

CLBT-750
CLBT-754
CLT-750
CLT-754
HT-750CRD

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 8-Bolt Opening Gear REAR of Centerline

64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8100" (20.5740MM)

TRANSMISSION GEAR DATA:

TOP 8-Bolt Opening Gear REAR of Centerline

40 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8100" (20.5740MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	TOP Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

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

ONE SPEED - SINGLE GEAR - POWERSHIFT (HYDRAULIC)

800XMAKP-*4	250	Eng	169				Furnished	800XMAKP-*4	250	Eng	169				Furnished
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ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

270XAAKX-*6	250	Opp	73			328481X	Furnished	270XAAKP-*4	300	Opp	73			328481X	Furnished
270XDAKX-*6	250	Opp	110			328481X	Furnished	270XDAKP-*4	300	Opp	110			328481X	Furnished
270XKAKX-*6	225	Opp	149			328481X	Furnished	270XKAKP-*4	300	Opp	149			328481X	Furnished
852XBAKP-*6	500	Opp	95				Furnished	852XBAKP-*4	500	Opp	95				Furnished
852XGAKP-*6	500	Opp	122				Furnished	852XGAKP-*4	500	Opp	122				Furnished
852XJAKP-*6	500	Opp	144				Furnished	852XJAKP-*4	500	Opp	144				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAKX-*6 (6)	500	Opp	95				Furnished	885XBAKP-*4 (6)	500	Opp	95				Furnished
885XGAKX-*6 (8)	500	Opp	122				Furnished	885XGAKP-*4 (8)	500	Opp	122				Furnished
885XJAKX-*6 (9)	500	Opp	144				Furnished	885XJAKP-*4 (9)	500	Opp	144				Furnished
885XMAKX-*6 (10)	500	Opp	169				Furnished	885XMAKP-*4 (10)	500	Opp	169				Furnished

ONE SPEED - FORWARD & REVERSE

863XBAKX-*4(#)	500	Opp	95	118			Furnished								
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NOTE: For S.A.E. 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 P.T.O. applications prior to serial build number 32404. For applications after 32404 see application number ALL-6.

NOTE: Left side opening located at approximately 7 o'clock, right side at 1 o'clock as viewed from rear of transmission.

NOTE: Do not use Adapter Gear Assemblies on any Allison Automatic Transmission.

NOTE: 378897 Street Tee required for pressure lube P.T.O.s and must be purchased separately. Only the pressure lube line 328075X (line to the idler pin) is included with the P.T.O. 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 P.T.O. clutch).

NOTE: (#) Engine must be stopped in order to engage/disengage Mechanical shift P.T.O.s.

(1) Input Gear Part No. 5-P-223
(2) Input Gear Part No. 5-P-293
(3) Input Gear Part No. 5-P-294
(4) Input Gear Part No. 5-P-224
(5) Input Gear Part No. 5-P-284
(6) Input Gear Part No. 5-P-1106

(7) Input Gear Part No. 5-P-1107
(8) Input Gear Part No. 5-P-1108
(9) Input Gear Part No. 5-P-1109
(10) Input Gear Part No. 5-P-1110

January 2008

3000 MH	B 300
3000 RDS	B 400
3000 TRV	MD-3060P
3200 TRV	MD-3070P
3500 RDS	MD-3560P

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 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.H. 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 P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (1)	402	Eng	72				Furnished	267SBFJP-*3 (1)	402	Eng	72				Furnished
267SDFJP-*5 (2)	390	Eng	87				Furnished	267SDFJP-*3 (2)	390	Eng	87				Furnished
267SGFJP-*5 (3)	360	Eng	103				Furnished	267SGFJP-*3 (3)	360	Eng	103				Furnished
267SMFJP-*5 (4)	318	Eng	129				Furnished	267SMFJP-*3 (4)	318	Eng	129				Furnished
267SSFJP-*5(*) (5)	265	Eng	161				Furnished	267SSFJP-*3(*) (5)	265	Eng	161				Furnished
267XBFJP-*5 (6)	335	Eng	72				Furnished	267XBFJP-*3 (6)	335	Eng	72				Furnished
267XDFJP-*5 (7)	325	Eng	87				Furnished	267XDFJP-*3 (7)	325	Eng	87				Furnished
267XGFJP-*5 (8)	300	Eng	103				Furnished	267XGFJP-*3 (8)	300	Eng	103				Furnished
267XMFJP-*5 (9)	265	Eng	129				Furnished	267XMFJP-*3 (9)	265	Eng	129				Furnished
267XSFJP-*5(*) (5)	250	Eng	161				Furnished	267XSFJP-*3(*) (5)	250	Eng	161				Furnished
269SBFJW-*3 (1)	402	Eng	68				Furnished	269SBFJW-*3 (1)	402	Eng	68				Furnished
269SDFJW-*3 (2)	390	Eng	81				Furnished	269SDFJW-*3 (2)	390	Eng	81				Furnished
269SGFJW-*3 (3)	360	Eng	96				Furnished	269SGFJW-*3 (3)	300	Eng	96				Furnished
269SMFJW-*3 (10)	318	Eng	119				Furnished	269SMFJW-*3 (10)	318	Eng	119				Furnished
269XBFJW-*3 (6)	335	Eng	68				Furnished	269XBFJW-*3 (6)	335	Eng	68				Furnished
269XDFJW-*3 (7)	335	Eng	81				Furnished	269XDFJW-*3 (7)	335	Eng	81				Furnished
269XGFJW-*3 (8)	300	Eng	96				Furnished	269XGFJW-*3 (8)	360	Eng	96				Furnished
269XMFJW-*3 (9)	300	Eng	119				Furnished	269XMFJW-*3 (9)	300	Eng	119				Furnished
867XGFJP-*5 (11)	575	Eng	76				Furnished	867XGFJP-*5 (11)	575	Eng	76				Furnished
867XMFJP-*5 (12)	490	Eng	98				Furnished	867XMFJP-*5 (12)	490	Eng	98				Furnished
867XRFJP-*5 (13)	415	Eng	117				Furnished	867XRFJP-*5 (13)	415	Eng	117				Furnished
867XTFJP-*5 (14)	350	Eng	140				Furnished	867XTFJP-*5 (14)	350	Eng	140				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

277HBFJP-*5 (6)	335	Eng	72				Furnished	277SBFJP-*5 (6)	402	Eng	72				Furnished
277HDFJP-*5 (7)	325	Eng	87				Furnished	277SDFJP-*5 (7)	390	Eng	87				Furnished
277HGFJP-*5 (8)	300	Eng	103				Furnished	277SGFJP-*5 (8)	360	Eng	103				Furnished
277HMFJP-*5 (9)	265	Eng	129				Furnished	277SMFJP-*5 (9)	318	Eng	129				Furnished
277HSFJP-*5 (5)	250	Eng	161				Furnished	277SSFJP-*5(*) (5)	265	Eng	161				Furnished
277SBFJP-*5 (1)	402	Eng	72				Furnished	277XBFJP-*5 (6)	335	Eng	72				Furnished

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NOTE: This P.T.O. opening is a non-standard 10-Bolt opening.

NOTE: When direct mounting a Parker P2 060 piston pump to a 267 Series P.T.O. on the left (drivers) side opening, the P.T.O. must be ordered as a "3" assembly arrangement for pump clearance.

NOTE: Pump brackets for the Parker P2 060 piston pump are available and must be ordered separately. For the 267 Series Left Side 329413-1X, for the 277 Series Right Side 329413-2X and for the 278 Right Side 329413-3X.

NOTE: All models require a hose assembly. For the 267 Series, use 329130-1X for the left side and 329130-4X for the right side. For the 269, 277, 278 and 859 Series, use 329130-5X for the left side and 329075-1X for the right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY.

NOTE: The 269 Series is available with a Wet Spline "XY" Output Only.

NOTE: The 267 Series is not available in the "3" arrangement with an "XK" output due to interference with the pressure lube fitting.

NOTE: Wiring harness 379926 must be used in 2003 GM trucks for the 277, 278 and 859 Series P.T.O.s if the GM provided in-dash P.T.O. switch is used to control P.T.O. operations.

NOTE: Do not use adapter gear assemblies on any Allison automatic transmissions.

NOTE: 277H was designed and released for Hino Chassis 338 (Left Side Only). The 379502 Pressure Switch and Shifter Valve must be remotely mounted from the housing to clear the vehicle spring shackle. The P.T.O. must be ordered as a Remote Mount Shift Option ("H") and comes with 329441X Pressure Switch Relocation Kit. If using a 277G mounting option order 329441X separately.

NOTE: (*) Only for MD transmissions built after June 5, 1997 starting with serial number 6510119021.

- (1) Input Gear Part No. 5-P-1350
- (2) Input Gear Part No. 5-P-1293
- (3) Input Gear Part No. 5-P-1225
- (4) Input Gear Part No. 5-P-1351
- (5) Input Gear Part No. 5-P-1173
- (6) Input Gear Part No. 5-P-912

- (7) Input Gear Part No. 5-P-913
- (8) Input Gear Part No. 5-P-914
- (9) Input Gear Part No. 5-P-915
- (10) Input Gear Part No. 5-P-1391
- (11) Input Gear Part No. 5-P-1160
- (12) Input Gear Part No. 5-P-1161

- (13) Input Gear Part No. 5-P-1162
- (14) Input Gear Part No. 5-P-1212

January 2008

3000 MH	B 300
3000 RDS	B 400
3000 TRV	MD-3060P
3200 TRV	MD-3070P
3500 RDS	MD-3560P

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.H. 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.H. 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 P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

277SDFJP-*5 (2)	390	Eng	87				Furnished	277XDFJP-*5 (7)	325	Eng	87				Furnished
277SGFJP-*5 (3)	360	Eng	103				Furnished	277XGFJP-*5 (8)	300	Eng	103				Furnished
277SMFJP-*5 (4)	318	Eng	129				Furnished	277XMFJP-*5 (9)	265	Eng	129				Furnished
277SSFJP-*5(*) (5)	265	Eng	161				Furnished	277XSFJP-*5(*) (5)	250	Eng	161				Furnished
277XBFJP-*5 (6)	335	Eng	72				Furnished	278SBFJP-*3 (1)	402	Eng	68				Furnished
277XDFJP-*5 (7)	325	Eng	87				Furnished	278SDFJP-*3 (2)	390	Eng	81				Furnished
277XGFJP-*5 (8)	300	Eng	103				Furnished	278SGFJP-*3 (3)	360	Eng	96				Furnished
277XMFJP-*5 (9)	265	Eng	129				Furnished	278SMFJP-*3 (4)	318	Eng	119				Furnished
277XSFJP-*5(*) (5)	250	Eng	161				Furnished	278SSFJP-*3 (5)	265	Eng	147				Furnished
278SBFJP-*3 (1)	402	Eng	68				Furnished	278STFJP-*3 (15)	240	Eng	173				Furnished
278SDFJP-*3 (2)	390	Eng	81				Furnished	278XBFJP-*3 (6)	335	Eng	68				Furnished
278SGFJP-*3 (3)	360	Eng	96				Furnished	278XDFJP-*3 (7)	325	Eng	81				Furnished
278SMFJP-*3 (4)	318	Eng	119				Furnished	278XGFJP-*3 (8)	300	Eng	96				Furnished
278SSFJP-*3 (5)	265	Eng	147				Furnished	278XMFJP-*3 (9)	265	Eng	119				Furnished
278STFJP-*3 (15)	240	Eng	173				Furnished	278XSFJP-*3 (5)	250	Eng	147				Furnished
278XBFJP-*3 (6)	335	Eng	68				Furnished	278XTFJP-*3 (16)	225	Eng	173				Furnished
278XDFJP-*3 (7)	325	Eng	81				Furnished	859XGFJP-*5 (11)	575	Eng	76				Furnished
278XGFJP-*3 (8)	300	Eng	96				Furnished	859XJFJP-*5 (17)	525	Eng	86				Furnished
278XMFJP-*3 (9)	265	Eng	119				Furnished	859XMFJP-*5 (12)	490	Eng	98				Furnished
278XSFJP-*3 (5)	250	Eng	147				Furnished	859XRFJP-*5 (13)	415	Eng	117				Furnished
278XTFJP-*3 (16)	225	Eng	173				Furnished	859XSFJP-*5 (18)	385	Eng	128				Furnished
859XGFJP-*5 (11)	575	Eng	76				Furnished	859XTFJP-*5 (14)	350	Eng	140				Furnished
859XJFJP-*5 (17)	525	Eng	86				Furnished	859XWFJP-*5(*) (19)	285	Eng	168				Furnished
859XMFJP-*5 (12)	490	Eng	98				Furnished								
859XRFJP-*5 (13)	415	Eng	117				Furnished								
859XSFJP-*5 (18)	385	Eng	128				Furnished								
859XTFJP-*5 (14)	350	Eng	140				Furnished								
859XWFJP-*5(*) (19)	285	Eng	168				Furnished								

NOTE: This P.T.O. opening is a non-standard 10-Bolt opening.

NOTE: When direct mounting a Parker P2 060 piston pump to a 267 Series P.T.O. on the left (drivers) side opening, the P.T.O. must be ordered as a "3" assembly arrangement for pump clearance.

NOTE: Pump brackets for the Parker P2 060 piston pump are available and must be ordered separately. For the 267 Series Left Side 329413-1X, for the 277 Series Right Side 329413-2X and for the 278 Right Side 329413-3X.

NOTE: All models require a hose assembly. For the 267 Series, use 329130-1X for the left side and 329130-4X for the right side. For the 269, 277, 278 and 859 Series, use 329130-5X for the left side and 329075-1X for the right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY.

NOTE: The 269 Series is available with a Wet Spline "XY" Output Only.

NOTE: The 267 Series is not available in the "3" arrangement with an "XK" output due to interference with the pressure lube fitting.

NOTE: Wiring harness 379926 must be used in 2003 GM trucks for the 277, 278 and 859 Series P.T.O.s if the GM provided in-dash P.T.O. switch is used to control P.T.O. operations.

NOTE: Do not use adapter gear assemblies on any Allison automatic transmissions.

NOTE: 277H was designed and released for Hino Chassis 338 (Left Side Only). The 379502 Pressure Switch and Shifter Valve must be remotely mounted from the housing to clear the vehicle spring shackle. The P.T.O. must be ordered as a Remote Mount Shift Option ("H") and comes with 329441X Pressure Switch Relocation Kit. If using a 277G mounting option order 329441X separately.

NOTE: (*) Only for MD transmissions built after June 5, 1997 starting with serial number 6510119021.

(1) Input Gear Part No. 5-P-1350
 (2) Input Gear Part No. 5-P-1293
 (3) Input Gear Part No. 5-P-1225
 (4) Input Gear Part No. 5-P-1351
 (5) Input Gear Part No. 5-P-1173
 (6) Input Gear Part No. 5-P-912

(7) Input Gear Part No. 5-P-913
 (8) Input Gear Part No. 5-P-914
 (9) Input Gear Part No. 5-P-915
 (11) Input Gear Part No. 5-P-1160
 (12) Input Gear Part No. 5-P-1161
 (13) Input Gear Part No. 5-P-1162

(14) Input Gear Part No. 5-P-1212
 (15) Input Gear Part No. 5-P-1410
 (16) Input Gear Part No. 5-P-1409
 (17) Input Gear Part No. 5-P-1394
 (18) Input Gear Part No. 5-P-1392
 (19) Input Gear Part No. 5-P-1309

January 2008

4000 EVS	4500 RDS	B 500
4000 MH	4700 EVS	HD-4060P
4000 RDS	4700 OFS	HD-4070P
4000 TRV	4700 RDS	HD-4560P
4500 EVS	4800 EVS	

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.H. 10-Bolt Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX PITCH LINE TO APERTURE FACE: 1.7799" (45.2100MM)	TRANSMISSION GEAR DATA: R.H. 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 P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine % Hi Rev	Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine % Hi Rev	Filler Block	Adapter Assy.	Stud Kit
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ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (1)	402	Eng	103			Furnished	267SBFJP-*3 (1)	402	Eng	103			Furnished
267SDFJP-*5 (2)	390	Eng	123			Furnished	267SDFJP-*3 (2)	390	Eng	123			Furnished
267SGFJP-*5 (3)	360	Eng	147			Furnished	267SGFJP-*3 (3)	360	Eng	147			Furnished
267SMFJP-*5 (4)	318	Eng	184			Furnished	267SMFJP-*3 (4)	318	Eng	184			Furnished
267SSFJP-*5 (5)	265	Eng	229			Furnished	267SSFJP-*3 (5)	265	Eng	229			Furnished
267XBFJP-*5 (6)	335	Eng	103			Furnished	267XBFJP-*3 (6)	335	Eng	103			Furnished
267XDFJP-*5 (7)	325	Eng	123			Furnished	267XDFJP-*3 (7)	325	Eng	123			Furnished
267XGFJP-*5 (8)	300	Eng	147			Furnished	267XGFJP-*3 (8)	300	Eng	147			Furnished
267XMFJP-*5 (9)	265	Eng	184			Furnished	267XMFJP-*3 (9)	265	Eng	184			Furnished
267XSFJP-*5 (5)	250	Eng	229			Furnished	267XSFJP-*3 (5)	250	Eng	229			Furnished
269SBFJW-*3 (1)	402	Eng	97			Furnished	269SBFJW-*3 (1)	402	Eng	97			Furnished
269SDFJW-*3 (2)	390	Eng	115			Furnished	269SDFJW-*3 (2)	390	Eng	115			Furnished
269SGFJW-*3 (3)	360	Eng	137			Furnished	269SGFJW-*3 (3)	360	Eng	137			Furnished
269SMFJW-*3 (4)	318	Eng	170			Furnished	269SMFJW-*3 (4)	318	Eng	170			Furnished
269XBFJW-*3 (6)	335	Eng	97			Furnished	269XBFJW-*3 (6)	335	Eng	97			Furnished
269XDFJW-*3 (7)	335	Eng	115			Furnished	269XDFJW-*3 (7)	335	Eng	115			Furnished
269XGFJW-*3 (8)	300	Eng	137			Furnished	269XGFJW-*3 (8)	300	Eng	137			Furnished
269XMFJW-*3 (9)	300	Eng	170			Furnished	269XMFJW-*3 (9)	300	Eng	170			Furnished
867XGFJP-*5 (10)	575	Eng	108			Furnished	867XGFJP-*5 (10)	575	Eng	108			Furnished
867XMFJP-*5 (11)	490	Eng	139			Furnished	867XMFJP-*5 (11)	490	Eng	139			Furnished
867XRFJP-*5 (12)	410	Eng	167			Furnished	867XRFJP-*5 (12)	410	Eng	167			Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

277SBFJP-*5 (1)	402	Eng	103			Furnished	277SBFJP-*5 (1)	402	Eng	103			Furnished
277SDFJP-*5 (2)	390	Eng	123			Furnished	277SDFJP-*5 (2)	390	Eng	123			Furnished
277SGFJP-*5 (3)	360	Eng	147			Furnished	277SGFJP-*5 (3)	360	Eng	147			Furnished
277SMFJP-*5 (4)	318	Eng	184			Furnished	277SMFJP-*5 (4)	318	Eng	184			Furnished
277SSFJP-*5 (5)	265	Eng	229			Furnished	277SSFJP-*5 (5)	265	Eng	229			Furnished
277XBFJP-*5 (6)	335	Eng	103			Furnished	277XBFJP-*5 (6)	335	Eng	103			Furnished
277XDFJP-*5 (7)	325	Eng	123			Furnished	277XDFJP-*5 (7)	325	Eng	123			Furnished

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CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.Lbs on their P.T.O. Drive Gear.

NOTE: The right side opening is located at approximately 1 o'clock when viewed from the rear. All P.T.O.s mounted in this location require pressure lubrication.

NOTE: Do not use Adapter Gear Assemblies on any Allison Automatic Transmissions.

NOTE: All models require a hose assembly. For the 267 Series, use 329130-1X for the left side and 329130-6X for the right side. For the 269, 277, 278 and 859 Series, use 329130-4X for the left side and 329075-2X for the right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY.

NOTE: 269 Series is available with a Wet Spline "XY" Output Only.

NOTE: 267 & 269 Series are constantly engaged and will always run when engine is running.

NOTE: The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.

- (1) Input Gear Part No. 5-P-1350
- (2) Input Gear Part No. 5-P-1293
- (3) Input Gear Part No. 5-P-1225
- (4) Input Gear Part No. 5-P-1351
- (5) Input Gear Part No. 5-P-1173
- (6) Input Gear Part No. 5-P-912

- (7) Input Gear Part No. 5-P-913
- (8) Input Gear Part No. 5-P-914
- (9) Input Gear Part No. 5-P-915
- (10) Input Gear Part No. 5-P-1160
- (11) Input Gear Part No. 5-P-1161
- (12) Input Gear Part No. 5-P-1162

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4000 EVS	4500 RDS	B 500
4000 MH	4700 EVS	HD-4060P
4000 RDS	4700 OFS	HD-4070P
4000 TRV	4700 RDS	HD-4560P
4500 EVS	4800 EVS	

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.H. 10-Bolt Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX PITCH LINE TO APERTURE FACE: 1.7799" (45.2100MM)	TRANSMISSION GEAR DATA: R.H. 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 P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

277XGFJP-*5 (8)	300	Eng	147				Furnished	277XGFJP-*5 (8)	300	Eng	147				Furnished
277XMFJP-*5 (9)	265	Eng	184				Furnished	277XMFJP-*5 (9)	265	Eng	184				Furnished
277XSFJP-*5 (5)	250	Eng	229				Furnished	277XSFJP-*5 (5)	250	Eng	229				Furnished
278SBFJP-*3 (1)	402	Eng	97				Furnished	278SBFJP-*3 (1)	402	Eng	97				Furnished
278SDFJP-*3 (2)	390	Eng	115				Furnished	278SDFJP-*3 (2)	390	Eng	115				Furnished
278SGFJP-*3 (3)	360	Eng	137				Furnished	278SGFJP-*3 (3)	360	Eng	137				Furnished
278SMFJP-*3 (4)	318	Eng	170				Furnished	278SMFJP-*3 (4)	318	Eng	170				Furnished
278SSFJP-*3 (5)	265	Eng	210				Furnished	278SSFJP-*3 (5)	265	Eng	210				Furnished
278XBFJP-*3 (6)	335	Eng	97				Furnished	278XBFJP-*3 (6)	335	Eng	97				Furnished
278XDFJP-*3 (7)	325	Eng	115				Furnished	278XDFJP-*3 (7)	325	Eng	115				Furnished
278XGFJP-*3 (8)	300	Eng	137				Furnished	278XGFJP-*3 (8)	300	Eng	137				Furnished
278XMFJP-*3 (9)	265	Eng	170				Furnished	278XMFJP-*3 (9)	265	Eng	170				Furnished
278XSFJP-*3 (5)	250	Eng	210				Furnished	278XSFJP-*3 (5)	250	Eng	210				Furnished
859XGFJP-*5 (10)	575	Eng	108				Furnished	859XGFJP-*5 (10)	575	Eng	108				Furnished
859XJFJP-*5 (13)	525	Eng	123				Furnished	859XJFJP-*5 (13)	525	Eng	123				Furnished
859XMFJP-*5 (11)	490	Eng	139				Furnished	859XMFJP-*5 (11)	490	Eng	139				Furnished
								859XRFJP-*5 (12)	410	Eng	167				Furnished
								859XSFJP-*5 (14)	375	Eng	183				Furnished

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their P.T.O. Drive Gear.

NOTE: The right side opening is located at approximately 1 o'clock when viewed from the rear. All P.T.O.s mounted in this location require pressure lubrication.

NOTE: Do not use Adapter Gear Assemblies on any Allison Automatic Transmissions.

NOTE: All models require a hose assembly. For the 267 Series, use 329130-1X for the left side and 329130-6X for the right side. For the 269, 277, 278 and 859 Series, use 329130-4X for the left side and 329075-2X for the right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY.

NOTE: 269 Series is available with a Wet Spline "XY" Output Only.

NOTE: 267 & 269 Series are constantly engaged and will always run when engine is running.

NOTE: The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.

