJX-*3 (37)	250 C	Opp	144	Furnished
282XPAJX-*3 (27)	250 C	Opp	144	8-A-032	Furnished	272XSAJX-*3 (38)	225 C	Opp	161	Furnished
282XSAJX-*3 (28)	225 C	Opp	161	8-A-032	Furnished					
282XTAJX-*3 (29)	225 C	Opp	180	8-A-032	Furnished					

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MAAJX-*3 (30)	250 C	Opp	49	328481X	Furnished	272MAAJX-*3 (30)	250 C	Opp	49	Furnished
272MBAJX-*3 (31)	250 C	Opp	60			272MBAJX-*3 (31)	250 C	Opp	60	Furnished
272MCAJX-*3 (32)	250 C	Opp	73			272MCAJX-*3 (32)	250 C	Opp	73	Furnished
272MDAJX-*3 (33)	250 C	Opp	87			272MDAJX-*3 (33)	250 C	Opp	87	Furnished
272MGAJX-*3 (34)	250 C	Opp	103			272MGAJX-*3 (34)	250 C	Opp	103	Furnished
272MKAJX-*3 (35)	250 C	Opp	115			272MKAJX-*3 (35)	250 C	Opp	115	Furnished
272MMAJX-*3 (36)	250 C	Opp	129			272MMAJX-*3 (36)	250 C	Opp	129	Furnished
272MPAJX-*3 (37)	250 C	Opp	144			272MPAJX-*3 (37)	250 C	Opp	144	Furnished
272MSAJX-*3 (38)	225 C	Opp	161			272MSAJX-*3 (38)	225 C	Opp	161	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	60	Furnished
885XGAHX-*3 (9)	500 I	Opp	77	Furnished
885XJAHX-*3 (5)	500 I	Opp	91	Furnished
885XMAHX-*3 (6)	500 I	Opp	107	Furnished

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135(21) Input Gear Part No. 5-P-1510-11X
(22) Input Gear Part No. 5-P-1510-12X
(23) Input Gear Part No. 5-P-1510-13X
(24) Input Gear Part No. 5-P-1510-14X
(25) Input Gear Part No. 5-P-1510-15X
(26) Input Gear Part No. 5-P-1510-16X(27) Input Gear Part No. 5-P-1510-17X
(28) Input Gear Part No. 5-P-1510-18X
(29) Input Gear Part No. 5-P-1510-19X
(30) Input Gear Part No. 5-P-1510-1X
(31) Input Gear Part No. 5-P-1510-2X
(32) Input Gear Part No. 5-P-1510-3X(33) Input Gear Part No. 5-P-1510-4X
(34) Input Gear Part No. 5-P-1510-5X
(35) Input Gear Part No. 5-P-1510-6X
(36) Input Gear Part No. 5-P-1510-7X
(37) Input Gear Part No. 5-P-1510-8X
(38) Input Gear Part No. 5-P-1510-9X

CHELSEA®**MERITOR/ROCKWELL****RKW-1**

M-11F10A-E11 M-11F10A-S11 M-11F9A-E11 M-11F9A-S11 M-11G10A-D11 M-11G10A-E11 M-11G10A-M11 M-11G10A-S11	M-11G9A-D11 M-11G9A-E11 M-11G9A-M11 M-11G9A-S11 M-12F10A-E12 M-12F10A-S12 M-12F9A-E12 M-12F9A-S12	M-12G10A-D12 M-12G10A-E12 M-12G10A-M12 M-12G10A-S12 M-12G9A-D12 M-12G9A-E12 M-12G9A-M12 M-12G9A-S12
--	--	--

BOTTOM SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

0.8100" (20.5740MM)

TRANSMISSION GEAR DATA:R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd	Rev					I / C ↑	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - FORWARD & REVERSE

348XFAHX-*5 (42)	200 I	Opp	77	81	Furnished	340XFAHX-*5 (42)	200 I	Opp	77	81	7-A-140(46)	Furnished
863XBAHX-*5	500 I	Opp	60	74	Furnished							Furnished

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng	Furnished	626XAHX-3AH	250 I	Eng	Furnished
				630XAHX-3AH	250 I	Eng	Furnished
				645XAHX-3AH	250 I	Eng	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

(42) Input Gear Part No. 5-P-581
(46) Filler block furnished with PTO

Meritor/Rockwell

RKW-2

MERITOR/ROCKWELL

CHELSEA®

MO-11F10A-S11	MO-12F9A-S12	MO-12G9A-S12
MO-11G10A-D11	MO-12G10A-D12	MO-13F10A-E13
MO-11G10A-E11	MO-12G10A-E12	MO-13F10A-S13
MO-11G10A-M11	MO-12G10A-M12	MO-13F9A-E13
MO-11G10A-S11	MO-12G10A-S12	MO-13F9A-S13
MO-12F10A-E12	MO-12G9A-D12	MO-13G10A-D13
MO-12F10A-S12	MO-12G9A-E12	MO-13G10A-E13
MO-12F9A-E12	MO-12G9A-M12	MO-13G10A-M13

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8100" (20.5740MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	85	7-A-032(P)(45)	328564X	Furnished	221XCAHX-*3	250 I	Opp	85	7-A-032(45)	Furnished
221ZEAHX-*3	250 I	Opp	98		328564X	Furnished	221XEAHX-*3	250 I	Opp	98		Furnished
489XAAHX-*5 (12)	250 I	Opp	75			Furnished	442XAAHX-*3 (12)	250 I	Opp	75		Furnished
489XCAHX-*5 (13)	250 I	Opp	96			Furnished	442XBAHX-*3 (18)	250 I	Opp	75		Furnished
489XFAHX-*5 (2)	250 I	Opp	118			Furnished	442XCAHX-*3 (13)	250 I	Opp	96		Furnished
489XHAHX-*5 (15)	250 I	Opp	137			Furnished	442XFAHX-*3 (2)	250 I	Opp	118		Furnished
489XLAHX-*5 (1)	250 I	Opp	153			Furnished	442XHAX-*3 (15)	250 I	Opp	137		Furnished
489XQAHX-*5 (1)	225 I	Opp	165			Furnished	442XLAHX-*3 (1)	250 I	Opp	153		Furnished
489XRAHX-*5 (1)	225 I	Opp	191			Furnished	442XQAHX-*3 (1)	225 I	Opp	165		Furnished
489XSAHX-*5 (1)	200 I	Opp	227			Furnished	442XRAHX-*3 (1)	225 I	Opp	191		Furnished
489XUAHX-*5 (1)	195 I	Opp	270			Furnished	442XSAHX-*3 (1)	200 I	Opp	227		Furnished
489XWAHX-*5 (1)	175 I	Opp	318			Furnished	442XUAHX-*3 (1)	195 I	Opp	270		Furnished
489XXAHX-*5 (1)	140 I	Opp	376			Furnished	442XWAHX-*3 (1)	175 I	Opp	318		Furnished
680XFAHX-*3 (10)	375 I	Opp	118			Furnished	442XXAHX-*3 (1)	140 I	Opp	376		Furnished
680XHAX-*3 (20)	375 I	Opp	137			Furnished	660XFAHX-*3 (10)	375 I	Opp	118		Furnished
680XQAHX-*3 (11)	375 I	Opp	165			Furnished	660XHAX-*3 (15)	375 I	Opp	137		Furnished
680XRAHX-*3 (19)	350 I	Opp	191			Furnished	660XQAHX-*3 (11)	375 I	Opp	165		Furnished
680XSQAHX-*3 (14)	325 I	Opp	227			Furnished	660XRAHX-*3 (19)	350 I	Opp	191		Furnished
823XBAHX-*3 (39)	500 I	Opp	80			Furnished	660XSQAHX-*3 (14)	325 I	Opp	227		Furnished
823XDAHX-*3 (43)	500 I	Opp	95			Furnished						
823XGAHX-*3 (44)	500 I	Opp	103			Furnished						
823XJAHX-*3 (40)	500 I	Opp	122			Furnished						
823XMAHX-*3 (38)	500 I	Opp	143			Furnished						
823XRAHX-*3 (42)	400 I	Opp	197			Furnished						
823XTKTX-*3 (17)	350 I	Opp	239			Furnished						
880XBAHX-*3 (3)	500 I	Opp	80			Furnished						
880XDAHX-*3 (4)	500 I	Opp	95			Furnished						
880XGAHX-*3 (9)	500 I	Opp	104			Furnished						
880XJAHX-*3 (5)	500 I	Opp	122			Furnished						
880XMAHX-*3 (6)	500 I	Opp	143			Furnished						
880XQAHX-*3 (16)	450 I	Opp	167			Furnished						

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

CHELSEA®**MERITOR/ROCKWELL****RKW-2**

MO-11F10A-S11	MO-12F9A-S12	MO-12G9A-S12
MO-11G10A-D11	MO-12G10A-D12	MO-13F10A-E13
MO-11G10A-E11	MO-12G10A-E12	MO-13F10A-S13
MO-11G10A-M11	MO-12G10A-M12	MO-13F9A-E13
MO-11G10A-S11	MO-12G10A-S12	MO-13F9A-S13
MO-12F10A-E12	MO-12G9A-D12	MO-13G10A-D13
MO-12F10A-S12	MO-12G9A-E12	MO-13G10A-E13
MO-12F9A-E12	MO-12G9A-M12	MO-13G10A-M13

BOTTOM SIDE ONLY		RIGHT SIDE ONLY	
TRANSMISSION GEAR DATA: BOT 08-BOLT Opening Gear FORWARD of Centerline 45 Teeth - SPUR		TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear FORWARD of Centerline 45 Teeth - SPUR	
PITCH LINE TO APERTURE FACE: 0.8100" (20.5740MM)		PITCH LINE TO APERTURE FACE: 1.0850" (27.5600MM)	

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XRAHX-*3 (7)	400 I	Opp	197	Furnished
880XTAHX-*3 (8)	350 I	Opp	254	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (29)	250 C	Opp	66	328481X	Furnished	272XAAJX-*3 (29)	250 C	Opp	66	Furnished
282XBAJX-*3 (21)	250 C	Opp	80	8-A-032	Furnished	272XBAJX-*3 (30)	250 C	Opp	80	Furnished
282XCAJX-*3 (22)	250 C	Opp	97	8-A-032	Furnished	272XCAJX-*3 (31)	250 C	Opp	97	Furnished
282XDAJX-*3 (23)	250 C	Opp	116	8-A-032	Furnished	272XDAJX-*3 (32)	250 C	Opp	116	Furnished
282XGAJX-*3 (24)	250 C	Opp	138	8-A-032	Furnished	272XGAJX-*3 (33)	250 C	Opp	138	Furnished
282XKAJX-*3 (25)	250 C	Opp	155	8-A-032	Furnished	272XKAJX-*3 (34)	250 C	Opp	155	Furnished
282XMAJX-*3 (26)	250 C	Opp	173	8-A-032	Furnished	272XMAJX-*3 (35)	250 C	Opp	173	Furnished
282XPAJX-*3 (27)	250 C	Opp	193	8-A-032	Furnished	272XPAJX-*3 (36)	250 C	Opp	193	Furnished
282XSAXJX-*3 (28)	225 C	Opp	216	8-A-032	Furnished	272XSAXJX-*3 (37)	225 C	Opp	216	Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MAAJX-*3 (29)	250 C	Opp	66	328481X	Furnished	272MAAJX-*3 (29)	250 C	Opp	66	Furnished
272MBAJX-*3 (30)	250 C	Opp	80			272MBAJX-*3 (30)	250 C	Opp	80	Furnished
272MCAJX-*3 (31)	250 C	Opp	97			272MCAJX-*3 (31)	250 C	Opp	97	Furnished
272MDAJX-*3 (32)	250 C	Opp	116			272MDAJX-*3 (32)	250 C	Opp	116	Furnished
272MGAJX-*3 (33)	250 C	Opp	138			272MGAJX-*3 (33)	250 C	Opp	138	Furnished
272MKAJX-*3 (34)	250 C	Opp	155			272MKAJX-*3 (34)	250 C	Opp	155	Furnished
272MMAJX-*3 (35)	250 C	Opp	173			272MMAJX-*3 (35)	250 C	Opp	173	Furnished
272MPAJX-*3 (36)	250 C	Opp	193			272MPAJX-*3 (36)	250 C	Opp	193	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	80	Furnished
885XGAHX-*3 (9)	500 I	Opp	104	Furnished
885XJAHX-*3 (5)	500 I	Opp	122	Furnished
885XMAHX-*3 (6)	500 I	Opp	143	Furnished

ONE SPEED - FORWARD & REVERSE

Continued on Next Page

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (5) Input Gear Part No. 5-P-1102
- (6) Input Gear Part No. 5-P-1103
- (7) Input Gear Part No. 5-P-1104
- (8) Input Gear Part No. 5-P-1105
- (9) Input Gear Part No. 5-P-1135
- (21) Input Gear Part No. 5-P-1510-11X
- (22) Input Gear Part No. 5-P-1510-12X
- (23) Input Gear Part No. 5-P-1510-13X
- (24) Input Gear Part No. 5-P-1510-14X
- (25) Input Gear Part No. 5-P-1510-15X
- (26) Input Gear Part No. 5-P-1510-16X
- (27) Input Gear Part No. 5-P-1510-17X
- (28) Input Gear Part No. 5-P-1510-18X
- (29) Input Gear Part No. 5-P-1510-1X
- (30) Input Gear Part No. 5-P-1510-2X
- (31) Input Gear Part No. 5-P-1510-3X
- (32) Input Gear Part No. 5-P-1510-4X
- (33) Input Gear Part No. 5-P-1510-5X
- (34) Input Gear Part No. 5-P-1510-6X
- (35) Input Gear Part No. 5-P-1510-7X
- (36) Input Gear Part No. 5-P-1510-8X
- (37) Input Gear Part No. 5-P-1510-9X

Meritor/Rockwell

RKW-2

MERITOR/ROCKWELL

CHELSEA®

MO-11F10A-S11	MO-12F9A-S12	MO-12G9A-S12
MO-11G10A-D11	MO-12G10A-D12	MO-13F10A-E13
MO-11G10A-E11	MO-12G10A-E12	MO-13F10A-S13
MO-11G10A-M11	MO-12G10A-M12	MO-13F9A-E13
MO-11G10A-S11	MO-12G10A-S12	MO-13F9A-S13
MO-12F10A-E12	MO-12G9A-D12	MO-13G10A-D13
MO-12F10A-S12	MO-12G9A-E12	MO-13G10A-E13
MO-12F9A-E12	MO-12G9A-M12	MO-13G10A-M13

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8100" (20.5740MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (41)	200 I	Opp	103	108	Furnished	340XFAHX-*5 (41)	200 I	Opp	103	108	7-A-140(45)	Furnished
863XBAHX-*5	500 I	Opp	80	100	Furnished							

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng	Furnished	626XAHX-3AH	250 I	Eng	Furnished
				630XAHX-3AH	250 I	Eng	Furnished
				645XAHX-3AH	250 I	Eng	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.(41) Input Gear Part No. 5-P-581
(45) Filler block furnished with PTO

CHELSEA®**MERITOR/ROCKWELL****RKW-3**

MO-11F9B-E11	MO-12G9B-D12	MO-13G9B-M13
MO-11F9B-S11	MO-12G9B-E12	MO-13G9B-S13
MO-11G9B-D11	MO-12G9B-M12	MO-14F9B-E14
MO-11G9B-E11	MO-12G9B-S12	MO-14F9B-S14
MO-11G9B-M11	MO-13F9B-E13	MO-14G9B-D14
MO-11G9B-S11	MO-13F9B-S13	MO-14G9B-E14
MO-12F9B-E12	MO-13G9B-D13	MO-14G9B-M14
MO-12F9B-S12	MO-13G9B-E13	MO-14G9B-S14

BOTTOM SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

0.8100" (20.5740MM)

TRANSMISSION GEAR DATA:R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489XAAHX-*5 (12)	250 I	Opp	64	Furnished	221XCAHX-*3	250 I	Eng	73	7-A-032(P)(46)	329138X	Furnished
489XCAHX-*5 (13)	250 I	Opp	82	Furnished	21XEAHX-*3	250 I	Eng	84		329138X	Furnished
489XFAHX-*5 (2)	250 I	Opp	101	Furnished	442XAAHX-*3 (12)	250 I	Opp	64			Furnished
489XHAHX-*5 (15)	250 I	Opp	117	Furnished	442XBAHX-*3 (18)	250 I	Eng	64			REQUIRED
489XLAHX-*5 (1)	250 I	Opp	131	Furnished	442XCAHX-*3 (13)	250 I	Opp	82			Furnished
489XQAHX-*5 (1)	225 I	Opp	141	Furnished	442XFAHX-*3 (2)	250 I	Opp	101			Furnished
489XRAHX-*5 (1)	225 I	Opp	163	Furnished	442XHAHX-*3 (15)	250 I	Opp	117			Furnished
489XSAXH-*5 (1)	200 I	Opp	194	Furnished	442XLAHX-*3 (1)	250 I	Opp	131			Furnished
680XFAHX-*3 (10)	375 I	Opp	101	Furnished	442XOAHX-*3 (1)	225 I	Opp	141			Furnished
680XHAHX-*3 (20)	375 I	Opp	117	Furnished	442XRAHX-*3 (1)	225 I	Opp	163			Furnished
680XQAHX-*3 (11)	375 I	Opp	141	Furnished	442XSAHX-*3 (1)	200 I	Opp	194			Furnished
680XRAXH-*3 (19)	350 I	Opp	163	Furnished	660XFAHX-*3 (10)	375 I	Opp	101			Furnished
680XSAHX-*3 (14)	325 I	Opp	194	Furnished	660XHAHX-*3 (15)	375 I	Opp	117			Furnished
823XDAHX-*3 (40)	500 I	Opp	69	Furnished	660XOAHX-*3 (11)	375 I	Opp	141			Furnished
823XDAHX-*3 (44)	500 I	Opp	81	Furnished	660XRAHX-*3 (19)	350 I	Opp	163			Furnished
823XGAHX-*3 (45)	500 I	Opp	88	Furnished	660XSAHX-*3 (14)	325 I	Opp	194			Furnished
823XJAHX-*3 (41)	500 I	Opp	104	Furnished							
823XMAHX-*3 (39)	500 I	Opp	122	Furnished							
823XRAHX-*3 (43)	400 I	Opp	169	Furnished							
823XTKTX-*3 (17)	350 I	Opp	205	8-A-165(P)(46)							
880XBAHX-*3 (3)	500 I	Opp	69	Furnished							
880XDAHX-*3 (4)	500 I	Opp	82	Furnished							
880XGAHX-*3 (9)	500 I	Opp	89	Furnished							
880XJAHX-*3 (5)	500 I	Opp	104	Furnished							
880XMAHX-*3 (6)	500 I	Opp	122	Furnished							
880XQAHX-*3 (16)	450 I	Opp	143	Furnished							
880XRAXH-*3 (7)	400 I	Opp	169	Furnished							
880XTAUX-*3 (8)	350 I	Opp	218	Furnished							

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (30)	250 C	Opp	56	328481X	Furnished	272XAAJX-*3 (30)	250 C	Opp	56		
282XBAJX-*3 (21)	250 C	Opp	69	8-A-032	Furnished	272XBAJX-*3 (31)	250 C	Opp	69		Furnished

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

RKW-3

MERITOR/ROCKWELL

CHELSEA®

MO-11F9B-E11	MO-12G9B-D12	MO-13G9B-M13
MO-11F9B-S11	MO-12G9B-E12	MO-13G9B-S13
MO-11G9B-D11	MO-12G9B-M12	MO-14F9B-E14
MO-11G9B-E11	MO-12G9B-S12	MO-14F9B-S14
MO-11G9B-M11	MO-13F9B-E13	MO-14G9B-D14
MO-11G9B-S11	MO-13F9B-S13	MO-14G9B-E14
MO-12F9B-E12	MO-13G9B-D13	MO-14G9B-M14
MO-12F9B-S12	MO-13G9B-E13	MO-14G9B-S14