(1) Input Gear Part No. 5-P-1350
 (2) Input Gear Part No. 5-P-1293
 (3) Input Gear Part No. 5-P-1225
 (4) Input Gear Part No. 5-P-1351
 (5) Input Gear Part No. 5-P-1173
 (6) Input Gear Part No. 5-P-912

(7) Input Gear Part No. 5-P-913
 (8) Input Gear Part No. 5-P-914
 (9) Input Gear Part No. 5-P-915
 (10) Input Gear Part No. 5-P-1160
 (11) Input Gear Part No. 5-P-1161
 (12) Input Gear Part No. 5-P-1162

(13) Input Gear Part No. 5-P-1394
 (14) Input Gear Part No. 5-P-1392

January 2008

1000	2100 EVS	2200 RDS	2500 RDS
1000 EVS	2100 MH	2300 RDS	B 210
1000 MH	2100 RDS	2400	B 220
1000 RDS	2200 EVS	2500 EVS	
2000	2200 MH	2500 MH	

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 6-Bolt Opening Gear FORWARD of Centerline

64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0080" (25.6000MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0080" (25.6032MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442GBHVP-*5 (1)	215	Eng	96				Furnished	442GBHVP-*3 (1)	215	Eng	96				Furnished
442GBHVX-*5 (1)	150	Eng	96				Furnished	442GBHVX-*3 (1)	150	Eng	96				Furnished
442GFHVP-*5 (2)	165	Eng	151				Furnished	442GFHVP-*3 (2)	165	Eng	151				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

250GDHVX-*5 (3)	120	Eng	122				Furnished	250GDHVX-*5 (3)	120	Eng	122				Furnished
250GMHVX-*5 (4)	50	Eng	178				Furnished	250GMHVX-*5 (4)	50	Eng	178				Furnished
270GAHVP-*5 (5)	310	Eng	81				Furnished	270GAHVP-*3 (5)	310	Eng	81				Furnished
270GBHVP-*5 (6)	239	Eng	105				Furnished	270GBHVP-*3 (6)	239	Eng	105				Furnished
270GDHVP-*5 (7)	206	Eng	121				Furnished	270GDHVP-*3 (7)	206	Eng	121				Furnished
270GKHVP-*5 (8)	152	Eng	163				Furnished	270GKHVP-*3 (8)	152	Eng	163				Furnished
271GAHVP-*3 (5)	250	Eng	81				Furnished	271GAHVP-*5 (5)	250	Eng	81				Furnished
271GBHVP-*3 (6)	239	Eng	105				Furnished	271GBHVP-*5 (6)	239	Eng	105				Furnished
271GDHVP-*3 (7)	206	Eng	121				Furnished	271GDHVP-*5 (7)	206	Eng	121				Furnished
271GKHVP-*3 (8)	152	Eng	163				Furnished	271GKHVP-*5 (8)	152	Eng	163				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

230GAHVP-*5 (5)	310	Eng	81				Furnished	230GAHVP-*3 (5)	310	Eng	81				Furnished
230GBHVP-*5 (6)	239	Eng	105				Furnished	230GBHVP-*3 (6)	239	Eng	105				Furnished
230GDHVP-*5 (7)	206	Eng	121				Furnished	230GDHVP-*3 (7)	206	Eng	121				Furnished
231GAHVP-*3 (5)	250	Eng	81				Furnished	231GAHVP-*5 (5)	250	Eng	81				Furnished
231GBHVP-*3 (6)	239	Eng	105				Furnished	231GBHVP-*5 (6)	239	Eng	105				Furnished
231GDHVP-*3 (7)	206	Eng	121				Furnished	231GDHVP-*5 (7)	206	Eng	121				Furnished

GEARED ADAPTERS

645GHVX-4HV (2)	Eng		7-A-140(P)(9)		Furnished	645GHVX-3HV (2)	Eng		7-A-140(P)(9)		Furnished
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CAUTION: If installing a P.T.O. with the EOC, speed sensor 379917 must be used. Standard speed sensor, part number 379243, may cause incorrect speed readings to the EOC control box.

CAUTION: The P.T.O. torque ratings shown are based on the maximum allowable torque of 250lb/ft at the 64 tooth gear in the transmission with the P.T.O. on one opening only. With P.T.O.s mounted on both openings the maximum allowable torque at the 64 tooth gear in the transmission is 200 lb/ft. The 270/271/230/231 Series torque ratings will be as follows, "A" ratio = 247 lb/ft., "B" ratio = 190 lb/ft., "D" ratio = 165 lbs/ft. With the 442 Series on both sides, P.T.O. torque ratings will be as follows, "B"P" ratio = 208 lb/ft., "F" ratio = 135 lb/ft. For a more precise evaluation of your P.T.O. application refer to the Allison Body Builders Book, Section F, P.T.O. Systems Provisions.

NOTE: There is 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 "P.T.O. Enable" circuit of the TCM by the P.T.O. switch. Lock up will only come on in the "NETURAL" and "PARK" positions at 1100 RPM transmission turbine speed. This equates to 1200-1250 RPM or higher engine speed, depending on P.T.O. load. The lock up clutch does not come on automatically in "DRIVE" at 1100 RPM. Refer to the appropriate owner's manual for wiring installation.

NOTE: To connect the P.T.O. switch to the "P.T.O. Enable" circuit of the TCM, a wiring kit must be ordered depending on the type of shifter being used. For Shifter without EOC order 329336-1X, for Shifter with EOC order 329336-2X and for Shifter with Pilot Valve order 329336-3X. These kits will include wire and installation instructions.

NOTE: Wiring harness 379924 must be used in the MY2003 and after GM "C" series trucks for the 270/271 and 230/231 Series P.T.O.s and wiring harness 379925 must be used for the 250 Series P.T.O. if the GM provided in-dash switch is used and torque converter lock-up is required for the application. ORDER SEPARATELY

NOTE: For 270/271 Series order P.T.O. Hose Installation Kit 329365X to complete P.T.O shifter installation.

NOTE: The 645 geared adapter listed on this application page is for the 442°F Ratio Only. A 442ZFHV with 7-A-140 filler block and 7170-1X stud kit must be used when mounting the P.T.O. to the 645 adapter.

NOTE: If the 442 Series is ordered with Pressure Lube, Hose 328075X is supplied with the P.T.O. A Restrictor Orifice, 379896 (442°FHVP) or 379594 (442°BHVP) is required and is shipped with the P.T.O.

NOTE: Output Shaft Rotation is "Engine" (Eng) Only for 442°B Ratio, DO NOT USE with Geared Adapter.

NOTE: A lube "T" fitting is required in the oil return cooling line to supply low pressure oil to the idler shaft of the 230, 231, 270, 271, or 442 Series P.T.O. 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 then a compression "T" fitting may be installed. The high pressure port requires a 7/16-20 O-ring boss fitting.

(1) Input Gear Part No. 5-P-1358
(2) Input Gear Part No. 5-P-1300
(3) Input Gear Part No. 5-P-1294

(4) Input Gear Part No. 5-P-1386
(5) Input Gear Part No. 5-P-1295
(6) Input Gear Part No. 5-P-1296

(7) Input Gear Part No. 5-P-1297
(8) Input Gear Part No. 5-P-1417
(9) Filler block furnished with P.T.O.

January 2008

MD-3066P

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 10-Bolt Opening Gear FORWARD of Centerline

83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

R.H. 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 P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (1)	402	Eng	88				Furnished	267SBFJP-*3 (1)	402	Eng	88				Furnished
267SDFJP-*5 (2)	390	Eng	106				Furnished	267SDFJP-*3 (2)	390	Eng	106				Furnished
267SGFJP-*5 (3)	360	Eng	126				Furnished	267SGFJP-*3 (3)	360	Eng	126				Furnished
267SMFJP-*5 (4)	309	Eng	157				Furnished	267SMFJP-*3 (4)	309	Eng	157				Furnished
267SSFJP-*5 (5)	247	Eng	196				Furnished	267SSFJP-*3 (5)	247	Eng	196				Furnished
267XBFJP-*5 (6)	335	Eng	88				Furnished	267XBFJP-*3 (6)	335	Eng	88				Furnished
267XDFJP-*5 (7)	325	Eng	106				Furnished	267XDFJP-*3 (7)	325	Eng	106				Furnished
267XGFJP-*5 (8)	300	Eng	126				Furnished	267XGFJP-*3 (8)	300	Eng	126				Furnished
267XMFJP-*5 (9)	265	Eng	157				Furnished	267XMFJP-*3 (9)	265	Eng	157				Furnished
267XSFJP-*5 (5)	247	Eng	196				Furnished	267XSFJP-*3 (5)	247	Eng	196				Furnished
269SGFJW-*3 (3)	360	Eng	117				Furnished	269SGFJW-*3 (3)	360	Eng	117				Furnished
269XGFJW-*3 (8)	300	Eng	117				Furnished	269XGFJW-*3 (8)	300	Eng	117				Furnished
867XGFJP-*5 (10)	522	Eng	93				Furnished	867XGFJP-*5 (10)	522	Eng	93				Furnished
867XMFJP-*5 (11)	408	Eng	119				Furnished	867XMFJP-*5 (11)	408	Eng	119				Furnished
867XRFJP-*5 (12)	342	Eng	142				Furnished	867XRFJP-*5 (12)	342	Eng	142				Furnished
867XTFJP-*5 (13)	284	Eng	171				Furnished	867XTFJP-*5 (13)	284	Eng	171				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

277SBFJP-*5 (1)	402	Eng	88				Furnished	277SBFJP-*5 (1)	402	Eng	88				Furnished
277SDFJP-*5 (2)	390	Eng	106				Furnished	277SDFJP-*5 (2)	390	Eng	106				Furnished
277SGFJP-*5 (3)	360	Eng	126				Furnished	277SGFJP-*5 (3)	360	Eng	126				Furnished
277SMFJP-*5 (4)	309	Eng	157				Furnished	277SMFJP-*5 (4)	309	Eng	157				Furnished
277SSFJP-*5 (5)	247	Eng	196				Furnished	277SSFJP-*5 (5)	247	Eng	196				Furnished
277XBFJP-*5 (6)	335	Eng	88				Furnished	277XBFJP-*5 (6)	335	Eng	88				Furnished
277XDFJP-*5 (7)	325	Eng	106				Furnished	277XDFJP-*5 (7)	325	Eng	106				Furnished
277XGFJP-*5 (8)	300	Eng	126				Furnished	277XGFJP-*5 (8)	300	Eng	126				Furnished
277XMFJP-*5 (9)	265	Eng	157				Furnished	277XMFJP-*5 (9)	265	Eng	157				Furnished
277XSFJP-*5 (5)	247	Eng	196				Furnished	277XSFJP-*5 (5)	247	Eng	196				Furnished
278SBFJP-*3 (1)	402	Eng	83				Furnished	278SBFJP-*3 (1)	402	Eng	83				Furnished
278SDFJP-*3 (2)	390	Eng	99				Furnished	278SDFJP-*3 (2)	390	Eng	99				Furnished

Continued Next Page**CAUTION:** The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 485 Ft.Lbs on their P.T.O. Drive Gear.**NOTE:** 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 P.T.O. mounted on this transmission must have the pressure lube option ("P").**NOTE:** All models require a hose assembly. For the 267 Series, use 329130-1X for the left side and 329130-6X for the right side. For the 269, 277, 278 and 859 Series, use 329130-4X for the left side and 329075-2X for the right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY.**NOTE:** The 269 Series is available with a Wet Spline "XY" Output Only.**NOTE:** 267 Series are constantly engaged and will always run when engine is running.**NOTE:** The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.**NOTE:** Do not use Adapter Gear Assemblies on any Allison Automatic Transmissions.

(1) Input Gear Part No. 5-P-1350
 (2) Input Gear Part No. 5-P-1293
 (3) Input Gear Part No. 5-P-1225
 (4) Input Gear Part No. 5-P-1351
 (5) Input Gear Part No. 5-P-1173

(6) Input Gear Part No. 5-P-912
 (7) Input Gear Part No. 5-P-913
 (8) Input Gear Part No. 5-P-914
 (9) Input Gear Part No. 5-P-915
 (10) Input Gear Part No. 5-P-1160

(11) Input Gear Part No. 5-P-1161
 (12) Input Gear Part No. 5-P-1162
 (13) Input Gear Part No. 5-P-1212

January 2008

MD-3066P

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 10-Bolt Opening Gear FORWARD of Centerline

83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7800" (45.2100MM)

TRANSMISSION GEAR DATA:

R.H. 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 P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

278SGFJP-*3 (3)	360	Eng	117				Furnished	278SGFJP-*3 (3)	360	Eng	117				Furnished
278SMFJP-*3 (4)	318	Eng	145				Furnished	278SMFJP-*3 (4)	318	Eng	145				Furnished
278SSFJP-*3 (5)	265	Eng	180				Furnished	278SSFJP-*3 (5)	265	Eng	180				Furnished
278STFJP-*3 (14)	230	Eng	211				Furnished	278STFJP-*3 (14)	230	Eng	211				Furnished
278XBFJP-*3 (6)	335	Eng	83				Furnished	278XBFJP-*3 (6)	335	Eng	83				Furnished
278XDFJP-*3 (7)	325	Eng	99				Furnished	278XDFJP-*3 (7)	325	Eng	99				Furnished
278XGFJP-*3 (8)	300	Eng	117				Furnished	278XGFJP-*3 (8)	300	Eng	117				Furnished
278XTFJP-*3 (15)	225	Eng	211				Furnished	278XTFJP-*3 (15)	225	Eng	211				Furnished
859XGFJP-*5 (10)	522	Eng	93				Furnished	859XGFJP-*5 (10)	522	Eng	93				Furnished
859XJFJP-*5 (16)	462	Eng	105				Furnished	859XJFJP-*5 (16)	462	Eng	105				Furnished
859XMFJP-*5 (11)	408	Eng	119				Furnished	859XMFJP-*5 (11)	408	Eng	119				Furnished
859XRFJP-*5 (12)	339	Eng	143				Furnished	859XRFJP-*5 (12)	339	Eng	143				Furnished
859XSFJP-*5 (17)	311	Eng	156				Furnished	859XSFJP-*5 (17)	311	Eng	156				Furnished
859XTFJP-*5 (13)	284	Eng	171				Furnished	859XTFJP-*5 (13)	284	Eng	171				Furnished
859XWFPJP-*5 (18)	233	Eng	208				Furnished	859XWFPJP-*5 (18)	233	Eng	208				Furnished

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 485 Ft.Lbs on their P.T.O. Drive Gear.**NOTE:** 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 P.T.O. mounted on this transmission must have the pressure lube option ("P").**NOTE:** All models require a hose assembly. For the 267 Series, use 329130-1X for the left side and 329130-6X for the right side. For the 269, 277, 278 and 859 Series, use 329130-4X for the left side and 329075-2X for the right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY.**NOTE:** The 269 Series is available with a Wet Spline "XY" Output Only.**NOTE:** 267 Series are constantly engaged and will always run when engine is running.**NOTE:** The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.**NOTE:** Do not use Adapter Gear Assemblies on any Allison Automatic Transmissions.

(3) Input Gear Part No. 5-P-1225
 (4) Input Gear Part No. 5-P-1351
 (5) Input Gear Part No. 5-P-1173
 (6) Input Gear Part No. 5-P-912
 (7) Input Gear Part No. 5-P-913

(8) Input Gear Part No. 5-P-914
 (10) Input Gear Part No. 5-P-1160
 (11) Input Gear Part No. 5-P-1161
 (12) Input Gear Part No. 5-P-1162
 (13) Input Gear Part No. 5-P-1212

(14) Input Gear Part No. 5-P-1410
 (15) Input Gear Part No. 5-P-1409
 (16) Input Gear Part No. 5-P-1394
 (17) Input Gear Part No. 5-P-1392
 (18) Input Gear Part No. 5-P-1309

January 2008

3000 EVS

3500 EVS

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 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 P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	TOP Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBFJP-*5 (1)	402	Eng	88				Furnished	267SBFJP-*3 (1)	402	Eng	88				Furnished
267SDFJP-*5 (2)	390	Eng	106				Furnished	267SDFJP-*3 (2)	390	Eng	106				Furnished
267SGFJP-*5 (3)	360	Eng	126				Furnished	267SGFJP-*3 (3)	360	Eng	126				Furnished
267SMFJP-*5 (4)	309	Eng	157				Furnished	267SMFJP-*3 (4)	309	Eng	157				Furnished
267SSFJP-*5 (5)	247	Eng	196				Furnished	267SSFJP-*3 (5)	247	Eng	196				Furnished
267XBFJP-*5 (6)	335	Eng	88				Furnished	267XBFJP-*3 (6)	335	Eng	88				Furnished
267XDFJP-*5 (7)	325	Eng	106				Furnished	267XDFJP-*3 (7)	325	Eng	106				Furnished
267XGFJP-*5 (8)	300	Eng	126				Furnished	267XGFJP-*3 (8)	300	Eng	126				Furnished
267XMFJP-*5 (9)	265	Eng	157				Furnished	267XMFJP-*3 (9)	265	Eng	157				Furnished
267XSFJP-*5 (5)	247	Eng	196				Furnished	267XSFJP-*3 (5)	247	Eng	196				Furnished
269SGFJW-*3 (3)	360	Eng	117				Furnished	269SGFJW-*3 (3)	360	Eng	117				Furnished
269XGFJW-*3 (8)	300	Eng	117				Furnished	269XGFJW-*3 (8)	300	Eng	117				Furnished
867XGFJP-*5 (10)	575	Eng	93				Furnished	867XGFJP-*5 (10)	575	Eng	93				Furnished
867XMFJP-*5 (11)	490	Eng	119				Furnished	867XMFJP-*5 (11)	490	Eng	119				Furnished
867XRFJP-*5 (12)	415	Eng	142				Furnished	867XRFJP-*5 (12)	415	Eng	142				Furnished
867XTFJP-*5 (13)	350	Eng	171				Furnished	867XTFJP-*5 (13)	350	Eng	171				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

277SBFJP-*5 (1)	402	Eng	88				Furnished	277SBFJP-*5 (1)	402	Eng	88				Furnished
277SDFJP-*5 (2)	390	Eng	106				Furnished	277SDFJP-*5 (2)	390	Eng	106				Furnished
277SGFJP-*5 (3)	360	Eng	126				Furnished	277SGFJP-*5 (3)	360	Eng	126				Furnished
277SMFJP-*5 (4)	309	Eng	157				Furnished	277SMFJP-*5 (4)	309	Eng	157				Furnished
277SSFJP-*5 (5)	247	Eng	196				Furnished	277SSFJP-*5 (5)	247	Eng	196				Furnished
277XBFJP-*5 (6)	335	Eng	88				Furnished	277XBFJP-*5 (6)	335	Eng	88				Furnished
277XDFJP-*5 (7)	325	Eng	106				Furnished	277XDFJP-*5 (7)	325	Eng	106				Furnished
277XGFJP-*5 (8)	300	Eng	126				Furnished	277XGFJP-*5 (8)	300	Eng	126				Furnished
277XMFJP-*5 (9)	265	Eng	157				Furnished	277XMFJP-*5 (9)	265	Eng	157				Furnished
277XSFJP-*5 (5)	247	Eng	196				Furnished	277XSFJP-*5 (5)	247	Eng	196				Furnished
278SBFJP-*3 (1)	402	Eng	83				Furnished	278SBFJP-*3 (1)	402	Eng	83				Furnished
278SDFJP-*3 (2)	390	Eng	99				Furnished	278SDFJP-*3 (2)	390	Eng	99				Furnished

Continued Next Page

NOTE: Allison Transmission Maximum Power Capability of the Top Mount P.T.O. 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 Top Mount P.T.O. Option. Refer to Allison Watch #291 for complete details.

NOTE: The Stated Intermittent Torque Values on this Page are for Fire and Emergency Vehicle Applications with One P.T.O. not to Exceed 790 Lbs.ft [1068 N.m] on the Transmission P.T.O. Drive Gear. For Two P.T.O. Applications the Combined Torque Valve Can Not Exceed 790 Lbs.ft [1068 N.m] at the Transmission P.T.O. Drive Gear. See Example on "How to Calculate".

NOTE: "How to Calculate" Torque for two (2) P.T.O. INTERMITTENT Applications. Combined Total = [Actual Torque of P.T.O.#1] / [Per Cent of Engine] + [Actual Torque of P.T.O.#2] / [Per Cent of Engine]. Application is OK if Combined Torque is less than 790 Lbs.ft for Intermittent use and the P.T.O.s Torque Requirements are less than Stated P.T.O. Torque Limits. For CONTINUOUS Applications = Application is OK if Combined Torque is less than 685 Lbs.ft and the P.T.O.s Torque Requirements are less than Stated P.T.O. Torque Limits x .70.

NOTE: All models require a hose assembly. For the 267 Series, use 329130-1X for the left side and 329130-6X for the right side. For the 269, 277, 278 and 859 Series, use 329130-4X for the left side and 329075-2X for the right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY

NOTE: The 269 Series is available with a Wet Spline "XY" Output Only.

NOTE: The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.

- (1) Input Gear Part No. 5-P-1350
 (2) Input Gear Part No. 5-P-1293
 (3) Input Gear Part No. 5-P-1225
 (4) Input Gear Part No. 5-P-1351
 (5) Input Gear Part No. 5-P-1173

- (6) Input Gear Part No. 5-P-912
 (7) Input Gear Part No. 5-P-913
 (8) Input Gear Part No. 5-P-914
 (9) Input Gear Part No. 5-P-915
 (10) Input Gear Part No. 5-P-1160

- (11) Input Gear Part No. 5-P-1161
 (12) Input Gear Part No. 5-P-1162
 (13) Input Gear Part No. 5-P-1212

January 2008

3000 EVS

3500 EVS

LEFT SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 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 P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	TOP Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

278SGFJP-*3 (3)	360	Eng	117				Furnished	278SGFJP-*3 (3)	360	Eng	117				Furnished
278SMFJP-*3 (4)	318	Eng	145				Furnished	278SMFJP-*3 (4)	318	Eng	145				Furnished
278SSFJP-*3 (5)	265	Eng	180				Furnished	278SSFJP-*3 (5)	265	Eng	180				Furnished
278STFJP-*3 (14)	230	Eng	211				Furnished	278STFJP-*3 (14)	230	Eng	211				Furnished
278XBFJP-*3 (6)	335	Eng	83				Furnished	278XBFJP-*3 (6)	335	Eng	83				Furnished
278XDFJP-*3 (7)	325	Eng	99				Furnished	278XDFJP-*3 (7)	325	Eng	99				Furnished
278XGFJP-*3 (8)	300	Eng	117				Furnished	278XGFJP-*3 (8)	300	Eng	117				Furnished
278XTFJP-*3 (15)	225	Eng	211				Furnished	278XTFJP-*3 (15)	225	Eng	211				Furnished
859XGFJP-*5 (10)	575	Eng	93				Furnished	859XGFJP-*5 (10)	575	Eng	93				Furnished
859XJFJP-*5 (16)	525	Eng	105				Furnished	859XJFJP-*5 (16)	525	Eng	105				Furnished
859XMFJP-*5 (11)	490	Eng	119				Furnished	859XMFJP-*5 (11)	490	Eng	119				Furnished
859XRFJP-*5 (12)	415	Eng	143				Furnished	859XRFJP-*5 (12)	415	Eng	143				Furnished
859XSFJP-*5 (17)	385	Eng	156				Furnished	859XSFJP-*5 (17)	385	Eng	156				Furnished
859XTFJP-*5 (13)	350	Eng	171				Furnished	859XTFJP-*5 (13)	350	Eng	171				Furnished
859XWFPJP-*5 (18)	285	Eng	208				Furnished	859XWFPJP-*5 (18)	285	Eng	208				Furnished

NOTE: Allison Transmission Maximum Power Capability of the Top Mount P.T.O. 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 Top Mount P.T.O. Option. Refer to Allison Watch #291 for complete details.

NOTE: The Stated Intermittent Torque Values on this Page are for Fire and Emergency Vehicle Applications with One P.T.O. not to Exceed 790 Lbs.ft [1068 N.m] on the Transmission P.T.O. Drive Gear. For Two P.T.O. Applications the Combined Torque Valve Can Not Exceed 790 Lbs.ft [1068 N.m] at the Transmission P.T.O. Drive Gear. See Example on "How to Calculate".

NOTE: "How to Calculate" Torque for two (2) P.T.O. INTERMITTENT Applications. Combined Total = [Actual Torque of P.T.O.#1] / [Per Cent of Engine] + [Actual Torque of P.T.O.#2] / [Per Cent of Engine]. Application is OK if Combined Torque is less than 790 Lbs.ft for Intermittent use and the P.T.O.s Torque Requirements are less than Stated P.T.O. Torque Limits. For CONTINUOUS Applications = Application is OK if Combined Torque is less than 685 Lbs.ft and the P.T.O.s Torque Requirements are less than Stated P.T.O. Torque Limits x .70.

NOTE: All models require a hose assembly. For the 267 Series, use 329130-1X for the left side and 329130-6X for the right side. For the 269, 277, 278 and 859 Series, use 329130-4X for the left side and 329075-2X for the right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY

NOTE: The 269 Series is available with a Wet Spline "XY" Output Only.

NOTE: The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.

(3) Input Gear Part No. 5-P-1225
(4) Input Gear Part No. 5-P-1351
(5) Input Gear Part No. 5-P-1173
(6) Input Gear Part No. 5-P-912
(7) Input Gear Part No. 5-P-913

(8) Input Gear Part No. 5-P-914
(10) Input Gear Part No. 5-P-1160
(11) Input Gear Part No. 5-P-1161
(12) Input Gear Part No. 5-P-1162
(13) Input Gear Part No. 5-P-1212

(14) Input Gear Part No. 5-P-1410
(15) Input Gear Part No. 5-P-1409
(16) Input Gear Part No. 5-P-1394
(17) Input Gear Part No. 5-P-1392
(18) Input Gear Part No. 5-P-1309

January 2008

1000 (GM 3600 CAB-CHASSIS)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

6.8648" (25.6032MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

250GDHVX-*5 (1)	120	Eng	122	Furnished
250GMHVX-*5 (2)	50	Eng	178	Furnished

Pumps for 250 Series

Option Code Number	250 Series Pumps**	Cubic Inch Displacement	Gals/Min @ 1000 R.P.M.	Maximum Pressure (PSI)	Maximum Speed (R.P.M.)
508	CGP-P5C008-1AA	0.18	0.8	4400	4000
508	CGP-P5C008-1AA	0.18	0.8	4400	4000
510	CGP-P5C010-1AA	0.23	1	4400	4000
513	CGP-P5C013-1AA	0.31	1.3	4400	4000
519	CGP-P5C019-1AA	0.44	1.9	4400	3300
1116	CGP-P11C016-1AC	0.37	1.6	4400	4000
1121	CGP-P11C021-1AC	0.49	2.1	4400	4000
1126	CGP-P11C026-1AC	0.60	2.6	4400	3600
1129	CGP-P11C029-1AC	0.67	2.9	4400	3600
1137	CGP-P11C037-1AC	0.85	3.7	4400	3300
1449	CGP-P31C054-1AE	1.24	5.4	3500	3000
1462	CGP-P31C061-1AE	1.43	6.2	3500	3000

** All 250 Series Pumps MUST be Rear Ported

CAUTION: Failure to use the approved provided components may cause premature failure of the power take-off, the transmission and /or the pump/hydraulic system. For MY 2006 and Prior - Installation Kit# 329331X was required for installation of heat shields and plumbing for the pump. For MY 2007 and Later special heat shields and pump plumbing are not required.

NOTE: 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 P.T.O. switch. This equates to 1200-1250 RPM or higher engine speed, depending on P.T.O. 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.

NOTE: The P.T.O. torque ratings shown are based on the maximum allowable torque of 250 lb-ft at the 64 tooth gear in the transmission with the P.T.O. on one opening only. With P.T.O.s 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 P.T.O. application refer to the Allison Body Builders Book, Section F, P.T.O. Systems Provisions.

NOTE: The 250 Series on the MY 2007 and later GM 3600 Cab/Chassis requires a wiring harness Chelsea part number 379930. This harness must be ordered separately and is required for proper P.T.O. to Engine interface operation. Refer to GM UI Bulletin #80.

NOTE: Only the 12v "B" option shifter can be used on this application.

NOTE: The left P.T.O. aperture opening on this application is not usable due to engine fuel lines blocking the opening.

(1) Input Gear Part No. 5-P-1294

(2) Input Gear Part No. 5-P-1386

January 2008

UNIVERSITAT DE VALÈNCIA

El Poder de Mover

 Chelsea	4.2.22	Parker Hannifin Corporation Chelsea Products Division Olive Branch, MS 38654 USA
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CATERPILLAR



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CATERPILLAR TRANSMISSION INDEX

Transmission Make and Model	P.T.O. Appl. Number	Number Forward Speeds	Teeth in P.T.O. Driver
CX28	CAT-2	6	L79-R79
CX31	CAT-1	6	L88-R88
CX35	CAT-3	8	L100-R100
TH48FT-E70 (OFF Highway Automatic)	CAT-4	5	B56-L57-R57
TH48FT-E80 (OFF Highway Automatic)	CAT-5	5	B51-L57-R57



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

Transmission P.T.O. Driver & Aperatures (Viewed from Rear of Transmission)

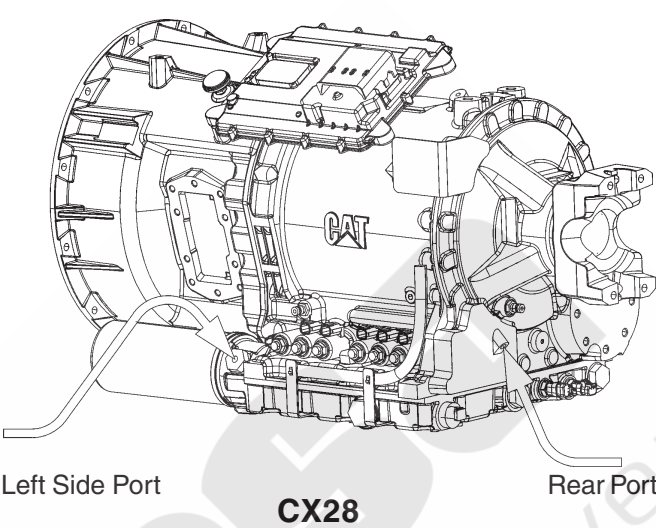
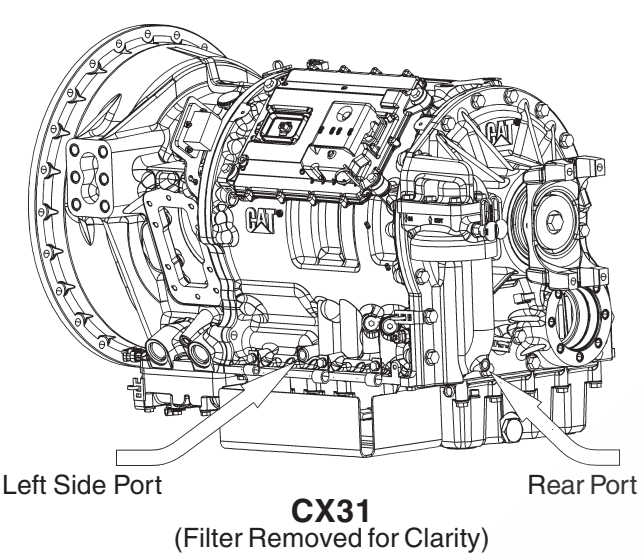
L-Left Side R-Right Side B-Bottom Side T-Top Side

For transmission not listed, contact your authorized Chelsea Distributor.

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CATERPILLAR TRANSMISSION INDEX

Pressure Port Locations & Hose Chart (SK-414 Rev B)



Both High Pressure Connections are -4 O-Ring Boss

HOSE CHART							
Trans.	P.T.O.	P.T.O. Location	High Oil Pressure Location	P.T.O. Valve Location	P.T.O. Fitting	Trans. Fitting	Trans.-P.T.O. Valve Hose #
CX31 CX28	277, 278 859	Driver (LHS)	LHS	Attached	379486	379812	329075-1X
		Driver (LHS)	Rear				329075-5X
		Pass. (RHS)	LHS			379486	329075-2X
		Pass. (RHS)	Rear				329075-5X
		Driver (LHS)	LHS	Remote	379486	379812	329130-6X
		Driver (LHS)	Rear				329130-6X
		Pass. (RHS)	LHS				329130-6X
		Pass. (RHS)	Rear				329130-6X
	267	Driver (LHS)	LHS	N/A	379486	379812	329130-3X
		Driver (LHS)	Rear			379486	329075-5X
		Pass. (RHS)	LHS			379812	329075-2X
		Pass. (RHS)	Rear			379812	329075-5X
	867	Driver (LHS)	LHS	N/A	379486	379812	329130-3X
		Driver (LHS)	Rear				329075-5X
		Pass. (RHS)	LHS			379486	329075-2X
		Pass. (RHS)	Rear				329075-5X

LHS = Left Side of Transmission, 8 o'clock position
RHS = Right Side of Transmission, 1 o'clock position

NOTES:

- 1. P.T.O. Fitting 379486 and Transmission Fitting 379812 included with the P.T.O. Unit. If Using 379486 in Transmission it Must be Purchased Separately.
- 2. Hoses to be Purchased Separately.
- 3. 379486 Elbow Will Not Install on the CX31 Left Hand (Driver) Side Oil Port Due to Transmission Interference. On CX28, 379486 Elbow will Fit on LHS Port.
- 4. If 379486 is Listed as Transmission Fitting for Rear Location for CX31. Route Hose Along Right Hand (passenger) Side of Transmission and Under Transmission Output Yoke. For the CX28, Route Hose Under the ECM.

CX31

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 10-Bolt Opening Gear FORWARD of Centerline

88 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7207" (43.7060MM)

TRANSMISSION GEAR DATA:

R.H. 10-Bolt Opening Gear FORWARD of Centerline

88 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7207" (43.7060MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBKVP-*5 (1)	402	Eng	104				Furnished	267SBKVP-*3 (1)	402	Eng	104				Furnished
267SDKVP-*5 (2)	390	Eng	124				Furnished	267SDKVP-*3 (2)	390	Eng	124				Furnished
267SGKVP-*5 (3)	360	Eng	148				Furnished	267SGKVP-*3 (3)	360	Eng	148				Furnished
267SMKVP-*5 (4)	318	Eng	185				Furnished	267SMKVP-*3 (4)	318	Eng	185				Furnished
267SSKVP-*5 (5)	265	Eng	231				Furnished	267SSKVP-*3 (5)	265	Eng	231				Furnished
267XBKVP-*5 (6)	335	Eng	104				Furnished	267XBKVP-*3 (6)	335	Eng	104				Furnished
267XCKVP-*5 (7)	330	Eng	111				Furnished	267XCKVP-*3 (7)	330	Eng	111				Furnished
267XDKVP-*5 (8)	325	Eng	124				Furnished	267XDKVP-*3 (8)	325	Eng	124				Furnished
267XGKVP-*5 (9)	300	Eng	148				Furnished	267XGKVP-*3 (9)	300	Eng	148				Furnished
267XMKVP-*5 (10)	265	Eng	185				Furnished	267XMKVP-*3 (10)	265	Eng	185				Furnished
267XSKVP-*5 (11)	250	Eng	231				Furnished	267XSKVP-*3 (11)	250	Eng	231				Furnished
269SBKVP-*3 (1)	402	Eng	98				Furnished	269SBKVP-*3 (1)	402	Eng	98				Furnished
269SDKVP-*3 (2)	390	Eng	117				Furnished	269SDKVP-*3 (2)	390	Eng	117				Furnished
269SGKVP-*3 (3)	360	Eng	138				Furnished	269SGKVP-*3 (3)	360	Eng	138				Furnished
269SMKVP-*3 (4)	318	Eng	171				Furnished	269SMKVP-*3 (4)	318	Eng	171				Furnished
269XBKVP-*3 (6)	335	Eng	98				Furnished	269XBKVP-*3 (6)	335	Eng	98				Furnished
269XDKVP-*3 (8)	325	Eng	117				Furnished	269XDKVP-*3 (8)	325	Eng	117				Furnished
269XGKVP-*3 (9)	300	Eng	138				Furnished	269XGKVP-*3 (9)	300	Eng	138				Furnished
269XMKVP-*3 (10)	265	Eng	171				Furnished	269XMKVP-*3 (10)	265	Eng	171				Furnished
867XGKVP-*5 (12)	575	Eng	109				Furnished	867XGKVP-*5 (12)	575	Eng	109				Furnished
867XMKVP-*5 (13)	490	Eng	140				Furnished	867XMKVP-*5 (13)	490	Eng	140				Furnished
867XRKVP-*5 (14)	415	Eng	168				Furnished	867XRKVP-*5 (14)	415	Eng	168				Furnished
867XTKVP-*5 (15)	350	Eng	201				Furnished	867XTKVP-*5 (15)	350	Eng	201				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

277SBKVP-*5 (1)	402	Eng	104			Furnished	277SBKVP-*5 (1)	402	Eng	104			Furnished
277SDKVP-*5 (2)	390	Eng	124			Furnished	277SDKVP-*5 (2)	390	Eng	124			Furnished

Continued Next Page**NOTE:** See Front Section of Caterpillar Index for Pressure Hose Chart Requirements (SK-414) for Side Mount Applications. Rear Mounts come with the Hose Supplied.**NOTE:** P.T.O. Units Require a Pressure Regulating Solenoid and are Shipped with Units Ordered for this Transmission ("KV" input gear).**NOTE:** The Internal Drive Shaft for the Rear Mount Opening is Optional from Caterpillar and Must be Specified when the Transmission is Ordered.**NOTE:** The Transmission Filter may Interfere with Large Pumps Mounted to P.T.O.s at the 8 o'clock (Left Side) Position. A Remote Mount Filter Kit can be ordered from Caterpillar if this Option is Required. Large Pumps will also Require the Use of the Rear Pressure Port for Oil Supply Requirements. (See Front Section for Location and Hose Requirements, SK-414)**NOTE:** The 267 Series in the "5" Arrangement May Have Possible Interference Between the Lube Fitting and Converter Housing. Make Sure the Fitting is Screwed Completely In before you Torque Down the P.T.O. Verify that the Fitting is not Contacting the Transmission Housing. A "3" Arrangement with SAE "B" Output Must Either be "XQ" or "AK" Can be Used. The "XK" Output can Not be Used Due to Interference Between Flange and Pressure Lube Fitting.**NOTE:** Harness to use for GM trucks is Chelsea part number 379927 if dash mounted P.T.O. switch is to be used*** NOTE:** The "XV" Output for the CAT-D Rear Mount is Rated at Both 800 Lbs.ft Intermittent and 800 Lbs.ft Continuous. This Output is not Derated for Continuous Operation.**** NOTE:** The CAT-H Rear Mount is Rated at 335 Lbs.ft for Both Intermittent and Continuous Applications(All Output Options) .

- (1) Input Gear Part No. 5-P-1402
 (2) Input Gear Part No. 5-P-1413
 (3) Input Gear Part No. 5-P-1414
 (4) Input Gear Part No. 5-P-1415
 (5) Input Gear Part No. 5-P-1416
 (6) Input Gear Part No. 5-P-1361

- (7) Input Gear Part No. 5-P-1419
 (8) Input Gear Part No. 5-P-1362
 (9) Input Gear Part No. 5-P-1363
 (10) Input Gear Part No. 5-P-1367
 (11) Input Gear Part No. 5-P-1368
 (12) Input Gear Part No. 5-P-1360

- (13) Input Gear Part No. 5-P-1398
 (14) Input Gear Part No. 5-P-1399
 (15) Input Gear Part No. 5-P-1401

January 2008

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LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 10-Bolt Opening Gear FORWARD of Centerline

88 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7207" (43.7060MM)

TRANSMISSION GEAR DATA:

R.H. 10-Bolt Opening Gear FORWARD of Centerline

88 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7207" (43.7060MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
277SGKVP-*5 (3)	360	Eng	148				Furnished	277SGKVP-*5 (3)	360	Eng	148				Furnished
277SMKVP-*5 (4)	318	Eng	185				Furnished	277SMKVP-*5 (4)	318	Eng	185				Furnished
277SSKVP-*5 (5)	265	Eng	231				Furnished	277SSKVP-*5 (5)	265	Eng	231				Furnished
277XBKVP-*5 (6)	335	Eng	104				Furnished	277XBKVP-*5 (6)	335	Eng	104				Furnished
277XDKVP-*5 (8)	325	Eng	124				Furnished	277XDKVP-*5 (8)	325	Eng	124				Furnished
277XGKVP-*5 (9)	300	Eng	148				Furnished	277XGKVP-*5 (9)	300	Eng	148				Furnished
277XMKVP-*5 (10)	265	Eng	185				Furnished	277XMKVP-*5 (10)	265	Eng	185				Furnished
277XSKVP-*5 (11)	250	Eng	231				Furnished	277XSKVP-*5 (11)	250	Eng	231				Furnished
278SBKVP-*3 (1)	402	Eng	98				Furnished	278SBKVP-*3 (1)	402	Eng	98				Furnished
278SDKVP-*3 (2)	390	Eng	117				Furnished	278SDKVP-*3 (2)	390	Eng	117				Furnished
278SGKVP-*3 (3)	360	Eng	138				Furnished	278SGKVP-*3 (3)	360	Eng	138				Furnished
278SMKVP-*3 (4)	318	Eng	171				Furnished	278SMKVP-*3 (4)	318	Eng	171				Furnished
278SSKVP-*3 (5)	265	Eng	212				Furnished	278SSKVP-*3 (5)	265	Eng	212				Furnished
278XBKVP-*3 (6)	335	Eng	98				Furnished	278XBKVP-*3 (6)	335	Eng	98				Furnished
278XDKVP-*3 (8)	325	Eng	117				Furnished	278XDKVP-*3 (8)	325	Eng	117				Furnished
278XGKVP-*3 (9)	300	Eng	138				Furnished	278XGKVP-*3 (9)	300	Eng	138				Furnished
278XMKVP-*3 (10)	265	Eng	171				Furnished	278XMKVP-*3 (10)	265	Eng	171				Furnished
278XSKVP-*3 (11)	250	Eng	212				Furnished	278XSKVP-*3 (11)	250	Eng	212				Furnished
859XGKVP-*5 (12)	575	Eng	109				Furnished	859XGKVP-*5 (12)	575	Eng	109				Furnished
859XJKVP-*5 (16)	525	Eng	124				Furnished	859XJKVP-*5 (16)	525	Eng	124				Furnished
859XMKVP-*5 (13)	490	Eng	140				Furnished	859XMKVP-*5 (13)	490	Eng	140				Furnished
859XRKVP-*5 (14)	415	Eng	168				Furnished	859XRKVP-*5 (14)	415	Eng	168				Furnished
859XSKVP-*5 (17)	385	Eng	184				Furnished	859XSKVP-*5 (17)	385	Eng	184				Furnished
859XTKVP-*5 (15)	350	Eng	201				Furnished	859XTKVP-*5 (15)	350	Eng	201				Furnished

Continued Next Page**NOTE:** See Front Section of Caterpillar Index for Pressure Hose Chart Requirements (SK-414) for Side Mount Applications. Rear Mounts come with the Hose Supplied.**NOTE:** P.T.O. Units Require a Pressure Regulating Solenoid and are Shipped with Units Ordered for this Transmission ("KV" input gear).**NOTE:** The Internal Drive Shaft for the Rear Mount Opening is Optional from Caterpillar and Must be Specified when the Transmission is Ordered.**NOTE:** The Transmission Filter may Interfere with Large Pumps Mounted to P.T.O.s at the 8 o'clock (Left Side) Position. A Remote Mount Filter Kit can be ordered from Caterpillar if this Option is Required. Large Pumps will also Require the Use of the Rear Pressure Port for Oil Supply Requirements. (See Front Section for Location and Hose Requirements, SK-414)**NOTE:** The 267 Series in the "5" Arrangement May Have Possible Interference Between the Lube Fitting and Converter Housing. Make Sure the Fitting is Screwed Completely In before you Torque Down the P.T.O. Verify that the Fitting is not Contacting the Transmission Housing. A "3" Arrangement with SAE "B" Output Must Either be "XQ" or "AK" Can be Used. The "XK" Output can Not be Used Due to Interference Between Flange and Pressure Lube Fitting.**NOTE:** Harness to use for GM trucks is Chelsea part number 379927 if dash mounted P.T.O. switch is to be used*** NOTE:** The "XV" Output for the CAT-D Rear Mount is Rated at Both 800 Lbs.ft Intermittent and 800 Lbs.ft Continuous. This Output is not Derated for Continuous Operation.**** NOTE:** The CAT-H Rear Mount is Rated at 335 Lbs.ft for Both Intermittent and Continuous Applications(All Output Options) .

(1) Input Gear Part No. 5-P-1402
 (2) Input Gear Part No. 5-P-1413
 (3) Input Gear Part No. 5-P-1414
 (4) Input Gear Part No. 5-P-1415
 (5) Input Gear Part No. 5-P-1416
 (6) Input Gear Part No. 5-P-1361

(8) Input Gear Part No. 5-P-1362
 (9) Input Gear Part No. 5-P-1363
 (10) Input Gear Part No. 5-P-1367
 (11) Input Gear Part No. 5-P-1368
 (12) Input Gear Part No. 5-P-1360
 (13) Input Gear Part No. 5-P-1398

(14) Input Gear Part No. 5-P-1399
 (15) Input Gear Part No. 5-P-1401
 (16) Input Gear Part No. 5-P-1397
 (17) Input Gear Part No. 5-P-1400

January 2008

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REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 8-Bolt Opening

17 Teeth -

PITCH LINE TO APERTURE FACE:**Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.**

REAR Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

DIRECT DRIVE - REAR MOUNT

CAT-D *	800	Opp	125				Furnished								
---------	-----	-----	-----	--	--	--	-----------	--	--	--	--	--	--	--	--

POWERSHIFT - REAR MOUNT (HYDRAULIC)

CAT-H **	335	Opp	125				Furnished								
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NOTE: See Front Section of Caterpillar Index for Pressure Hose Chart Requirements (SK-414) for Side Mount Applications. Rear Mounts come with the Hose Supplied.

NOTE: P.T.O. Units Require a Pressure Regulating Solenoid and are Shipped with Units Ordered for this Transmission ("KV" input gear).

NOTE: The Internal Drive Shaft for the Rear Mount Opening is Optional from Caterpillar and Must be Specified when the Transmission is Ordered.

NOTE: The Transmission Filter may Interfere with Large Pumps Mounted to P.T.O.s at the 8 o'clock (Left Side) Position. A Remote Mount Filter Kit can be ordered from Caterpillar if this Option is Required. Large Pumps will also Require the Use of the Rear Pressure Port for Oil Supply Requirements. (See Front Section for Location and Hose Requirements, SK-414)

NOTE: The 267 Series in the "5" Arrangement May Have Possible Interference Between the Lube Fitting and Converter Housing. Make Sure the Fitting is Screwed Completely In before you Torque Down the P.T.O. Verify that the Fitting is not Contacting the Transmission Housing. A "3" Arrangement with SAE "B" Output Must Either be "XQ" or "AK" Can be Used. The "XK" Output can Not be Used Due to Interference Between Flange and Pressure Lube Fitting.

NOTE: Harness to use for GM trucks is Chelsea part number 379927 if dash mounted P.T.O. switch is to be used

*** NOTE:** The "XV" Output for the CAT-D Rear Mount is Rated at Both 800 Lbs.ft Intermittent and 800 Lbs.ft Continuous. This Output is not Derated for Continuous Operation.

**** NOTE:** The CAT-H Rear Mount is Rated at 335 Lbs.ft for Both Intermittent and Continuous Applications(All Output Options) .