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8100" (20.5740MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XCAJX-*3 (22)	250 C	Opp	83	8-A-032	Furnished	272XCAJX-*3 (32)	250 C	Opp	83				Furnished
282XDAJX-*3 (23)	250 C	Opp	100	8-A-032	Furnished	272XDAJX-*3 (33)	250 C	Opp	100				Furnished
282XGAJX-*3 (24)	250 C	Opp	118	8-A-032	Furnished	272XGAJX-*3 (34)	250 C	Opp	118				Furnished
282XKAJX-*3 (25)	250 C	Opp	132	8-A-032	Furnished	272XKAJX-*3 (35)	250 C	Opp	132				Furnished
282XMAJX-*3 (26)	250 C	Opp	148	8-A-032	Furnished	272XMAJX-*3 (36)	250 C	Opp	148				Furnished
282XPAJX-*3 (27)	250 C	Opp	165	8-A-032	Furnished	272XPAJX-*3 (37)	250 C	Opp	165				Furnished
282XS AJX-*3 (28)	225 C	Opp	185	8-A-032	Furnished	272XS AJX-*3 (38)	225 C	Opp	185				Furnished
282XTAJX-*3 (29)	225 C	Opp	207	8-A-032	Furnished								Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MAAJX-*3 (30)	250 C	Opp	56	328481X	Furnished	272MAAJX-*3 (30)	250 C	Opp	56				Furnished
						272MAAJX-*3 (31)	250 C	Opp	69				Furnished
						272MCAJX-*3 (32)	250 C	Opp	83				Furnished
						272MDAJX-*3 (33)	250 C	Opp	100				Furnished
						272MGAJX-*3 (34)	250 C	Opp	118				Furnished
						272MKAJX-*3 (35)	250 C	Opp	132				Furnished
						272MMAJX-*3 (36)	250 C	Opp	148				Furnished
						272MPAJX-*3 (37)	250 C	Opp	165				Furnished
						272MSAJX-*3 (38)	225 C	Opp	185				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	69		Furnished								
85XGAHX-*3 (9)	500 I	Opp	89										
885XJAHX-*3 (5)	500 I	Opp	104										
885XMAHX-*3 (6)	500 I	Opp	122										

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (42)	200 I	Opp	88	93	Furnished	340XFAHX-*5 (42)	200 I	Opp	88	93	7-A-140(46)		Furnished
863XBAHX-*5	500 I	Opp	69	85	Furnished								

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng			Furnished	626XAHX-3AH	250 I	Eng					Furnished
-------------	-------	-----	--	--	-----------	-------------	-------	-----	--	--	--	--	-----------

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

CHELSEA®**MERITOR/ROCKWELL****RKW-3**

MO-11F9B-E11	MO-12G9B-D12	MO-13G9B-M13
MO-11F9B-S11	MO-12G9B-E12	MO-13G9B-S13
MO-11G9B-D11	MO-12G9B-M12	MO-14F9B-E14
MO-11G9B-E11	MO-12G9B-S12	MO-14F9B-S14
MO-11G9B-M11	MO-13F9B-E13	MO-14G9B-D14
MO-11G9B-S11	MO-13F9B-S13	MO-14G9B-E14
MO-12F9B-E12	MO-13G9B-D13	MO-14G9B-M14
MO-12F9B-S12	MO-13G9B-E13	MO-14G9B-S14

BOTTOM SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**
0.8100" (20.5740MM)**TRANSMISSION GEAR DATA:**R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR**PITCH LINE TO APERTURE FACE:**
1.0850" (27.5600MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

GEARED ADAPTERS

630XAHX-3AH	250 I	Eng	Furnished
645XAHX-3AH	250 I	Eng	

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.**Meritor/Rockwell**

RKW-4

MERITOR/ROCKWELL

CHELSEA®

MO-11F10C-E11	MO-12G10C-D12	MO-13G10C-M13
MO-11F10C-S11	MO-12G10C-E12	MO-13G10C-S13
MO-11G10C-D11	MO-12G10C-M12	MO-14F10C-E14
MO-11G10C-E11	MO-12G10C-S12	MO-14F10C-E16
MO-11G10C-M11	MO-13F10C-E13	MO-14F10C-M16
MO-11G10C-S11	MO-13F10C-S13	MO-14F10C-S14
MO-12F10C-E12	MO-13G10C-D13	MO-14F10C-S16
MO-12F10C-S12	MO-13G10C-E13	MO-14G10C-D14

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.8100" (20.5740MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	82	7-A-032(P)(39)	328564X	Furnished	221XCAHX-*3	250 I	Opp	82	7-A-032(P)(39)	Furnished
221ZEAHX-*3	250 I	Opp	95		328564X	Furnished	221XEAHX-*3	250 I	Opp	95		Furnished
489XAAHX-*5 (12)	250 I	Opp	72			Furnished	442XAAHX-*3 (12)	250 I	Opp	72		Furnished
489XCAHX-*5 (13)	250 I	Opp	92			Furnished	442XBAHX-*3 (18)	250 I	Eng	72		REQUIRED
489XFAHX-*5 (2)	250 I	Opp	114			Furnished	442XCAHX-*3 (13)	250 I	Opp	92		Furnished
489XHAHX-*5 (15)	250 I	Opp	132			Furnished	442XFAHX-*3 (2)	250 I	Opp	114		Furnished
489XLAHX-*5 (1)	250 I	Opp	148			Furnished	442XHAHX-*3 (15)	250 I	Opp	132		Furnished
489XQAHX-*5 (1)	225 I	Opp	159			Furnished	442XLAHX-*3 (1)	250 I	Opp	148		Furnished
489XRAHX-*5 (1)	225 I	Opp	184			Furnished	442XQAHX-*3 (1)	225 I	Opp	159		Furnished
489XSAHX-*5 (1)	200 I	Opp	219			Furnished	442XRAHX-*3 (1)	225 I	Opp	184		Furnished
489XUAHX-*5 (1)	195 I	Opp	261			Furnished	442XSAHX-*3 (1)	200 I	Opp	219		Furnished
489XWAHX-*5 (1)	175 I	Opp	307			Furnished	442XUAHX-*3 (1)	195 I	Opp	261		Furnished
489XXAHX-*5 (1)	140 I	Opp	363			Furnished	442XWAHX-*3 (1)	175 I	Opp	307		Furnished
680XFAHX-*3 (10)	375 I	Opp	114	8-A-165(39)		Furnished	442XXAHX-*3 (1)	140 I	Opp	363		Furnished
680XHAHX-*3 (20)	375 I	Opp	132			Furnished	660XFAHX-*3 (10)	375 I	Opp	114		Furnished
680XQAHX-*3 (11)	375 I	Opp	159			Furnished	660XHAHX-*3 (15)	375 I	Opp	132		Furnished
680XRAHX-*3 (19)	350 I	Opp	184			Furnished	660XQAHX-*3 (11)	375 I	Opp	159		Furnished
680XSAHX-*3 (14)	325 I	Opp	219			Furnished	660XRAHX-*3 (19)	350 I	Opp	184		Furnished
823XTKTX-*17	350 I	Opp	230			Furnished	660XSAHX-*3 (14)	325 I	Opp	219		Furnished
880XBAHX-*3 (3)	500 I	Opp	78			Furnished						
880XDAHX-*3 (4)	500 I	Opp	92			Furnished						
880XGAHX-*3 (9)	500 I	Opp	100			Furnished						
880XJAHX-*3 (5)	500 I	Opp	118			Furnished						
880XMAHX-*3 (6)	500 I	Opp	138			Furnished						
880XQAHX-*3 (16)	450 I	Opp	162			Furnished						
880XRAHX-*3 (7)	400 I	Opp	191			Furnished						
880XTAHX-*3 (8)	350 I	Opp	245									

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3 (29)	250 C	Opp	63		328481X	Furnished	272XAAJX-*3 (29)	250 C	Opp	63		Furnished
282XBAJX-*3 (21)	250 C	Opp	78	8-A-032		Furnished	272XBAJX-*3 (30)	250 C	Opp	78		Furnished
282XCAJX-*3 (22)	250 C	Opp	94	8-A-032		Furnished	272XCAJX-*3 (31)	250 C	Opp	94		Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

Chelsea

October 2022
5.12.20Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(21) Input Gear Part No. 5-P-1510-11X
(22) Input Gear Part No. 5-P-1510-12X
(29) Input Gear Part No. 5-P-1510-1X
(30) Input Gear Part No. 5-P-1510-2X
(31) Input Gear Part No. 5-P-1510-3X
(39) Filler block furnished with PTO

CHELSEA®**MERITOR/ROCKWELL****RKW-4**

MO-11F10C-E11	MO-12G10C-D12	MO-13G10C-M13
MO-11F10C-S11	MO-12G10C-E12	MO-13G10C-S13
MO-11G10C-D11	MO-12G10C-M12	MO-14F10C-E14
MO-11G10C-E11	MO-12G10C-S12	MO-14F10C-E16
MO-11G10C-M11	MO-13F10C-E13	MO-14F10C-M16
MO-11G10C-S11	MO-13F10C-S13	MO-14F10C-S14
MO-12F10C-E12	MO-13G10C-D13	MO-14F10C-S16
MO-12F10C-S12	MO-13G10C-E13	MO-14G10C-D14

BOTTOM SIDE ONLY							RIGHT SIDE ONLY						
TRANSMISSION GEAR DATA:							TRANSMISSION GEAR DATA:						
BOT 08-BOLT Opening Gear FORWARD of Centerline							R.S. 06-BOLT Opening Gear FORWARD of Centerline						
45 Teeth - SPUR							45 Teeth - SPUR						
PITCH LINE TO APERTURE FACE:							PITCH LINE TO APERTURE FACE:						
0.8100" (20.5740MM)							1.0850" (27.5600MM)						

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XDAJX-*3 (23)	250 C	Opp	112	8-A-032	Furnished	272XDAJX-*3 (32)	250 C	Opp	112				Furnished
282XGAJX-*3 (24)	250 C	Opp	134	8-A-032	Furnished	272XGAJX-*3 (33)	250 C	Opp	134				Furnished
282XKAJX-*3 (25)	250 C	Opp	149	8-A-032	Furnished	272XKAJX-*3 (34)	250 C	Opp	149				Furnished
282XMAJX-*3 (26)	250 C	Opp	167	8-A-032	Furnished	272XMAJX-*3 (35)	250 C	Opp	167				Furnished
282XPAJX-*3 (27)	250 C	Opp	187	8-A-032	Furnished	272XPAJX-*3 (36)	250 C	Opp	187				Furnished
282XSAJX-*3 (28)	225 C	Opp	209	8-A-032	Furnished	272XSAJX-*3 (37)	225 C	Opp	209				Furnished

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MAAJX-*3 (29)	250 C	Opp	63	328481X	Furnished	272MAAJX-*3 (29)	250 C	Opp	63				Furnished
						272MBAJX-*3 (30)	250 C	Opp	78				Furnished
						272MCAJX-*3 (31)	250 C	Opp	94				Furnished
						272MDAJX-*3 (32)	250 C	Opp	112				Furnished
						272MGAJX-*3 (33)	250 C	Opp	134				Furnished
						272MKAJX-*3 (34)	250 C	Opp	149				Furnished
						272MMAJX-*3 (35)	250 C	Opp	167				Furnished
						272MPAJX-*3 (36)	250 C	Opp	187				Furnished
						272MSAJX-*3 (37)	225 C	Opp	209				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	78		Furnished								
885XGAHX-*3 (9)	500 I	Opp	100		Furnished								
885XJAHX-*3 (5)	500 I	Opp	118		Furnished								
885XMAHX-*3 (6)	500 I	Opp	138		Furnished								

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (38)	200 I	Opp	100	105	Furnished	340XFAHX-*5 (38)	200 I	Opp	100	105	7-A-140(39)		Furnished
863XBAHX-*5	500 I	Opp	78	96	Furnished								

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng			Furnished	626XAHX-3AH	250 I	Eng					Furnished
						630XAHX-3AH	250 I	Eng					Furnished
						645XAHX-3AH	250 I	Eng					Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

ZFM-5

MERITOR/ROCKWELL

CHELSEA®

M-13Z12A-A14 (Rear Mount PTO)
 M-13Z12A-A13 (Rear Mount PTO)
 M-14Z12A-A14 (Rear Mount PTO)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

524XMACX-F-*	300 C	Eng	84	Furnished
524XTACX-F-*	300 C	Eng	109	Furnished
524XVACX-F-*	258 C	Eng	148	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

WARNING: Any attempt to bypass transmission control may result in damage to Freedomline Transmissions.

CAUTION: PTO installers must ensure that PTOs are integrated in a manner that permits proper transmission control of PTO engagement and disengagement.

CHELSEA®**MERITOR/ROCKWELL****ZFM-6**

MO-14Z12A-A16 (Rear Mount PTO)
 MO-15Z12A-A16 (Rear Mount PTO)
 MO-14Z12A-A14 (Rear Mount PTO)
 MO-13Z12A-A13 (Rear Mount PTO)
 MO-15Z12A-A15 (Rear Mount PTO)
 MO-16Z12A-A16 (Rear Mount PTO)
 MO-13Z12A-A14 (Rear Mount PTO)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

524XMACX-F-*	300 C	Eng	139	Furnished
524XTACX-F-*	258 C	Eng	180	Furnished
524XVACX-F-*	258 C	Eng	243	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

WARNING: Any attempt to bypass transmission control may result in damage to Freedomline Transmissions.

CAUTION: PTO installers must ensure that PTOs are integrated in a manner that permits proper transmission control of PTO engagement and disengagement.

Meritor/Rockwell

ZFM-7

MERITOR/ROCKWELL

CHELSEA®

MO-15Z16A-A15 (Rear Mount PTO)
 MO-15Z16A-A16 (Rear Mount PTO)
 MO-13Z16A-A13 (Rear Mount PTO)
 MO-14Z16A-A14 (Rear Mount PTO)
 MO-16Z16A-A16 (Rear Mount PTO)
 MO-13Z16A-A14 (Rear Mount PTO)
 MO-14Z16A-A16 (Rear Mount PTO)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (16 SPEED TRANSMISSIONS)

524XMACX-F-*	300 C	Eng	114	Furnished
524XTACX-F-*	300 C	Eng	148	Furnished
524XVACX-F-*	258 C	Eng	200	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

WARNING: Any attempt to bypass transmission control may result in damage to Freedomline Transmissions.

CAUTION: PTO installers must ensure that PTOs are integrated in a manner that permits proper transmission control of PTO engagement and disengagement.

Meritor/Rockwell Notes

RKW-1

1. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. Two Gear PTOs with Direct Mount Pumps may Not Clear the Transmission Bulge on the Right Side. Check for Clearance Before Mounting the PTO and Pump.
3. The 422XBAH MUST be used with one of the Geared Adapters Listed on the Application Page. Direction of rotation shown is the final output shaft rotation w/ Geared Adapter.
4. 272/282 Series-Must be used as an AIR Shift PTO. Order Air Shift Options Only

RKW-2

1. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. Two Gear PTOs with Direct Mount Pumps may Not Clear the Transmission Bulge on the Right Side. Check for Clearance Before Mounting the PTO and Pump.
3. The 422XBAH MUST be used with one of the Geared Adapters Listed on the Application Page. Direction of rotation shown is the final output shaft rotation w/ Geared Adapter.
4. 272/282 Series-Must be used as an AIR Shift PTO. Order Air Shift Options Only

RKW-3

1. Use constant mesh PTOs only on this application.
2. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
3. Two gear PTOs with direct mount pumps may not clear the transmission bulge on the right side. Check for clearance before mounting the PTO and pump.
4. The 422XBAH MUST be used with one of the Geared Adapters Listed on the Application Page. Direction of rotation shown is the final output shaft rotation w/ Geared Adapter.
5. 272/282 Series-Must be used as an AIR Shift PTO. Order Air Shift Options Only

RKW-4

1. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. The 422XBAH MUST be used with one of the Geared Adapters Listed on the Application Page. Direction of rotation shown is the final output shaft rotation w/ Geared Adapter.
3. 272/282 Series-Must be used as an AIR Shift PTO. Order Air Shift Options Only

ZFM-5

1. Freedomline Transmissions must control PTO engagement. The F shift option provides a ZF Meritor approved 12V / Air Shift Kit and wiring harness to connect to the transmission (ZMTEC) controller.
2. Use installation kit 328388-82X (12V / Air w/ wiring harness) to connect a 524 Series, or contact ZF Meritor (800-535-5560) for other wiring considerations or ZMTEC software questions.
3. 524 Rear Mount - Adapter Assembly 329993X is furnished with the PTO and does not need to be ordered separately.

ZFM-6

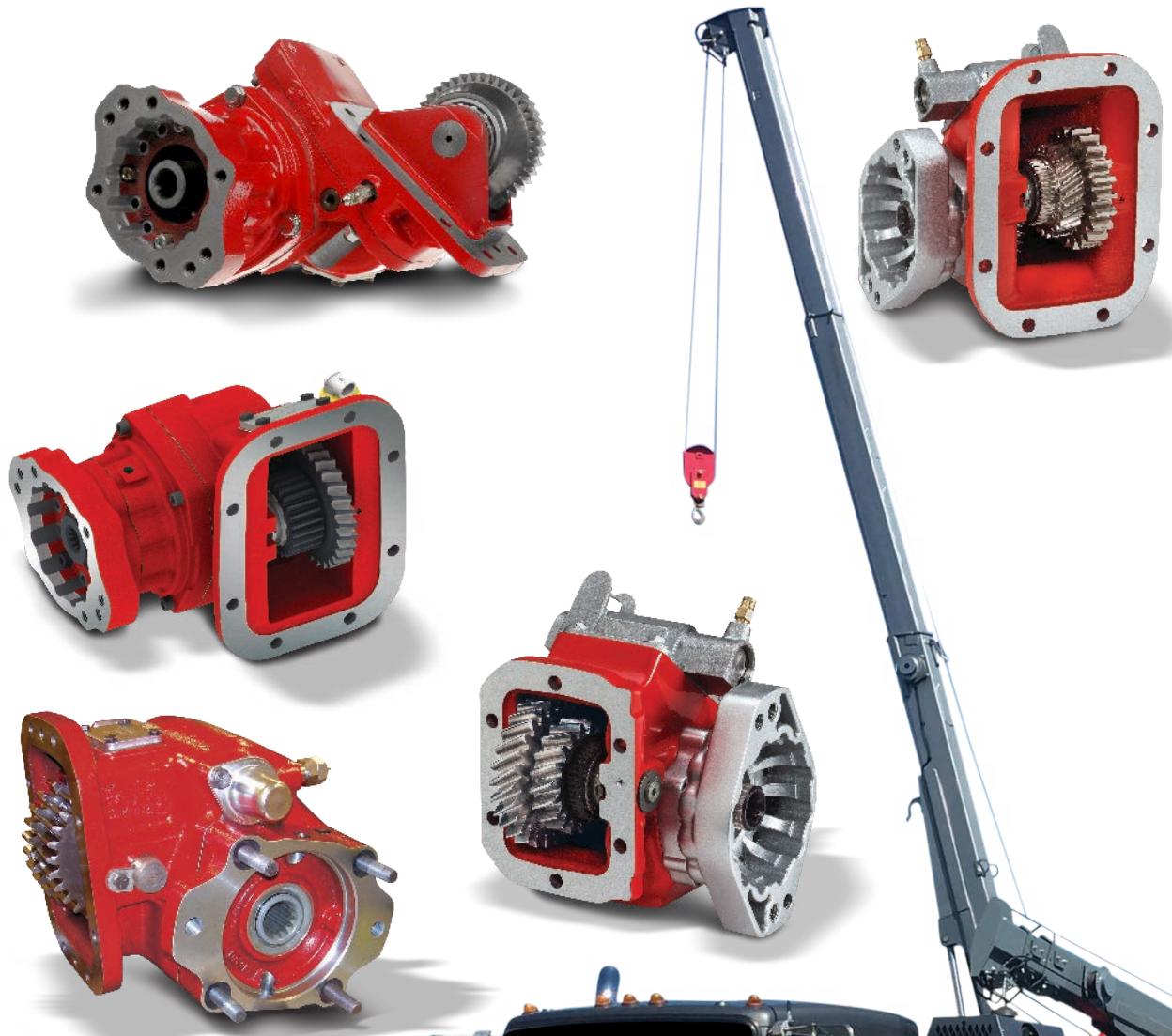
1. Freedomline Transmissions must control PTO engagement. The F shift option provides a ZF Meritor approved 12V / Air Shift Kit and wiring harness to connect to the transmission (ZMTEC) controller.
2. Use installation kit 328388-82X (12V / Air w/ wiring harness) to connect a 524 Series, or contact ZF Meritor (800-535-5560) for other wiring considerations or ZMTEC software questions.
3. 524 Rear Mount - Adapter Assembly 329993X is furnished with the PTO and does not need to be ordered separately.

Meritor/Rockwell Notes

ZFM-7

1. Freedoline Transmissions must control PTO engagement. The F shift option provides a ZF Meritor approved 12V / Air Shift Kit and wiring harness to connect to the transmission (ZMTEC) controller.
2. Use installation kit 328388-82X (12V / Air w/ wiring harness) to connect a 524 Series, or contact ZF Meritor (800-535-5560) for other wiring considerations or ZMTEC software questions.
3. 524 Rear Mount - Adapter Assembly 329993X is furnished with the PTO and does not need to be ordered separately.