January 2008

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LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 10-Bolt Opening Gear FORWARD of Centerline

79 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7207" (43.7060MM)

TRANSMISSION GEAR DATA:

R.H. 10-Bolt Opening Gear FORWARD of Centerline

79 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7207" (43.7060MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBKVP-*5 (1)	402	Eng	94				Furnished	267SBKVP-*3 (1)	402	Eng	94				Furnished
267SDKVP-*5 (2)	390	Eng	112				Furnished	267SDKVP-*3 (2)	390	Eng	112				Furnished
267SGKVP-*5 (3)	360	Eng	133				Furnished	267SGKVP-*3 (3)	360	Eng	133				Furnished
267SMKVP-*5 (4)	318	Eng	167				Furnished	267SMKVP-*3 (4)	318	Eng	167				Furnished
267SSKVP-*5 (5)	265	Eng	207				Furnished	267SSKVP-*3 (5)	265	Eng	207				Furnished
267XBKVP-*5 (6)	335	Eng	94				Furnished	267XBKVP-*3 (6)	335	Eng	94				Furnished
267XCKVP-*5 (7)	330	Eng	99				Furnished	267XCKVP-*3 (7)	330	Eng	99				Furnished
267XDKVP-*5 (8)	325	Eng	112				Furnished	267XDKVP-*3 (8)	325	Eng	112				Furnished
267XGKVP-*5 (9)	300	Eng	133				Furnished	267XGKVP-*3 (9)	300	Eng	133				Furnished
267XMKVP-*5 (10)	265	Eng	167				Furnished	267XMKVP-*3 (10)	265	Eng	167				Furnished
267XSKVP-*5 (11)	250	Eng	207				Furnished	267XSKVP-*3 (11)	250	Eng	207				Furnished
269SBKVP-*3 (1)	402	Eng	88				Furnished	269SBKVP-*3 (1)	402	Eng	88				Furnished
269SDKVP-*3 (2)	390	Eng	105				Furnished	269SDKVP-*3 (2)	390	Eng	105				Furnished
269SGKVP-*3 (3)	360	Eng	124				Furnished	269SGKVP-*3 (3)	360	Eng	124				Furnished
269SMKVP-*3 (4)	318	Eng	154				Furnished	269SMKVP-*3 (4)	318	Eng	154				Furnished
269XBKVP-*3 (6)	335	Eng	88				Furnished	269XBKVP-*3 (6)	335	Eng	88				Furnished
269XDKVP-*3 (8)	325	Eng	105				Furnished	269XDKVP-*3 (8)	325	Eng	105				Furnished
269XGKVP-*3 (9)	300	Eng	124				Furnished	269XGKVP-*3 (9)	300	Eng	124				Furnished
269XMKVP-*3 (10)	265	Eng	154				Furnished	269XMKVP-*3 (10)	265	Eng	154				Furnished
								867XGKVP-*5 (12)	575	Eng	98				Furnished
								867XMKVP-*5 (13)	490	Eng	126				Furnished
								867XRKVP-*5 (14)	415	Eng	151				Furnished
								867XTKVP-*5 (15)	350	Eng	181				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

278SBKVP-*3 (1)	402	Eng	88				Furnished	277SBKVP-*5 (1)	402	Eng	94				Furnished
278SDKVP-*3 (2)	390	Eng	105				Furnished	277SDKVP-*5 (2)	390	Eng	112				Furnished

Continued Next Page**NOTE:** See Front Section of Caterpillar Index for Pressure Hose Chart Requirements (SK-414) for Side Mount Applications. Rear Mount Units come with Hose Supplied.**NOTE:** Hotshift P.T.O. Units Require a Pressure Regulating Solenoid and are Shipped with Units Ordered for this Transmission ("KV" input gear).**NOTE:** The Internal Drive Shaft for the Rear Mount Opening is Optional from Caterpillar and Must be Specified when the Transmission is Ordered.**NOTE:** Large Pumps on the Left Hand Side (LHS) may Require the Use of the Rear Pressure Port for Oil Supply Requirements. If the Left Hand Side (LHS) P.T.O. opening is used, the transmission dipstick should be relocated to the Right Hand Side (RHS).**NOTE:** A "3" Arrangement with SAE "B" Output Must Either be "XQ" or "AK". The "XK" Output can Not be Used Due to Interference Between Flange and Pressure Lube Fitting. On the LHS, if the 267 Series "5" arrangement is used, pump clearance is severely limited due to position of the transmission valve bank.. A "3" arrangement offers much more clearance.**NOTE:** 859, 867, 277 Series will not fit and/or allow pump clearance on the Left Hand Side (LHS).**NOTE:** Harness to use for GM trucks is Chelsea part number 379927 if dash mounted P.T.O. switch is to be used***NOTE:** The "XV" Output for the CAT-D Rear Mount is Limited to 667 Lbs.ft Intermittent Torque Due to Transmission Load Limits. All Other Output Options are Limited by the Hydraulic Pump Output Shaft Spline.**** NOTE:** The CAT-H Rear Mount is Rated at 335 Lbs.ft for Both Intermittent and Continuous Applications(All Output Options) .

- (1) Input Gear Part No. 5-P-1402
- (2) Input Gear Part No. 5-P-1413
- (3) Input Gear Part No. 5-P-1414
- (4) Input Gear Part No. 5-P-1415
- (5) Input Gear Part No. 5-P-1416
- (6) Input Gear Part No. 5-P-1361

- (7) Input Gear Part No. 5-P-1419
- (8) Input Gear Part No. 5-P-1362
- (9) Input Gear Part No. 5-P-1363
- (10) Input Gear Part No. 5-P-1367
- (11) Input Gear Part No. 5-P-1368
- (12) Input Gear Part No. 5-P-1360

- (13) Input Gear Part No. 5-P-1398
- (14) Input Gear Part No. 5-P-1399
- (15) Input Gear Part No. 5-P-1401

January 2008

CX28

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 10-Bolt Opening Gear FORWARD of Centerline

79 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7207" (43.7060MM)

TRANSMISSION GEAR DATA:

R.H. 10-Bolt Opening Gear FORWARD of Centerline

79 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7207" (43.7060MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

278SGKVP-*3 (3)	360	Eng	124				Furnished	277SGKVP-*5 (3)	360	Eng	133				Furnished
278SMKVP-*3 (4)	318	Eng	154				Furnished	277SMKVP-*5 (4)	318	Eng	167				Furnished
278SSKVP-*3 (5)	265	Eng	191				Furnished	277SSKVP-*5 (5)	265	Eng	207				Furnished
278XBKVP-*3 (6)	335	Eng	88				Furnished	277XBKVP-*5 (6)	335	Eng	94				Furnished
278XDKVP-*3 (8)	325	Eng	105				Furnished	277XDKVP-*5 (8)	325	Eng	112				Furnished
278XGKVP-*3 (9)	300	Eng	124				Furnished	277XGKVP-*5 (9)	300	Eng	133				Furnished
278XMKVP-*3 (10)	265	Eng	154				Furnished	277XMKVP-*5 (10)	265	Eng	167				Furnished
278XSKVP-*3 (11)	250	Eng	191				Furnished	277XSKVP-*5 (11)	250	Eng	207				Furnished
								278SBKVP-*3 (1)	402	Eng	88				Furnished
								278SDKVP-*3 (2)	390	Eng	105				Furnished
								278SGKVP-*3 (3)	360	Eng	124				Furnished
								278SMKVP-*3 (4)	318	Eng	154				Furnished
								278SSKVP-*3 (5)	265	Eng	191				Furnished
								278XBKVP-*3 (6)	335	Eng	88				Furnished
								278XDKVP-*3 (8)	325	Eng	105				Furnished
								278XGKVP-*3 (9)	300	Eng	124				Furnished
								278XMKVP-*3 (10)	265	Eng	154				Furnished
								278XSKVP-*3 (11)	250	Eng	191				Furnished
								859XGKVP-*5 (12)	575	Eng	98				Furnished
								859XJKVP-*5 (16)	525	Eng	112				Furnished
								859XMKVP-*5 (13)	490	Eng	126				Furnished
								859XRKVP-*5 (14)	415	Eng	151				Furnished
								859XSKVP-*5 (17)	385	Eng	165				Furnished
								859XTKVP-*5 (15)	350	Eng	181				Furnished

Continued Next Page**NOTE:** See Front Section of Caterpillar Index for Pressure Hose Chart Requirements (SK-414) for Side Mount Applications. Rear Mount Units come with Hose Supplied.**NOTE:** Hotshift P.T.O. Units Require a Pressure Regulating Solenoid and are Shipped with Units Ordered for this Transmission ("KV" input gear).**NOTE:** The Internal Drive Shaft for the Rear Mount Opening is Optional from Caterpillar and Must be Specified when the Transmission is Ordered.**NOTE:** Large Pumps on the Left Hand Side (LHS) may Require the Use of the Rear Pressure Port for Oil Supply Requirements. If the Left Hand Side (LHS) P.T.O. opening is used, the transmission dipstick should be relocated to the Right Hand Side (RHS).**NOTE:** A "3" Arrangement with SAE "B" Output Must Either be "XQ" or "AK". The "XK" Output can Not be Used Due to Interference Between Flange and Pressure Lube Fitting. On the LHS, if the 267 Series "5" arrangement is used, pump clearance is severely limited due to position of the transmission valve bank.. A "3" arrangement offers much more clearance.**NOTE:** 859, 867, 277 Series will not fit and/or allow pump clearance on the Left Hand Side (LHS).**NOTE:** Harness to use for GM trucks is Chelsea part number 379927 if dash mounted P.T.O. switch is to be used***NOTE:** The "XV" Output for the CAT-D Rear Mount is Limited to 667 Lbs.ft Intermittent Torque Due to Transmission Load Limits. All Other Output Options are Limited by the Hydraulic Pump Output Shaft Spline.**** NOTE:** The CAT-H Rear Mount is Rated at 335 Lbs.ft for Both Intermittent and Continuous Applications(All Output Options) .

- (1) Input Gear Part No. 5-P-1402
 (2) Input Gear Part No. 5-P-1413
 (3) Input Gear Part No. 5-P-1414
 (4) Input Gear Part No. 5-P-1415
 (5) Input Gear Part No. 5-P-1416
 (6) Input Gear Part No. 5-P-1361

- (8) Input Gear Part No. 5-P-1362
 (9) Input Gear Part No. 5-P-1363
 (10) Input Gear Part No. 5-P-1367
 (11) Input Gear Part No. 5-P-1368
 (12) Input Gear Part No. 5-P-1360
 (13) Input Gear Part No. 5-P-1398

- (14) Input Gear Part No. 5-P-1399
 (15) Input Gear Part No. 5-P-1401
 (16) Input Gear Part No. 5-P-1397
 (17) Input Gear Part No. 5-P-1400

January 2008

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REAR SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 8-Bolt Opening

17 Teeth -

PITCH LINE TO APERTURE FACE:

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

REAR Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

DIRECT DRIVE - REAR MOUNT

CAT-D *	667	Opp	125				Furnished								
---------	-----	-----	-----	--	--	--	-----------	--	--	--	--	--	--	--	--

POWERSHIFT - REAR MOUNT (HYDRAULIC)

CAT-H **	335	Opp	125				Furnished								
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NOTE: See Front Section of Caterpillar Index for Pressure Hose Chart Requirements (SK-414) for Side Mount Applications. Rear Mount Units come with Hose Supplied.

NOTE: Hotshift P.T.O. Units Require a Pressure Regulating Solenoid and are Shipped with Units Ordered for this Transmission ("KV" input gear).

NOTE: The Internal Drive Shaft for the Rear Mount Opening is Optional from Caterpillar and Must be Specified when the Transmission is Ordered.

NOTE: Large Pumps on the Left Hand Side (LHS) may Require the Use of the Rear Pressure Port for Oil Supply Requirements. If the Left Hand Side (LHS) P.T.O. opening is used, the transmission dipstick should be relocated to the Right Hand Side (RHS).

NOTE: A "3" Arrangement with SAE "B" Output Must Either be "XQ" or "AK". The "XK" Output can Not be Used Due to Interference Between Flange and Pressure Lube Fitting. On the LHS, if the 267 Series "5" arrangement is used, pump clearance is severely limited due to position of the transmission valve bank.. A "3" arrangement offers much more clearance.

NOTE: 859, 867, 277 Series will not fit and/or allow pump clearance on the Left Hand Side (LHS).

NOTE: Harness to use for GM trucks is Chelsea part number 379927 if dash mounted P.T.O. switch is to be used

***NOTE:** The "XV" Output for the CAT-D Rear Mount is Limited to 667 Lbs.ft Intermittent Torque Due to Transmission Load Limits. All Other Output Options are Limited by the Hydraulic Pump Output Shaft Spline.

**** NOTE:** The CAT-H Rear Mount is Rated at 335 Lbs.ft for Both Intermittent and Continuous Applications(All Output Options) .

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CX35

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 10-Bolt Opening Gear FORWARD of Centerline

100 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7207" (43.7060MM)

TRANSMISSION GEAR DATA:

R.H. 10-Bolt Opening Gear FORWARD of Centerline

100 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7207" (43.7060MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - CONSTANT MESH

267SBKVP-*5 (1)	402	Eng	118				Furnished	267SBKVP-*3 (1)	402	Eng	118				Furnished
267SDKVP-*5 (2)	390	Eng	141				Furnished	267SDKVP-*3 (2)	390	Eng	141				Furnished
267SGKVP-*5 (3)	360	Eng	168				Furnished	267SGKVP-*3 (3)	360	Eng	168				Furnished
267SMKVP-*5 (4)	318	Eng	210				Furnished	267SMKVP-*3 (4)	318	Eng	210				Furnished
267XBKVP-*5 (5)	335	Eng	118				Furnished	267XBKVP-*3 (5)	335	Eng	118				Furnished
267XCKVP-*5 (6)	330	Eng	126				Furnished	267XCKVP-*3 (6)	330	Eng	126				Furnished
267XDKVP-*5 (7)	325	Eng	141				Furnished	267XDKVP-*3 (7)	325	Eng	141				Furnished
267XGKVP-*5 (8)	300	Eng	168				Furnished	267XGKVP-*3 (8)	300	Eng	168				Furnished
267XMKVP-*5 (9)	265	Eng	210				Furnished	267XMKVP-*3 (9)	265	Eng	210				Furnished
269SBKVP-*3 (1)	402	Eng	111				Furnished	269SBKVP-*3 (1)	402	Eng	111				Furnished
269SDKVP-*3 (2)	390	Eng	132				Furnished	269SDKVP-*3 (2)	390	Eng	132				Furnished
269SGKVP-*3 (3)	360	Eng	157				Furnished	269SGKVP-*3 (3)	360	Eng	157				Furnished
269SMKVP-*3 (4)	318	Eng	194				Furnished	269SMKVP-*3 (4)	318	Eng	194				Furnished
269XBKVP-*3 (5)	335	Eng	111				Furnished	269XBKVP-*3 (5)	335	Eng	111				Furnished
269XDKVP-*3 (7)	325	Eng	132				Furnished	269XDKVP-*3 (7)	325	Eng	132				Furnished
269XGKVP-*3 (8)	300	Eng	157				Furnished	269XGKVP-*3 (8)	300	Eng	157				Furnished
269XMKVP-*3 (9)	265	Eng	194				Furnished	269XMKVP-*3 (9)	265	Eng	194				Furnished
867XGKVP-*5 (10)	575	Eng	124				Furnished	867XGKVP-*5 (10)	575	Eng	124				Furnished
867XMKVP-*5 (11)	490	Eng	160				Furnished	867XMKVP-*5 (11)	490	Eng	160				Furnished
867XRKVP-*5 (12)	415	Eng	191				Furnished	867XRKVP-*5 (12)	415	Eng	191				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

277SBKVP-*5 (1)	402	Eng	118				Furnished	277SBKVP-*5 (1)	402	Eng	118				Furnished
277SDKVP-*5 (2)	390	Eng	141				Furnished	277SDKVP-*5 (2)	390	Eng	141				Furnished
277SGKVP-*5 (3)	360	Eng	168				Furnished	277SGKVP-*5 (3)	360	Eng	168				Furnished
277SMKVP-*5 (4)	318	Eng	210				Furnished	277SMKVP-*5 (4)	318	Eng	210				Furnished
277XBKVP-*5 (5)	335	Eng	118				Furnished	277XBKVP-*5 (5)	335	Eng	118				Furnished

Continued Next Page**NOTE:** See Front Section of Caterpillar Index for Pressure Hose Chart Requirements (SK-414) for Side Mount Applications. Rear Mounts come with the Hose Supplied.**NOTE:** P.T.O. Units Require a Pressure Regulating Solenoid and are Shipped with Units Ordered for this Transmission ("KV" input gear).**NOTE:** The Internal Drive Shaft for the Rear Mount Opening is Optional from Caterpillar and Must be Specified when the Transmission is Ordered.**NOTE:** The Transmission Filter may Interfere with Large Pumps Mounted to P.T.O.s at the 8 o'clock (Left Side) Position. A Remote Mount Filter Kit can be ordered from Caterpillar if this Option is Required. Large Pumps will also Require the Use of the Rear Pressure Port for Oil Supply Requirements. (See Front Section for Location and Hose Requirements, SK-414)**NOTE:** The 267 Series in the "5" Arrangement May Have Possible Interference Between the Lube Fitting and Converter Housing. Make Sure the Fitting is Screwed Completely In before you Torque Down the P.T.O. Verify that the Fitting is not Contacting the Transmission Housing. A "3" Arrangement with SAE "B" Output Must Either be "XQ" or "AK" Can be Used. The "XK" Output can Not be Used Due to Interference Between Flange and Pressure Lube Fitting.**NOTE:** Harness to use for GM trucks is Chelsea part number 379927 if dash mounted P.T.O. switch is to be used*** NOTE:** The "XV" Output for the CAT-D Rear Mount is Rated at Both 800 Lbs.ft Intermittent and 800 Lbs.ft Continuous. This Output is not Derated for Continuous Operation.**** NOTE:** The CAT-H Rear Mount is Rated at 335 Lbs.ft for Both Intermittent and Continuous Applications(All Output Options) .

- (1) Input Gear Part No. 5-P-1402
 (2) Input Gear Part No. 5-P-1413
 (3) Input Gear Part No. 5-P-1414
 (4) Input Gear Part No. 5-P-1415
 (5) Input Gear Part No. 5-P-1361
 (6) Input Gear Part No. 5-P-1419

- (7) Input Gear Part No. 5-P-1362
 (8) Input Gear Part No. 5-P-1363
 (9) Input Gear Part No. 5-P-1367
 (10) Input Gear Part No. 5-P-1360
 (11) Input Gear Part No. 5-P-1398
 (12) Input Gear Part No. 5-P-1399

January 2008

CX35

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 10-Bolt Opening Gear FORWARD of Centerline

100 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7207" (43.7060MM)

TRANSMISSION GEAR DATA:

R.H. 10-Bolt Opening Gear FORWARD of Centerline

100 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

1.7207" (43.7060MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

277XDKVP-*5 (7)	325	Eng	141				Furnished	277XDKVP-*5 (7)	325	Eng	141				Furnished
277XGKVP-*5 (8)	300	Eng	168				Furnished	277XGKVP-*5 (8)	300	Eng	168				Furnished
277XMKVP-*5 (9)	265	Eng	210				Furnished	277XMKVP-*5 (9)	265	Eng	210				Furnished
278SBKVP-*3 (1)	402	Eng	111				Furnished	278SBKVP-*3 (1)	402	Eng	111				Furnished
278SDKVP-*3 (2)	390	Eng	132				Furnished	278SDKVP-*3 (2)	390	Eng	132				Furnished
278SGKVP-*3 (3)	360	Eng	157				Furnished	278SGKVP-*3 (3)	360	Eng	157				Furnished
278SMKVP-*3 (4)	318	Eng	194				Furnished	278SMKVP-*3 (4)	318	Eng	194				Furnished
278XBKVP-*3 (5)	335	Eng	111				Furnished	278XBKVP-*3 (5)	335	Eng	111				Furnished
278XDKVP-*3 (7)	325	Eng	132				Furnished	278XDKVP-*3 (7)	325	Eng	132				Furnished
278XGKVP-*3 (8)	300	Eng	157				Furnished	278XGKVP-*3 (8)	300	Eng	157				Furnished
278XMKVP-*3 (9)	265	Eng	194				Furnished	278XMKVP-*3 (9)	265	Eng	194				Furnished
859XGKVP-*5 (10)	575	Eng	124				Furnished	859XGKVP-*5 (10)	575	Eng	124				Furnished
859XJKVP-*5 (13)	525	Eng	141				Furnished	859XJKVP-*5 (13)	525	Eng	141				Furnished
859XMKVP-*5 (11)	490	Eng	160				Furnished	859XMKVP-*5 (11)	490	Eng	160				Furnished
859XRKVP-*5 (12)	415	Eng	191				Furnished	859XRKVP-*5 (12)	415	Eng	191				Furnished
859XSKVP-*5 (14)	385	Eng	209				Furnished	859XSKVP-*5 (14)	385	Eng	209				Furnished

Continued Next Page

NOTE: See Front Section of Caterpillar Index for Pressure Hose Chart Requirements (SK-414) for Side Mount Applications. Rear Mounts come with the Hose Supplied.**NOTE:** P.T.O. Units Require a Pressure Regulating Solenoid and are Shipped with Units Ordered for this Transmission ("KV" input gear).**NOTE:** The Internal Drive Shaft for the Rear Mount Opening is Optional from Caterpillar and Must be Specified when the Transmission is Ordered.**NOTE:** The Transmission Filter may Interfere with Large Pumps Mounted to P.T.O.s at the 8 o'clock (Left Side) Position. A Remote Mount Filter Kit can be ordered from Caterpillar if this Option is Required. Large Pumps will also Require the Use of the Rear Pressure Port for Oil Supply Requirements. (See Front Section for Location and Hose Requirements, SK-414)**NOTE:** The 267 Series in the "5" Arrangement May Have Possible Interference Between the Lube Fitting and Converter Housing. Make Sure the Fitting is Screwed Completely In before you Torque Down the P.T.O. Verify that the Fitting is not Contacting the Transmission Housing. A "3" Arrangement with SAE "B" Output Must Either be "XQ" or "AK" Can be Used. The "XK" Output can Not be Used Due to Interference Between Flange and Pressure Lube Fitting.**NOTE:** Harness to use for GM trucks is Chelsea part number 379927 if dash mounted P.T.O. switch is to be used*** NOTE:** The "XV" Output for the CAT-D Rear Mount is Rated at Both 800 Lbs.ft Intermittent and 800 Lbs.ft Continuous. This Output is not Derated for Continuous Operation.**** NOTE:** The CAT-H Rear Mount is Rated at 335 Lbs.ft for Both Intermittent and Continuous Applications(All Output Options) .

(1) Input Gear Part No. 5-P-1402
 (2) Input Gear Part No. 5-P-1413
 (3) Input Gear Part No. 5-P-1414
 (4) Input Gear Part No. 5-P-1415
 (5) Input Gear Part No. 5-P-1361
 (7) Input Gear Part No. 5-P-1362

(8) Input Gear Part No. 5-P-1363
 (9) Input Gear Part No. 5-P-1367
 (10) Input Gear Part No. 5-P-1360
 (11) Input Gear Part No. 5-P-1398
 (12) Input Gear Part No. 5-P-1399
 (13) Input Gear Part No. 5-P-1397

(14) Input Gear Part No. 5-P-1400

January 2008

CX35

REAR SIDE ONLY**TRANSMISSION GEAR DATA:**

REAR 8-Bolt Opening

17 Teeth -

PITCH LINE TO APERTURE FACE:**Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.**

REAR Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

DIRECT DRIVE - REAR MOUNT

CAT-D *	800	Opp	125				Furnished								
---------	-----	-----	-----	--	--	--	-----------	--	--	--	--	--	--	--	--

POWERSHIFT - REAR MOUNT (HYDRAULIC)

CAT-H **	335	Opp	125				Furnished								
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NOTE: See Front Section of Caterpillar Index for Pressure Hose Chart Requirements (SK-414) for Side Mount Applications. Rear Mounts come with the Hose Supplied.

NOTE: P.T.O. Units Require a Pressure Regulating Solenoid and are Shipped with Units Ordered for this Transmission ("KV" input gear).

NOTE: The Internal Drive Shaft for the Rear Mount Opening is Optional from Caterpillar and Must be Specified when the Transmission is Ordered.

NOTE: The Transmission Filter may Interfere with Large Pumps Mounted to P.T.O.s at the 8 o'clock (Left Side) Position. A Remote Mount Filter Kit can be ordered from Caterpillar if this Option is Required. Large Pumps will also Require the Use of the Rear Pressure Port for Oil Supply Requirements. (See Front Section for Location and Hose Requirements, SK-414)

NOTE: The 267 Series in the "5" Arrangement May Have Possible Interference Between the Lube Fitting and Converter Housing. Make Sure the Fitting is Screwed Completely In before you Torque Down the P.T.O. Verify that the Fitting is not Contacting the Transmission Housing. A "3" Arrangement with SAE "B" Output Must Either be "XQ" or "AK" Can be Used. The "XK" Output can Not be Used Due to Interference Between Flange and Pressure Lube Fitting.

NOTE: Harness to use for GM trucks is Chelsea part number 379927 if dash mounted P.T.O. switch is to be used

*** NOTE:** The "XV" Output for the CAT-D Rear Mount is Rated at Both 800 Lbs.ft Intermittent and 800 Lbs.ft Continuous. This Output is not Derated for Continuous Operation.

**** NOTE:** The CAT-H Rear Mount is Rated at 335 Lbs.ft for Both Intermittent and Continuous Applications(All Output Options) .

January 2008

TH48FT-E70

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

56 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.7677" (19.5000MM)

TRANSMISSION GEAR DATA:

R.H. 8-Bolt Opening Gear FORWARD of Centerline

57 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.7850" (19.9300MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

823XBAHX-*3 (1)	500	Opp	109				Furnished	823XBAHX-*3 (1)	500	Opp	109				Furnished
823XDAHX-*3 (2)	500	Opp	129				Furnished	823XDAHX-*3 (2)	500	Opp	129				Furnished
823XGAHX-*3 (3)	500	Opp	141				Furnished	823XGAHX-*3 (3)	500	Opp	141				Furnished
823XJAHX-*3 (4)	500	Opp	165				Furnished	823XJAHX-*3 (4)	500	Opp	165				Furnished
823XMAHX-*3 (5)	500	Opp	194				Furnished	823XMAHX-*3 (5)	500	Opp	194				Furnished
880XBAHX-*3 (6)	500	Opp	109				Furnished	880XBAHX-*3 (6)	500	Opp	109				Furnished
880XDAHX-*3 (7)	500	Opp	129				Furnished	880XDAHX-*3 (7)	500	Opp	129				Furnished
880XGAHX-*3 (8)	500	Opp	141				Furnished	880XGAHX-*3 (8)	500	Opp	141				Furnished
880XJAHX-*3 (9)	500	Opp	165				Furnished	880XJAHX-*3 (9)	500	Opp	165				Furnished
880XMAHX-*3 (10)	500	Opp	194				Furnished	880XMAHX-*3 (10)	500	Opp	194				Furnished
880XQAHX-*3 (11)	450	Opp	227				Furnished	880XQAHX-*3 (11)	450	Opp	227				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (6)	500	Opp	109				Furnished	885XBAHX-*3 (6)	500	Opp	109				Furnished
885XGAHX-*3 (8)	500	Opp	141				Furnished	885XGAHX-*3 (8)	500	Opp	141				Furnished
885XJAHX-*3 (9)	500	Opp	165				Furnished	885XJAHX-*3 (9)	500	Opp	165				Furnished

Continued Next Page

NOTE: This Transmission is Not a True Automatic but the 56 and 57 Tooth P.T.O. Drive Gears are Turning All the Time, Therefore Powershift P.T.O. Models and Non-Shifting or Constant Mesh P.T.O. Models are Recommended.

NOTE: The 56 and 57 Tooth P.T.O. Drive Gears in this Transmission are Idler Gears, Therefore the P.T.O. Output Speeds are the Same on All Three (3) Openings.

(1) Input Gear Part No. 5-P-285
 (2) Input Gear Part No. 5-P-971
 (3) Input Gear Part No. 5-P-980
 (4) Input Gear Part No. 5-P-325
 (5) Input Gear Part No. 5-P-283
 (6) Input Gear Part No. 5-P-1100

(7) Input Gear Part No. 5-P-1101
 (8) Input Gear Part No. 5-P-1135
 (9) Input Gear Part No. 5-P-1102
 (10) Input Gear Part No. 5-P-1103
 (11) Input Gear Part No. 5-P-1385

January 2008

TH48FT-E70

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.H. 8-Bolt Opening Gear FORWARD of Centerline

57 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.7850" (19.9300MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

823XBAHX-*5 (1)	500	Opp	109				Furnished
823XDAHX-*5 (2)	500	Opp	129				Furnished
823XGAHX-*5 (3)	500	Opp	141				Furnished
823XJAHX-*5 (4)	500	Opp	165				Furnished
823XMAHX-*5 (5)	500	Opp	194				Furnished
880XBAHX-*5 (6)	500	Opp	109				Furnished
880XDAHX-*5 (7)	500	Opp	129				Furnished
880XGAHX-*5 (8)	500	Opp	141				Furnished
880XJAHX-*5 (9)	500	Opp	165				Furnished
880XMAHX-*5 (10)	500	Opp	194				Furnished
880XQAHX-*5 (11)	450	Opp	227				Furnished
885XBAHX-*5 (6)	500	Opp	109				Furnished
885XGAHX-*5 (8)	500	Opp	141				Furnished
885XJAHX-*5 (9)	500	Opp	165				Furnished

NOTE: This Transmission is Not a True Automatic but the 56 and 57 Tooth P.T.O. Drive Gears are Turning All the Time, Therefore Powershift P.T.O. Models and Non-Shifting or Constant Mesh P.T.O. Models are Recommended.

NOTE: The 56 and 57 Tooth P.T.O. Drive Gears in this Transmission are Idler Gears, Therefore the P.T.O. Output Speeds are the Same on All Three (3) Openings.

- (1) Input Gear Part No. 5-P-285
 (2) Input Gear Part No. 5-P-971
 (3) Input Gear Part No. 5-P-980
 (4) Input Gear Part No. 5-P-325
 (5) Input Gear Part No. 5-P-283
 (6) Input Gear Part No. 5-P-1100

- (7) Input Gear Part No. 5-P-1101
 (8) Input Gear Part No. 5-P-1135
 (9) Input Gear Part No. 5-P-1102
 (10) Input Gear Part No. 5-P-1103
 (11) Input Gear Part No. 5-P-1385

January 2008

TH48FT-E80

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

51 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.7846" (19.9000MM)

TRANSMISSION GEAR DATA:

R.H. 8-Bolt Opening Gear FORWARD of Centerline

57 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.7850" (19.9300MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

823XBAHX-*3 (1)	500	Opp	109				Furnished	823XBAHX-*3 (1)	500	Opp	109				Furnished
823XDAHX-*3 (2)	500	Opp	129				Furnished	823XDAHX-*3 (2)	500	Opp	129				Furnished
823XGAHX-*3 (3)	500	Opp	141				Furnished	823XGAHX-*3 (3)	500	Opp	141				Furnished
823XJAHX-*3 (4)	500	Opp	165				Furnished	823XJAHX-*3 (4)	500	Opp	165				Furnished
823XMAHX-*3 (5)	500	Opp	194				Furnished	823XMAHX-*3 (5)	500	Opp	194				Furnished
880XBAHX-*3 (6)	500	Opp	109				Furnished	880XBAHX-*3 (6)	500	Opp	109				Furnished
880XDAHX-*3 (7)	500	Opp	129				Furnished	880XDAHX-*3 (7)	500	Opp	129				Furnished
880XGAHX-*3 (8)	500	Opp	141				Furnished	880XGAHX-*3 (8)	500	Opp	141				Furnished
880XJAHX-*3 (9)	500	Opp	165				Furnished	880XJAHX-*3 (9)	500	Opp	165				Furnished
880XMAHX-*3 (10)	500	Opp	194				Furnished	880XMAHX-*3 (10)	500	Opp	194				Furnished
880XQAHX-*3 (11)	450	Opp	227				Furnished	880XQAHX-*3 (11)	450	Opp	227				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (6)	500	Opp	109				Furnished	885XBAHX-*3 (6)	500	Opp	109				Furnished
885XGAHX-*3 (8)	500	Opp	141				Furnished	885XGAHX-*3 (8)	500	Opp	141				Furnished
885XJAHX-*3 (9)	500	Opp	165				Furnished	885XJAHX-*3 (9)	500	Opp	165				Furnished

Continued Next Page

NOTE: This Transmission is Not a True Automatic but the 51 and 57 Tooth P.T.O. Drive Gears are Turning All the Time, Therefore Powershift P.T.O. Models and Non-Shifting or Constant Mesh P.T.O. Models are Recommended.

NOTE: The 51 and 57 Tooth P.T.O. Drive Gears in this Transmission are Idler Gears, Therefore the P.T.O. Output Speeds are the Same on All Three (3) Openings.

- (1) Input Gear Part No. 5-P-285
 (2) Input Gear Part No. 5-P-971
 (3) Input Gear Part No. 5-P-980
 (4) Input Gear Part No. 5-P-325
 (5) Input Gear Part No. 5-P-283
 (6) Input Gear Part No. 5-P-1100

- (7) Input Gear Part No. 5-P-1101
 (8) Input Gear Part No. 5-P-1135
 (9) Input Gear Part No. 5-P-1102
 (10) Input Gear Part No. 5-P-1103
 (11) Input Gear Part No. 5-P-1385

January 2008

TH48FT-E80

LEFT SIDE ONLY**TRANSMISSION GEAR DATA:**

L.H. 8-Bolt Opening Gear FORWARD of Centerline

57 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0.7850" (19.9300MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

823XBAHX-*5 (1)	500	Opp	109					Furnished
823XDAHX-*5 (2)	500	Opp	129					Furnished
823XGAHX-*5 (3)	500	Opp	141					Furnished
823XJAHX-*5 (4)	500	Opp	165					Furnished
823XMAHX-*5 (5)	500	Opp	194					Furnished
880XBAHX-*5 (6)	500	Opp	109					Furnished
880XDAHX-*5 (7)	500	Opp	129					Furnished
880XGAHX-*5 (8)	500	Opp	141					Furnished
880XJAHX-*5 (9)	500	Opp	165					Furnished
880XMAHX-*5 (10)	500	Opp	194					Furnished
880XQAHX-*5 (11)	450	Opp	227					Furnished
885XBAHX-*5 (6)	500	Opp	109					Furnished
885XGAHX-*5 (8)	500	Opp	141					Furnished
885XJAHX-*5 (9)	500	Opp	165					Furnished

NOTE: This Transmission is Not a True Automatic but the 51 and 57 Tooth P.T.O. Drive Gears are Turning All the Time, Therefore Powershift P.T.O. Models and Non-Shifting or Constant Mesh P.T.O. Models are Recommended.

NOTE: The 51 and 57 Tooth P.T.O. Drive Gears in this Transmission are Idler Gears, Therefore the P.T.O. Output Speeds are the Same on All Three (3) Openings.

- (1) Input Gear Part No. 5-P-285
 (2) Input Gear Part No. 5-P-971
 (3) Input Gear Part No. 5-P-980
 (4) Input Gear Part No. 5-P-325
 (5) Input Gear Part No. 5-P-283
 (6) Input Gear Part No. 5-P-1100

- (7) Input Gear Part No. 5-P-1101
 (8) Input Gear Part No. 5-P-1135
 (9) Input Gear Part No. 5-P-1102
 (10) Input Gear Part No. 5-P-1103
 (11) Input Gear Part No. 5-P-1385

January 2008

UNIVERSITAT DE VALÈNCIA

El Poder de Mover

Parker Chelsea

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



CHELSEA



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CHELSEA TRANSMISSION INDEX

Transmission Make and Model	P.T.O. Appl. Number	Number Forward Speeds	Teeth in P.T.O. Driver
912 AH (6 Pitch Spur)	CHL-3	1	L39-R39
912 AH (6 Pitch Spur)(Top)	CHL-3A	1	T39
941 (6P 20 SPUR)	CHL-4	1	L23-R23



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

Transmission P.T.O. Driver & Aperatures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side

For transmission not listed, contact your authorized Chelsea Distributor.

January 2008

912 AH

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 8-Bolt Opening Gear FORWARD of Centerline

39 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8100" (20.5700MM)

TRANSMISSION GEAR DATA:

R.H. 8-Bolt Opening Gear FORWARD of Centerline

39 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8100" (20.5700MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			
ONE SPEED - SINGLE GEAR - MECHANICAL SHIFT															
100XRAHX-*3 (1)	125	Opp	162			328481X	Furnished	100XRAHX-*3 (1)	125	Opp	162			328481X	Furnished
812XKAHX-*3	400	Opp	108				Furnished	812XKAHX-*3	400	Opp	108				Furnished

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*5	250	Eng	72		7-A-032(P)(2)	328564X	Furnished	221ZCAHX-*3	250	Eng	72		7-A-032(P)(2)	328564X	Furnished
221ZEAHX-*5	250	Eng	84			328564X	Furnished	221ZEAHX-*3	250	Eng	84			328564X	Furnished
221ZLAHX-*5	200	Eng	112			328564X	Furnished	221ZLAHX-*3	200	Eng	112			328564X	Furnished
221ZPAHX-*5	200	Eng	136			328564X	Furnished	221ZPAHX-*3	200	Eng	136			328564X	Furnished
442ZFAHX-*5 (3)	250	Eng	101			328564X	Furnished	442ZFAHX-*3 (3)	250	Eng	101			328564X	Furnished
442ZHAHX-*5 (4)	250	Eng	117			328564X	Furnished	442ZHAHX-*3 (4)	250	Eng	117			328564X	Furnished
442ZLAHX-*5 (5)	250	Eng	130			328564X	Furnished	442ZLAHX-*3 (5)	250	Eng	130			328564X	Furnished
442ZQAHX-*5 (5)	225	Eng	140			328564X	Furnished	442ZQAHX-*3 (5)	225	Eng	140			328564X	Furnished
442ZRAHX-*5 (5)	225	Eng	162			328564X	Furnished	442ZRAHX-*3 (5)	225	Eng	162			328564X	Furnished
442ZSAHX-*5 (5)	200	Eng	193			328564X	Furnished	442ZSAHX-*3 (5)	200	Eng	193			328564X	Furnished
442ZUAHX-*5 (5)	195	Eng	230			328564X	Furnished	442ZUAHX-*3 (5)	195	Eng	230			328564X	Furnished
442ZWAHX-*5 (5)	175	Eng	271			328564X	Furnished	442ZWAHX-*3 (5)	175	Eng	271			328564X	Furnished
442ZXAHX-*5 (5)	140	Eng	321			328564X	Furnished	442ZXAHX-*3 (5)	140	Eng	321			328564X	Furnished
489XFAHX-*5 (3)	250	Eng	101				Furnished	489XFAHX-*3 (3)	250	Eng	101				Furnished
489XHAHX-*5 (4)	250	Eng	117				Furnished	489XHAHX-*3 (4)	250	Eng	117				Furnished
489XLAHX-*5 (5)	250	Eng	130				Furnished	489XLAHX-*3 (5)	250	Eng	130				Furnished
489XQAHX-*5 (5)	225	Eng	140				Furnished	489XQAHX-*3 (5)	225	Eng	140				Furnished
489XRAHX-*5 (5)	225	Eng	162				Furnished	489XRAHX-*3 (5)	225	Eng	162				Furnished
489XSAHX-*5 (5)	200	Eng	193				Furnished	489XSAHX-*3 (5)	200	Eng	193				Furnished
489XUAHX-*5 (5)	195	Eng	230				Furnished	489XUAHX-*3 (5)	195	Eng	230				Furnished
489XWAHX-*5 (5)	175	Eng	271				Furnished	489XWAHX-*3 (5)	175	Eng	271				Furnished
489XXAHX-*5 (5)	140	Eng	321				Furnished	489XXAHX-*3 (5)	140	Eng	321				Furnished
680XFAHX-*5 (6)	375	Eng	101				Furnished	680XFAHX-*3 (6)	375	Eng	101				Furnished
680XQAHX-*5 (7)	375	Eng	140				Furnished	680XQAHX-*3 (7)	375	Eng	140				Furnished
680XSAHX-*5 (8)	325	Eng	193				Furnished	680XSAHX-*3 (8)	325	Eng	193				Furnished

Continued Next Page**CAUTION:** Do not use geared adapters with 442 "A" and "C" ratios.**CAUTION:** 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.**NOTE:** If two or three 8 bolt P.T.O.s are to be mounted on split shaft use stud kit 328170-190X to prevent thread interference.**NOTE:** The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.**NOTE:** If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

(1) Gear and Shaft Kit No. KXA-2-P-565

(2) Filler block furnished with P.T.O.

(3) Input Gear Part No. 5-P-1077

(4) Input Gear Part No. 5-P-1364

(5) Input Gear Part No. 5-P-1004

(6) Input Gear Part No. 5-P-1242

(7) Input Gear Part No. 5-P-1246

(8) Input Gear Part No. 5-P-1322

912 AH

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 8-Bolt Opening Gear FORWARD of Centerline

39 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8100" (20.5700MM)

TRANSMISSION GEAR DATA:

R.H. 8-Bolt Opening Gear FORWARD of Centerline

39 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8100" (20.5700MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

823XBAHX-*5 (9)	500	Eng	69				Furnished	823XBAHX-*3 (9)	500	Eng	69				Furnished
823XJAHX-*5 (10)	500	Eng	104				Furnished	823XJAHX-*3 (10)	500	Eng	104				Furnished
823XMAHX-*5 (11)	500	Eng	122				Furnished	823XMAHX-*3 (11)	500	Eng	122				Furnished
823XRAHX-*5 (12)	400	Eng	168				Furnished	823XRAHX-*3 (12)	400	Eng	168				Furnished
823XTKTX-*5 (13)	350	Eng	204		8-A-165 (2)		Furnished	823XTKTX-*3 (13)	350	Eng	204		8-A-165 (2)		Furnished
880XBAHX-*5 (14)	500	Eng	69				Furnished	880XBAHX-*3 (14)	500	Eng	69				Furnished
880XDAHX-*5 (15)	500	Eng	81				Furnished	880XDAHX-*3 (15)	500	Eng	81				Furnished
880XGAHX-*5 (16)	500	Eng	88				Furnished	880XGAHX-*3 (16)	500	Eng	88				Furnished
880XJAHX-*5 (17)	500	Eng	104				Furnished	880XJAHX-*3 (17)	500	Eng	104				Furnished
880XMAHX-*5 (18)	500	Eng	122				Furnished	880XMAHX-*3 (18)	500	Eng	122				Furnished
880XQAHX-*5 (19)	450	Eng	142				Furnished	880XQAHX-*3 (19)	450	Eng	142				Furnished
880XRAHX-*5 (20)	400	Eng	168				Furnished	880XRAHX-*3 (20)	400	Eng	168				Furnished
880XTAHX-*5 (21)	350	Eng	217				Furnished	880XTAHX-*3 (21)	350	Eng	217				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

230XAAJX-*5	250	Eng	53	7-A-032(P)	328481X	Furnished	230XAAJX-*3	250	Eng	53	7-A-032(P)	328481X	Furnished
230XBAJX-*5	250	Eng	69	7-A-032(P)	328481X	Furnished	230XBAJX-*3	250	Eng	69	7-A-032(P)	328481X	Furnished
230XDAJX-*5	250	Eng	80	7-A-032(P)	328481X	Furnished	230XDAJX-*3	250	Eng	80	7-A-032(P)	328481X	Furnished
230XKAJX-*5	250	Eng	108	7-A-032(P)	328481X	Furnished	230XKAJX-*3	250	Eng	108	7-A-032(P)	328481X	Furnished
230XQAJX-*5	250	Eng	143	7-A-032(P)	328481X	Furnished	230XQAJX-*3	250	Eng	143	7-A-032(P)	328481X	Furnished
230XUAJX-*5	225	Eng	229	7-A-032(P)	328481X	Furnished	230XUAJX-*3	225	Eng	229	7-A-032(P)	328481X	Furnished
236ZDAH-X*5 (5)	250	Eng	105		328564X	Furnished	236ZDAH-X*3 (5)	250	Eng	105		328564X	Furnished
236ZKAHX-*5 (5)	250	Eng	135		328564X	Furnished	236ZKAHX-*3 (5)	250	Eng	135		328564X	Furnished
236ZQAHX-*5 (5)	250	Eng	182		328564X	Furnished	236ZQAHX-*3 (5)	250	Eng	182		328564X	Furnished
236ZUAHX-*5 (5)	225	Eng	209		328564X	Furnished	236ZUAHX-*3 (5)	225	Eng	209		328564X	Furnished
885XBAHX-*5 (14)	500	Eng	69			Furnished	885XBAHX-*3 (14)	500	Eng	69			Furnished
885XGAHX-*5 (16)	500	Eng	88			Furnished	885XGAHX-*3 (16)	500	Eng	88			Furnished
885XJAHX-*5 (17)	500	Eng	104			Furnished	885XJAHX-*3 (17)	500	Eng	104			Furnished
885XMAHX-*5 (18)	500	Eng	122			Furnished	885XMAHX-*3 (18)	500	Eng	122			Furnished

Continued Next Page**CAUTION:** Do not use geared adapters with 442 "A" and "C" ratios.**CAUTION:** 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.**NOTE:** If two or three 8 bolt P.T.O.s are to be mounted on split shaft use stud kit 328170-190X to prevent thread interference.**NOTE:** The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.**NOTE:** If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

(2) Filler block furnished with P.T.O.
 (5) Input Gear Part No. 5-P-1004
 (9) Input Gear Part No. 5-P-285
 (10) Input Gear Part No. 5-P-325
 (11) Input Gear Part No. 5-P-283
 (12) Input Gear Part No. 5-P-721

(13) Input Gear Part No. 5-P-1395
 (14) Input Gear Part No. 5-P-1100
 (15) Input Gear Part No. 5-P-1101
 (16) Input Gear Part No. 5-P-1135
 (17) Input Gear Part No. 5-P-1102
 (18) Input Gear Part No. 5-P-1103

(19) Input Gear Part No. 5-P-1385
 (20) Input Gear Part No. 5-P-1104
 (21) Input Gear Part No. 5-P-1105

January 2008

912 AH

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 8-Bolt Opening Gear FORWARD of Centerline

39 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8100" (20.5700MM)

TRANSMISSION GEAR DATA:

R.H. 8-Bolt Opening Gear FORWARD of Centerline

39 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8100" (20.5700MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			
ONE SPEED - FORWARD & REVERSE															
340SFAHX-*5 (22)	200	Eng	88	92	7-A-032(P) 7-A-140 (2)	310778X	Furnished	340SFAHX-*5 (22)	200	Eng	88	92	7-A-032(P) 7-A-140 (2)	310778X	Furnished
352ZSAHX-*5 (5)	140	Eng	196	254		328564X	Furnished	352ZSAHX-*5 (5)	140	Eng	196	254		328564X	Furnished
863XBAHX-*5	500	Eng	69	85			Furnished	863XBAHX-*5	500	Eng	69	85			Furnished
ONE SPEED - DUAL SHAFT															
452ZSAHX-*5 (5)	140	Eng	196			328564X	Furnished	452ZSAHX-*3 (5)	140	Eng	196			328564X	Furnished
GEARED ADAPTERS															
628XAHX-4AH							Furnished	628XAHX-3AH							Furnished

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.**CAUTION:** 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.**NOTE:** If two or three 8 bolt P.T.O.s are to be mounted on split shaft use stud kit 328170-190X to prevent thread interference.**NOTE:** The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.**NOTE:** If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

(2) Filler block furnished with P.T.O.
 (5) Input Gear Part No. 5-P-1004
 (22) Input Gear Part No. 5-P-581

January 2008

912 AH

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

TOP 8-Bolt Opening Gear FORWARD of Centerline

39 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8100" (20.5700MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	TOP Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHP-*3	250	Eng	72	7-A-032(P)(1)	328564X	Furnished
221ZEAHP-*3	250	Eng	84		328564X	Furnished
221ZLAHP-*3	200	Eng	112		328564X	Furnished
221ZPAHP-*3	200	Eng	136		328564X	Furnished
442ZAAHP-*3 (2)	250	Eng	64		328564X	Furnished
442ZCAHP-*3 (3)	250	Eng	81		328564X	Furnished
442ZFAHP-*3 (4)	250	Eng	101		328564X	Furnished
442ZHAHP-*3 (5)	250	Eng	117		328564X	Furnished
442ZLAHP-*3 (6)	250	Eng	130		328564X	Furnished
442ZQAHP-*3 (6)	225	Eng	140		328564X	Furnished
442ZRAHP-*3 (6)	225	Eng	162		328564X	Furnished
442ZSAHP-*3 (6)	200	Eng	193		328564X	Furnished
442ZUAHP-*3 (6)	195	Eng	230		328564X	Furnished
442ZWAHP-*3 (6)	175	Eng	271		328564X	Furnished
442ZXAHHP-*3 (6)	140	Eng	321		328564X	Furnished
489XAAHP-*3 (2)	250	Eng	64			Furnished
489XCAHP-*3 (3)	250	Eng	81			Furnished
489XFAHP-*3 (4)	250	Eng	101			Furnished
489XHAHP-*3 (5)	250	Eng	117			Furnished
489XLAHP-*3 (6)	250	Eng	130			Furnished
489XQAHP-*3 (6)	225	Eng	140			Furnished
489XRAHP-*3 (6)	225	Eng	162			Furnished
489XSAHP-*3 (6)	200	Eng	193			Furnished
489XUAHP-*3 (6)	195	Eng	230			Furnished
489XWAHP-*3 (6)	175	Eng	271			Furnished
489XXAHP-*3 (6)	140	Eng	321			Furnished
680XFAHP-*3 (7)	375	Eng	101			Furnished
680XQAHP-*3 (8)	375	Eng	140			Furnished
680XSAHP-*3 (9)	325	Eng	193			Furnished

Continued Next Page

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.**CAUTION:** 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.**NOTE:** P.T.O.s 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.**NOTE:** Pressure lube installation kits must be ordered separately. 880 Series P.T.O.s use kit 329110-1X, all other models use 329110X.**NOTE:** If two or three 8 bolt P.T.O.s are to be mounted on split shaft, use stud kit 328170-190X to prevent thread interference.**NOTE:** The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

- (1) Filler block furnished with P.T.O.
 (2) Input Gear Part No. 5-P-1280
 (3) Input Gear Part No. 5-P-1287
 (4) Input Gear Part No. 5-P-1077
 (5) Input Gear Part No. 5-P-1364
 (6) Input Gear Part No. 5-P-1004

- (7) Input Gear Part No. 5-P-1242
 (8) Input Gear Part No. 5-P-1246
 (9) Input Gear Part No. 5-P-1322

January 2008

912 AH

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

TOP 8-Bolt Opening Gear FORWARD of Centerline

39 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8100" (20.5700MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	TOP Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XBAHP-*3 (10)	500	Eng	69	Furnished
880XDAHP-*3 (11)	500	Eng	81	Furnished
880XGAHP-*3 (12)	500	Eng	88	Furnished
880XJAHP-*3 (13)	500	Eng	104	Furnished
880XMAHP-*3 (14)	500	Eng	122	Furnished
880XQAHP-*3 (15)	450	Eng	142	Furnished
880XRAHP-*3 (16)	400	Eng	168	Furnished
880XTAHP-*3 (17)	350	Eng	217	Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHP-*3 (10)	500	Eng	69	Furnished
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CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.**CAUTION:** 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.**NOTE:** P.T.O.s 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.**NOTE:** Pressure lube installation kits must be ordered separately. 880 Series P.T.O.s use kit 329110-1X, all other models use 329110X.**NOTE:** If two or three 8 bolt P.T.O.s are to be mounted on split shaft, use stud kit 328170-190X to prevent thread interference.**NOTE:** The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