PACCAR



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

 **WARNING:** This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
TX-8 (Paccar)	PAC-2	8	L51-R51
TX-12 PO-14F112C (Eaton EEO-14F112C)	PAC-1	12	CS-B42
TX-12 PO-15F112C (Eaton EEO-15F112C)	PAC-1	12	CS-B42
TX-12 PO-16F112C (Eaton EEO-16F112C)	PAC-1	12	CS-B42
TX-12 PO-17F112C (Eaton EEO-17F112C)	PAC-1	12	CS-B42
TX-12 PO-18F112C (Eaton EEO-18F112C)	PAC-1	12	CS-B42
TX-18 PXD-16F118D	PAC-3	18	CS-B46
TX-18 PXD-18F118D	PAC-3	18	CS-B46
TX-18 PRO PXDP-16F118D	PAC-3	18	CS-B46
TX-18 PRO PXDP-18F118D	PAC-3	18	CS-B46



*IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US*

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershft
For transmissions not listed, contact your authorized Chelsea Distributor.

Paccar

PAC-1

PACCAR

CHELSEA®

TX-12 PO-14F112C (Eaton EEO-14F112C)
 TX-12 PO-15F112C (Eaton EEO-15F112C)
 TX-12 PO-16F112C (Eaton EEO-16F112C)
 TX-12 PO-17F112C (Eaton EEO-17F112C)
 TX-12 PO-18F112C (Eaton EEO-18F112C)

BOTTOM SIDE ONLY**REAR SIDE ONLY****TRANSMISSION GEAR DATA:**

BOT 08-BOLT Opening Gear FORWARD of Centerline
 46 Teeth - SPUR HELIX

PITCH LINE TO APERTURE FACE:

0.820" (20.8204MM)

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0" (0MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489QCLZX-*3 (5)	200 I	Opp	94	Furnished
489QFLZX-*3 (6)	250 I	Opp	116	Furnished
489QHLZX-*3 (7)	250 I	Opp	135	Furnished
489QLLZX-*3 (1)	225 I	Opp	151	Furnished
489QQLZX-*3 (1)	225 I	Opp	162	Furnished
489QRLLZX-*3 (1)	225 I	Opp	188	Furnished
680QFLZX-*3 (8)	375 I	Opp	116	Furnished
680QHLZX-*3 (9)	375 I	Opp	135	Furnished
680QRLLZX-*3 (10)	350 I	Opp	188	Furnished
880QGLZX-*3 (2)	500 I	Opp	107	Furnished
880QJLZX-*3 (3)	500 I	Opp	125	Furnished
880QQLZX-*3 (4)	450 I	Opp	173	Furnished

REAR MOUNT - MECHANICAL SHIFT

511XRLZW-*.*	500 C	Opp	137	Furnished
524XMLZX-*.*	300 C	Eng	142	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

WARNING: SHIFT OPTIONS - Only one shift option is available for this transmission, D 12V Elec/Air. PTO is required to interface with the TCM to signal operation. The necessary 12VDC wiring harness is provided with PTO.

CAUTION: The Transmission Control Module (TCM) must be configured for PTO operation using chassis software. The default setting for this feature is 'Disabled'. Failure to configure the TCM for PTO operation may result in transmission, PTO, or driven equipment damage. See PACCAR for additional information regarding this and dual (bottom + rear mount) PTO configuration.

- (1) Input Gear Part No. 5-P-1571
- (2) Input Gear Part No. 5-P-1574
- (3) Input Gear Part No. 5-P-1575
- (4) Input Gear Part No. 5-P-1577
- (5) Input Gear Part No. 5-P-1587
- (6) Input Gear Part No. 5-P-1588
- (7) Input Gear Part No. 5-P-1589
- (8) Input Gear Part No. 5-P-1590
- (9) Input Gear Part No. 5-P-1591
- (10) Input Gear Part No. 5-P-1593

TX-8 (Paccar)

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.S. 08-BOLT Opening Gear FORWARD of Centerline
51 Teeth - L.H. Helix

PITCH LINE TO APERTURE FACE:
3.9777" (101.0336MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

272UCMGP-*3 (1)	258 C	Opp	73	Furnished
272UDMGP-*3 (2)	258 C	Opp	88	Furnished
272UGMGP-*3 (3)	258 C	Opp	104	Furnished
272UKMGP-*3 (4)	258 C	Opp	117	Furnished
272UMMGP-*3 (5)	258 C	Opp	130	Furnished
272UPMGP-*3 (6)	253 C	Opp	146	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

WARNING: SHIFT OPTIONS - Only one shift option is available for this transmission, D 12V Elec/Air. PTO is required to interface with the TCM to signal operation. The necessary 12VDC wiring harness is provided with PTO.

CAUTION: The Transmission Control Module (TCM) must be configured for PTO operation using chassis software. The default setting for this feature is 'Disabled'. Failure to configure the TCM for PTO operation may result in transmission, PTO, or driven equipment damage. See PACCAR for additional information regarding this and dual (bottom + rear mount) PTO configuration.

- (1) Input Gear Part No. 5-P-1495
- (2) Input Gear Part No. 5-P-1479
- (3) Input Gear Part No. 5-P-1480
- (4) Input Gear Part No. 5-P-1481
- (5) Input Gear Part No. 5-P-1482

- (6) Input Gear Part No. 5-P-1571

TX-18 PXD-16F118D
TX-18 PXD-18F118D
TX-18 PRO PXDP-16F118D
TX-18 PRO PXDP-18F118D

BOTTOM SIDE ONLY

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear REAR of Centerline
46 Teeth - Spur

PITCH LINE TO APERTURE FACE:
.8197" (20.8204MM)

TRANSMISSION GEAR DATA:

Rear 4-Bolt Opening Gear NON STANDARD of Centerline
35 Teeth - Spur

PITCH LINE TO APERTURE FACE:
0" (0MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489QAMEX-*6(5)	225I	Opp	70	380711X	Furnished
489QFMEX-*6(1)	225I	Opp	111	380711X	Furnished
489QLMEX-*6(6)	225I	Opp	144	380711X	Furnished
489QQMEX-*6(6)	225I	Opp	155	380711X	Furnished
489QRMEX-*6(6)	225I	Opp	180	380711X	Furnished
680QFMEX-*6(7)	375I	Opp	111	380711X	Furnished
680QHMEX-*6(8)	375I	Opp	129	380711X	Furnished
680QQMEX-*6(9)	375I	Opp	155	380711X	Furnished
880QGMEX-*4(2)	500I	Opp	112		Furnished
880QMMEX-*4(3)	395I	Opp	155		Furnished
880QQMEX-*4(4)	336I	Opp	181		Furnished

REAR MOUNT - MECHANICAL SHIFT

524XMMEX-*-*	300C	Eng	111	Furnished
524XTMEX-*-*	300C	Eng	150	Furnished
524XVMEX-*-*	258C	Eng	200	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: For the 489 and 680 Series, the only shift options available are the 5 and 6 shift options. For the 880 Series, the only shift options available are the D and V shift options. All shift options are the 12V Elec/Air type. This shift type is required to interface with the transmission TCM. The necessary 12V wiring harness is provided with the 6 and D shift options.

CAUTION: The Endurant Transmission Control Module (TCM) must be configured for PTO operation using ServiceRanger software. The default setting for this feature is 'Disabled'. Failure to configure the TCM for PTO operation may result in transmission, PTO, or driven equipment damage. See Eaton PTO Information Guide TRIG2600 EN-US for additional information regarding this and dual (bottom + rear mount) PTO configuration.

CAUTION: 489 and 680 Series PTO's require the use of 380711X spacer plate for mounting to the transmission. The spacer plate is assembled between the PTO and transmission. See SK-672 for details. The spacer plate is included with the PTO. It does not need to be ordered separately.

CAUTION: Eaton Transmission Division has established a maximum torque limit for the transmission driver gear. For all Endurant XD transmissions the torque limit is as follows: 8-Bolt Bottom Mount - 555 lb-ft [745 Nm] continuous, Rear Mount - 555 lb-ft [745 Nm] continuous, Combined - 555 lb-ft [745 Nm] continuous.

CAUTION: 524 Series - External lubrication is required for this application. Lubrication kit 330085X is furnished with the PTO. Failure to install the lubrication kit prior to PTO start up may cause damage to the PTO and/or transmission. See SK-677 for details

- (1) Input Gear Part No. 5-P-1688
- (2) Input Gear Part No. 5-P-1670
- (3) Input Gear Part No. 5-P-1671
- (4) Input Gear Part No. 5-P-1672
- (5) Input Gear Part No. 5-P-1702
- (6) Input Gear Part No. 5-P-1703
- (7) Input Gear Part No. 5-P-1705
- (8) Input Gear Part No. 5-P-1706
- (9) Input Gear Part No. 5-P-1707

Paccar Notes

PAC-1

1. Gaskets are replaced by a custom molded o-ring. No backlash setting required. Special piloting studs are included in lieu of dowel pins.

PAC-2

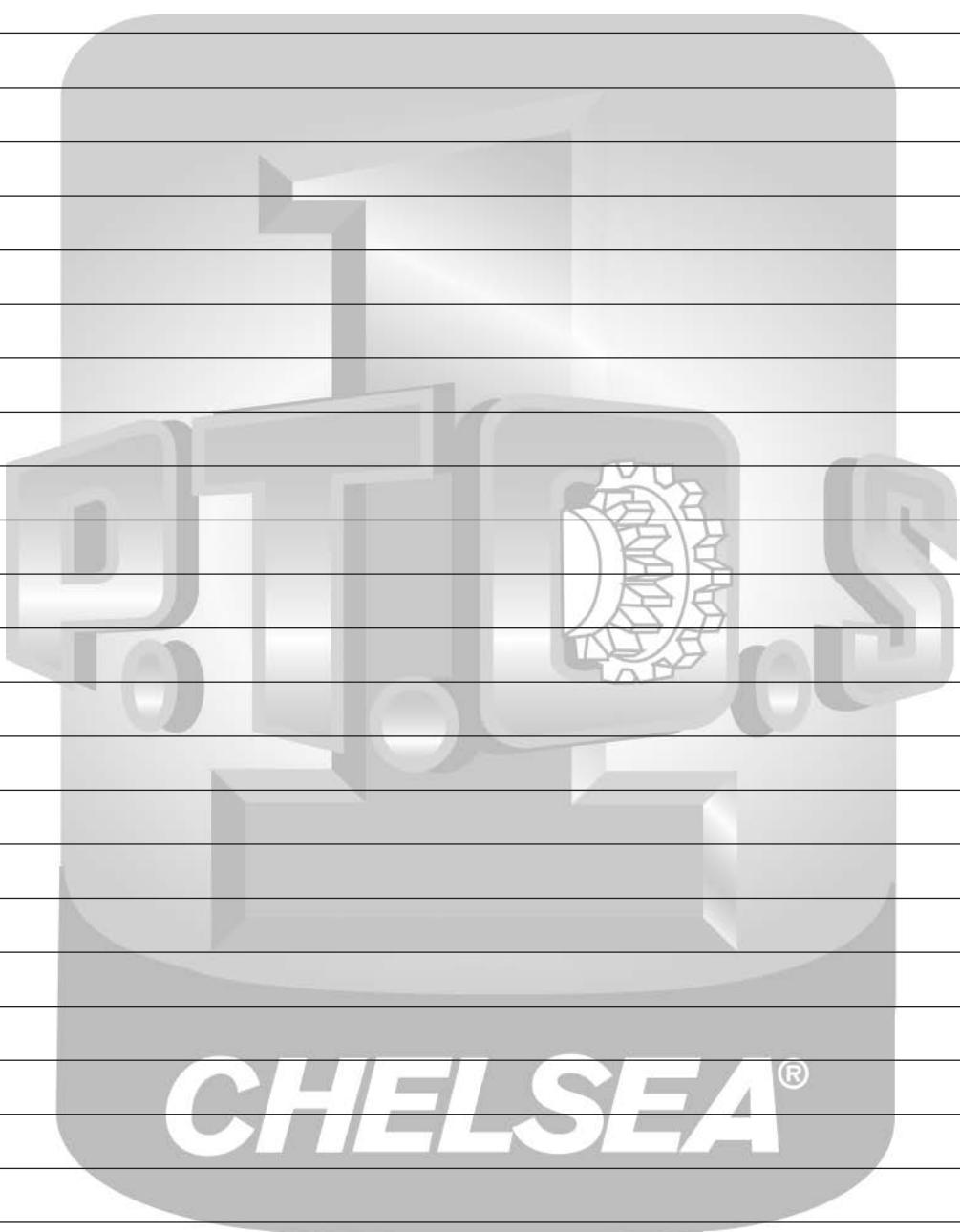
1. Gaskets are replaced by a custom molded o-ring. No backlash setting required. Special piloting studs are included in lieu of dowel pins.

PAC-3

1. Gaskets are replaced by a custom molded o-ring. No backlash setting required. Special piloting studs are included in lieu of dowel pins.
2. The D or 6 shift option must be used for new installations. A 4-way valve will be provided with these shift options that supplies air to both sides of the shifter. The factory air valve cannot be used because it is only a 3-way valve. The V or 5 shift option can be used for replacement PTO's.
3. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use the RK rotatable flange for the A & C ratios.
4. 524 Series - The Input Adapter 330086X is furnished with the PTO
5. The Endurant transmission is equipped with threaded support bosses on the back of the transmission for pump support brackets. See Eaton PTO Information Guide TRIG2600 EN-US for additional information and support locations.

Paccar

NOTES



Paccar

TREMEC/TTC/SPICER



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

 **WARNING:** This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

TREMEC/TTC/SPICER TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
1010-3B (BM#301115 and Later)	SPR-105	10	R48-B48
1020-3A (BM#301125 and Later)	SPR-105	20	R48-B48
1020-5A (BM#301126 and Later)	SPR-105	20	R48-B48
1214-3A (BM#301212 & 301130 and Later)	SPR-104	14	R54-B54
1214-5A (BM#301213 & 301131 and Later)	SPR-104	14	R54-B54
1410-3B (BM#301165)	SPR-105	10	R48-B48
ASO100-10S	SPR-140	10	L45-R45
ASO10-ESP	SPR-140	10	L45-R45
ASO10-VP10	SPR-140	10	L45-R45
ASO125-10S (BM#301579)	SPR-140	10	L45-R45
ASO140-10S (BM#301580)	SPR-140	10	L45-R45
ASO150-10S (BM#301578)	SPR-140	10	L45-R45
ASO160-10S	SPR-140	10	L45-R45
ASO165-10S (BM#301581)	SPR-140	10	L45-R45
LASO125-10S (BM#301620)	SPR-140	10	L45-R45
LASO140-10S (BM#301621)	SPR-140	10	L45-R45
LASO150-10S (BM#301622)	SPR-140	10	L45-R45
LLASO125-10S	SPR-140	10	L45-R45
LLASO140-10S	SPR-140	10	L45-R45
LLASO150-10S	SPR-140	10	L45-R45
LLPSO100-10S	SPR-140	10	L45-R45
LLPSO10-VPD	SPR-140	10	L45-R45
LLPSO125-10S	SPR-140	10	L45-R45
LLPSO140-10S	SPR-140	10	L45-R45
LLPSO150-10S	SPR-140	10	L45-R45
LLPSO165-10S	SPR-140	10	L45-R45
LPSO100-10S	SPR-140	10	L45-R45
LPSO125-10S (BM#301572)	SPR-140	10	L45-R45
LPSO140-10S (BM#301573)	SPR-140	10	L45-R45
LPSO150-10S (BM#301574)	SPR-140	10	L45-R45
LPSO165-10S	SPR-140	10	L45-R45
PS86-10V (BM#301587)	SPR-144	10	L45-R45
PSDO165-18A (Released for Mexico Market)	TTC-151	18	R52-B52
PSDO185-18A (Released for Mexico Market)	TTC-151	18	R52-B52
PSDO205-18A (Released for Mexico Market)	TTC-151	18	R52-B52
PSO100-10S (BM#301560)	SPR-140	10	L45-R45



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

Tremec/TTC/Spicer

TREMEC/TTC/SPICER TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
PSO10-ESP	SPR-140	10	L45-R45
PSO10-VPD	SPR-140	10	L45-R45
PSO115-10V (BM#301588)	SPR-140	10	L45-R45
PSO125-10S (BM#301561)	SPR-140	10	L45-R45
PSO125-10V (BM#301589)	SPR-140	10	L45-R45
PSO140-10S (BM#301562)	SPR-140	10	L45-R45
PSO145-10V (BM#301582)	SPR-140	10	L45-R45
PSO145-9R (BM#301625)	SPR-140	9	L45-R45
PSO150-10S (BM#301563)	SPR-140	10	L45-R45
PSO160-10S	SPR-140	10	L45-R45
PSO165-10S (BM#301564)	SPR-140	10	L45-R45
PSX150-9S (BM#301521)	SPR-140	9	L45-R45
TDET0880 (Same as TR-4050, Dodge Mexico)	TTC-150	5	R32
TDET1015 (Same as TR-4050 w/ special ratio-Ford Mexico)	TTC-150	5	R32
TDET1361 (Same as TR-4050, Chev/GMC)	TTC-150	5	R32
TDET1664 (Same as TR-4050, Ford Mexico)	TTC-150	5	R32
TR-4050 (Transmission made in Mexico)	TTC-150	5	R32



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

1214-3A (BM#301212 & 301130 and Later)
1214-5A (BM#301213 & 301131 and Later)

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.5660" (14.3700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7210" (18.3100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221XCAHX-*3	250 I	Opp	57	7-A-032(45)	328564X	Furnished	221XCAHX-*3	250 I	Opp	57	7-A-350 7-A-032(45)		328170-35X
221XEAHX-*3	250 I	Opp	66	7-A-062(P)	310778X	Furnished	221XEAHX-*3	250 I	Opp	66	7-A-300		328170-35X
489XAAHX-*5 (12)	250 I	Opp	50	8-A-062	328170-8X	442KAAHX-*3 (12)	250 I	Opp	50	7-A-300		7170-5X	
8-A-093													
489XCAHX-*5 (13)	250 I	Opp	64	8-A-062	328170-8X	442KCAHX-*3 (13)	250 I	Opp	64	7-A-300		7170-5X	
8-A-093													
489XFAXH-*5 (2)	250 I	Opp	80	8-A-062	328170-8X	442KFAHX-*3 (2)	250 I	Opp	80	7-A-300		7170-5X	
8-A-093													
489XHAXH-*5 (15)	250 I	Opp	93	8-A-062	328170-8X	442KHAHX-*3 (15)	250 I	Opp	93	7-A-300		7170-5X	
8-A-093													
489XLAXH-*5 (1)	250 I	Opp	103	8-A-062	328170-8X	442KLAHX-*3 (1)	250 I	Opp	103	7-A-300		7170-5X	
8-A-093													
489XQAHX-*5 (1)	225 I	Opp	111	8-A-062	328170-8X	442KQAHX-*3 (1)	225 I	Opp	111	7-A-300		7170-5X	
8-A-093													
489XRAXH-*5 (1)	225 I	Opp	128	8-A-062	328170-8X	442KRAHX-*3 (1)	225 I	Opp	128	7-A-300		7170-5X	
8-A-093													
489XSAXH-*5 (1)	200 I	Opp	153	8-A-062	328170-8X	442KSAHX-*3 (1)	200 I	Opp	153	7-A-300		7170-5X	
8-A-093													
489XUAXH-*5 (1)	195 I	Opp	182	8-A-062	328170-8X	442KWAHX-*3 (1)	175 I	Opp	214	7-A-300		7170-5X	
8-A-093													
489XWAHX-*5 (1)	175 I	Opp	214	8-A-062	328170-8X	442KXAHX-*3 (1)	140 I	Opp	254	7-A-300		7170-5X	
8-A-093													
489XXAHX-*5 (1)	140 I	Opp	254	8-A-062	328170-8X	660KFAHX-*3 (10)	375 I	Opp	80	7-A-300		7170-5X	
8-A-093													
680XFAHX-*3 (10)	375 I	Opp	80	8-A-062	328170-8X	660KHAHX-*3 (15)	375 I	Opp	93	7-A-300		7170-5X	
8-A-093													
680XHAXH-*3 (18)	375 I	Opp	93	8-A-062	328170-8X	660KQAHX-*3 (11)	375 I	Opp	111	7-A-300		7170-5X	
8-A-093													
680XQAHX-*3 (11)	375 I	Opp	111	8-A-062	328170-8X	660KRAHX-*3 (17)	350 I	Opp	128	7-A-300		7170-5X	
8-A-093													