(10) Input Gear Part No. 5-P-1100
 (11) Input Gear Part No. 5-P-1101
 (12) Input Gear Part No. 5-P-1135
 (13) Input Gear Part No. 5-P-1102
 (14) Input Gear Part No. 5-P-1103
 (15) Input Gear Part No. 5-P-1385

(16) Input Gear Part No. 5-P-1104
 (17) Input Gear Part No. 5-P-1105

January 2008

941

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 6-Bolt Opening Gear FORWARD of Centerline

23 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.1250" (28.5750MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

23 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.1250" (28.5750MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - SINGLE GEAR - MECHANICAL SHIFT

100XRAHX-*3 (1)	125	Opp	96				Furnished	100XRAHX-*3 (1)	125	Opp	96				Furnished
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ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221XCAHX-*3	250	Eng	43		7-A-032 (2)		Furnished	221XCAHX-*3	250	Eng	43		7-A-032 (2)		Furnished
221XEAHX-*3	250	Eng	49				Furnished	221XEAHX-*3	250	Eng	49				Furnished
221XLAHX-*3	200	Eng	66				Furnished	221XLAHX-*3	200	Eng	66				Furnished
221XPAHX-*3	200	Eng	80				Furnished	221XPAHX-*3	200	Eng	80				Furnished
442XFAHX-*3 (3)	250	Eng	59				Furnished	442XFAHX-*3 (3)	250	Eng	59				Furnished
442XHAHX-*3 (4)	250	Eng	68				Furnished	442XHAHX-*3 (4)	250	Eng	68				Furnished
442XLAHX-*3 (5)	250	Eng	77				Furnished	442XLAHX-*3 (5)	250	Eng	77				Furnished
442XQAHX-*3 (5)	225	Eng	83				Furnished	442XQAHX-*3 (5)	225	Eng	83				Furnished
442XRAHX-*3 (5)	225	Eng	96				Furnished	442XRAHX-*3 (5)	225	Eng	96				Furnished
442XSAHX-*3 (5)	200	Eng	114				Furnished	442XSAHX-*3 (5)	200	Eng	114				Furnished
442XUAHX-*3 (5)	195	Eng	136				Furnished	442XUAHX-*3 (5)	135	Eng	136				Furnished
442XWAHX-*3 (5)	175	Eng	160				Furnished	442XWAHX-*3 (5)	175	Eng	160				Furnished
442XXAHX-*3 (5)	140	Eng	189				Furnished	442XXAHX-*3 (5)	140	Eng	189				Furnished
660XFAHX-*3 (6)	375	Eng	59				Furnished	660XFAHX-*3 (6)	375	Eng	59				Furnished
660XQAHX-*3 (7)	375	Eng	83				Furnished	660XQAHX-*3 (7)	375	Eng	83				Furnished
660XSAHX-*3 (8)	325	Eng	114				Furnished	660XSAHX-*3 (8)	325	Eng	114				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

230XAAJX-*3	250	Eng	31				Furnished	230XAAJX-*3	250	Eng	31				Furnished
230XBAJX-*3	250	Eng	41				Furnished	230XBAJX-*3	250	Eng	41				Furnished
230XDAJX-*3	250	Eng	47				Furnished	230XDAJX-*3	250	Eng	47				Furnished
230XKAJX-*3	250	Eng	64				Furnished	230XKAJX-*3	250	Eng	64				Furnished
230XQAJX-*3	250	Eng	85				Furnished	230XQAJX-*3	250	Eng	85				Furnished
230XUAJX-*3	225	Eng	135				Furnished	230XUAJX-*3	225	Eng	135				Furnished
236XDAHX-*3 (5)	250	Eng	62				Furnished	236XDAHX-*3 (5)	250	Eng	62				Furnished
236XKAHX-*3 (5)	250	Eng	80				Furnished	236XKAHX-*3 (5)	250	Eng	80				Furnished

Continued Next Page**CAUTION:** Do not use 442/489 "A" or "C" ratios on Chelsea split shafts if final rotation is "ENG".**NOTE:** 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.**NOTE:** If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

(1) Gear and Shaft Kit No. KXA-2-P-565

(2) Filler block furnished with P.T.O.

(3) Input Gear Part No. 5-P-1077

(4) Input Gear Part No. 5-P-1364

(5) Input Gear Part No. 5-P-1004

(6) Input Gear Part No. 5-P-1242

(7) Input Gear Part No. 5-P-1246

(8) Input Gear Part No. 5-P-1322

January 2008

941

LEFT SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

L.H. 6-Bolt Opening Gear FORWARD of Centerline

23 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.1250" (28.5750MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

23 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.1250" (28.5750MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
236XQAHX-*3 (5)	250	Eng	107				Furnished	236XQAHX-*3 (5)	250	Eng	107				Furnished
236XUAHX-*3 (5)	225	Eng	123				Furnished	236XUAHX-*3 (5)	225	Eng	123				Furnished
ONE SPEED - FORWARD & REVERSE															
340XFAHX-*5 (9)	200	Eng	52	54	7-A-140 (2)		Furnished	340XFAHX-*5 (9)	200	Eng	52	54	7-A-140 (2)		Furnished
352XSAHX-*3 (5)	140	Eng	116	150			Furnished	352XSAHX-*3 (5)	140	Eng	116	150			Furnished
ONE SPEED - DUAL SHAFT															
452XSAHX-*3 (5)	140	Eng	116				Furnished	452XSAHX-*3 (5)	140	Eng	116				Furnished
GEARED ADAPTERS															
626XAHX-4AH		Eng					Furnished	626XAHX-3AH		Eng					Furnished
630XAHX-4AH		Eng					Furnished	630XAHX-3AH		Eng					Furnished
645XAHX-4AH		Eng					Furnished	645XAHX-3AH		Eng					Furnished

CAUTION: Do not use 442/489 "A" or "C" ratios on Chelsea split shafts if final rotation is "ENG".**NOTE:** 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.**NOTE:** If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

(2) Filler block furnished with P.T.O.
 (5) Input Gear Part No. 5-P-1004
 (9) Input Gear Part No. 5-P-581

January 2008



DODGE



WARNING

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DODGE TRANSMISSION INDEX

Transmission Make and Model	P.T.O. Appl. Number	Number Forward Speeds	Teeth in P.T.O. Driver
AS68RC (Dodge/Sterling Cab Chassis w/Automatic)	DDG-1	6	R69
G56 (Dodge/Sterling Cab Chassis w/Manual)	DDG-2	6	L52



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

Transmission P.T.O. Driver & Aperatures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side

For transmission not listed, contact your authorized Chelsea Distributor.

January 2008

AS68RC

NO LEFT SIDE APPLICATIONS AVAILABLE

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.1200" (28.4480MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

270DAKUP-*3 (1)	208	Eng	65	Furnished
270DBKUP-*3 (2)	159	Eng	85	Furnished
270DDKUP-*3 (3)	138	Eng	98	Furnished
270DKKUP-*3 (4)	102	Eng	132	Furnished
270DQKUP-*3 (5)	91	Eng	148	Furnished

Current P.T.O.s Available for Aisin Transmission on Dodge Truck

Basic Model Number	Ratio	Output Option	% of Engine	Output Speed @1200 Engine RPM
270D	A	KUP-*3RA	65%	780
270D	B	KUP-*3RA	85%	1020
270D	D	KUP-*3RA	98%	1176
270D	K	KUP-*3RA	132%	1584
270D	Q	KUP-*3RA	148%	1776

Current Pumps Offered in the PGM20 with Bi-Directional Rotation

Pump Model Number S.A.E. "B" Shaft S.A.E. "B" Flange	Displacement in ³ /rev	Displacement Gal/rev	Flow at Lowest Speed(gal/min)	Flow at Fastest Speed(gal/min)
3089210081	1.97	0.0085	6.65	15.15
3089210091	2.46	0.0106	8.31	18.91
3089210082	2.96	0.0128	9.99	22.76
3089210083	3.45	0.0149	11.65	26.52
3089210084	3.94	0.0171	13.30	30.29
3089210089	3.94	0.0171	13.30	30.29

Flows for all P.T.O. and Pump Combinations at 1200 Engine RPM - Pump Number & Flow (gal/min)

Pump Model Number	65% (A)	85% (B)	98% (D)	132% (K)	148% (Q)
3089210081	6.65	8.70	10.03	13.51	15.15
3089210091	8.31	10.86	12.52	16.87	18.91
3089210082	9.99	13.07	15.07	20.30	22.76
3089210083	11.65	15.23	17.56	23.66	26.52
3089210084	13.30	17.40	20.06	27.02	30.29
3089210089	13.30	17.40	20.06	27.02	30.29

CAUTION: It is Required that Chelsea Wiring Harness (329457X) is Used. This will Allow the OBD II Monitoring System to be Disabled while the P.T.O. System is being Operated. This will Prevent "False" Lighting of the "Check Engine" Lamp due to the Engine-P.T.O. Driven Accessories

NOTE: The P.T.O. output shaft torque ratings are based on the maximum allowable torque at the 69 tooth transmission gear of 135 lbs-ft.

NOTE: When ordering the 270 "D", the Hose Kit 329453X, Wire Harness Kit 329457X and Metric Stud Kit 328170-205X is furnished with the P.T.O. The hose, wire harness and metric stud kits are required for completing the 270D Series installation. The 329453X kit supplies the hoses for the low pressure lube, high pressure oil, and drain back oil.

- (1) Input Gear Part No. 5-P-1353
- (2) Input Gear Part No. 5-P-1354
- (3) Input Gear Part No. 5-P-1355
- (4) Input Gear Part No. 5-P-1356
- (5) Input Gear Part No. 5-P-1359

January 2008

G56

LEFT SIDE ONLY

NO RIGHT SIDE APPLICATIONS AVAILABLE

TRANSMISSION GEAR DATA:

L.H. 6-Bolt Opening Gear REAR of Centerline

52 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442LLKH-X*6 (1)	250	Opp	67					7170-72X							
442LQKH-X*6 (1)	225	Opp	72					7170-72X							
442LRKH-X*6 (1)	225	Opp	84					7170-72X							
442LSKH-X*6 (1)	200	Opp	100					7170-72X							
442LUKH-X*6 (1)	195	Opp	119					7170-72X							
442LWKH-X*6 (1)	175	Opp	140					7170-72X							
442LXKH-X*6 (1)	140	Opp	165					7170-72X							

PGP511 Pumps w/Counter Clockwise Rotation - S.A.E. "A" Shaft/S.A.E. "A" Flange P.T.O. Shaft (REARWARD)

P.T.O. to order with this pump Option 442L*KHX-W6RC

Chelsea Pump Model	Displacement in ³ /rev	Displacement Gal/rev	Continuous Pressure PSI	Max Speed RPM
CGP-P11A016-1AC	0.37	0.0016	3988	4000
CGP-P11A026-1AC	0.60	0.0026	3988	3600
CGP-P11A029-1AC	0.67	0.0029	3988	3600
CGP-P11A037-1AC	0.85	0.0037	3988	3300

PGP511 Pumps w/Clockwise Rotation - S.A.E. "A" Shaft/S.A.E. "A" Flange P.T.O. Shaft (FORWARD)

P.T.O. to order with this pump Option 442L*KHX-W3RC

Chelsea Pump Model	Displacement in ³ /rev	Displacement Gal/rev	Continuous Pressure PSI	Max Speed RPM
CGP-P11C016-1AC	0.37	0.0016	3988	4000
CGP-P11C026-1AC	0.60	0.0026	3988	3600
CGP-P11C029-1AC	0.67	0.0029	3988	3600
CGP-P11C037-1AC	0.85	0.0037	3988	3300

PGP517 Pumps w/Clockwise Rotation - S.A.E. "B" Shaft/S.A.E. "A" Flange P.T.O. Shaft (FORWARD)

P.T.O. to order with this pump Option 442L*KHX-W3RD

Chelsea Pump Model	Displacement in ³ /rev	Displacement Gal/rev	Continuous Pressure PSI	Max Speed RPM
CGP-P17C050-2AN	1.16	0.0050	3625	3300
CGP-P17C066-2AN	1.52	0.0066	3625	3100
CGP-P17C087-2AN	2.01	0.0087	3625	3100
CGP-P17C100-2AN	2.31	0.0100	3625	3000
CGP-P17C137-2AN	3.16	0.0137	2900	2600

CAUTION: Chelsea Wiring Harness 329460X Must be Used to Complete the Installation (Order Separately). This will Allow the OBD II Monitoring System to be Disabled While the P.T.O. System is being Operated.

NOTE: P.T.O.s are shown in the Standard Arrangements with the P.T.O. Housing "Bulge" Down and the Output Shaft to the Rear of the Vehicle. Other Arrangements may be needed to Install P.T.O./Pump Applications due to the Transmission Cross Member Support Interfering with Pump Installations to the Rear of the Vehicle.

NOTE: P.T.O.s will not fit on 4x4 Dodge/Sterling 4500/5500 Series Vehicles due to Frontwheel Driveshaft Interference.

(1) Input Gear Part No. 5-P-1343

January 2008

 Chelsea	4.5.4	Parker Hannifin Corporation Chelsea Products Division Olive Branch, MS 38654 USA
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**EATON
FULLER**



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Transmission/Chelsea Power Take-Offs Torque Capacities

Eaton Transmissions has recently reviewed the maximum allowable torque ratings on the HD transmissions P.T.O. 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 FR/FRO and all RT/RTO/RTLO.

1. For all FR/FRO transmissions the maximum rating for the transmission P.T.O. gear is 500 Ft-lbs.
2. For all RT/RTO/RTLO transmission the maximum rating for the transmission P.T.O. gear is 350 Ft-lbs.
3. RT/RTO/RTLO transmissions can be upgraded to allow for 500 Ft-lbs by using a roller type input bearing, Eaton part number 4301417.

The following Chelsea application pages now reflect this new Eaton established torque rating. Listed in the P.T.O. Intermittent Torque Rating Column (Inter. Torq.) is the P.T.O. output torque limit stated as to not exceed the maximum transmission P.T.O. gear torque requirements. On the FR/FRO pages the P.T.O. intermittent torque rating will not exceed the transmission gear rating of 500 Ft-lbs. For RT/RTO/RTLO pages the P.T.O. intermittent torque limit rating will not exceed the transmission gear rating of 350 Ft-lbs.

FR/FRO Application Pages

FLR-88	FLR-90	FLR-91
--------	--------	--------

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 new published intermittent torque values listed on each application page listed in the charts above are calculated as not to exceed the Eaton transmission torque limit. For the FR/FRO a transmission gear rating of 500 Ft-lbs. And for the RT/RTO/RTLO transmissions a gear rating of 350 Ft-lbs.
- The torque charts on the following pages will help you determine the correct torque requirements 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 FR/FRO and RT/RTO/RTLO HD transmissions.
- If you do have a RT/RTO/RTLO transmission with the roller type input bearing (Eaton part number 4301417) the chart on the following pages will provide you with the torque values for each P.T.O. Series/speed ratio.
- Continuous torque ratings are also listed for Series and P.T.O. 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 and does not exceed the transmission drive gear rating.

EATON/FULLER TRANSMISSION INDEX

RT/RTO/RTLO Torque Charts

FLR-10	FLR-16	FLR-26	FLR-34	FLR-43	FLR-49	FLR-59	FLR-85
FLR-11	FLR-17	FLR-27	FLR-35	FLR-44	FLR-50	FLR-63	FLR-87
FLR-12	FLR-18	FLR-28	FLR-36	FLR-45	FLR-51	FLR-64	FLR-98
FLR-13	FLR-19	FLR-29	FLR-37	FLR-46	FLR-52	FLR-80	FLR-99
FLR-14	FLR-22	FLR-30	FLR-38	FLR-47	FLR-57	FLR-81	
FLR-15	FLR-23	FLR-32	FLR-39	FLR-48	FLR-58	FLR-82	

6-BOLT OPENING W/ 45 TEETH P.T.O. DRIVER GEAR (Right Side)

Standard Chelsea Ratings				Transmission P.T.O. Gear 350 Ft-lb Torque Capacity		Transmission P.T.O. Gear 500 Ft-lb Torque Capacity	
P.T.O. MODEL	RATIO	INT. TQ.	CONT.	INT. TQ.	CONT. TQ.	INT. TQ.	CONT. TQ.
100	R	125	88	125	88	125	88
221	C	250	175	250	175	250	175
	E	250	175	250	175	250	175
	L	200	140	200	140	200	140
	P	200	140	200	140	200	140
230	A	250	175	250	175	250	175
	B	250	175	250	175	250	175
	D	250	175	250	175	250	175
	K	250	175	250	175	250	175
	Q	250	175	212	175	250	175
	U	225	158	132	132	188	158
236	D	250	175	250	175	250	175
	K	250	175	224	175	250	175
	Q	250	175	166	166	238	175
	U	225	158	145	145	208	158
260	A	250	175	250	175	250	175
340	F	200	140	200	140	200	140
352	S	140	98	140	98	140	98
442	A	250	175	250	175	250	175
	C	250	175	250	175	250	175
	F	250	175	250	175	250	175
	H	250	175	250	175	250	175
	L	250	175	233	175	250	175
	Q	225	158	216	158	225	158
	R	200	140	187	140	200	140
	S	200	140	156	140	200	140
	U	195	137	132	132	188	137
	W	175	122	112	112	160	123
	X	140	98	94	94	135	98
452	S	140	98	140	98	140	98
660	F	375	263	301	263	375	263
	Q	375	263	216	216	308	216
	S	325	228	156	156	224	160

Shaded Area Indicates Torque Ratings BELOW Chelsea Standard Ratings for Intermittent or Continuous Operations.

January 2008

RT/RTO/RTLO Torque Charts

8-BOLT OPENING W/ 47 TEETH P.T.O. DRIVER GEAR (Bottom)

Standard Chelsea Ratings				Transmission P.T.O. Gear 350 Ft-lb Torque Capacity		Transmission P.T.O. Gear 500 Ft-lb Torque Capacity	
P.T.O. MODEL	RATIO	INT. TQ.	CONT. TQ.	INT. TQ.	CONT. TQ.	INT. TQ.	CONT. TQ.
100	R	125	88	125	88	125	88
221	C	250	175	250	175	250	175
	E	250	175	250	175	250	175
	L	200	140	200	140	200	140
	P	200	140	200	140	200	140
230	A	250	175	250	175	250	175
	B	250	175	250	175	250	175
	D	250	175	250	175	250	175
	K	250	175	250	175	250	175
	Q	250	175	203	175	250	175
	U	225	158	126	126	180	158
236	D	250	175	250	175	250	175
	K	250	175	215	175	250	175
	Q	250	175	160	160	227	175
	U	225	158	139	139	199	158
260	A	250	175	250	175	250	175
352	S	140	98	140	98	140	98
489/442	A	250	175	250	175	250	175
	C	250	175	250	175	250	175
	F	250	175	250	175	250	175
	H	250	175	250	175	250	175
	L	250	175	222	175	250	175
	Q	225	158	206	158	225	158
	R	225	158	178	158	225	158
	S	200	140	150	140	200	140
	U	195	137	126	126	180	137
	W	175	123	107	107	153	123
	X	140	98	91	91	135	98
680	F	375	263	288	263	375	263
	Q	375	263	206	206	295	207
	S	325	228	150	150	214	150
812	K	400	280	268	268	382	280
823/863 880/885	B	500	350	423	350	500	350
880	D	500	350	357	350	500	350
	G	500	350	329	329	470	350
823/880 885	J	500	350	279	279	399	350
823/880 885	M	500	350	238	238	340	340
880	Q	500	350	203	203	290	290
823/880	R	400	280	172	172	246	246
880	T	350	280	134	134	191	191
823	T	350	245	142	142	203	203

Shaded Area Indicates Torque Ratings BELOW Chelsea Standard Ratings for Intermittent or Continuous Operations.

January 2008

EATON/FULLER TRANSMISSION INDEX

FR/FRO Torque Charts

FLR-88, FLR-90, FLR-91

6-BOLT OPENING W/ 45 TEETH P.T.O. DRIVER GEAR (Right Side)					
Standard Chelsea Ratings				Transmission P.T.O. Gear 500 Ft-lb Torque Capacity	
P.T.O. MODEL	RATIO	INT. TQ.	CONT. TQ.	INT. TQ.	CONT. TQ.
230	A	250	175	250	175
	B	250	175	250	175
	D	250	175	250	175
	K	250	175	250	175
	Q	250	175	250	175
	U	225	158	188	158
236	D	250	175	250	175
	K	250	175	250	175
352	S	140	98	140	98
442	A	250	175	250	175
	C	250	175	250	175
	F	250	175	250	175
	H	250	175	250	175
	L	250	175	250	175
	Q	225	158	225	158
	R	225	158	225	158
	S	200	140	200	140
660	F	375	263	375	263
	Q	375	263	308	216
	S	325	228	224	160

Shaded Area Indicates Torque Ratings BELOW Chelsea Standard Ratings for Intermittent or Continuous Operations.

January 2008

FR/FRO Torque Charts

8-BOLT OPENING W/ 47 TEETH P.T.O. DRIVER GEAR (Bottom)					
Standard Chelsea Ratings				Transmission P.T.O. Gear 500 Ft-lb Torque Capacity	
P.T.O. MODEL	RATIO	INT. TQ.	CONT. TQ.	INT. TQ.	CONT. TQ.
100	R	125	88	125	88
221	C	250	175	250	175
	E	250	175	250	175
	L	200	140	200	140
	P	200	140	200	140
230	A	250	175	250	175
	B	250	175	250	175
	D	250	175	250	175
	K	250	175	250	175
	Q	250	175	250	175
	U	225	158	180	158
352	S	140	98	140	98
489	A	250	175	250	175
	C	250	175	250	175
	F	250	175	250	175
	H	250	175	250	175
	L	250	175	250	175
	Q	225	158	225	158
	R	225	158	225	158
	S	200	140	200	140
	U	195	137	180	137
	W	175	123	153	123
680	F	375	263	375	263
	Q	375	263	295	207
	S	325	228	214	149
863/880	B	500	350	500	350
885	D	500	350	500	350
880/885	G	500	350	470	350
	J	500	350	399	350
	M	500	350	340	340
880	Q	450	350	290	290
	R	400	280	246	246
	T	350	245	191	191

Shaded Area Indicates Torque Ratings BELOW Chelsea Standard Ratings for Intermittent or Continuous Operations.

El Poder de Mover

 Chelsea	4.6.6	Parker Hannifin Corporation Chelsea Products Division Olive Branch, MS 38654 USA
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EATON/FULLER TRANSMISSION INDEX

Transmission Make and Model	P.T.O. Appl. Number	Number Forward Speeds	Teeth in P.T.O. Driver
AT-1202	FLR-60	2	B30-T30
EH8-E306A-UP	FLR-92	6	L48-R48
F-5405-DM3	FLR-97	5	L39-R39
F-5405B-DM3 (6 Speed from Brazil, w/ 6th gear locked out electronically)	FLR-92	5	L48-R48
F-6405B-DM3	FLR-57	5	B47-R45
F-6406N-ASW	FLR-97	6	L39-R39
F-6406N-ASX	FLR-97	6	L39-R39
F-6406N-AW3	FLR-97	6	L39-R39
F-8406N-ASW	FLR-97	6	L39-R39
FM-14D310B-LST	FLR-34	10	B47-R45
FM-15D310B-LST	FLR-34	10	B47-R45
FO-16D313E-LEP	FLR-58	13	B47-R45
FO-5406B-DM3	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	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-16D313E-LEP	FLR-58	13	B47-R45
FR-11210B	FLR-90	10	B47-R45
FR-12210B	FLR-90	10	B47-R45
FR-13210B	FLR-90	10	B47-R45
FR-14210B	FLR-90	10	B47-R45
FR-15210B	FLR-90	10	B47-R45
FR-9210	FLR-90	10	B47-R45
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
FRO-11210B	FLR-91	10	B47-R45
FRO-11210C	FLR-88	10	B47-R45



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

Transmission P.T.O. Driver & Aperatures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side

For transmission not listed, contact your authorized Chelsea Distributor.