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (13) Input Gear Part No. 5-P-1287
- (2) Input Gear Part No. 5-P-1077
- (15) Input Gear Part No. 5-P-1364
- (10) Input Gear Part No. 5-P-1242
- (17) Input Gear Part No. 5-P-1441
- (11) Input Gear Part No. 5-P-1246
- (18) Input Gear Part No. 5-P-1494
- (12) Input Gear Part No. 5-P-1280
- (45) Furnished, but not required

1214-3A (BM#301212 & 301130 and Later)
1214-5A (BM#301213 & 301131 and Later)

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.5660" (14.3700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.7210" (18.3100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]							I / C [†]					

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

680XRAHX-*3 (17)	350 I	Opp	128	8-A-062 8-A-093	328170-8X	660KSAHX-*3 (14)	325 I	Opp	153	7-A-300	7170-5X
680XSAHX-*3 (14)	325 I	Opp	153	8-A-062 8-A-093	328170-8X						
823XBAHX-*3 (38)	500 I	Opp	54	8-A-165	328170-14X						
823XDAHX-*3 (42)	500 I	Opp	64	8-A-165	328170-14X						
823XGAHX-*3 (43)	500 I	Opp	70	8-A-165	328170-14X						
823XJAHX-*3 (39)	500 I	Opp	82	8-A-165	328170-14X						
823XMAHX-*3 (37)	500 I	Opp	96	8-A-165	328170-14X						
823XRAHX-*3 (41)	400 I	Opp	133	8-A-165	328170-14X						
880XBAHX-*3 (3)	500 I	Opp	54	8-A-165	328170-14X						
880XDAHX-*3 (4)	500 I	Opp	64	8-A-165	328170-14X						
880XGAHX-*3 (9)	500 I	Opp	70	8-A-165	328170-14X						
880XJAHX-*3 (5)	500 I	Opp	82	8-A-165	328170-14X						
880XMAHX-*3 (6)	500 I	Opp	96	8-A-165	328170-14X						
880XQAHX-*3 (16)	450 I	Opp	113	8-A-165	328170-14X						
880XRAHX-*3 (7)	400 I	Opp	133	8-A-165	328170-14X						
880XTAHX-*3 (8)	350 I	Opp	171	8-A-165	328170-14X						

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XBAJX-*3 (19)	300 C	Opp	54	8-A-248 8-A-032	328170-8X	272XAAJX-*3 (28)	300 C	Opp	44	7-A-300	328170-172X
282XCAJX-*3 (20)	300 C	Opp	66	8-A-248 8-A-032	328170-8X	272XBAJX-*3 (29)	300 C	Opp	54	7-A-300	328170-172X
282XDAJX-*3 (21)	300 C	Opp	78	8-A-248 8-A-032	328170-8X	272XCAJX-*3 (30)	300 C	Opp	66	7-A-300	328170-172X
282XGAJX-*3 (22)	300 C	Opp	93	8-A-248 8-A-032	328170-8X	272XDAJX-*3 (31)	300 C	Opp	78	7-A-300	328170-172X
282XKAJX-*3 (23)	274 C	Opp	104	8-A-248 8-A-032	328170-8X	272XGAJX-*3 (32)	300 C	Opp	93	7-A-300	328170-172X
282XMAJX-*3 (24)	245 C	Opp	117	8-A-248 8-A-032	328170-8X	272XKAJX-*3 (33)	300 C	Opp	104	7-A-300	328170-172X

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (9) Input Gear Part No. 5-P-1135
- (21) Input Gear Part No. 5-P-1510-13X
- (30) Input Gear Part No. 5-P-1510-3X
- (39) Input Gear Part No. 5-P-325
- (4) Input Gear Part No. 5-P-1101
- (14) Input Gear Part No. 5-P-1322
- (22) Input Gear Part No. 5-P-1510-14X
- (31) Input Gear Part No. 5-P-1510-4X
- (41) Input Gear Part No. 5-P-721
- (5) Input Gear Part No. 5-P-1102
- (16) Input Gear Part No. 5-P-1385
- (23) Input Gear Part No. 5-P-1510-15X
- (32) Input Gear Part No. 5-P-1510-5X
- (42) Input Gear Part No. 5-P-971
- (6) Input Gear Part No. 5-P-1103
- (17) Input Gear Part No. 5-P-1441
- (24) Input Gear Part No. 5-P-1510-16X
- (33) Input Gear Part No. 5-P-1510-6X
- (43) Input Gear Part No. 5-P-980
- (7) Input Gear Part No. 5-P-1104
- (19) Input Gear Part No. 5-P-1510-11X
- (28) Input Gear Part No. 5-P-1510-1X
- (37) Input Gear Part No. 5-P-283
- (8) Input Gear Part No. 5-P-1105
- (20) Input Gear Part No. 5-P-1510-12X
- (29) Input Gear Part No. 5-P-1510-2X
- (38) Input Gear Part No. 5-P-285

1214-3A (BM#301212 & 301130 and Later)
1214-5A (BM#301213 & 301131 and Later)

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.5660" (14.3700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7210" (18.3100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XPAJX-*3 (25)	219 C	Opp	130	8-A-248 8-A-032	328170-8X	272XMAJX-*3 (34)	300 C	Opp	117	7-A-300	328170-172X
282XS AJX-*3 (26)	196 C	Opp	146	8-A-248 8-A-032	328170-8X	272XPAJX-*3 (35)	300 C	Opp	130	7-A-300	328170-172X
282XTAJX-*3 (27)	175 C	Opp	163	8-A-248 8-A-032	328170-8X	272XS AJX-*3 (36)	300 C	Opp	146	7-A-300	328170-172X

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MAAJX-*3 (28)	300 C	Opp	44	7-A-300	328170-172X
272MBAJX-*3 (29)	300 C	Opp	54	7-A-300	328170-172X
272MCAJX-*3 (30)	300 C	Opp	66	7-A-300	328170-172X
272MDAJX-*3 (31)	300 C	Opp	78	7-A-300	328170-172X
272MGAJX-*3 (32)	300 C	Opp	93	7-A-300	328170-172X
272MKAJX-*3 (33)	300 C	Opp	104	7-A-300	328170-172X
272MMAJX-*3 (34)	300 C	Opp	117	7-A-300	328170-172X
272MPAJX-*3 (35)	300 C	Opp	130	7-A-300	328170-172X
272MSAJX-*3 (36)	300 C	Opp	146	7-A-300	328170-172X

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	54	8-A-165	328170-14X
885XGAHX-*3 (9)	500 I	Opp	70	8-A-165	328170-14X
885XJAHX-*3 (5)	500 I	Opp	82	8-A-165	328170-14X
885XMAHX-*3 (6)	500 I	Opp	96	8-A-165	328170-14X

ONE SPEED - FORWARD & REVERSE

348KFAHX-*5 (40)	200 I	Opp	70	73	8-A-190	328170-8X	340XFAHX-*5 (40)	200 I	Opp	70	73	7-A-140(44) 7-A-270	7170-5X	
863XBAHX-*5	500 I	Opp	54	67	8-A-165	328170-14X								

GEARED ADAPTERS

628XAHX-3AH	250 I	Eng	8-A-190	328170-8X	626KAHX-4AH	250 I	Eng	7-A-300	7170-5X
-------------	-------	-----	---------	-----------	-------------	-------	-----	---------	---------

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (26) Input Gear Part No. 5-P-1510-18X
- (31) Input Gear Part No. 5-P-1510-4X
- (36) Input Gear Part No. 5-P-1510-9X
- (5) Input Gear Part No. 5-P-1102
- (27) Input Gear Part No. 5-P-1510-19X
- (32) Input Gear Part No. 5-P-1510-5X
- (40) Input Gear Part No. 5-P-581
- (6) Input Gear Part No. 5-P-1103
- (28) Input Gear Part No. 5-P-1510-1X
- (33) Input Gear Part No. 5-P-1510-6X
- (44) Filler block furnished with PTO
- (9) Input Gear Part No. 5-P-1135
- (29) Input Gear Part No. 5-P-1510-2X
- (34) Input Gear Part No. 5-P-1510-7X
- (25) Input Gear Part No. 5-P-1510-17X
- (30) Input Gear Part No. 5-P-1510-3X
- (35) Input Gear Part No. 5-P-1510-8X

SPR-104

TREMEC/TTC/SPICER

CHELSEA®

1214-3A (BM#301212 & 301130 and Later)
 1214-5A (BM#301213 & 301131 and Later)

BOTTOM SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**

BOT 08-BOLT Opening Gear FORWARD of Centerline
 54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.5660" (14.3700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.7210" (18.3100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			
GEARED ADAPTERS													
							630KAHX-3AH	250 I	Eng		7-A-300		7170-5X
							645KAHX-3AH	250 I	Eng		7-A-300		7170-5X

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

1010-3B (BM#301115 and Later)
 1020-3A (BM#301125 and Later)
 1020-5A (BM#301126 and Later)
 1410-3B (BM#301165)

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
 48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0660" (27.0800MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.2210" (31.0100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torque	Dir Rot	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torque	Dir Rot	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C ↑							I/C ↑					

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250 I	Opp	56	7-A-062(P) 7-A-032(42)	328481X	Furnished	221ZCAHX-*3	250 I	Opp	56	7-A-165 7-A-032(42)		328170-1X
221ZEAHX-*3	250 I	Opp	64	7-A-032(P)	328481X	Furnished	221ZEAHX-*3	250 I	Opp	64	7-A-140		328170-1X
823ZBAHX-*3 (36)	500 I	Opp	53	8-A-700		328170-133X	442LAAHX-*3 (11)	250 I	Opp	49	7-A-140		328170-76X
823ZDAHX-*3 (40)	500 I	Opp	62	8-A-700		328170-133X	442LCAHX-*3 (12)	250 I	Opp	63	7-A-140		328170-76X
823ZGAHX-*3 (41)	500 I	Opp	68	8-A-700		328170-133X	442LFAHX-*3 (2)	250 I	Opp	77	7-A-140		328170-76X
823ZJAHX-*3 (37)	500 I	Opp	80	8-A-700		328170-133X	442LHAHX-*3 (14)	250 I	Opp	89	7-A-140		328170-76X
823ZMAHX-*3 (35)	500 I	Opp	94	8-A-700		328170-133X	442LLAHX-*3 (1)	250 I	Opp	100	7-A-140		328170-76X
823ZRAXH-*3 (39)	400 I	Opp	129	8-A-700		328170-133X	442LQAHX-*3 (1)	225 I	Opp	108	7-A-140		328170-76X
880ZBAHX-*3 (3)	500 I	Opp	53	8-A-700		328170-133X	442LRAHX-*3 (1)	225 I	Opp	125	7-A-140		328170-76X
880ZDAHX-*3 (4)	500 I	Opp	62	8-A-700		328170-133X	442LSAHX-*3 (1)	200 I	Opp	149	7-A-140		328170-76X
880ZGAHX-*3 (8)	500 I	Opp	68	8-A-700		328170-133X	442LUAHX-*3 (1)	195 I	Opp	177	7-A-140		328170-76X
880ZJAHX-*3 (5)	500 I	Opp	80	8-A-700		328170-133X	442LWAHX-*3 (1)	175 I	Opp	209	7-A-140		328170-76X
880ZMAHX-*3 (6)	500 I	Opp	94	8-A-700		328170-133X	442LXAHX-*3 (1)	140 I	Opp	247	7-A-140		328170-76X
880ZQAHX-*3 (15)	450 I	Opp	109	8-A-700		328170-133X	660LFAHX-*3 (9)	375 I	Opp	77	7-A-140		328170-76X
880ZRAHX-*3 (7)	400 I	Opp	129	8-A-700		328170-133X	660LHAHX-*3 (14)	375 I	Opp	89	7-A-140		328170-76X
							660LQAHX-*3 (10)	375 I	Opp	108	7-A-140		328170-76X
							660LRAHX-*3 (16)	350 I	Opp	125	7-A-140		328170-76X
							660LSAHX-*3 (13)	325 I	Opp	149	7-A-140		328170-76X

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XBAJX-*3 (17)	300 C	Opp	53	8-A-032		Furnished	272XAAJX-*3 (26)	300 C	Opp	43			Furnished
282XCAJX-*3 (18)	300 C	Opp	64	8-A-032		Furnished	272XBAJX-*3 (27)	300 C	Opp	53			Furnished
282XDAXJX-*3 (19)	300 C	Opp	76	8-A-032		Furnished	272XCAJX-*3 (28)	300 C	Opp	64			Furnished
282XGAJX-*3 (20)	300 C	Opp	91	8-A-032		Furnished	272XDAJX-*3 (29)	300 C	Opp	76			Furnished
282XKAJX-*3 (21)	300 C	Opp	102	8-A-032		Furnished	272XGAJX-*3 (30)	300 C	Opp	91			Furnished
282XMAJX-*3 (22)	275 C	Opp	114	8-A-032		Furnished	272XKAJX-*3 (31)	300 C	Opp	102			Furnished
282XPAJX-*3 (23)	246 C	Opp	246	8-A-032		Furnished	272XMAJX-*3 (32)	300 C	Opp	114			Furnished
282XSAXJX-*3 (24)	220 C	Opp	142	8-A-032		Furnished	272XPAJX-*3 (33)	300 C	Opp	246			Furnished
282XTAJX-*3 (25)	197 C	Opp	159	8-A-032		Furnished	272XSAJX-*3 (34)	300 C	Opp	142			Furnished

Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (1) Input Gear Part No. 5-P-1004
- (9) Input Gear Part No. 5-P-1242
- (17) Input Gear Part No. 5-P-1510-11X
- (25) Input Gear Part No. 5-P-1510-19X
- (33) Input Gear Part No. 5-P-1510-8X
- (2) Input Gear Part No. 5-P-1077
- (10) Input Gear Part No. 5-P-1246
- (18) Input Gear Part No. 5-P-1510-12X
- (26) Input Gear Part No. 5-P-1510-1X
- (34) Input Gear Part No. 5-P-1510-9X
- (3) Input Gear Part No. 5-P-1100
- (11) Input Gear Part No. 5-P-1280
- (19) Input Gear Part No. 5-P-1510-13X
- (27) Input Gear Part No. 5-P-1510-2X
- (35) Input Gear Part No. 5-P-283
- (4) Input Gear Part No. 5-P-1101
- (12) Input Gear Part No. 5-P-1287
- (20) Input Gear Part No. 5-P-1510-14X
- (28) Input Gear Part No. 5-P-1510-3X
- (36) Input Gear Part No. 5-P-285
- (5) Input Gear Part No. 5-P-1102
- (13) Input Gear Part No. 5-P-1322
- (21) Input Gear Part No. 5-P-1510-15X
- (29) Input Gear Part No. 5-P-1510-4X
- (37) Input Gear Part No. 5-P-325
- (6) Input Gear Part No. 5-P-1103
- (14) Input Gear Part No. 5-P-1364
- (22) Input Gear Part No. 5-P-1510-16X
- (30) Input Gear Part No. 5-P-1510-5X
- (39) Input Gear Part No. 5-P-721
- (7) Input Gear Part No. 5-P-1104
- (15) Input Gear Part No. 5-P-1385
- (23) Input Gear Part No. 5-P-1510-17X
- (31) Input Gear Part No. 5-P-1510-6X
- (40) Input Gear Part No. 5-P-971
- (8) Input Gear Part No. 5-P-1135
- (16) Input Gear Part No. 5-P-1441
- (24) Input Gear Part No. 5-P-1510-18X
- (32) Input Gear Part No. 5-P-1510-7X
- (41) Input Gear Part No. 5-P-980

SPR-105

TREMEC/TTC/SPICER

CHELSEA®

1010-3B (BM#301115 and Later)
 1020-3A (BM#301125 and Later)
 1020-5A (BM#301126 and Later)
 1410-3B (BM#301165)

BOTTOM SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**

BOT 08-BOLT Opening Gear FORWARD of Centerline
 48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0660" (27.0800MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.2210" (31.0100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot	Fwd					I / C †	Rot	Fwd			

ONE SPEED - POWERSHIFT LOW PROFILE (AIR OR HYDRAULIC)

272MAAJX-*3 (26)	300 C	Opp	43	Furnished
272MBAJX-*3 (27)	300 C	Opp	53	Furnished
272MCAJX-*3 (28)	300 C	Opp	64	Furnished
272MDAJX-*3 (29)	300 C	Opp	76	Furnished
272MGAJX-*3 (30)	300 C	Opp	91	Furnished
272MKAJX-*3 (31)	300 C	Opp	102	Furnished
272MMAJX-*3 (32)	300 C	Opp	114	Furnished
272MPAJX-*3 (33)	300 C	Opp	246	Furnished
272MSAJX-*3 (34)	300 C	Opp	142	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885ZBAHX-*3 (3)	500 I	Opp	53	8-A-700	328170-133X
885ZGAHX-*3 (8)	500 I	Opp	68	8-A-700	328170-133X
885ZJAHX-*3 (5)	500 I	Opp	80	8-A-700	328170-133X
885ZMAHX-*3 (6)	500 I	Opp	94	8-A-700	328170-133X

ONE SPEED - FORWARD & REVERSE

340SFAHX-*5 (38) 200 I Opp 68 71 7-A-062 328170-94X

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (27) Input Gear Part No. 5-P-1510-2X
- (32) Input Gear Part No. 5-P-1510-7X
- (5) Input Gear Part No. 5-P-1102
- (28) Input Gear Part No. 5-P-1510-3X
- (33) Input Gear Part No. 5-P-1510-8X
- (6) Input Gear Part No. 5-P-1103
- (29) Input Gear Part No. 5-P-1510-4X
- (34) Input Gear Part No. 5-P-1510-9X
- (8) Input Gear Part No. 5-P-1135
- (30) Input Gear Part No. 5-P-1510-5X
- (38) Input Gear Part No. 5-P-581
- (26) Input Gear Part No. 5-P-1510-1X
- (31) Input Gear Part No. 5-P-1510-6X

ASO10-ESP	LASO125-10S (BM#301620)	LLPSO125-10S
ASO10-VP10	LASO140-10S (BM#301621)	LLPSO140-10S
ASO100-10S	LASO150-10S (BM#301622)	LLPSO150-10S
ASO125-10S (BM#301579)	LLASO125-10S	LLPSO165-10S
ASO140-10S (BM#301580)	LLASO140-10S	LPSO100-10S
ASO150-10S (BM#301578)	LLASO150-10S	LPSO125-10S (BM#301572)
ASO160-10S	LLPSO10-VPD	LPSO140-10S (BM#301573)
ASO165-10S (BM#301581)	LLPSO100-10S	LPSO150-10S (BM#301574)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.7300" (18.5420MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear REAR of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0750" (27.3050MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221XCAHX-*5	250 I	Opp	71	7-A-062 7-A-032(37)	328481X	Furnished	221XCAHX-*4	250 I	Opp	71	7-A-062 7-A-032(37)	Furnished
221XEAHX-*5	250 I	Opp	82			Furnished	221XEAHX-*4	250 I	Opp	82		Furnished
489XAAHX-*5 (12)	250 I	Opp	62			Furnished	442XFAHX-*4 (2)	250 I	Opp	98		Furnished
489XCAHX-*5 (13)	250 I	Opp	80			Furnished	442XHAHX-*4 (15)	250 I	Opp	114		Furnished
489XFAHX-*5 (2)	250 I	Opp	98			Furnished	442XLAHX-*4 (1)	250 I	Opp	127		Furnished
489XHAHX-*5 (15)	250 I	Opp	114			Furnished	442XQAHX-*4 (1)	225 I	Opp	137		Furnished
489XLAHX-*5 (1)	250 I	Opp	127			Furnished	442XRAHX-*4 (1)	225 I	Opp	159		Furnished
489XQAHX-*5 (1)	225 I	Opp	137			Furnished	442XSAHX-*4 (1)	200 I	Opp	189		Furnished
489XRAHX-*5 (1)	225 I	Opp	159			Furnished	442XUAHX-*4 (1)	195 I	Opp	225		Furnished
489XSAHX-*5 (1)	200 I	Opp	189			Furnished	442XWAHX-*4 (1)	175 I	Opp	265		Furnished
489XUAHX-*5 (1)	195 I	Opp	225			Furnished	442XXAHX-*4 (1)	140 I	Opp	313		Furnished
489XWAHX-*5 (1)	175 I	Opp	265			Furnished	660XFAHX-*4 (10)	375 I	Opp	98		Furnished
489XXAHX-*5 (1)	140 I	Opp	313			Furnished	660XHAHX-*4 (15)	375 I	Opp	114		Furnished
680XFAHX-*5 (10)	375 I	Opp	98			Furnished	660XQAHX-*4 (11)	375 I	Opp	137		Furnished
680XHAHX-*5 (19)	375 I	Opp	114			Furnished	660XRAHX-*4 (18)	350 I	Opp	159		Furnished
680XQAHX-*5 (11)	375 I	Opp	137			Furnished	660XSAHX-*4 (14)	325 I	Opp	189		Furnished
680XRAHX-*5 (18)	350 I	Opp	159			Furnished						
680XSAHX-*5 (14)	325 I	Opp	189			Furnished						
823XBAHX-*5 (30)	500 I	Opp	67			Furnished						
823XDAHX-*5 (34)	500 I	Opp	79			Furnished						
823XGAHX-*5 (35)	500 I	Opp	86			Furnished						
823XJAHX-*5 (31)	500 I	Opp	101			Furnished						
823XMAHX-*5 (29)	500 I	Opp	119			Furnished						
823XRAHX-*5 (33)	400 I	Opp	164			Furnished						
823XTKTX-*5 (17)	350 I	Opp	199	8-A-165(36)		Furnished						
880XBAHX-*5 (3)	500 I	Opp	67			Furnished						
880XDAHX-*5 (4)	500 I	Opp	79			Furnished						
880XGAHX-*5 (9)	500 I	Opp	86			Furnished						
880XJAHX-*5 (5)	500 I	Opp	101			Furnished						
880XMAHX-*5 (6)	500 I	Opp	119			Furnished						
880XQAHX-*5 (16)	450 I	Opp	139			Furnished						

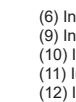
Continued on Next Page

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.



SPR-140

TREMEC/TTC/SPICER

CHELSEA®

ASO10-ESP	LASO125-10S (BM#301620)	LLPSO125-10S
ASO10-VP10	LASO140-10S (BM#301621)	LLPSO140-10S
ASO100-10S	LASO150-10S (BM#301622)	LLPSO150-10S
ASO125-10S (BM#301579)	LLASO125-10S	LLPSO165-10S
ASO140-10S (BM#301580)	LLASO140-10S	LPSO100-10S
ASO150-10S (BM#301578)	LLPSO150-10S	LPSO125-10S (BM#301572)
ASO160-10S	LLPSO10-VPD	LPSO140-10S (BM#301573)
ASO165-10S (BM#301581)	LLPSO100-10S	LPSO150-10S (BM#301574)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.7300" (18.5420MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear REAR of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0750" (27.3050MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]							I / C [†]					

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XRAHX-*5 (7)	400 I	Opp	164	Furnished
880XTAHX-*5 (8)	350 I	Opp	212	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XBAJX-*5 (20)	300 C	Opp	67	8-A-093 8-A-032	Furnished
282XCAJX-*5 (21)	300 C	Opp	81	8-A-093 8-A-032	Furnished
282XDAJX-*5 (22)	300 C	Opp	97	8-A-093 8-A-032	Furnished
282XGAJX-*5 (23)	300 C	Opp	115	8-A-093 8-A-032	Furnished
282XKAJX-*5 (24)	300 C	Opp	129	8-A-093 8-A-032	Furnished
282XMAJX-*5 (25)	300 C	Opp	144	8-A-093 8-A-032	Furnished
282XPAJX-*5 (26)	300 C	Opp	161	8-A-093 8-A-032	Furnished
282XSAJX-*5 (27)	278 C	Opp	180	8-A-093 8-A-032	Furnished
282XTAJX-*5 (28)	248 C	Opp	202	8-A-093 8-A-032	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*5 (3)	500 I	Opp	67	Furnished
885XGAHX-*5 (9)	500 I	Opp	86	Furnished
885XJAHX-*5 (5)	500 I	Opp	101	Furnished
885XMAHX-*5 (6)	500 I	Opp	119	Furnished

ONE SPEED - FORWARD & REVERSE

348XFAHX-*5 (32)	200 I	Opp	86	90	Furnished	340XFAHX-*4 (32)	200 I	Opp	86	90	7-A-140(36)	Furnished
------------------	-------	-----	----	----	-----------	------------------	-------	-----	----	----	-------------	-----------

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.**CAUTION:** Do not use geared adapters with 442 A and C ratios.

- (3) Input Gear Part No. 5-P-1100
- (9) Input Gear Part No. 5-P-1135
- (24) Input Gear Part No. 5-P-1510-15X
- (32) Input Gear Part No. 5-P-581
- (5) Input Gear Part No. 5-P-1102
- (20) Input Gear Part No. 5-P-1510-11X
- (25) Input Gear Part No. 5-P-1510-16X
- (36) Filler block furnished with PTO
- (6) Input Gear Part No. 5-P-1103
- (21) Input Gear Part No. 5-P-1510-12X
- (26) Input Gear Part No. 5-P-1510-17X
- (7) Input Gear Part No. 5-P-1104
- (22) Input Gear Part No. 5-P-1510-13X
- (27) Input Gear Part No. 5-P-1510-18X
- (8) Input Gear Part No. 5-P-1105
- (23) Input Gear Part No. 5-P-1510-14X
- (28) Input Gear Part No. 5-P-1510-19X

ASO10-ESP	LASO125-10S (BM#301620)	LLPSO125-10S
ASO10-VP10	LASO140-10S (BM#301621)	LLPSO140-10S
ASO100-10S	LASO150-10S (BM#301622)	LLPSO150-10S
ASO125-10S (BM#301579)	LLASO125-10S	LLPSO165-10S
ASO140-10S (BM#301580)	LLASO140-10S	LPSO100-10S
ASO150-10S (BM#301578)	LLASO150-10S	LPSO125-10S (BM#301572)
ASO160-10S	LLPSO10-VPD	LPSO140-10S (BM#301573)
ASO165-10S (BM#301581)	LLPSO100-10S	LPSO150-10S (BM#301574)

LEFT SIDE ONLY**RIGHT SIDE ONLY****TRANSMISSION GEAR DATA:**

L.S. 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7300" (18.5420MM)**TRANSMISSION GEAR DATA:**

R.S. 06-BOLT Opening Gear REAR of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0750" (27.3050MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - FORWARD & REVERSE

348ZFAHX-*5 (32)	200 I	Opp	86	90	8-A-093(T) 8-A-032(P)	Furnished							
863XBAHX-*5	500 I	Opp	67	83		Furnished							

GEARED ADAPTERS

628XAHX-4AH	250 I	Eng	8-A-032	Furnished	626XAHX-4AH	250 I	Eng	Furnished
					630XAHX-4AH	250 I	Eng	Furnished
					645XAHX-4AH	250 I	Eng	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 A and C ratios.

(32) Input Gear Part No. 5-P-581

PS86-10V (BM#301587)

LEFT SIDE ONLY							RIGHT SIDE ONLY						
TRANSMISSION GEAR DATA: L.S. 06-BOLT Opening Gear FORWARD of Centerline 45 Teeth - SPUR							TRANSMISSION GEAR DATA: R.S. 06-BOLT Opening Gear REAR of Centerline 45 Teeth - SPUR						
PITCH LINE TO APERTURE FACE: 0.7300" (17.8550MM)							PITCH LINE TO APERTURE FACE: 1.0750" (27.3050MM)						

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]							Fwd					

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221XEAHX-*5	250 I	Opp	58	328481X	Furnished	221XCAHX-*4	250 I	Opp	51	7-A-062 7-A-032(31)	Furnished
489XAAHX-*5 (12)	250 I	Opp	44	Furnished	489XAAHX-*4	250 I	Opp	58		Furnished	
489XCAHX-*5 (13)	250 I	Opp	57	Furnished	489XCAHX-*4 (2)	250 I	Opp	70		Furnished	
489XFAHX-*5 (2)	250 I	Opp	70	Furnished	489XFAHX-*4 (15)	250 I	Opp	81		Furnished	
489XHAHX-*5 (15)	250 I	Opp	81	Furnished	489XHAHX-*4 (1)	250 I	Opp	91		Furnished	
489XLAHX-*5 (1)	250 I	Opp	91	Furnished	489XLAHX-*4 (1)	225 I	Opp	98		Furnished	
489XQAHX-*5 (1)	225 I	Opp	98	Furnished	489XQAHX-*4 (1)	225 I	Opp	113		Furnished	
489XRAHX-*5 (1)	225 I	Opp	113	Furnished	489XRAHX-*4 (1)	200 I	Opp	135		Furnished	
489XSAHX-*5 (1)	200 I	Opp	135	Furnished	489XSAHX-*4 (1)	195 I	Opp	161		Furnished	
489XUAHX-*5 (1)	195 I	Opp	161	Furnished	489XUAHX-*4 (1)	175 I	Opp	189		Furnished	
489XWAHX-*5 (1)	175 I	Opp	189	Furnished	489XWAHX-*4 (1)	140 I	Opp	224		Furnished	
489XXAHX-*5 (1)	140 I	Opp	224	Furnished	489XXAHX-*4 (10)	375 I	Opp	70		Furnished	
680XFAHX-*5 (10)	375 I	Opp	70	Furnished	680XFAHX-*4 (15)	375 I	Opp	81		Furnished	
680XHAHX-*5 (19)	375 I	Opp	81	Furnished	680XHAHX-*4 (11)	375 I	Opp	98		Furnished	
680XQAHX-*5 (11)	375 I	Opp	98	Furnished	680XQAHX-*4 (18)	350 I	Opp	113		Furnished	
680XRAHX-*5 (18)	350 I	Opp	113	Furnished	680XRAHX-*4 (14)	325 I	Opp	135		Furnished	
680XSAHX-*5 (14)	325 I	Opp	135	Furnished							
823XTKTX-*3 (17)	350 I	Opp	142	8-A-165(30)	Furnished						
880XBAHX-*3 (3)	500 I	Opp	48	Furnished							
880XDAHX-*3 (4)	500 I	Opp	57	Furnished							
880XGAHX-*3 (9)	500 I	Opp	62	Furnished							
880XJAHX-*3 (5)	500 I	Opp	72	Furnished							
880XMAHX-*3 (6)	500 I	Opp	85	Furnished							
880XQAHX-*3 (16)	450 I	Opp	99	Furnished							
880XRAHX-*3 (7)	400 I	Opp	117	Furnished							
880XTAHX-*3 (8)	350 I	Opp	151	Furnished							

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XBAJX-*5 (20)	300 C	Opp	48	8-A-032	Furnished
282XCAJX-*5 (21)	300 C	Opp	58	8-A-032	Furnished
282XDAJX-*5 (22)	300 C	Opp	69	8-A-032	Furnished

Continued on Next Page

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1004 (6) Input Gear Part No. 5-P-1103 (11) Input Gear Part No. 5-P-1246 (16) Input Gear Part No. 5-P-1385 (21) Input Gear Part No. 5-P-1510-12X
 (2) Input Gear Part No. 5-P-1077 (7) Input Gear Part No. 5-P-1104 (12) Input Gear Part No. 5-P-1280 (17) Input Gear Part No. 5-P-1395 (22) Input Gear Part No. 5-P-1510-13X
 (3) Input Gear Part No. 5-P-1100 (8) Input Gear Part No. 5-P-1105 (13) Input Gear Part No. 5-P-1287 (18) Input Gear Part No. 5-P-1441 (30) Filler block furnished with PTO
 (4) Input Gear Part No. 5-P-1101 (9) Input Gear Part No. 5-P-1135 (14) Input Gear Part No. 5-P-1322 (19) Input Gear Part No. 5-P-1494 (31) Furnished, but not required
 (5) Input Gear Part No. 5-P-1102 (10) Input Gear Part No. 5-P-1242 (15) Input Gear Part No. 5-P-1364 (20) Input Gear Part No. 5-P-1510-11X

PS86-10V (BM#301587)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7300" (17.8550MM)**TRANSMISSION GEAR DATA:**

R.S. 06-BOLT Opening Gear REAR of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0750" (27.3050MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

282XGAJX-*5 (23)	300 C	Opp	82	8-A-032	Furnished
282XKAJX-*5 (24)	300 C	Opp	92	8-A-032	Furnished
282XMAJX-*5 (25)	300 C	Opp	103	8-A-032	Furnished
282XPAJX-*5 (26)	300 C	Opp	115	8-A-032	Furnished
282XSAJX-*5 (27)	300 C	Opp	129	8-A-032	Furnished
282XTAJX-*5 (28)	300 C	Opp	144	8-A-032	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (3)	500 I	Opp	48	Furnished
885XGAHX-*3 (9)	500 I	Opp	62	Furnished
885XJAHX-*3 (5)	500 I	Opp	72	Furnished
885XMAHX-*3 (6)	500 I	Opp	85	Furnished

ONE SPEED - FORWARD & REVERSE

348XFAHX-*4 (29)	200 I	Opp	61	64	Furnished	340XFAHX-*4 (29)	200 I	Opp	61	64	7-A-140(31)	Furnished
863XBAHX-*5	500 I	Opp	48	59	Furnished							

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (3) Input Gear Part No. 5-P-1100
- (24) Input Gear Part No. 5-P-1510-15X
- (29) Input Gear Part No. 5-P-581
- (5) Input Gear Part No. 5-P-1102
- (25) Input Gear Part No. 5-P-1510-16X
- (31) Furnished, but not required
- (6) Input Gear Part No. 5-P-1103
- (26) Input Gear Part No. 5-P-1510-17X
- (9) Input Gear Part No. 5-P-1135
- (27) Input Gear Part No. 5-P-1510-18X
- (23) Input Gear Part No. 5-P-1510-14X
- (28) Input Gear Part No. 5-P-1510-19X

TTC-150

TREMEC/TTC/SPICER

CHELSEA®

TDET0880 (Same as TR-4050, Dodge Mexico)
 TDET1015 (Same as TR-4050 w/ special ratio-Ford Mexico)
 TDET1361 (Same as TR-4050, Chevy/GMC)
 TDET1664 (Same as TR-4050, Ford Mexico)
 TR-4050 (Transmission made in Mexico)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
 32 Teeth - R.H. - HELIX

PITCH LINE TO APERTURE FACE:
 1.1400" (28.9342MM)**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C †	Rot	Fwd					I / C †	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442XLKNX-*3 (1)	250 I	Opp	49	Furnished
442XQKNX-*3 (1)	225 I	Opp	53	Furnished
442XRKNX-*3 (1)	225 I	Opp	61	Furnished
442XSKNX-*3 (1)	200 I	Opp	73	Furnished
442XUKNX-*3 (1)	195 I	Opp	87	Furnished
442XWKNX-*3 (1)	175 I	Opp	102	Furnished
442XXKNX-*3 (1)	140 I	Opp	121	Furnished

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272ZAKNX-*3 (2)	300 C	Opp	24	Furnished
272ZBKNX-*3 (3)	300 C	Opp	29	Furnished
272ZCKNX-*3 (4)	300 C	Opp	35	Furnished
272ZDKNX-*3 (5)	300 C	Opp	42	Furnished
272ZGKNX-*3 (6)	279 C	Opp	50	Furnished
272ZKKNX-*3 (7)	249 C	Opp	56	Furnished
272ZMKNX-*3 (8)	223 C	Opp	63	Furnished
272ZPKNX-*3 (9)	200 C	Opp	71	Furnished
272ZSKNX-*3 (10)	178 C	Opp	79	Furnished

GEARED ADAPTERS

626XKNX-3KP	250 I	Eng	7170-4X
630XKNX-3KP	250 I	Eng	7170-4X
645XKNX-3KP	250 I	Eng	7170-4X

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

PSDO165-18A (Released for Mexico Market)
PSDO185-18A (Released for Mexico Market)
PSDO205-18A (Released for Mexico Market)

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.9280" (23.5700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear REAR of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.2280" (31.1900MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3 (28)	250 I	Opp	68	8-A-032(T)	310778X	Furnished	221ZCAHX-*4 (28)	250 I	Opp	68	7-A-093(T)	328170-96X
221ZEAHX-*3 (27)	250 I	Opp	75	8-A-032(P)	310778X	Furnished	221ZEAHX-*4 (27)	250 I	Opp	75	7-A-062(T)	328170-96X
489ZAAHX-*5 (12)	250 I	Opp	59	8-A-032(P)	Furnished	442LAAHX-*4 (12)	250 I	Opp	59	7-A-062(P)	328170-94X	
489ZCAHX-*5 (13)	250 I	Opp	76	8-A-032(P)	Furnished	442LCAXH-*4 (13)	250 I	Opp	76	7-A-062(P)	328170-94X	
489ZFAHX-*5 (2)	250 I	Opp	94	8-A-032(P)	Furnished	442LFAHX-*4 (2)	250 I	Opp	94	7-A-062(P)	328170-94X	
489ZHAHX-*5 (15)	250 I	Opp	108	8-A-032(P)	Furnished	442LHAHX-*4 (15)	250 I	Opp	108	7-A-062(P)	328170-94X	
489ZLAHX-*5 (1)	250 I	Opp	122	8-A-032(P)	Furnished	442LLAHX-*4 (1)	250 I	Opp	121	7-A-062(P)	328170-94X	
489ZQAHX-*5 (1)	225 I	Opp	131	8-A-032(P)	Furnished	442LQAHX-*4 (1)	225 I	Opp	131	7-A-062(P)	328170-94X	
489ZRAHX-*5 (1)	225 I	Opp	152	8-A-032(P)	Furnished	442LRAHX-*4 (1)	225 I	Opp	152	7-A-062(P)	328170-94X	
489ZSAHX-*5 (1)	200 I	Opp	181	8-A-032(P)	Furnished	442LSAHX-*4 (1)	200 I	Opp	181	7-A-062(P)	328170-94X	
489ZUAHX-*5 (1)	195 I	Opp	215	8-A-032(P)	Furnished	442LUAHX-*4 (1)	195 I	Opp	216	7-A-062(P)	328170-94X	
489ZWAHX-*5 (1)	175 I	Opp	254	8-A-032(P)	Furnished	442LWAHX-*4 (1)	175 I	Opp	254	7-A-062(P)	328170-94X	
489ZXAHX-*5 (1)	140 I	Opp	300	8-A-032(P)	Furnished	442LXAHX-*4 (1)	140 I	Opp	301	7-A-062(P)	328170-94X	
880ZBAHX-*3 (3)	500 I	Opp	64	8-A-248(P)	328170-179X	660LFAHX-*4 (10)	375 I	Opp	94	7-A-062(P)	328170-94X	
				8-A-500								
880ZDAHX-*3 (4)	500 I	Opp	76	8-A-245(P)	328170-179X	660LHAHX-*4 (15)	375 I	Opp	108	7-A-062(P)	328170-94X	
				8-A-500								
880ZGAHX-*3 (9)	500 I	Opp	85	8-A-248(P)	328170-179X	660LQAHX-*4 (11)	375 I	Opp	131	7-A-062(P)	328170-94X	
				8-A-500								
880ZJAHX-*3 (5)	500 I	Opp	97	8-A-248(P)	328170-179X	660LRAHX-*4 (17)	350 I	Opp	152	7-A-062(P)	328170-94X	
				8-A-500								
880ZMAHX-*3 (6)	500 I	Opp	113	8-A-248(P)	328170-179X	660LSAHX-*4 (14)	325 I	Opp	181	7-A-062(P)	328170-94X	
				8-A-500								
880ZQAHX-*3 (16)	450 I	Opp	134	8-A-248(P)	328170-179X							
				8-A-500								
880ZRRAHX-*3 (7)	400 I	Opp	158	8-A-248(P)	328170-179X							
				8-A-500								
880ZTAHX-*3 (8)	350 I	Opp	203	8-A-248(P)	328170-179X							
				8-A-500								

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

Continued on Next Page

† = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1441
(27) Input Gear Part No. 5-P-202
(28) Input Gear Part No. 5-P-319

PSDO165-18A (Released for Mexico Market)
 PSDO185-18A (Released for Mexico Market)
 PSDO205-18A (Released for Mexico Market)

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 08-BOLT Opening Gear FORWARD of Centerline
 52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.9280" (23.5700MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear REAR of Centerline
 52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.2280" (31.1900MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]							I / C [†]					
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)													

282XBAJX-*5 (18)	300 C	Opp	64	8-A-032 8-A-032	Furnished
282XCAJX-*5 (19)	300 C	Opp	78	8-A-032 8-A-032	Furnished
282XDAJX-*5 (20)	300 C	Opp	93	8-A-032 8-A-032	Furnished
282XGAJX-*5 (21)	300 C	Opp	111	8-A-032 8-A-032	Furnished
282XKAJX-*5 (22)	300 C	Opp	124	8-A-032 8-A-032	Furnished
282XMAJX-*5 (23)	300 C	Opp	139	8-A-032 8-A-032	Furnished
282XPAJX-*5 (24)	300 C	Opp	155	8-A-032 8-A-032	Furnished
282XS AJX-*5 (25)	289 C	Opp	173	8-A-032 8-A-032	Furnished
282XTAJX-*5 (26)	258 C	Opp	194	8-A-032 8-A-032	Furnished