January 2008

EATON/FULLER TRANSMISSION INDEX

Transmission Make and Model	P.T.O. Appl. Number	Number Forward Speeds	Teeth in P.T.O. Driver
FRO-12210B	FLR-91	10	B47-R45
FRO-12210C	FLR-88	10	B47-R45
FRO-13210B	FLR-91	10	B47-R45
FRO-13210C	FLR-88	10	B47-R45
FRO-14210B	FLR-91	10	B47-R45
FRO-14210C	FLR-88	10	B47-R45
FRO-15210B	FLR-91	10	B47-R45
FRO-15210C	FLR-88	10	B47-R45
FRO-16210B	FLR-91	10	B47-R45
FRO-16210C	FLR-88	10	B47-R45
FRO-16210R	FLR-88	10	B47-R45
FRO-17210C	FLR-88	10	B47-R45
FRO-18210C	FLR-88	10	B47-R45
FS-4205A	FLR-78	5	L28-R28
FS-4205B	FLR-79	5	L28-R28
FS-5306A	FLR-68	6	L38-R38
FS-5406A	FLR-68	6	L38-R38
FS-5406N	FLR-97	6	L39-R39
FS-6106A	FLR-67	6	L50-R50
FS-6205A	FLR-69	5	L39-R39
FS-6205B	FLR-70	5	L41-R41
FS-6206A	FLR-68	6	L38-R38
FS-6305A	FLR-69	5	L39-R39
FS-6305B	FLR-70	5	L41-R41
FS-6306A	FLR-68	6	L38-R38
FS-6406A	FLR-68	6	L38-R38
FS-6406N	FLR-97	6	L39-R39
FS-8206A	FLR-67	6	L50-R50
FS-8209A (Australia)	FLR-84	9	L23
FS-8406A	FLR-67	6	L50-R50
FSB-5406B	FLR-94	6	L38-R38
FSB-6406B	FLR-94	6	L38-R38
FSO-6406A (Eaton Brazil)	FLR-92	6	L48-R48
FSO-8406A (Eaton Brazil)	FLR-92	6	L48-R48
RT-11609A (Thrushaft option use AT mounting)	FLR-34	8+1	B47-R45
RT-11709H (Thrushaft option use AU mounting)	FLR-34	9	B47-R45

Transmission P.T.O. Driver & Aperatures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side

January 2008

For transmission not listed, contact your authorized Chelsea Distributor.



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

EATON/FULLER TRANSMISSION INDEX

Transmission Make and Model	P.T.O. Appl. Number	Number Forward Speeds	Teeth in P.T.O. Driver
RT-12609A (Thrushaft option use AT mounting)	FLR-34	9	B47-R45
RT-12709A	FLR-34	9	B47-R45
RT-12710B (Thrushaft option use AU mounting)	FLR-34	10	B47-R45
RT-13609A (Thrushaft option use AT mounting)	FLR-34	9	B47-R45
RT-13709H (Thrushaft option use AU mounting)	FLR-34	9	B47-R45
RT-13710B (Thrushaft option use AU mounting)	FLR-34	10	B47-R45
RT-14609A (Thrushaft option use AU mounting)	FLR-34	8+1	B47-R45
RT-14709A	FLR-34	9	B47-R45
RT-14710B (Thrushaft option use AU mounting)	FLR-34	10	B47-R45
RT-14710B-AS2	FLR-34	10	B47-R45
RT-14715 (Thrushaft option use BD mounting)	FLR-34	15	B47-R45
RT-14910B-AS2	FLR-34	10	B47-R45
RT-14915	FLR-34	15	B47-R45
RT-15715	FLR-34	15	B47-R45
RT-6609A	FLR-66	9	B33-R33
RT-6610	FLR-40	10	B33-R33
RT-6613	FLR-40	13	B33-R33
RT-7608LL	FLR-66	8+2	B33-R33
RT-7609 (ENGLAND)	FLR-40	9	B33-R33
RT-8608L	FLR-64	8	B47-R45
RT-8609	FLR-66	9	B33-R33
RT-8709B	FLR-34	9	B47-R45
RT-8908LL	FLR-34	8+2	B47-R45
RT-9509C (ENGLAND)	FLR-34	9	B47-R45
RT-9710B	FLR-34	10	B47-R45
RT-9710B (Thrushaft option use AU mounting)	FLR-34	10	B47-R45
RTA-14710B-AS	FLR-34	10	B47-R45
RTAO-10710B-AC	FLR-57	10	B47-R45
RTAO-10710B-AS	FLR-57	10	B47-R45
RTAO-10710C-AC	FLR-58	10	B47-R45
RTAO-10710C-AS	FLR-58	10	B47-R45
RTAO-12710B-AC	FLR-57	10	B47-R45
RTAO-12710B-AS	FLR-57	10	B47-R45
RTAO-12710C-AC	FLR-58	10	B47-R45
RTAO-12710C-AS	FLR-58	10	B47-R45
RTAO-14710B-AC	FLR-57	10	B47-R45



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

Transmission P.T.O. Driver & Aperatures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side

For transmission not listed, contact your authorized Chelsea Distributor.

January 2008

EATON/FULLER TRANSMISSION INDEX

Transmission Make and Model	P.T.O. Appl. Number	Number Forward Speeds	Teeth in P.T.O. Driver
RTAO-14710B-AC	FLR-57	10	B47-R45
RTAO-14710B-AS	FLR-57	10	B47-R45
RTAO-14710C-AC	FLR-58	10	B47-R45
RTAO-14710C-AS	FLR-58	10	B47-R45
RTAO-16710B-AC (Australia)	FLR-57	10	B47-R45
RTAO-16710B-AC	FLR-57	10	B47-R45
RTAO-16710B-AS	FLR-57	10	B47-R45
RTAO-16710C-AS	FLR-58	10	B47-R45
RTF-11609A	FLR-34	9	B47-R45
RTF-12609A	FLR-34	9	B47-R45
RTF-12709H	FLR-34	9	B47-R45
RTF-12710B	FLR-34	10	B47-R45
RTF-13609A	FLR-34	9	B47-R45
RTF-13709H	FLR-34	9	B47-R45
RTF-13710B	FLR-34	10	B47-R45
RTF-14609A	FLR-34	9	B47-R45
RTF-14709H	FLR-34	9	B47-R45
RTF-14710B	FLR-34	10	B47-R45
RTF-14715	FLR-34	15	B47-R45
RTF-14915	FLR-34	15	B47-R45
RTF-15715	FLR-34	15	B47-R45
RTF-8908LL (Australia)	FLR-34	8	B47-R45
RTL-13710B	FLR-34	10	B47-R45
RTL-14710B	FLR-34	10	B47-R45
RTLO-11610B-T2	FLR-34	10	B47-R45
RTLO-12610B	FLR-34	10	B47-R45
RTLO-12610B-T2	FLR-34	10	B47-R45
RTLO-12713A	FLR-58	13	B47-R45
RTLO-12913A (Australia)	FLR-58	13	B47-R45
RTLO-13610B	FLR-34	10	B47-R45
RTLO-13610B-T2	FLR-34	10	B47-R45
RTLO-14610A	FLR-34	10	B47-R45
RTLO-14610B	FLR-34	10	B47-R45
RTLO-14610B-T2	FLR-34	10	B47-R45
RTLO-14613B	FLR-34	13	B47-R45
RTLO-14713A	FLR-58	13	B47-R45

Transmission P.T.O. Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side

January 2008

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

EATON/FULLER TRANSMISSION INDEX

Transmission Make and Model	P.T.O. Appl. Number	Number Forward Speeds	Teeth in P.T.O. Driver
RTLO-14713A-T2	FLR-58	13	B47-R45
RTLO-14718B	FLR-58	18	B47-R45
RTLO-14718B-T2	FLR-58	18	B47-R45
RTLO-14913-T2 (Australia)	FLR-58	13	B47-R45
RTLO-14913A (Australia)	FLR-58	13	B47-R45
RTLO-14918A-AS2	FLR-58	18	B47-R45
RTLO-14918A-AS3	FLR-58	18	B47-R45
RTLO-14918B	FLR-58	18	B47-R45
RTLO-14918B-AS	FLR-58	18	B47-R45
RTLO-15610B-T2	FLR-34	10	B47-R45
RTLO-16610B	FLR-34	10	B47-R45
RTLO-16610B-T2	FLR-34	10	B47-R45
RTLO-16713A	FLR-58	13	B47-R45
RTLO-16713A-T2	FLR-58	13	B47-R45
RTLO-16718B	FLR-58	18	B47-R45
RTLO-16718B-T2	FLR-58	18	B47-R45
RTLO-16913-T2 (Australia)	FLR-58	13	B47-R45
RTLO-16913A (Australia)	FLR-58	13	B47-R45
RTLO-16913L-LHP	FLR-58	13	B47-R45
RTLO-16913LHS-D	FLR-58	13	B47-R45
RTLO-16918A-AS2	FLR-58	18	B47-R45
RTLO-16918A-AS3	FLR-58	18	B47-R45
RTLO-16918B	FLR-58	18	B47-R45
RTLO-16918B-AS	FLR-58	18	B47-R45
RTLO-17610B	FLR-34	10	B47-R45
RTLO-17610B-T2	FLR-34	10	B47-R45
RTLO-18610B	FLR-34	10	B47-R45
RTLO-18718B	FLR-58	18	B47-R45
RTLO-18718B-T2	FLR-58	18	B47-R45
RTLO-18913A	FLR-58	13	B47-R45
RTLO-18913A-T2	FLR-58	13	B47-R45
RTLO-18918A-AS2	FLR-58	18	B47-R45
RTLO-18918B	FLR-58	18	B47-R45
RTLO-18918B-AS	FLR-58	18	B47-R45
RTLO-20913A	FLR-58	13	B47-R45
RTLO-20918A-AS2	FLR-58	18	B47-R45



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

Transmission P.T.O. Driver & Aperatures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side

For transmission not listed, contact your authorized Chelsea Distributor.

January 2008

EATON/FULLER TRANSMISSION INDEX

Transmission Make and Model	P.T.O. Appl. Number	Number Forward Speeds	Teeth in P.T.O. Driver
RTLO-20918B	FLR-58	18	B47-R45
RTLO-20918B-AS	FLR-58	18	B47-R45
RTLO-22918A-AS2	FLR-58	18	B47-R45
RTLO-22918A-AS3	FLR-58	18	B47-R45
RTLO-22918A-AS3	FLR-58	18	B47-R45
RTLOM-16913L-LH	FLR-58	13	B47-R45
RTO-10710B-AS2	FLR-57	10	B47-R45
RTO-10910B-AS2	FLR-57	10	B47-R45
RTO-10910B-AS3	FLR-57	10	B47-R45
RTO-10910B-DM2 (UltraShift)	FLR-100	10	B47-R45
RTO-10910B-DM3	FLR-100	10	B47-R45
RTO-11709MLL	FLR-58	9+2	B47-R45
RTO-11908LL	FLR-57	8+2	B47-R45
RTO-11909ALL	FLR-58	11	B47-R45
RTO-11909MLL	FLR-58	9	B47-R45
RTO-12710B-AS2	FLR-57	10	B47-R45
RTO-12910B-AS2	FLR-57	10	B47-R45
RTO-12910B-AS2	FLR-57	10	B47-R45
RTO-12910B-AS3	FLR-57	10	B47-R45
RTO-12910B-DM2 (UltraShift)	FLR-100	10	B47-R45
RTO-12910B-DM3	FLR-100	10	B47-R45
RTO-14609B (Thrushaft option use AU mounting)	FLR-58	9	B47-R45
RTO-14613	FLR-34	13	B47-R45
RTO-14709MLL	FLR-58	9+2	B47-R45
RTO-14710B-AS2	FLR-57	10	B47-R45
RTO-14908LL	FLR-57	8+2	B47-R45
RTO-14909ALL	FLR-58	11	B47-R45
RTO-14910B-AS2	FLR-57	10	B47-R45
RTO-14910B-AS3	FLR-57	10	B47-R45
RTO-14910B-DM2 (UltraShift)	FLR-100	10	B47-R45
RTO-14910B-DM3	FLR-100	10	B47-R45
RTO-14910C-AS2	FLR-58	10	B47-R45
RTO-14910C-AS3	FLR-58	10	B47-R45
RTO-14915	FLR-59	15	B47-R45
RTO-16710B	FLR-57	10	B47-R45
RTO-16710B-AS2	FLR-57	10	B47-R45

Transmission P.T.O. Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side

January 2008

For transmission not listed, contact your authorized Chelsea Distributor.



IMPORTANT: See Safety Information
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EATON/FULLER TRANSMISSION INDEX

Transmission Make and Model	P.T.O. Appl. Number	Number Forward Speeds	Teeth in P.T.O. Driver
RTO-16710C-AS2	FLR-58	10	B47-R45
RTO-16908LL	FLR-57	8+2	B47-R45
RTO-16909ALL	FLR-58	11	B47-R45
RTO-16910B-AS2	FLR-57	10	B47-R45
RTO-16910B-AS3	FLR-57	10	B47-R45
RTO-16910B-DM2 (UltraShift)	FLR-100	10	B47-R45
RTO-16910B-DM3	FLR-100	10	B47-R45
RTO-16910C-AS2	FLR-58	10	B47-R45
RTO-16910C-AS3	FLR-58	10	B47-R45
RTO-16915	FLR-59	15	B47-R45
RTO-18910B-AS2	FLR-58	10	B47-R45
RTO-18910B-AS3	FLR-58	10	B47-R45
RTO-6610	FLR-41	10	B33-R33
RTO-6613	FLR-41	13	B33-R33
RTO-7613	FLR-40	13	B33-R33
RTO-909B	FLR-58	8+1	B47-R45
RTO-9513	FLR-34	13	B47-R45
RTOC-16909A (Convertible 9 to 13 Speed)	FLR-58	9	B47-R45
RTOF-12913A (Australia)	FLR-58	13	B47-R45
RTX-11609B	FLR-58	9	B47-R45
RTX-11609P	FLR-57	9	B47-R45
RTX-11609R (Thrushaft option use AT mounting)	FLR-57	8+1	B47-R45
RTX-12609B (Thrushaft option use AT mounting)	FLR-58	9	B47-R45
RTX-12609P	FLR-57	9	B47-R45
RTX-12609R	FLR-57	9	B47-R45
RTX-12709H	FLR-58	9	B47-R45
RTX-12710C (Thrushaft option use AU mounting)	FLR-58	10	B47-R45
RTX-13609B (Thrushaft option use AT mounting)	FLR-58	9	B47-R45
RTX-13609B	FLR-58	9	B47-R45
RTX-13709H	FLR-58	9	B47-R45
RTX-13710B	FLR-57	10	B47-R45
RTX-13710B	FLR-57	10	B47-R45
RTX-13710C (Thrushaft option use AU mounting)	FLR-58	10	B47-R45
RTX-14609B	FLR-58	9	B47-R45
RTX-14609R (Thrushaft option use AU mounting)	FLR-57	8+1	B47-R45
RTX-14708LL	FLR-57	8	B47-R45



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

Transmission P.T.O. Driver & Aperatures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side

For transmission not listed, contact your authorized Chelsea Distributor.

January 2008

EATON/FULLER TRANSMISSION INDEX

Transmission Make and Model	P.T.O. Appl. Number	Number Forward Speeds	Teeth in P.T.O. Driver
RTX-14709H	FLR-58	9	B47-R45
RTX-14710B (Thrushaft option use AU mounting)	FLR-57	10	B47-R45
RTX-14710C (Thrushaft option use AU mounting)	FLR-58	10	B47-R45
RTX-14715	FLR-59	15	B47-R45
RTX-15715	FLR-59	15	B47-R45
RTX-16709B	FLR-58	9	B47-R45
RTX-16709H	FLR-58	9	B47-R45
RTX-16710B	FLR-57	10	B47-R45
RTX-16710X	FLR-58	10	B47-R45
T-14607A	FLR-75	7	L78-R78
T-14607B	FLR-75	7	L78-R78
TX-14607B	FLR-77	7	L78-R78

Transmission P.T.O. Driver & Aperatures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side

January 2008

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

FM-14D310B-LST	RT-12709A	RT-14609A	RT-14910B-AS2	RT-9509C	RTF-12609A	RTF-13710B	RTF-14915
FM-15D310B-LST	RT-12710B	RT-14709A	RT-14915	RT-9710B	RTF-12709H	RTF-14609A	RTF-15715
RT-11609A	RT-13609A	RT-14710B	RT-15715	RT-9710B	RTF-12710B	RTF-14709H	RTF-8908LL
RT-11709H	RT-13709H	RT-14710B-AS2	RT-8709B	RTA-14710B-AS	RTF-13609A	RTF-14710B	RTL-13710B
RT-12609A	RT-13710B	RT-14715	RT-8908LL	RTF-11609A	RTF-13709H	RTF-14715	RTL-14710B

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - SINGLE GEAR - MECHANICAL SHIFT

100XRAHX-*3 (1)	125	Eng	137			328481X	Furnished	100XRAHX-*3 (1)	125	Opp	131			329138X	Furnished
812XKAHX-*3	268	Eng	91				Furnished								

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250	Opp	61		7-A-032(P)(2)	328564X	Furnished	221XCAHX-*3	250	Opp	58		7-A-032 (2)		Furnished
221ZEAHX-*3	250	Opp	70			328564X	Furnished	221XEAHX-*3	250	Opp	67				Furnished
221ZLAHX-*3	200	Opp	95			328564X	Furnished	221XLAHX-*3	200	Opp	91				Furnished
221ZPAHX-*3	200	Opp	114			328564X	Furnished	221XPAHX-*3	200	Opp	110				Furnished
442ZAAHX-*3 (4)	250	Opp	54			328564X	Furnished	442XAAHX-*3 (4)	250	Opp	51				Furnished
442ZCAHX-*3 (5)	250	Opp	69			328564X	Furnished	442XBAHX-*3 (3)	250	Eng	51		REQUIRED		Furnished
442ZFAHX-*3 (6)	250	Opp	85			328564X	Furnished	442XCAHX-*3 (5)	250	Opp	66				Furnished
442ZHAHX-*3 (7)	250	Opp	99			328564X	Furnished	442XFAHX-*3 (6)	250	Opp	81				Furnished
442ZLAHX-*3 (8)	222	Opp	110			328564X	Furnished	442XHAHX-*3 (7)	250	Opp	94				Furnished
442ZQAHX-*3 (8)	206	Opp	118			328564X	Furnished	442XLAHX-*3 (8)	233	Opp	105				Furnished
442ZRAHX-*3 (8)	178	Opp	137			328564X	Furnished	442XQAHX-*3 (8)	216	Opp	113				Furnished
442ZSAHX-*3 (8)	150	Opp	163			328564X	Furnished	442XRAHX-*3 (8)	187	Opp	131				Furnished
442ZUAHX-*3 (8)	126	Opp	194			328564X	Furnished	442XSAHX-*3 (8)	156	Opp	156				Furnished
442ZWAHX-*3 (8)	107	Opp	229			328564X	Furnished	442XUAHX-*3 (8)	132	Opp	186				Furnished
442ZXAHX-*3 (8)	91	Opp	271			328564X	Furnished	442XWAHX-*3 (8)	112	Opp	219				Furnished
489XAAHX-*3 (4)	250	Opp	54				Furnished	442XXAHX-*3 (8)	94	Opp	259				Furnished
489XCAHX-*3 (5)	250	Opp	69				Furnished	660XFAHX-*3 (9)	301	Opp	81				Furnished
489XFAHX-*3 (6)	250	Opp	85				Furnished	660XQAHX-*3 (10)	216	Opp	113				Furnished
489XHAHX-*3 (7)	250	Opp	99				Furnished	660XSAHX-*3 (11)	156	Opp	156				Furnished
489XLAHX-*3 (8)	222	Opp	110				Furnished								
489XQAHX-*3 (8)	206	Opp	118				Furnished								
489XRAHX-*3 (8)	178	Opp	137				Furnished								
489XSAHX-*3 (8)	150	Opp	163				Furnished								
489XUAHX-*3 (8)	126	Opp	194				Furnished								
489XWAHX-*3 (8)	107	Opp	229				Furnished								

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CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 100 Series will not mount on the right side without an adapter gear due to output shaft interference with transmission housing.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

- (1) Gear and Shaft Kit No. KXA-2-P-565
 (2) Filler block furnished with P.T.O.
 (3) Input Gear Part No. 5-P-1418
 (4) Input Gear Part No. 5-P-1280
 (5) Input Gear Part No. 5-P-1287
 (6) Input Gear Part No. 5-P-1077

- (7) Input Gear Part No. 5-P-1364
 (8) Input Gear Part No. 5-P-1004
 (9) Input Gear Part No. 5-P-1242
 (10) Input Gear Part No. 5-P-1246
 (11) Input Gear Part No. 5-P-1322

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FM-14D310B-LST	RT-12709A	RT-14609A	RT-14910B-AS2	RT-9509C	RTF-12609A	RTF-13710B	RTF-14915
FM-15D310B-LST	RT-12710B	RT-14709A	RT-14915	RT-9710B	RTF-12709H	RTF-14609A	RTF-15715
RT-11609A	RT-13609A	RT-14710B	RT-15715	RT-9710B	RTF-12710B	RTF-14709H	RTF-8908LL
RT-11709H	RT-13709H	RT-14710B-AS2	RT-8709B	RTA-14710B-AS	RTF-13609A	RTF-14710B	RTL-13710B
RT-12609A	RT-13710B	RT-14715	RT-8908LL	RTF-11609A	RTF-13709H	RTF-14715	RTL-14710B

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489XXAHX-*3 (8)	91	Opp	271					Furnished							
680XFAHX-*3 (9)	288	Opp	85					Furnished							
680XQAHX-*3 (10)	206	Opp	118					Furnished							
680XSAHX-*3 (11)	150	Opp	163					Furnished							
823XBAHX-*3 (12)	423	Opp	58					Furnished							
823XJAHX-*3 (13)	279	Opp	88					Furnished							
823XMAHX-*3 (14)	238	Opp	103					Furnished							
823XRAHX-*3 (15)	172	Opp	142					Furnished							
823XTKTX-*3 (16)	142	Opp	172		8-A-165 (2)			Furnished							
880XBAHX-*3 (17)	423	Opp	58					Furnished							
880XDAHX-*3 (18)	357	Opp	69					Furnished							
880XGAHX-*3 (19)	329	Opp	74					Furnished							
880XJAHX-*3 (20)	279	Opp	88					Furnished							
880XMAHX-*3 (21)	238	Opp	103					Furnished							
880XQAHX-*3 (22)	203	Opp	120					Furnished							
880XRAHX-*3 (23)	172	Opp	142					Furnished							
880XTAHX-*3 (24)	134	Opp	183					Furnished							

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

230XAAJX-*3	250	Opp	45			328481X	Furnished	230XAAJX-*3	250	Opp	43				Furnished
230XBAJX-*3	250	Opp	58			328481X	Furnished	230XBAJX-*3	250	Opp	56				Furnished
230XDAJX-*3	250	Opp	67			328481X	Furnished	230XDAJX-*3	250	Opp	64				Furnished
230XKAJX-*3	250	Opp	91			328481X	Furnished	230XKAJX-*3	250	Opp	87				Furnished
230XQAJX-*3	203	Opp	121			328481X	Furnished	230XQAJX-*3	212	Opp	116				Furnished
230XUAJX-*3	126	Opp	194			328481X	Furnished	230XUAJX-*3	132	Opp	185				Furnished
236ZDAH-X*3 (8)	250	Opp	89			328564X	Furnished	236ZDAH-X*3 (8)	250	Opp	85				Furnished
236ZKAHX-*3 (8)	215	Opp	114			328564X	Furnished	236ZKAHX-*3 (8)	224	Opp	109				Furnished
236ZQAHX-*3 (8)	160	Opp	154			328564X	Furnished	236ZQAHX-*3 (8)	166	Opp	147				Furnished
236ZUAHX-*3 (8)	139	Opp	176			328564X	Furnished	236ZUAHX-*3 (8)	145	Opp	168				Furnished

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CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 100 Series will not mount on the right side without an adapter gear due to output shaft interference with transmission housing.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

(2) Filler block furnished with P.T.O.
(8) Input Gear Part No. 5-P-1004
(9) Input Gear Part No. 5-P-1242
(10) Input Gear Part No. 5-P-1246
(11) Input Gear Part No. 5-P-1322
(12) Input Gear Part No. 5-P-285

(13) Input Gear Part No. 5-P-325
(14) Input Gear Part No. 5-P-283
(15) Input Gear Part No. 5-P-721
(16) Input Gear Part No. 5-P-1395
(17) Input Gear Part No. 5-P-1100
(18) Input Gear Part No. 5-P-1101

(19) Input Gear Part No. 5-P-1135
(20) Input Gear Part No. 5-P-1102
(21) Input Gear Part No. 5-P-1103
(22) Input Gear Part No. 5-P-1385
(23) Input Gear Part No. 5-P-1104
(24) Input Gear Part No. 5-P-1105

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FM-14D310B-LST	RT-12709A	RT-14609A	RT-14910B-AS2	RT-9509C	RTF-12609A	RTF-13710B	RTF-14915
FM-15D310B-LST	RT-12710B	RT-14709A	RT-14915	RT-9710B	RTF-12709H	RTF-14609A	RTF-15715
RT-11609A	RT-13609A	RT-14710B	RT-15715	RT-9710B	RTF-12710B	RTF-14709H	RTF-8908LL
RT-11709H	RT-13709H	RT-14710B-AS2	RT-8709B	RTA-14710B-AS	RTF-13609A	RTF-14710B	RTL-13710B
RT-12609A	RT-13710B	RT-14715	RT-8908LL	RTF-11609A	RTF-13709H	RTF-14715	RTL-14710B

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (17)	423	Opp	58				Furnished								
885XGAHX-*3 (19)	329	Opp	74				Furnished								
885XJAHX-*3 (20)	279	Opp	88				Furnished								
885XMAHX-*3 (21)	238	Opp	103				Furnished								

ONE SPEED - FORWARD & REVERSE

340SFAHX-*5 (25)	200	Opp	74	78	7-A-032(P) 7-A-140 (26)	310778X	Furnished	340XFAHX-*5 (25)	200	Opp	71	75	7-A-140 (2)		Furnished
352ZSAHX-*3 (8)	140	Opp	165	214		328564X	Furnished	352XSAHX-*3 (8)	140	Opp	158	205			Furnished
863XBAHX-*5	423	Opp	58	72			Furnished								

ONE SPEED - DUAL SHAFT

452ZSAHX-*3 (8)	140	Opp	165			328564X	Furnished	452XSAHX-*3 (8)	140	Opp	158				Furnished
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GEARED ADAPTERS

628XAHX-4AH					8-A-032		Furnished	626XAHX-3AH							Furnished
								630XAHX-3AH							Furnished
								645XAHX-3AH							Furnished

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CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 100 Series will not mount on the right side without an adapter gear due to output shaft interference with transmission housing.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

(2) Filler block furnished with P.T.O.