ONE SPEED - FORWARD & REVERSE

348ZFAHX-*5 (29)	200 I	Opp	82	86	8-A-032	Furnished	340ZFAHX-*4 (29)	200 I	Opp	82	86	7-A-062(P)	Furnished
------------------	-------	-----	----	----	---------	-----------	------------------	-------	-----	----	----	------------	-----------

GEARED ADAPTERS

628ZAHX-3XX (1)	250 I	Eng	8-A-032(T)	Furnished	626KAHX-4XX (1)	250 I	Eng	7-A-062(T)	328170-94X
					630KAHX-4XX (1)	250 I	Eng	7-A-062(T)	328170-94X
					645KAHX-4XX (1)	250 I	Eng	7-A-062(T)	328170-94X

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1004 (22) Input Gear Part No. 5-P-1510-15X (29) Input Gear Part No. 5-P-581
 (18) Input Gear Part No. 5-P-1510-11X (23) Input Gear Part No. 5-P-1510-16X
 (19) Input Gear Part No. 5-P-1510-12X (24) Input Gear Part No. 5-P-1510-17X
 (20) Input Gear Part No. 5-P-1510-13X (25) Input Gear Part No. 5-P-1510-18X
 (21) Input Gear Part No. 5-P-1510-14X (26) Input Gear Part No. 5-P-1510-19X

Tremec/TTC/Spicer Notes

SPR-104

1. Speeds shown are with transmission in high range. For speeds in low range, multiply speed shown by .84.
2. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
3. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

SPR-105

1. PTO speeds shown are with transmission in low range - for speeds in high range multiply speeds shown by 1.28.
2. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

SPR-140

1. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

SPR-144

1. The AK & XK output flanges can not be used with the A & C ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

TTC-150

1. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

TTC-151

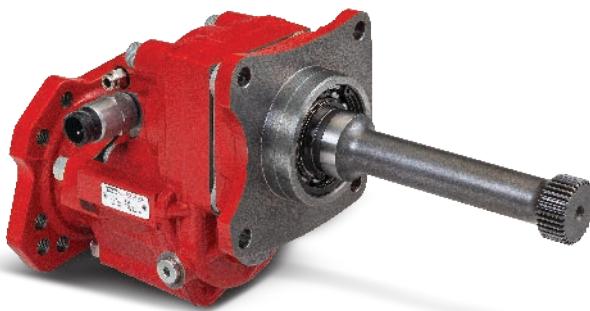
1. The PTO output speeds shown are with the transmission in High Range, for PTO output speeds with the transmission in low range, multiply speeds shown by .82
2. 272/282 Series - Must be used as an AIR Shift PTO. Order Air Shift Options Only

Tremec/TTC/Spicer

NOTES



VOLVO



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

 **WARNING:** This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

Transmission Make and Model	PTO	Number	Teeth in
	Appl. Number	Forward Speeds	PTO Driver
AT2412 (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2412 (I-Shift) Low Ratio	VLV-10	12	CS
AT2512 (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2512 (I-Shift) Low Ratio	VLV-10	12	CS
AT2512C (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2512C (I-Shift) Low Ratio	VLV-10	12	CS
AT2612 (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2612 (I-Shift) Low Ratio	VLV-10	12	CS
AT2612D (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2612D (I-Shift) Low Ratio	VLV-10	12	CS
AT2812 (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2812 (I-Shift) Low Ratio	VLV-10	12	CS
AT2812C (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2812C (I-Shift) Low Ratio	VLV-10	12	CS
ATO2512 (I-Shift) High Split Range	VLV-13H	12	CS
ATO2512 (I-Shift) Low Ratio	VLV-13	12	CS
ATO2512C (I-Shift) High Split Range	VLV-13H	12	CS
ATO2512C (I-Shift) Low Ratio	VLV-13	12	CS
ATO2612 (I-Shift) High Split Range	VLV-13H	12	CS
ATO2612 (I-Shift) Low Ratio	VLV-13	12	CS
ATO2612C (I-Shift) High Split Range	VLV-13H	12	CS
ATO2612C (I-Shift) Low Ratio	VLV-13	12	CS
ATO2612D (I-Shift) High Split Range	VLV-13H	12	CS
ATO2612D (I-Shift) Low Ratio	VLV-13	12	CS
ATO2613F (I-Shift) High Split Range	VLV-13H	12	CS
ATO2613F (I-Shift) Low Ratio	VLV-13	12	CS
ATO3112 (I-Shift) High Split Range	VLV-13H	12	CS
ATO3112 (I-Shift) Low Ratio	VLV-13	12	CS
ATO3112C (I-Shift) High Split Range	VLV-13H	12	CS
ATO3112C (I-Shift) Low Ratio	VLV-13	12	CS
ATO3112D (I-Shift) High Split Range	VLV-13H	12	CS
ATO3112D (I-Shift) Low Ratio	VLV-13	12	CS
V2412AT (I-Shift) High Split Ratio	VLV-10H	12	CS
V2412AT (I-Shift) Low Ratio	VLV-10	12	CS
V2512AT (I-Shift) High Split Ratio	VLV-10H	12	CS

VOLVO



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

VOLVO TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
V2512AT (I-Shift) Low Ratio	VLV-10	12	CS
V2812AT (I-Shift) High Split Ratio	VLV-10H	12	CS
V2812AT (I-Shift) Low Ratio	VLV-10	12	CS
VO2512AT (I-Shift) High Split Range	VLV-13H	12	CS
VO2512AT (I-Shift) Low Ratio	VLV-13	12	CS
VO3112AT (I-Shift) High Split Range	VLV-13H	12	CS
VO3112AT (I-Shift) Low Ratio	VLV-13	12	CS

Volvo



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

CHELSEA®**VOLVO****VLV-10**

AT2412 (I-Shift) Low Ratio
 AT2512 (I-Shift) Low Ratio
 AT2512C (I-Shift) Low Ratio
 AT2612 (I-Shift) Low Ratio
 AT2612D (I-Shift) Low Ratio
 AT2812 (I-Shift) Low Ratio
 AT2812C (I-Shift) Low Ratio
 V2412AT (I-Shift) Low Ratio

V2512AT (I-Shift) Low Ratio
 V2812AT (I-Shift) Low Ratio

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening NON-STANDARD of Centerline
 0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

512XRASW-V-XY	258 C	Opp	70	Furnished
512XRASX-V-XK	258 C	Opp	70	Furnished
512XRASX-V-XV	258 C	Opp	70	Furnished
524XTASX-V-*	300 C	Eng	93	Furnished
524XVASX-V-*	258 C	Eng	126	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

Volvo

VLV-10H

VOLVO

CHELSEA®

AT2412 (I-Shift) High Split Ratio
 AT2512 (I-Shift) High Split Ratio
 AT2512C (I-Shift) High Split Ratio
 AT2612 (I-Shift) High Split Ratio
 AT2612D (I-Shift) High Split Ratio
 AT2812 (I-Shift) High Split Ratio
 AT2812C (I-Shift) High Split Ratio
 V2412AT (I-Shift) High Split Ratio

V2512AT (I-Shift) High Split Ratio
 V2812AT (I-Shift) High Split Ratio

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening NON-STANDARD of Centerline
 0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

512XRASW-V-XY	258	C	Opp	90									
512XRASX-V-XK	258	C	Opp	90									
512XRASX-V-XV	258	C	Opp	90									
524XTASX-V-*	300	C	Eng	119									
524XVASX-V-*	258	C	Eng	161									

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

Volvo

CHELSEA®**VOLVO****VLV-13**

ATO2512 (I-Shift) Low Ratio
 ATO2512C (I-Shift) Low Ratio
 ATO2612 (I-Shift) Low Ratio
 ATO2612C (I-Shift) Low Ratio
 ATO2612D (I-Shift) Low Ratio
 ATO2613F (I-Shift) Low Ratio
 ATO3112 (I-Shift) Low Ratio
 ATO3112C (I-Shift) Low Ratio

ATO3112D (I-Shift) Low Ratio
 VO2512AT (I-Shift) Low Ratio
 VO3112AT (I-Shift) Low Ratio

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening NON-STANDARD of Centerline
 0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

512XRASW-V-XY	258 C	Opp	90										
512XRASX-V-XK	258 C	Opp	90										
512XRASX-V-XV	258 C	Opp	90										
511XRASW-V-*	590 C	Opp	90										
524XTASX-V-*	300 C	Eng	120										
524XVASX-V-*	258 C	Eng	162										

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

Volvo

VLV-13H

VOLVO

CHELSEA®

ATO2512 (I-Shift) High Split Range
 ATO2512C (I-Shift) High Split Range
 ATO2612 (I-Shift) High Split Range
 ATO2612C (I-Shift) High Split Range
 ATO2612D (I-Shift) High Split Range
 ATO2612D (I-Shift) High Split Range
 ATO2613F (I-Shift) High Split Range
 ATO3112 (I-Shift) High Split Range
 ATO3112C (I-Shift) High Split Range

ATO3112D (I-Shift) High Split Range
 VO2512AT (I-Shift) High Split Range
 VO3112AT (I-Shift) High Split Range

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening NON-STANDARD of Centerline
 0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

512XRASW-V-XY	258 C	Opp	115	Furnished
512XRASX-V-XK	258 C	Opp	115	Furnished
512XRASX-V-XV	258 C	Opp	115	Furnished
524XTASX-V-*	300 C	Eng	154	Furnished
524XVASX-V-*	258 C	Eng	207	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

Volvo

Volvo Notes

VLV-10

1. Connection to Volvo system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package. Vehicle ECU must be programmed by dealer for PTO operation.
2. PTO must be ordered with the V shift option and use the OE factory supplied in dash PTO switch.
3. 511/523 Rear Mounts - The adapter 329735X is furnished with the PTO
4. 524 Rear Mount - The adapter 329980X is furnished with the PTO

VLV-10H

1. Connection to Volvo system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package. Vehicle ECU must be programmed by dealer for PTO operation.
2. PTO must be ordered with the V shift option and use the OE factory supplied in dash PTO switch.
3. 511/523 Rear Mounts - The adapter 329735X is furnished with the PTO
4. 524 Rear Mount - The adapter 329980X is furnished with the PTO

VLV-13

1. Connection to Volvo system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package. Vehicle ECU must be programmed by dealer for PTO operation.
2. PTO must be ordered with the V shift option and use the OE factory supplied in dash PTO switch.
3. 511/523 Rear Mounts - The adapter 329735X is furnished with the PTO
4. 524 Rear Mount - The adapter 329980X is furnished with the PTO

VLV-13H

1. Connection to Volvo system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package. Vehicle ECU must be programmed by dealer for PTO operation.
2. PTO must be ordered with the V shift option and use the OE factory supplied in dash PTO switch.
3. 511/523 Rear Mounts - The adapter 329735X is furnished with the PTO
4. 524 Rear Mount - The adapter 329980X is furnished with the PTO

VOLVO

NOTES



Volvo

ZF



Parker | Chelsea

ENGINEERING YOUR SUCCESS.



WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

 **WARNING:** This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

© Copyright 2022, Parker Hannifin Corporation, All Rights Reserved

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
12AS-1630TD (AS-Tronic)	ZF-66	12	CS
12AS-1930TD (AS-Tronic)	ZF-66	12	CS
12AS-1930TO (AS-Tronic)	ZF-64	12	CS
12AS-2130TD (AS-Tronic)	ZF-66	12	CS
12AS-2130TO (AS-Tronic)	ZF-64	12	CS
12AS-2140TD (AS-Tronic)	ZF-66	12	CS
12AS-2301 (AS-Tronic - 12.33/0.78 Ratio)	ZF-64	12	CS
12AS-2301 (AS-Tronic - 15.86/1.0 Ratio)	ZF-66	12	CS
12AS-2330TD (AS-Tronic)	ZF-66	12	CS
12AS-2330TO (AS-Tronic)	ZF-64	12	CS
12AS-2340TD (AS-Tronic)	ZF-66	12	CS
12AS-2530TD (AS-Tronic)	ZF-66	12	CS
12AS-2530TD (AS-Tronic)	ZF-64	12	CS
12AS-2540TD (AS-Tronic)	ZF-66	12	CS
12AS-2540TO (AS-Tronic)	ZF-64	12	CS
12AS-2740TO (AS-Tronic)	ZF-64	12	CS
12AS-2940TO (AS-Tronic)	ZF-64	12	CS
16AS-2601 (AS-Tronic 14.12/0.83 Ratio)	ZF-65	16	CS
16AS-2601 (AS-Tronic - 17.03/1.0 Ratio)	ZF-67	16	CS
16AS-2630TO (AS-Tronic)	ZF-65	16	CS
6A-S800TO	ZF-22	6	CS
6S-800TO (6.58/0.78 Ratio)	ZF-22	6	CS
6AS-1000TO (6.75/0.78 Ratio)	ZF-24	6	CS
6S-750 (Ford Only Prior to January 2007)	ZF-45	6	L39
6S-800TO (6.58/0.78 Ratio)	ZF-22	6	CS
6S-850	ZF-23	6	CS
6S-850	ZF-46	6	CS
6S-1000TO (6.75/0.78 Ratio)	ZF-24	6	CS
6S-1200TD (7.72/1.0 Ratio)	ZF-25	6	CS
9S-1110 TD (12.72/1.00 Ratio)	ZF-47	9	CS
9S-1110 TO (9.48/0.75 Ratio)	ZF-47	9	CS
9S-1310 TD (12.72/1:00 Ratio)	ZF-7	9	CS
9S-1310 TO (9.48/0.75 Ratio)	ZF-7	9	CS
9S-1510 TO (9.48/0.75 Ratio)	ZF-7	9	CS
9S-910 TD (12.73/1.00 Ratio)	ZF-7	9	CS
S5-42 (7.5 Gas Wide Ratio)	ZF-4	5	L45-R45
S5-47 (Gas Wide Ratio 5.72/0.76)	ZF-4	5	L45-R45
S6-36 (6.93/0.80 Ratio)	ZF-2	6	CS



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.



ZF TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
S6-36 (7.43/1.00 Ratio)	ZF-35	6	CS
S6-36 (8.97/0.83 Ratio w/ GV36 Splitter)	ZF-33	6	CS
S6-65/AK6-65 (6.70/0.82 Ratio)	ZF-26	6	CS
S6-65/AK6-65 (9.00/1.00 Ratio)	ZF-27	6	CS
S6-66 (7.36/1.00 Ratio)	ZF-52	6	CS
S6-66 (9.06/1.0 Ratio) (Countershaft)	ZF-53	6	CS
S6-70 (6.8/1.0 Ratio)	ZF-54	6	CS
S6-70 (7.36/1.00 Ratio)	ZF-55	6	CS
S6-70 (7.92/1.00 Ratio)	ZF-56	6	CS
S6-70 (9.03/1.00 Ratio)	ZF-57	6	CS
S6-75 (7.52/1.00 Ratio)	ZF-58	6	CS
S6-75 (7.52/1.00 Ratio)	ZF-59	6	CS
S6-80/AK6-80 (6.70/0.73 Ratio) (Countershaft)	ZF-26	6	CS
S6-80/AK6-80 (9.10/1.00 Ratio)	ZF-28	6	CS
S6-90/AK6-90 (6.37/1.00)	ZF-29	6	CS
S6-90/AK6-90 (7.03/0.81 Ratio)	ZF-30	6	CS
S6-90/AK6-90 (9.01/1.00 Ratio) (Countershaft)	ZF-31	6	CS
S6-650 (Ford Truck Models Prior to January 2007)	ZF-45	6	L39
S6-650 (GM 3600 Cab/Chassis - Order Code ML6)	ZF-47	6	L39-R39
SAS-800TO (6.58/0.78 Ratio)	ZF-22	6	CS

ZF



IMPORTANT: See Safety Information
in Section 1 of the Chelsea Applications
catalog HY25-3000/US

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)
L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft
For transmissions not listed, contact your authorized Chelsea Distributor.

CHELSEA®**ZF****ZF-2**

S6-36 (6.93/0.80 Ratio)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

REAR MOUNT & THRSHAFT

524XTAAX- [*] -*	258 C	Eng	68
524XVAAX- [*] -*	258 C	Eng	92

Furnished
Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

ZF-4

ZF

CHELSEA®

S5-42 (7.5 Gas Wide Ratio)
 S5-47 (Gas Wide Ratio 5.72/0.76)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
 45 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.1953" (30.3606MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
 45 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.1953" (30.3606MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442XFGSX-*5 (1)	250 I	Opp	53	Furnished	442XFGSX-*3 (1)	250 I	Opp	53	Furnished	442XLGSX-*5 (2)	250 I	Opp	68
442XLGSX-*5 (2)	250 I	Opp	68	Furnished	442XLGSX-*3 (2)	250 I	Opp	68	Furnished	442XQGSX-*5 (2)	225 I	Opp	74
442XQGSX-*5 (2)	225 I	Opp	74	Furnished	442XQGSX-*3 (2)	225 I	Opp	74	Furnished	442XRGSX-*5 (2)	225 I	Opp	85
442XRGSX-*5 (2)	225 I	Opp	85	Furnished	442XRGSX-*3 (2)	225 I	Opp	85	Furnished	442XSGSX-*5 (2)	200 I	Opp	102
442XSGSX-*5 (2)	200 I	Opp	102	Furnished	442XSGSX-*3 (2)	200 I	Opp	102	Furnished	442XUGSX-*5 (2)	195 I	Opp	121
442XUGSX-*5 (2)	195 I	Opp	121	Furnished	442XUGSX-*3 (2)	195 I	Opp	121	Furnished	442XWGSX-*5 (2)	175 I	Opp	142
442XWGSX-*5 (2)	175 I	Opp	142	Furnished	442XWGSX-*3 (2)	175 I	Opp	142	Furnished	442XXGSX-*5 (2)	140 I	Opp	168
442XXGSX-*5 (2)	140 I	Opp	168	Furnished	442XXGSX-*3 (2)	140 I	Opp	168	Furnished				

ONE SPEED - FORWARD & REVERSE

340XFEDX-*5 (3)	200 I	Opp	41	43	7-A-140	7170-4X	340XFEDX-*5 (3)	200 I	Opp	41	43	7-A-140	7170-4X
					7-A-270							7-A-270	

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1151
 (2) Input Gear Part No. 5-P-1152
 (3) Input Gear Part No. 5-P-897

CHELSEA®**ZF****ZF-7**

9S-1110 TD (12.72/1.00 Ratio)
 9S-1110 TO (9.48/0.75 Ratio)
 9S-1310 TD (12.72/1.00 Ratio)
 9S-1310 TO (9.48/0.75 Ratio)
 9S-1510 TO (9.48/0.75 Ratio)
 9S-910 TD (12.73/1.00 Ratio)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

REAR MOUNT & THRSHAFT

512XRAQW-V-XY	258 C	Opp	97	Furnished
512XRAQX-V-XK	258 C	Opp	97	Furnished
512XRAQX-V-XV	258 C	Opp	97	Furnished
524XMAQX-* [*]	300 C	Opp	100	Furnished
524XTAQX-* [*]	300 C	Opp	129	Furnished
524XVAQX-* [*]	258 C	Opp	175	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

ZF

ZF-10

ZF

CHELSEA®

9S-1310 TD (12.72/1.00 Ratio)

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

REAR MOUNT & THRUSHIFT

512XRAQW-V-XY	258	C	Opp	72											
512XRAQX-V-XK	258	C	Opp	72											
512XRAQX-V-XV	258	C	Opp	72											
524XMAQX-*	300	C	Opp	74											
524XTAQX-*	300	C	Opp	96											
524XVAQX-*	258	C	Opp	130											

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

6S-S800TO
6AS-800TO (6.58/0.78 Ratio)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*XY	258 C	Opp	53	Furnished
512XRAHX-*XK	258 C	Opp	53	Furnished
512XRAHX-*XV	258 C	Opp	53	Furnished
524XTAH-*_*	258 C	Eng	70	Furnished
524XUAHX-*_*	258 C	Eng	81	Furnished
524XVAHX-*_*	258 C	Eng	95	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

ZF-23

ZF

CHELSEA®

6S-850

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

524XTAAX-**	258 C	Eng	56	Furnished
524VAAAX-**	258 C	Eng	76	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

6S-1000TO (6.75/0.78 Ratio)
6AS-1000TO (6.75/0.78 Ratio)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*XY	258 C	Opp	53	Furnished
512XRAHX-*XK	258 C	Opp	53	Furnished
512XRAHX-*XV	258 C	Opp	53	Furnished
524XTAH-*_*	258 C	Eng	70	Furnished
524XUAHX-*_*	258 C	Eng	81	Furnished
524XVAHX-*_*	258 C	Eng	95	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

ZF-25

ZF

CHELSEA®

6S-1200TD (7.72/1.0 Ratio)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*.XY	258	C	Opp	53											
512XRAHX-*.XK	258	C	Opp	53											
512XRAHX-*.XV	258	C	Opp	53											
524XTAH-*.*	258	C	Eng	72											
524XUAHX-*.*	258	C	Eng	83											
524XVAHX-*.*	258	C	Eng	97											

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

S6-65/AK6-65 (6.70/0.82 Ratio)
 S6-80/AK6-80 (6.70/0.73 Ratio) (Countershaft)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
 0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd	Rev					I / C ↑	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*XY	258 C	Opp	62	Furnished
512XRAHX-*XK	258 C	Opp	62	Furnished
512XRAHX-*XV	258 C	Opp	62	Furnished
524XTAH-*_*	258 C	Eng	83	Furnished
524XUAHX-*_*	258 C	Eng	95	Furnished
524XVAHX-*_*	258 C	Eng	112	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

ZF

ZF-27

ZF

CHELSEA®

S6-65/AK6-65 (9.00/1.00 Ratio)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*.XY	258	C	Opp	46	Furnished
512XRAHX-*.XK	258	C	Opp	46	Furnished
512XRAHX-*.XV	258	C	Opp	46	Furnished
524XTAH-*.*	258	C	Eng	61	Furnished
524XUAHX-*.*	258	C	Eng	71	Furnished
524XVAHX-*.*	258	C	Eng	83	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

CHELSEA®**ZF****ZF-28**

S6-80/AK6-80 (9.10/1.00 Ratio)

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth**PITCH LINE TO APERTURE FACE:**

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*XY	258 C	Opp	46	Furnished
512XRAHX-*XK	258 C	Opp	46	Furnished
512XRAHX-*XV	258 C	Opp	46	Furnished
524XTAH-*-*	258 C	Eng	61	Furnished
524XUAHX-*-*	258 C	Eng	71	Furnished
524XVAHX-*-*	258 C	Eng	83	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

ZF-29

ZF

CHELSEA®

S6-90/AK6-90 (6.37-1.00)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*.XY	258	C	Opp	66	Furnished
512XRAHX-*.XK	258	C	Opp	66	Furnished
512XRAHX-*.XV	258	C	Opp	66	Furnished
524XTAH-*.*	258	C	Eng	88	Furnished
524XUAHX-*.*	258	C	Eng	101	Furnished
524XVAHX-*.*	258	C	Eng	119	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

CHELSEA®**ZF****ZF-30**

S6-90/AK6-90 (7.03/0.81 Ratio)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth**PITCH LINE TO APERTURE FACE:**

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*XY	258 C	Opp	60	Furnished
512XRAHX-*XK	258 C	Opp	60	Furnished
512XRAHX-*XV	258 C	Opp	60	Furnished
524XTAH-*_*	258 C	Eng	80	Furnished
524XUAHX-*_*	258 C	Eng	92	Furnished
524XVAHX-*_*	258 C	Eng	108	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

ZF-31

ZF

CHELSEA®

S6-90/AK6-90 (9.01/1.00 Ratio) (Countershaft)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth**PITCH LINE TO APERTURE FACE:**

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*.XY	258	C	Opp	47	Furnished
512XRAHX-*.XK	258	C	Opp	47	Furnished
512XRAHX-*.XV	258	C	Opp	47	Furnished
524XTAH-*.*	258	C	Eng	62	Furnished
524XUAHX-*.*	258	C	Eng	72	Furnished
524XVAHX-*.*	258	C	Eng	84	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

S6-36 (8.97/0.83 Ratio w/ GV36 Splitter)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

524XTAAX- [*] -*	258 C	Eng	53
524XVAAX- [*] -*	258 C	Eng	72

Furnished
Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

ZF-34

ZF

CHELSEA®

S6-36 (7.43/0.85 Ratio)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

524XTAAX-**	258 C	Eng	64	Furnished
524VAAAX-**	258 C	Eng	86	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1515-1X
- (2) Input Gear Part No. 5-P-1515-2X
- (3) Input Gear Part No. 5-P-1515-3X
- (4) Input Gear Part No. 5-P-1515-4X

CHELSEA®**ZF****ZF-35**

S6-36 (7.43/1.00 Ratio)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth**PITCH LINE TO APERTURE FACE:**

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd					I / C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

524XTAAX- [*] -*	258 C	Eng	63
524XVAAX- [*] -*	258 C	Eng	86

Furnished
Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1515-1X
- (2) Input Gear Part No. 5-P-1515-2X
- (3) Input Gear Part No. 5-P-1515-3X
- (4) Input Gear Part No. 5-P-1515-4X

ZF

ZF-45

ZF

CHELSEA®

6S-650 (Ford Only Prior to January 2007)
 6S-750 (Ford Only Prior to January 2007)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
 39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

0.9330" (23.6982MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442XLHYX-*5 (1)	250 I	Opp	65	Furnished
442XQHYX-*5 (1)	225 I	Opp	70	Furnished
442XRHYX-*5 (1)	225 I	Opp	81	Furnished
442XSHYX-*5 (1)	200 I	Opp	96	Furnished
442XUHYX-*5 (1)	195 I	Opp	115	Furnished
442WHYX-*5 (1)	175 I	Opp	135	Furnished
442XXHYX-*5 (1)	140 I	Opp	160	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1237
 (2) Input Gear Part No. 5-P-1245

6S-850

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (6 SPEED TRANSMISSIONS)

524XTAAX- [*] -*	258 C	Eng	70
524XVAAX- [*] -*	258 C	Eng	95

Furnished
Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

- (1) Input Gear Part No. 5-P-1515-1X
- (2) Input Gear Part No. 5-P-1515-2X
- (3) Input Gear Part No. 5-P-1515-3X
- (4) Input Gear Part No. 5-P-1515-4X

ZF

S6-650 (GM 3600 Cab/Chassis - Order Code ML6)

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

0.9330" (23.6982MM)

TRANSMISSION GEAR DATA:

R.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

0.9330" (23.6982MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442XLHYX-*5 (1)	250 I	Opp	65	Furnished	442XLHYX-*5 (1)	250 I	Opp	65	Furnished
442XQHYX-*5 (1)	225 I	Opp	70	Furnished	442XQHYX-*5 (1)	225 I	Opp	70	Furnished
442XRHYX-*5 (1)	225 I	Opp	81	Furnished	442XRHYX-*5 (1)	225 I	Opp	81	Furnished
442XSHYX-*5 (1)	200 I	Opp	96	Furnished	442XSHYX-*5 (1)	200 I	Opp	96	Furnished
442XUHYX-*5 (1)	195 I	Opp	115	Furnished	442XUHYX-*5 (1)	195 I	Opp	115	Furnished
442XWHYX-*5 (1)	175 I	Opp	135	Furnished	442XWHYX-*5 (1)	175 I	Opp	135	Furnished
442XXHYX-*5 (1)	140 I	Opp	160	Furnished	442XXHYX-*5 (1)	140 I	Opp	160	Furnished

ONE SPEED - FORWARD & REVERSE

340XFHYX-*5 (2)	200 I	Opp	46	48	Furnished
-----------------	-------	-----	----	----	-----------

GEARED ADAPTERS

626XHYX-4JB (1)	250 I	Eng	Furnished
630XHYX-4JB (1)	250 I	Eng	Furnished
645XHYX-4JB (1)	250 I	Eng	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

CAUTION: It is required by GM Truck that the 442 Series when mounted on the right side of the transmission must have the direct mount pump, with hard tubing coming out of the rear of the pump, up and over the transmission output shaft, and a heat shield must be installed to cover the PTO and the pump. Order Kit number 329333X for complete pump and heat shield installation parts.

(1) Input Gear Part No. 5-P-1237
(2) Input Gear Part No. 5-P-1245

CHELSEA®**ZF****ZF-52**

S6-66 (7.36/1.00 Ratio)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*XY	258 C	Opp	52	Furnished
512XRAHX-*XK	258 C	Opp	52	Furnished
512XRAHX-*XV	258 C	Opp	52	Furnished
524XTAH-*-*	258 C	Eng	69	Furnished
524XUAHX-*-*	258 C	Eng	80	Furnished
524XVAHX-*-*	258 C	Eng	94	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

ZF-53

ZF

CHELSEA®

S6-66 (9.06-1.0 Ratio) (Countershaft)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth**PITCH LINE TO APERTURE FACE:**

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*.XY	258	C	Opp	42											
512XRAHX-*.XK	258	C	Opp	42											
512XRAHX-*.XV	258	C	Opp	42											
524XTAH-*.*	258	C	Eng	55											
524XUAHX-*.*	258	C	Eng	64											
524XVAHX-*.*	258	C	Eng	75											

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

S6-70 (6.8/1.0 Ratio)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*XY	258 C	Opp	51	Furnished
512XRAHX-*XK	258 C	Opp	51	Furnished
512XRAHX-*XV	258 C	Opp	51	Furnished
524XTAH-*-*	258 C	Eng	68	Furnished
524XUAHX-*-*	258 C	Eng	79	Furnished
524XVAHX-*-*	258 C	Eng	93	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

ZF-55

ZF

CHELSEA®

S6-70 (7.36/1.00 Ratio)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*.XY	258	C	Opp	48											
512XRAHX-*.XK	258	C	Opp	48											
512XRAHX-*.XV	258	C	Opp	48											
524XTAH-*.*	258	C	Eng	64											
524XUAHX-*.*	258	C	Eng	73											
524XVAHX-*.*	258	C	Eng	86											

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

S6-70 (7.92/1.00 Ratio)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:
0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*XY	258 C	Opp	44	Furnished
512XRAHX-*XK	258 C	Opp	44	Furnished
512XRAHX-*XV	258 C	Opp	44	Furnished
524XTAH-*-*	258 C	Eng	59	Furnished
524XUAHX-*-*	258 C	Eng	67	Furnished
524XVAHX-*-*	258 C	Eng	79	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

ZF-57

ZF

CHELSEA®

S6-70 (9.03/1.00 Ratio)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*.XY	258	C	Opp	39											
512XRAHX-*.XK	258	C	Opp	39											
512XRAHX-*.XV	258	C	Opp	39											
524XTAH-*.*	258	C	Eng	51											
524XUAHX-*.*	258	C	Eng	59											
524XVAHX-*.*	258	C	Eng	70											

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

S6-75 (7.52/1.00 Ratio)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth**PITCH LINE TO APERTURE FACE:**

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*XY	258 C	Opp	37	Furnished
512XRAHX-*XK	258 C	Opp	37	Furnished
512XRAHX-*XV	258 C	Opp	37	Furnished
524XTAH-*-*	258 C	Eng	49	Furnished
524XUAHX-*-*	258 C	Eng	56	Furnished
524XVAHX-*-*	258 C	Eng	66	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

ZF-59

ZF

CHELSEA®

S6-75 (7.52/1.00 Ratio)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 04-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %		Filler Block	Adapter Assy	Stud Kit
	I / C [†]	Rot	Fwd	Rev					I / C [†]	Rot	Fwd	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

512XRAHW-*.XY	258	C	Opp	55	Furnished
512XRAHX-*.XK	258	C	Opp	55	Furnished
512XRAHX-*.XV	258	C	Opp	55	Furnished
524XTAH-*.*	258	C	Eng	74	Furnished
524XUAHX-*.*	258	C	Eng	85	Furnished
524XVAHX-*.*	258	C	Eng	100	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

CHELSEA®**ZF****ZF-64**

12AS-1930TO (AS-Tronic)
 12AS-2130TO (AS-Tronic)
 12AS-2301 (AS-Tronic - 12.33/0.78 Ratio)
 12AS-2330TO (AS-Tronic)
 12AS-2530TO (AS-Tronic)
 12AS-2540TO (AS-Tronic)
 12AS-2740TO (AS-Tronic)
 12AS-2940TO (AS-Tronic)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

524XMACX-F-*	300 C	Eng	139	Furnished
524XTACX-F-*	300 C	Eng	180	Furnished
524XVACX-F-*	258 C	Eng	243	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

ZF

ZF-65

ZF

CHELSEA®

16AS-2601 (AS-Tronic - 14.12/0.83 Ratio)
 16AS-2630TO (AS-Tronic)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (16 SPEED TRANSMISSIONS)

524XMACX-F-*	300 C	Eng	114	Furnished
524XTACX-F-*	300 C	Eng	148	Furnished
524XVACX-F-*	258 C	Eng	200	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

ZF

CHELSEA®**ZF****ZF-66**

12AS-1630TD (AS-Tronic)
 12AS-1930TD (AS-Tronic)
 12AS-2130TD (AS-Tronic)
 12AS-2140TD (AS-Tronic)
 12AS-2301 (AS-Tronic - 15.86/1.0 Ratio)
 12AS-2330TD (AS-Tronic)
 12AS-2340TD (AS-Tronic)
 12AS-2530TD (AS-Tronic)

12AS-2540TD (AS-Tronic)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:**CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM**

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I / C ↑	Rot	Fwd					I / C ↑	Rot	Fwd			

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

524XMACX-F-*	300 C	Eng	84	Furnished
524XTACX-F-*	300 C	Eng	109	Furnished
524XVACX-F-*	258 C	Eng	148	Furnished

† I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
 Some notes may affect the proper PTO selection.

ZF

ZF-67

ZF

CHELSEA®

16AS-2601 (AS-Tronic - 17.03/1.0 Ratio)

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 00-BOLT Opening Gear NON-STANDARD of Centerline
0 Teeth

PITCH LINE TO APERTURE FACE:

0.0000" (0.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq	Dir	Engine %	Filler Block	Adapter Assy	Stud Kit
	I/C [†]	Rot	Fwd					I/C [†]	Rot	Fwd			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

524XMACX-F-*	300 C	Eng	78	Furnished
524XTACX-F-*	300 C	Eng	101	Furnished
524XVACX-F-*	300 C	Eng	137	Furnished

[†] I = Intermittent Torque Only - De-rate Torque Rating 30% for Continuous Duty.

C = Continuous or Intermittent Torque - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page.
Some notes may affect the proper PTO selection.

ZF

ZF Notes

ZF-4

1. No adapters available for this application.
2. The 100 Series will not mount on the left side due to interference with the reverse idler bulge.
3. Gas tank may prohibit the remote mounting of a hydraulic pump on the Left Hand side.
4. If there is interference with the exhaust system at the right hand aperture, use assembly arrangement 5.
5. Chelsea pump model P16-45 thru-85 can be direct mounted to PTOs. Larger pumps can not be direct mounted due to interference with the transmission.

ZF-7

1. 512/524 Rear Mounts - The adapter 329997X is furnished with the PTO

ZF-10

1. 512/524 Rear Mounts - The adapter 329997X is furnished with the PTO

ZF-33

1. For Rear Mounts - Speeds are shown in LOW split, multiply speed shown by 1.2 for speeds in HIGH split.

ZF-34

1. For Rear Mounts - Speeds are shown in LOW split, multiply speed shown by 1.16 for speeds in HIGH split.

ZF-35

1. For Rear Mounts - Speeds are shown in LOW split, multiply speed shown by 1.18 for speeds in HIGH split.

ZF-45

1. A 5 assembly is shown here, but other assembly arrangements may work better depending on the chassis setup, whether or not a direct mount pump is to be used, and whether or not a geared adapter is to be used. Chelsea P16-45 and -65 pumps can be direct mounted rearward if the PTO is a 3 assembly (bulge up), uses the XK pump flange, and is the L, R, S or U ratio. All other combinations will have interference problems. Chelsea P16-45 and -65 pumps can be direct mounted forward if a 4 assembly is used (bulge down), an XK pump flange is used, and is the L, R, S, or U ratio. All other combinations will have interference problems. Other ratios, assemblies, pump flanges and pumps may work if a geared adapter is used, but the PTO may be the lowest component on the truck. It would be vulnerable to damage.
2. The 236 series cannot be used on this transmission unless the truck is equipped with an auxiliary air supply.
3. If a 626, 630 or 645 series geared adapter is used, the PTO input gear is the 5-P-1244 JB gear, and the HY gear is used in the adapter. If a 626XHY, 630XHY or 645XHY Series geared adapter is going to be used, the PTO must be a deep mount (ex: 442Z*JB). Use a 7-A-125 filler block, gaskets to establish .006"-.012" backlash, and a 328170-76X stud kit to mount the PTO to the adapter. Be aware that using a geared adapter will change the direction of PTO rotation, but will not affect the speeds shown above.
4. Refer to Ford Body Builders Book (Power Take-Off Applications SEIC/PTO) for information on removal of a tab on the M60D transmission case. This will help in direct mount pump installations.
5. Ford Super Duty MY 2005 applications with the 6.8L gas engine may have PTO to engine exhaust pipe interference problems. It is recommended that you use an assembly arrangement 3. This still leaves the PTO close to the engine exhaust pipe. Route cable and wiring away from the exhaust pipe. Heat may be an issue for PTO operation due to the proximity of the engine exhaust pipe.

ZF

ZF Notes

ZF-47

1. Only 442 Series with the CABLE SHIFT option W and a SAE A 2 bolt output flange RC must be used on right side applications. The 442 Series must be "Shaft High" 5 assembly arrangement due to exhaust pipe interference. RC field conversion kit number 328591-112X ("XD" to RC)
2. There is a left and right PTO opening for GM/ ZF S6-650, the LEFT side aperture can be used in 4 x 2 vehicles. There is a interference on the 4 x 4 vehicles due to the front wheel driveshaft on the LEFT side.
3. The 626 and 645 Series adapters will mount to this transmission (LEFT Side Only) with the 5-P-1237 gear in the adapter and the 5-P-1244 gear in the 442 Series. The 442 Series must use a deep mount housing, stud kit 328170-76X and 7-A-125 spacer to mount to the adapter.
4. Parker P16-45/65 pumps can be mounted rearward and direct to the 442 series on the LEFT side if the PTO is a 3 assembly, (bulge up), has the XK or RC flange, and is the F, L, R, S, or U ratio.
5. Wiring harness assembly number 329333-4X can be used on all applications to control engine speed. See owner's manual HY25-1135-M1/US for complete instructions.

ZF-58

1. For Rear Mounts - Speeds are shown in LOW split, multiply speed shown by 1.12 for speeds in HIGH split

ZF-59

1. For Rear Mounts - Speeds are shown in LOW split, multiply speed shown by 1.12 for speeds in HIGH split

ZF-64

1. 524 Rear Mount - The adapter 329993X is furnished with the PTO

ZF-65

1. 524 Rear Mount - The adapter 329993X is furnished with the PTO

ZF-66

1. 524 Rear Mount - The adapter 329993X is furnished with the PTO

ZF-67

1. 524 Rear Mount - The adapter 329993X is furnished with the PTO

ZF

Offer of Sale

- 1. Definitions.** As used herein, the following terms have the meanings indicated.

Buyer: means any customer receiving a Quote for Products.

Buyer's Property: means any tools, patterns, plans, drawings, designs, specifications materials, equipment, or information furnished by Buyer, or which are or become Buyer's property.

Confidential Information: means any technical, commercial, or other proprietary information of Seller, including, without limitation, pricing, technical drawings or prints and/or part lists, which has been or will be disclosed, delivered, or made available, whether directly or indirectly, to Buyer.

Goods: means any tangible part, system or component to be supplied by Seller.

Intellectual Property Rights:

means any patents, trademarks, copyrights, trade dress, trade secrets or similar rights.

Products: means the Goods, Services and/or Software as described in a Quote.

Quote: means the offer or proposal made by Seller to Buyer for the supply of Products.

Seller: means Parker-Hannifin Corporation, all divisions, subsidiaries and businesses selling products under these terms.

Seller's IP: means patents, trademarks, copyrights, or other intellectual property rights relating to the Products, including without limitation, names, designs, images, drawings, models, software, templates, information, any improvements or creations or other intellectual property developed prior to or during the relationship contemplated herein.

Services: means any services to be provided by Seller.

Software: means any software related to the Goods, whether embedded or separately downloaded.

Special Tooling:

means equipment acquired by Seller or otherwise owned by Seller necessary to manufacture Goods, including but not limited to tools, jigs, and fixtures.

Terms: means the terms and conditions of this Offer of Sale.

- 2. Terms.** All sales of Products by Seller will be governed by, and are expressly conditioned upon Buyer's assent to, these Terms. These Terms are incorporated into any Quote provided by Seller to Buyer. Buyer's order for any Products whether communicated to Seller verbally, in writing, by electronic data interface or other electronic commerce, shall constitute acceptance of these Terms. Seller objects to any contrary or additional terms or conditions of Buyer. Reference in Seller's order acknowledgement to Buyer's purchase order or purchase order number shall in no way constitute an acceptance of any of Buyer's terms or conditions of purchase. Any Quote made by Seller to Buyer shall be considered a firm and definite offer and shall not be deemed to be otherwise despite any language on the face of the Quote. Seller reserves all rights to accept or reject any purported acceptance by Buyer to Seller's Quote if such purported acceptance attempts to vary the terms of the Quote. If Seller ships Products after Buyer issues an acceptance to the Quote, any additional or different terms proposed by Buyer will not become part of the parties' business relationship unless agreed to in a writing that is signed by an authorized representative of Seller, excluding email correspondence. If the

transaction proceeds without such agreement on the part of Seller, the business relationship will be governed solely by these Terms and the specific terms in Seller's Quote.

- 3. Price; Payment.** The Products set forth in the Quote are offered for sale at the prices indicated in the Quote. Unless otherwise specifically stated in the Quote, prices are valid for thirty (30) days and do not include any sales, use, or other taxes or duties. Seller reserves the right to modify prices for any reason and at any time by giving ten (10) days prior written notice. Unless otherwise specified by Seller, all prices are F.C.A. Seller's facility (INCOTERMS 2020). All sales are contingent upon credit approval and full payment for all purchases is due thirty (30) days from the date of invoice (or such date as may be specified in the Quote). Under any circumstances, Buyer may not withhold or suspend payment of any amounts due and payable as a deduction, set-off or recoupment of any amount, claim or dispute with Seller. Unpaid invoices beyond the specified payment date incur interest at the rate of 1.5% per month or the maximum allowable rate under applicable law. Seller reserves the right to require advance payment or provision of securities for first and subsequent deliveries if there is any doubt, in Seller's sole determination, regarding the Buyer's creditworthiness or for other business reasons. If the requested advance payment or securities are not provided to Seller's satisfaction, Seller reserves the right to suspend performance or reject the purchase order, in whole or in part, without prejudice to Seller's other rights or remedies, including the right to full compensation. Seller may revoke or shorten any payment periods previously granted in Seller's sole determination. The rights and remedies herein reserved to Seller are cumulative and in addition to any other or further rights and remedies available at law or in equity. No waiver by Seller of any breach by Buyer of any provision of these terms will constitute a waiver by Seller of any other breach of such provision.

4. Shipment; Delivery; Title and Risk of Loss. All delivery dates are approximate, and Seller is not responsible for damages or additional costs resulting from any delay. All deliveries are subject to our ability to procure materials from our suppliers. Regardless of the manner of shipment, delivery occurs and title and risk of loss or damage pass to Buyer, upon placement of the Products with the carrier at Seller's facility. Unless otherwise agreed prior to shipment and for domestic delivery locations only, Seller will select and arrange, at Buyer's sole expense, the carrier and means of delivery. When Seller selects and arranges the carrier and means of delivery, freight and insurance costs for shipment to the designated delivery location will be prepaid by Seller and added as a separate line item to the invoice. Buyer shall be responsible for any additional shipping charges incurred by Seller due to Buyer's acts or omissions. Buyer shall not return or repack any Products without the prior written authorization from Seller, and any return shall be at the sole cost and expense of Buyer.

5. Warranty. The warranty for the Products is as follows:

- (i) Seller warrants that all products sold conform to the applicable Parker Chelsea standard specification for the lesser period of 2 years (24 Months) from date of service or 2-1/2 years (30 Months) from date of build (as marked on the product name plate);
 - (ii) Services shall be performed in accordance with generally accepted practices and using the degree of care and skill that is ordinarily exercised and customary in the field to which the Services pertain and are warranted for a period of six (6) months from the date of completion of the Services; and
 - (iii) Software is only warranted to perform in accordance with applicable specifications provided by Seller to Buyer for ninety (90) days from the date of delivery or, when downloaded by a Buyer or end-user, from the date of the initial download.
- All prices are based upon the exclusive limited warranty stated above, and upon the following disclaimer: **EXEMPTION CLAUSE; DISCLAIMER OF WARRANTY, CONDITIONS,**

Continued on Next Page

Offer of Sale Continued



WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

REPRESENTATIONS: THIS WARRANTY IS THE SOLE AND ENTIRE WARRANTY, CONDITION, AND REPRESENTATION, PERTAINING TO PRODUCTS. SELLER DISCLAIMS ALL OTHER WARRANTIES, CONDITIONS, AND REPRESENTATIONS, WHETHER STATUTORY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THOSE RELATING TO DESIGN, NONINFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE. SELLER DOES NOT WARRANT THAT THE SOFTWARE IS ERROR-FREE OR FAULT-TOLERANT, OR THAT BUYER'S USE THEREOF WILL BE SECURE OR UNINTERRUPTED, UNLESS OTHERWISE AUTHORIZED IN WRITING BY SELLER, THE SOFTWARE SHALL NOT BE USED IN CONNECTION WITH HAZARDOUS OR HIGH-RISK ACTIVITIES OR ENVIRONMENTS. EXCEPT AS EXPRESSLY STATED HEREIN, ALL PRODUCTS ARE PROVIDED "AS IS".

6. Claims; Commencement of Actions. Buyer shall promptly inspect all Products upon receipt. No claims for shortages will be allowed unless reported to Seller within ten (10) days of delivery. Buyer shall notify Seller of any alleged breach of warranty within thirty (30) days after the date the non-conformance is or should have been discovered by Buyer. Any claim or action against Seller based upon breach of contract or any other theory, including tort, negligence, or otherwise must be commenced within twelve (12) months from the date of the alleged breach or other alleged event, without regard to the date of discovery.

7. Limitation of Liability. In the Event of a Breach of Warranty, Seller Will, at Its Option, Repair or Replace the Non-Conforming Products, Re-Perform the Services, or Refund the Purchase Price Paid Within a Reasonable Period of Time. In No Event Is Seller Liable for Any Special, Indirect, INCIDENTAL or CONSEQUENTIAL DAMAGES INCLUDING ANY LOSS OF REVENUE OR PROFITS, WHETHER BASED IN CONTRACT, TORT OR OTHER LEGAL THEORY. IN NO EVENT SHALL SELLER'S LIABILITY UNDER ANY CLAIM MADE BY BUYER EXCEED THE PURCHASE PRICE PAID FOR THE PRODUCTS.

8. Confidential Information. Buyer acknowledges and agrees that Confidential Information has been and will be received in confidence and will remain the property of Seller. Buyer further agrees that it will not use Seller's Confidential Information for any purpose other than for the benefit of Seller and shall return all such Confidential Information to Seller within thirty (30) days upon request.

9. Loss to Buyer's Property. Buyer's Property will be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer ordering the Products manufactured using Buyer's Property. Also, Seller shall not be responsible for any loss or damage to Buyer's Property while it is in Seller's possession or control.

10. Special Tooling. Seller may impose a tooling charge for any Special Tooling. Special Tooling shall be and remain Seller's property. In no event will Buyer acquire any interest in the Special Tooling, even if such Special Tooling has been specially converted or adapted for manufacture of Goods for Buyer and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller has the right to alter, discard or otherwise dispose of any Special Tooling or other property owned by Seller in its sole determination at any time.

11. Security Interest. To secure payment of all sums due from Buyer, Seller retains a security interest in all Products delivered to Buyer and, Buyer's acceptance of these Terms is deemed to be a Security Agreement under the Uniform Commercial Code. Buyer authorizes Seller as its attorney to execute and file on Buyer's behalf all documents Seller deems necessary to perfect Seller's security interest.

12. User Responsibility. Buyer, through its own analysis and testing, is solely responsible for making the final selection of the Products and assuring that all performance, endurance, maintenance, safety and warning requirements of the application

of the Products are met. Buyer must analyze all aspects of the application and follow applicable industry standards, specifications, and any technical information provided with the Quote or the Products, such as Seller's instructions, guides and specifications. If Seller provides options of or for Products based upon data or specifications provided by Buyer, Buyer is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the Products. In the event Buyer is not the end-user of the Products, Buyer will ensure such end-user complies with this paragraph.

13. Use of Products, Indemnity by Buyer. Buyer shall comply with all instructions, guides and specifications provided by Seller with the Quote or the Products. If Buyer uses or resells the Products in any way prohibited by Seller's instructions, guides or specifications, or Buyer otherwise fails to comply with Seller's instructions, guides and specifications, Buyer acknowledges that any such use, resale, or non-compliance is at Buyer's sole risk. Further, Buyer shall indemnify, defend, and hold Seller harmless from any losses, claims, liabilities, damages, lawsuits, judgments and costs (including attorney fees and defense costs), whether for personal injury, property damage, intellectual property infringement or any other claim, arising out of or in connection with: (a) improper selection, design, specification, application, or any misuse of Products; (b) any act or omission, negligent or otherwise, of Buyer; (c) Seller's use of Buyer's Property; (d) damage to the Products from an external cause, repair or attempted repair by anyone other than Seller, failure to follow instructions, guides and specifications provided by Seller, use with goods not provided by Seller, or opening, modifying, deconstructing, tampering with or repackaging the Products; or (e) Buyer's failure to comply with these Terms, including any legal or administrative proceedings, collection efforts, or other actions arising from or relating to such failure to comply. Seller shall not indemnify Buyer under any circumstance except as otherwise provided in these Terms.

14. Cancellations and Changes. Buyer may not cancel or modify, including but not limited to movement of delivery dates for the Products, any order for any reason except with Seller's written consent and upon terms that will indemnify, defend and hold Seller harmless against all direct, incidental and consequential loss or damage and any additional expense. Seller, at any time, may change features, specifications, designs and availability of Products.

15. Assignment. Buyer may not assign its rights or obligations without the prior written consent of Seller.

16. Force Majeure. Seller is not liable for delay or failure to perform any of its obligations by reason of any events or circumstances beyond its reasonable control. Such circumstances include without limitation: accidents, labor disputes or stoppages, government acts or orders, acts of nature, pandemics, epidemics, other widespread illness, or public health emergency, cyber related disruptions, cyber-attacks, ransomware sabotage, delays or failures in delivery from carriers or suppliers, shortages of materials, sudden increases in the price of raw material or components, shutdowns or slowdowns affecting the supply of raw materials or components, or the transportation thereof, oil shortages or oil price increases, energy crisis, energy or fuel interruption, war (whether declared or not) or the serious threat of same, riots, rebellions, acts of terrorism, embargoes, fire or any reason whether similar to the foregoing or otherwise. Seller will resume performance as soon as practicable after the event of force majeure has been removed. All delivery dates affected by an event of force majeure shall be tolled for the duration of such event of force majeure and rescheduled for mutually agreed dates as soon as practicable after the event of force majeure ceases to exist. The right to allocate capacity is in the Seller's sole discretion. An event of force majeure shall not include financial distress, insolvency, bankruptcy, or other

Continued on Next Page

Offer of Sale Continued

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl)phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

MAIN
Table of Contents

similar conditions affecting one of the parties, affiliates and/or subcontractors. An event of force majeure in the meaning of these Terms means any circumstances beyond Seller's control that permanently or temporarily hinders performance, even where that circumstance was already foreseen. Buyer shall not be entitled to cancel any orders following its claim of an event of force majeure.

17. Waiver and Severability. Failure to enforce any provision of these Terms will not invalidate that provision; nor will any such failure prejudice either party's right to enforce that provision in the future. Invalidation of any provision of these Terms shall not invalidate any other provision herein and, the remaining provisions will remain in full force and effect.

18. Duration. Unless otherwise stated in the Quote, any agreement governed by or arising from these Terms shall: (a) be for an initial duration of one (1) year; and (b) shall automatically renew for successive one-year terms unless terminated by Buyer with at least 180-days written notice to Seller or if Seller terminates the agreement pursuant to Section 19 of these Terms.

19. Termination. Seller may, without liability to Buyer, terminate any agreement governed by or arising from these Terms for any reason and at any time by giving Buyer thirty (30) days prior written notice. Seller may immediately terminate, in writing, if Buyer: (a) breaches any provision of these Terms, (b) becomes or is deemed insolvent, (c) appoints or has appointed a trustee, receiver or custodian for all or any part of Buyer's property, (d) files a petition for relief in bankruptcy on its own behalf, or one is filed against Buyer by a third party, (e) makes an assignment for the benefit of creditors; or (f) dissolves its business or liquidates all or a majority of its assets.

20. Ownership of Rights. Buyer agrees that (a) Seller (and/or its affiliates) owns or is the valid licensee of Seller's IP and (b) the furnishing of information, related documents or other materials by Seller to Buyer does not grant or transfer any ownership interest or license in or to Seller's IP to Buyer, unless expressly agreed in writing. Without limiting the foregoing, Seller retains ownership of all Software supplied to Buyer. In no event shall Buyer obtain any greater right in and to the Software than a right in a license limited to the use thereof and subject to compliance with any other terms provided with the Software. Buyer further agrees that it will not, directly or through intermediaries, reverse engineer, decompile, or disassemble any Software (including firmware) comprising or contained within a Product, except and only to the extent that such activity may be expressly permitted, either by applicable law or, in the case of open source software, the applicable open source license.

21. Indemnity for Infringement of Intellectual Property Rights. Seller is not liable for infringement of any Intellectual Property Rights except as provided in this Section. Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on a third-party claim that one or more of the Products infringes the Intellectual Property Rights of a third party in the country of delivery of the Products by Seller to Buyer. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of any such claim, and Seller having sole control over the defense of the claim including all negotiations for settlement or compromise. If one or more Products is subject to such a claim, Seller may, at its sole expense and option, procure for Buyer the right to continue using the Products, replace or modify the Products to render them non-infringing, or offer to accept return of the Products and refund the purchase price less a reasonable allowance for depreciation. Seller has no obligation or liability for any claim of infringement: (i) arising from information provided by Buyer (including Seller's use of Buyer's Property); or (ii) directed to any Products for which the designs are specified in whole or part by Buyer; or (iii) resulting from the modification, combination or use in a system of any Products. The foregoing provisions of this Section constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for claims of infringement of Intellectual Property Rights.

22. Governing Law. These Terms, the terms of any Quote, and the sale and delivery of all Products are deemed to have taken place in, and shall be governed and construed in accordance with, the laws of the State of Ohio, as applicable to contracts executed and wholly performed therein and without regard to conflicts of laws principles. Buyer irrevocably agrees and consents to the exclusive jurisdiction and venue of the courts of Cuyahoga County, Ohio with respect to any dispute, controversy or claim arising out of or relating to the sale and delivery of the Products.

23. Entire Agreement. These Terms, along with the terms set forth in the Quote, forms the entire agreement between the Buyer and Seller and constitutes the final, complete and exclusive expression of the terms of sale and purchase. In the event of a conflict between any term set forth in the Quote and these Terms, the terms set forth in the Quote shall prevail. All prior or contemporaneous written or oral agreements or negotiations with respect to the subject matter shall have no effect. No modification to these Terms will be binding on Seller unless agreed to in a writing that is signed by an authorized representative of Seller, excluding email correspondence, 'clickwrap' or other purported electronic assent to different or additional terms. Sections 2-25 of these Terms shall survive termination or cancellation of any agreement governed by or arising from these Terms.

24. No 'Wrap' Agreements/No Authority to Bind. Seller's clicking any buttons or any similar action, such as clicking "I Agree" or "Confirm," to utilize Buyer's software or webpage for the placement of orders, is NOT an agreement to Buyer's Terms and Conditions. **NO EMPLOYEE, AGENT OR REPRESENTATIVE OF SELLER HAS THE AUTHORITY TO BIND SELLER BY THE ACT OF CLICKING ANY BUTTON OR SIMILAR ACTION ON BUYER'S WEBSITE OR PORTAL.**

25. Compliance with Laws. Buyer agrees to comply with all applicable laws, regulations, and industry and professional standards, including those of the United States of America, and the country or countries in which Buyer may operate, including without limitation the U.S. Foreign Corrupt Practices Act ("FCPA"), the U.S. Anti-Kickback Act ("Anti-Kickback Act"), U.S. and E.U. export control and sanctions laws ("Export Laws"), the U.S. Food Drug and Cosmetic Act ("FDCA"), and the rules and regulations promulgated by the U.S. Food and Drug Administration ("FDA"), each as currently amended. Buyer agrees to indemnify, defend, and hold harmless Seller from the consequences of any violation of such laws, regulations and standards by Buyer, its employees or agents. Buyer represents that it is familiar with all applicable provisions of the FCPA, the Anti-Kickback Act, Export Laws, the FDCA and the FDA and certifies that Buyer will adhere to the requirements thereof and not take any action that would make Seller violate such requirements. Buyer represents and agrees that Buyer will not make any payment or give anything of value, directly or indirectly, to any governmental official, foreign political party or official thereof, candidate for foreign political office, or commercial entity or person, for any improper purpose, including the purpose of influencing such person to purchase Products or otherwise benefit the business of Seller. Buyer further represents and agrees that it will not receive, use, service, transfer or ship any Products from Seller in a manner or for a purpose that violates Export Laws or would cause Seller to be in violation of Export Laws. Buyer agrees to promptly and reliably provide Seller all requested information or documents, including end-user statements and other written assurances, concerning Buyer's ongoing compliance with Export Law.

09/22

Offer of Sale

NOTES

Offer of Sale



NOTES



Offer of Sale

NOTES

Offer of Sale



Chelsea Products

Mechanical Shift 6/8-Bolt



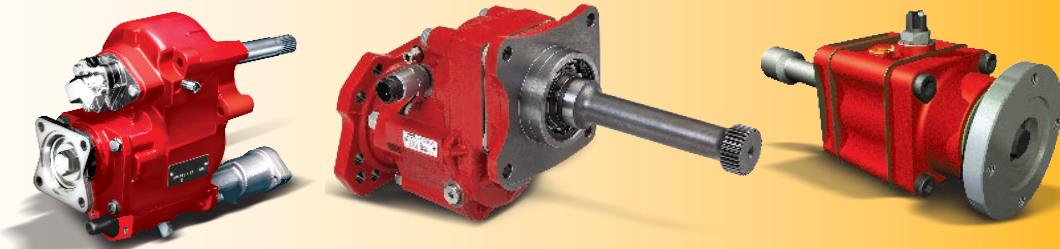
PowerShift 6/8-Bolt



PowerShift 10-Bolt



Rear Mount



Split Shaft Gear Boxes



Sales Offices Worldwide

North America

Canada

Parker Hannifin Canada
160 Chisholm Drive
Milton, Ontario L9T 3G9
Tel: (905) 693-3000
Fax: (905) 876-1958

Mexico

Parker Hannifin de México S.A. de C.V.
Motion and Control Division
Av. Eje Uno Norte 100
Parque Industrial Toluca 2000
Toluca
Edo Mex
Mexico
50233
Tel: 722 275 42 00
contacto@parker.com

Latin America

Pan American Div
7400 N W 19th St Suite A
Miami, FL 33126
UNITED STATES
Tel: (305) 470-8800
Fax: (305) 470-8809

South America

Brazil
Parker Hannifin Industria e Comercio Ltda.
Hydraulics Division
Av Frederico Ritter 1100
District Industrial
94930-000 Cachoeirinha
RS, Brazil
Tel: 55 51 3470 9144
Fax: 55 51 3470 9281

Europe

Parker Chelsea Products Europe
Parker Hannifin Manufacturing Germany GmbH & Co. KG
Neefestrasse 96
09116 Chemnitz
GERMANY
Tel: + 49 371 39370
Fax: + 49 371 3937-143

South Asia

Chelsea Products
Parker Hannifin India Pvt. Ltd.
TTC Industrial Area, Mahape
Navi Mumbai - 400 709, India
Tel: +91 22 4124 2500
Fax: +91 22 2768 6841

South Africa

Parker Hannifin Pty Ltd
Sales Company South Africa
10 Berne Avenue
Aeroport
Kempton Park
SOUTH AFRICA
1620
Tel: +0119610700
Fax: +011392213

Asia Pacific

Australia
Parker Hannifin (Australia) Pty. Ltd.
9 Carrington Road
Castle Hill
New South Wales, 2154
Tel: 61 2 9842-5150
Fax: 61 2 9842-5111

Parker Hannifin Singapore Pte
No 11 Fourth Chin Bee Rd
Jurong Town
SINGAPORE
619702
Tel: +6568876300

Parker Hannifin Hong Kong Ltd
RM 2001-04 20/F & 2011-12 20/F
THE GATEWAY
HARBOUR CITY TWR 2
TSIM SHA TSUI
KOWLOON
HONG KONG
Tel: +024288008
Fax: +024804256

Parker Hannifin Motion & Control (Shanghai) Co., Ltd.
280 Yunqiao Road, Jinqiao Export Processing Zone
Shanghai 201206, P. R. China
Tel: +02128995000
Fax: +02158348975

Parker Hannifin Beijing
Suite B9-B11
21/F Hanwei Plaza
No. 7 Guanghua Road
Chaoyang District
Beijing 100004, China
Tel: (+86) 10 6561 0520 - 5
Fax: (+86) 10 6561 0526 - 7