(8) Input Gear Part No. 5-P-1004

(17) Input Gear Part No. 5-P-1100

(19) Input Gear Part No. 5-P-1135

(20) Input Gear Part No. 5-P-1102

(21) Input Gear Part No. 5-P-1103

(25) Input Gear Part No. 5-P-581

(26) Filler block furnished with P.T.O. but not required

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FM-14D310B-LST	RT-12709A	RT-14609A	RT-14910B-AS2	RT-9509C	RTF-12609A	RTF-13710B	RTF-14915
FM-15D310B-LST	RT-12710B	RT-14709A	RT-14915	RT-9710B	RTF-12709H	RTF-14609A	RTF-15715
RT-11609A	RT-13609A	RT-14710B	RT-15715	RT-9710B	RTF-12710B	RTF-14709H	RTF-8908LL
RT-11709H	RT-13709H	RT-14710B-AS2	RT-8709B	RTA-14710B-AS	RTF-13609A	RTF-14710B	RTL-13710B
RT-12609A	RT-13710B	RT-14715	RT-8908LL	RTF-11609A	RTF-13709H	RTF-14715	RTL-14710B

REAR SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

REAR 0-Bolt Opening Gear NON-STANDARD of Centerline

48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0" (0MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

REAR Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

REAR MOUNT & THRUSHAFT

541-LAT	400	Eng	67				Furnished
541-LAU	400	Eng	67				Furnished
541-LBD	400	Eng	67				Furnished
541-MAT	350	Eng	87				Furnished
541-MAU	350	Eng	87				Furnished
541-MBD	350	Eng	87				Furnished
541-NAT	300	Eng	99				Furnished
541-NAU	300	Eng	99				Furnished
541-NBD	300	Eng	99				Furnished

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 100 Series will not mount on the right side without an adapter gear due to output shaft interference with transmission housing.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

RT-6610
RT-6613
RT-7609
RTO-7613

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear REAR of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear REAR of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - SINGLE GEAR - MECHANICAL SHIFT

100XRAHX-*4 (1)	125	Eng	99			328481X	Furnished	100XRAHX-*4 (1)	125	Opp	99			329138-1X	Furnished
812XKAHX-*4	400	Eng	66				Furnished								

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*6	250	Opp	44		7-A-032(P)(2)	328564X	Furnished	221XCAHX-*6	250	Opp	44		7-A-032 (2)		Furnished
221ZEAHX-*6	250	Opp	51			328564X	Furnished	221XEAHX-*6	250	Opp	51				Furnished
221ZLAHX-*6	200	Opp	69			328564X	Furnished	221XLAHX-*6	200	Opp	69				Furnished
221ZPAHX-*6	140	Opp	83			328564X	Furnished	221XPAHX-*6	200	Opp	83				Furnished
442ZFAHX-*6 (3)	250	Opp	62			328564X	Furnished	442XFAHX-*6 (3)	250	Opp	62				Furnished
442ZHAHX-*6 (4)	250	Opp	72			328564X	Furnished	442XHAHX-*6 (4)	250	Opp	72				Furnished
442ZLAHX-*6 (5)	250	Opp	80			328564X	Furnished	442XLAHX-*6 (5)	250	Opp	80				Furnished
442ZQAHX-*6 (5)	225	Opp	86			328564X	Furnished	442XQAHX-*6 (5)	225	Opp	86				Furnished
442ZRAHX-*6 (5)	225	Opp	99			328564X	Furnished	442XRAHX-*6 (5)	225	Opp	99				Furnished
442ZSAHX-*6 (5)	200	Opp	118			328564X	Furnished	442XSAHX-*6 (5)	200	Opp	118				Furnished
442ZUAHX-*6 (5)	195	Opp	141			328564X	Furnished	442XUAHX-*6 (5)	195	Opp	141				Furnished
442ZWAHX-*6 (5)	175	Opp	166			328564X	Furnished	442XWAHX-*6 (5)	175	Opp	166				Furnished
442ZXAHX-*6 (5)	140	Opp	196			328564X	Furnished	442XXAHX-*6 (5)	140	Opp	196				Furnished
489XFAHX-*6 (3)	250	Opp	62				Furnished	660XFAHX-*6 (6)	375	Opp	62				Furnished
489XHAHX-*6 (4)	250	Opp	72				Furnished	660XQAHX-*6 (7)	375	Opp	86				Furnished
489XLAHX-*6 (5)	250	Opp	80				Furnished	660XSAHX-*6 (8)	325	Opp	118				Furnished
489XQAHX-*6 (5)	225	Opp	86				Furnished								
489XRAHX-*6 (5)	225	Opp	99				Furnished								
489XSAHX-*6 (5)	200	Opp	118				Furnished								
489XUAHX-*6 (5)	195	Opp	141				Furnished								
489XWAHX-*6 (5)	175	Opp	166				Furnished								
489XXAHX-*6 (5)	140	Opp	196				Furnished								
680XFAHX-*6 (6)	375	Opp	62				Furnished								
680XQAHX-*6 (7)	375	Opp	86				Furnished								
680XSAHX-*6 (8)	325	Opp	118				Furnished								

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

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: All P.T.O.s 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.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

(1) Gear and Shaft Kit No. KXA-2-P-565
(2) Filler block furnished with P.T.O.
(3) Input Gear Part No. 5-P-1077
(4) Input Gear Part No. 5-P-1364
(5) Input Gear Part No. 5-P-1004
(6) Input Gear Part No. 5-P-1242

(7) Input Gear Part No. 5-P-1246
(8) Input Gear Part No. 5-P-1322

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RT-6610
RT-6613
RT-7609
RTO-7613

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear REAR of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear REAR of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

823XBAHX-*6 (9)	500	Opp	42				Furnished								
823XMAHX-*6 (10)	500	Opp	75				Furnished								
823XRAHX-*6 (11)	400	Opp	103				Furnished								
823XTKTX-*6 (12)	372	Opp	125		8-A-165 (2)		Furnished								
880XBAHX-*6 (13)	500	Opp	42				Furnished								
880XDAHX-*6 (14)	500	Opp	50				Furnished								
880XGAHX-*6 (15)	500	Opp	54				Furnished								
880XJAHX-*6 (16)	500	Opp	64				Furnished								
880XMAHX-*6 (17)	500	Opp	75				Furnished								
880XQAHX-*6 (18)	450	Opp	87				Furnished								
880XRAHX-*6 (19)	400	Opp	103				Furnished								
880XTAHX-*6 (20)	350	Opp	133				Furnished								

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

230XAAJX-*6	250	Opp	32			328481X	Furnished	230XAAJX-*6	250	Opp	32				Furnished
230XBAJX-*6	250	Opp	42			328481X	Furnished	230XBAJX-*6	250	Opp	42				Furnished
230XDAJX-*6	250	Opp	49			328481X	Furnished	230XDAJX-*6	250	Opp	49				Furnished
230XKAJX-*6	250	Opp	66			328481X	Furnished	230XKAJX-*6	250	Opp	66				Furnished
230XQAJX-*6	250	Opp	88			328481X	Furnished	230XQAJX-*6	250	Opp	88				Furnished
230XUAJX-*6	225	Opp	140			328481X	Furnished	230XUAJX-*6	225	Opp	140				Furnished
236ZDAHX-*6 (5)	250	Opp	65			328564X	Furnished	236ZDAHX-*6 (5)	250	Opp	65				Furnished
236ZKAHX-*6 (5)	250	Opp	82			328564X	Furnished	236ZKAHX-*6 (5)	250	Opp	82				Furnished
236ZQAHX-*6 (5)	250	Opp	111			328564X	Furnished	236ZQAHX-*6 (5)	250	Opp	111				Furnished
236ZUAHX-*6 (5)	225	Opp	127			328564X	Furnished	236ZUAHX-*6 (5)	225	Opp	127				Furnished
885XBAHX-*6 (13)	500	Opp	42				Furnished								
885XGAHX-*6 (15)	500	Opp	54				Furnished								
885XJAHX-*6 (16)	500	Opp	64				Furnished								
885XMAHX-*6 (17)	500	Opp	75				Furnished								

Continued Next Page

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

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: All P.T.O.s 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.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

(2) Filler block furnished with P.T.O.
(5) Input Gear Part No. 5-P-1004
(9) Input Gear Part No. 5-P-285
(10) Input Gear Part No. 5-P-283
(11) Input Gear Part No. 5-P-721
(12) Input Gear Part No. 5-P-1395

(13) Input Gear Part No. 5-P-1100
(14) Input Gear Part No. 5-P-1101
(15) Input Gear Part No. 5-P-1135
(16) Input Gear Part No. 5-P-1102
(17) Input Gear Part No. 5-P-1103
(18) Input Gear Part No. 5-P-1385

(19) Input Gear Part No. 5-P-1104
(20) Input Gear Part No. 5-P-1105

January 2008

RT-6610
RT-6613
RT-7609
RTO-7613

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear REAR of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear REAR of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - FORWARD & REVERSE

340SFAHX-*4 (21)	200	Opp	54	56	7-A-032(P)	310778X	Furnished	340XFAHX-*4 (21)	200	Opp	54	56	7-A-140 (2)		Furnished
352ZSAHX-*4 (5)	140	Opp	120	155		328564X	Furnished	352XSAHX-*6 (5)	140	Opp	120	155			Furnished
863XBAHX-*4	500	Opp	42	52			Furnished								

ONE SPEED - DUAL SHAFT

452ZSAHX-*6 (5)	140	Opp	120			328564X	Furnished	452XSAHX-*6 (5)	140	Eng	120		7-A-2000(T)	328530-1X	7170-31X
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GEARED ADAPTERS

628XAHX-4AH					8-A-032		Furnished	626XAHX-4AH							Furnished
								630XAHX-4AH							Furnished
								645XAHX-4AH							Furnished

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

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: All P.T.O.s 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.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

(2) Filler block furnished with P.T.O.
(5) Input Gear Part No. 5-P-1004
(21) Input Gear Part No. 5-P-581

January 2008

RTO-6610
RTO-6613

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear REAR of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear REAR of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - SINGLE GEAR - MECHANICAL SHIFT

100XRAHX-*4 (1)	125	Eng	123			328481X	Furnished	100XRAHX-*4 (1)	125	Opp	123			329138-1X	Furnished
812XKAHX-*4	400	Eng	82				Furnished								

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*6	250	Opp	55		7-A-032(P)(2)	328564X	Furnished	221XCAHX-*6	250	Opp	55		7-A-032 (2)		Furnished
221ZEAHX-*6	250	Opp	63			328564X	Furnished	221XEAHX-*6	250	Opp	63				Furnished
221ZLAHX-*6	200	Opp	85			328564X	Furnished	221XLAHX-*6	200	Opp	85				Furnished
221ZPAHX-*6	140	Opp	103			328564X	Furnished	221XPAHX-*6	200	Opp	103				Furnished
442ZFAHX-*6 (3)	250	Opp	76			328564X	Furnished	442XFAHX-*6 (3)	250	Opp	76				Furnished
442ZHAHX-*6 (4)	250	Opp	88			328564X	Furnished	442XHAHX-*6 (4)	250	Opp	88				Furnished
442ZLAHX-*6 (5)	250	Opp	99			328564X	Furnished	442XLAHX-*6 (5)	250	Opp	99				Furnished
442ZQAHX-*6 (5)	225	Opp	106			328564X	Furnished	442XQAHX-*6 (5)	225	Opp	106				Furnished
442ZRAHX-*6 (5)	225	Opp	123			328564X	Furnished	442XRAHX-*6 (5)	225	Opp	123				Furnished
442ZSAHX-*6 (5)	200	Opp	147			328564X	Furnished	442XSAHX-*6 (5)	200	Opp	147				Furnished
442ZUAHX-*6 (5)	195	Opp	175			328564X	Furnished	442XUAHX-*6 (5)	195	Opp	175				Furnished
442ZWAHX-*6 (5)	175	Opp	206			328564X	Furnished	442XWAHX-*6 (5)	175	Opp	206				Furnished
442ZXAHX-*6 (5)	140	Opp	243			328564X	Furnished	442XXAHX-*6 (5)	140	Opp	243				Furnished
489XFAHX-*6 (3)	250	Opp	76				Furnished	660XFAHX-*6 (6)	375	Opp	76				Furnished
489XHAHX-*6 (4)	250	Opp	88				Furnished	660XQAHX-*6 (7)	375	Opp	106				Furnished
489XLAHX-*6 (5)	250	Opp	99				Furnished	660XSAHX-*6 (8)	325	Opp	147				Furnished
489XQAHX-*6 (5)	225	Opp	106				Furnished								
489XRAHX-*6 (5)	225	Opp	123				Furnished								
489XSAHX-*6 (5)	200	Opp	147				Furnished								
489XUAHX-*6 (5)	195	Opp	175				Furnished								
489XWAHX-*6 (5)	175	Opp	206				Furnished								
489XXAHX-*6 (5)	140	Opp	243				Furnished								
680XFAHX-*6 (6)	375	Opp	76				Furnished								
680XQAHX-*6 (7)	375	Opp	106				Furnished								
680XSAHX-*6 (8)	325	Opp	147				Furnished								

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

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: All P.T.O.s 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.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

(1) Gear and Shaft Kit No. KXA-2-P-565
(2) Filler block furnished with P.T.O.
(3) Input Gear Part No. 5-P-1077
(4) Input Gear Part No. 5-P-1364
(5) Input Gear Part No. 5-P-1004
(6) Input Gear Part No. 5-P-1242

(7) Input Gear Part No. 5-P-1246
(8) Input Gear Part No. 5-P-1322

RTO-6610
RTO-6613

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear REAR of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear REAR of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

823XBAHX-*6 (9)	500	Opp	52					Furnished							
823XMAHX-*6 (10)	500	Opp	92					Furnished							
823XRAHX-*6 (11)	400	Opp	128					Furnished							
823XTKTX-*6 (12)	372	Opp	154		8-A-165 (2)			Furnished							
880XBAHX-*6 (13)	500	Opp	52					Furnished							
880XDAHX-*6 (14)	500	Opp	62					Furnished							
880XGAHX-*6 (15)	500	Opp	67					Furnished							
880XJAHX-*6 (16)	500	Opp	79					Furnished							
880XMAHX-*6 (17)	500	Opp	92					Furnished							
880XQAHX-*6 (18)	450	Opp	109					Furnished							
880XRAHX-*6 (19)	400	Opp	128					Furnished							
880XTAHX-*6 (20)	350	Opp	164					Furnished							

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

230XAAJX-*6	250	Opp	40			328481X	Furnished	230XAAJX-*6	250	Opp	40				Furnished
230XBAJX-*6	250	Opp	52			328481X	Furnished	230XBAJX-*6	250	Opp	52				Furnished
230XDAJX-*6	250	Opp	60			328481X	Furnished	230XDAJX-*6	250	Opp	60				Furnished
230XKAJX-*6	250	Opp	82			328481X	Furnished	230XKAJX-*6	250	Opp	82				Furnished
230XQAJX-*6	250	Opp	109			328481X	Furnished	230XQAJX-*6	250	Opp	109				Furnished
230XUAJX-*6	225	Opp	174			328481X	Furnished	230XUAJX-*6	225	Opp	174				Furnished
236ZDAHX-*6 (5)	250	Opp	80			328564X	Furnished	236ZDAHX-*6 (5)	250	Opp	80				Furnished
236ZKAHX-*6 (5)	250	Opp	102			328564X	Furnished	236ZKAHX-*6 (5)	250	Opp	102				Furnished
236ZQAHX-*6 (5)	250	Opp	138			328564X	Furnished	236ZQAHX-*6 (5)	250	Opp	138				Furnished
236ZUAHX-*6 (5)	225	Opp	158			328564X	Furnished	236ZUAHX-*6 (5)	225	Opp	158				Furnished
885XBAHX-*6 (13)	500	Opp	52				Furnished								
885XGAHX-*6 (15)	500	Opp	67				Furnished								
885XJAHX-*6 (16)	500	Opp	79				Furnished								
885XMAHX-*6 (17)	500	Opp	92				Furnished								

Continued Next Page

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

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: All P.T.O.s 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.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

(2) Filler block furnished with P.T.O.
(5) Input Gear Part No. 5-P-1004
(9) Input Gear Part No. 5-P-285
(10) Input Gear Part No. 5-P-283
(11) Input Gear Part No. 5-P-721
(12) Input Gear Part No. 5-P-1395

(13) Input Gear Part No. 5-P-1100
(14) Input Gear Part No. 5-P-1101
(15) Input Gear Part No. 5-P-1135
(16) Input Gear Part No. 5-P-1102
(17) Input Gear Part No. 5-P-1103
(18) Input Gear Part No. 5-P-1385

(19) Input Gear Part No. 5-P-1104
(20) Input Gear Part No. 5-P-1105

January 2008

RTO-6610

RTO-6613

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear REAR of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear REAR of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - FORWARD & REVERSE

340SFAHX-*4 (21)	200	Opp	67	70	7-A-032(P)	310778X	Furnished	340XFAHX-*4 (21)	200	Opp	67	70	7-A-140 (2)		Furnished
352ZSAHX-*6 (5)	140	Opp	149	192		328564X	Furnished	352XSAHX-*6 (5)	140	Opp	149	192			Furnished
863XBAHX-*4	500	Opp	52	64			Furnished								

ONE SPEED - DUAL SHAFT

452ZSAHX-*6 (5)	140	Opp	149			328564X	Furnished	452XSAHX-*6 (5)	140	Eng	149		7-A-2000(T)	328530-1X	7170-31X
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GEARED ADAPTERS

628XAHX-4AH							Furnished	626XAHX-4AH							Furnished
								630XAHX-4AH							Furnished
								645XAHX-4AH							Furnished

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.**CAUTION:** 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.**NOTE:** All P.T.O.s 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.**NOTE:** The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.**NOTE:** If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

(2) Filler block furnished with P.T.O.

(5) Input Gear Part No. 5-P-1004

(21) Input Gear Part No. 5-P-581

January 2008

F-6405B-DM3	RTAO-14710B-AC	RTAO-16710B-AS	RTO-12710B-AS2	RTO-14908LL	RTO-16908LL	RTX-12609P	RTX-14708LL
RTAO-10710B-AC	RTAO-14710B-AC	RTO-10710B-AS2	RTO-12910B-AS2	RTO-14910B-AS2	RTO-16910B-AS2	RTX-12609R	RTX-14710B
RTAO-10710B-AS	RTAO-14710B-AS	RTO-10910B-AS2	RTO-12910B-AS2	RTO-14910B-AS3	RTO-16910B-AS3	RTX-13710B	RTX-16710B
RTAO-12710B-AC	RTAO-16710B-AC	RTO-10910B-AS3	RTO-12910B-AS3	RTO-16710B	RTX-11609P	RTX-13710B	
RTAO-12710B-AS	RTAO-16710B-AC	RTO-11908LL	RTO-14710B-AS2	RTO-16710B-AS2	RTX-11609R	RTX-14609R	

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - SINGLE GEAR - MECHANICAL SHIFT

100XRAHX-*3 (1)	125	Eng	185		328481X	Furnished		100XRAHX-*3 (1)	125	Opp	177			329138X	Furnished
812XKAHX-*3	268	Eng	123			Furnished									

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250	Opp	82		7-A-032(P)(2)	328564X	Furnished	221XCAHX-*3	250	Opp	79		7-A-032 (2)		Furnished
221ZEAHX-*3	250	Opp	95			328564X	Furnished	221XEAHX-*3	250	Opp	91				Furnished
221ZLAHX-*3	200	Opp	128			328564X	Furnished	221XLAHX-*3	200	Opp	122				Furnished
221ZPAHX-*3	200	Opp	154			328564X	Furnished	221XPAHX-*3	200	Opp	148				Furnished
442ZAAHX-*3 (4)	250	Opp	72			328564X	Furnished	442XAAHX-*3 (4)	250	Opp	69				Furnished
442ZCAHX-*3 (5)	250	Opp	93			328564X	Furnished	442XBAHX-*3 (3)	250	Eng	69		REQUIRED		Furnished
442ZFAHX-*3 (6)	250	Opp	114			328564X	Furnished	442XCAHX-*3 (5)	250	Opp	89				Furnished
442ZHAHX-*3 (7)	250	Opp	132			328564X	Furnished	442XFAHX-*3 (6)	250	Opp	110				Furnished
442ZLAHX-*3 (8)	222	Opp	148			328564X	Furnished	442XHAHX-*3 (7)	250	Opp	127				Furnished
442ZQAHX-*3 (8)	206	Opp	160			328564X	Furnished	442XLAHX-*3 (8)	233	Opp	142				Furnished
442ZRAHX-*3 (8)	178	Opp	185			328564X	Furnished	442XQAHX-*3 (8)	216	Opp	153				Furnished
442ZSAHX-*3 (8)	150	Opp	220			328564X	Furnished	442XRAHX-*3 (8)	187	Opp	177				Furnished
442ZUAHX-*3 (8)	126	Opp	262			328564X	Furnished	442XSAHX-*3 (8)	156	Opp	211				Furnished
442ZWAHX-*3 (8)	107	Opp	308			328564X	Furnished	442XUAHX-*3 (8)	132	Opp	251				Furnished
442ZXAHX-*3 (8)	91	Opp	365			328564X	Furnished	442XWAHX-*3 (8)	112	Opp	295				Furnished
489XAAHX-*3 (4)	250	Opp	72				Furnished	442XXAHX-*3 (8)	94	Opp	349				Furnished
489XCAHX-*3 (5)	250	Opp	93				Furnished	660XFAHX-*3 (9)	301	Opp	110				Furnished
489XFAHX-*3 (6)	250	Opp	114				Furnished	660XQAHX-*3 (10)	216	Opp	153				Furnished
489XHAHX-*3 (7)	250	Opp	132				Furnished	660XSAHX-*3 (11)	156	Opp	211				Furnished
489XLAHX-*3 (8)	222	Opp	148				Furnished								
489XQAHX-*3 (8)	206	Opp	160				Furnished								
489XRAHX-*3 (8)	178	Opp	185				Furnished								
489XSAHX-*3 (8)	150	Opp	220				Furnished								
489XUAHX-*3 (8)	126	Opp	262				Furnished								
489XWAHX-*3 (8)	107	Opp	308				Furnished								

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CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 100 series will not mount on the right side without an adapter gear due to output shaft interference with transmission housing.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: 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.

- (1) Gear and Shaft Kit No. KXA-2-P-565
 (2) Filler block furnished with P.T.O.
 (3) Input Gear Part No. 5-P-1418
 (4) Input Gear Part No. 5-P-1280
 (5) Input Gear Part No. 5-P-1287
 (6) Input Gear Part No. 5-P-1077

- (7) Input Gear Part No. 5-P-1364
 (8) Input Gear Part No. 5-P-1004
 (9) Input Gear Part No. 5-P-1242
 (10) Input Gear Part No. 5-P-1246
 (11) Input Gear Part No. 5-P-1322

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F-6405B-DM3	RTAO-14710B-AC	RTAO-16710B-AS	RTO-12710B-AS2	RTO-14908LL	RTO-16908LL	RTX-12609P	RTX-14708LL
RTAO-10710B-AC	RTAO-14710B-AC	RTO-10710B-AS2	RTO-12910B-AS2	RTO-14910B-AS2	RTO-16910B-AS2	RTX-12609R	RTX-14710B
RTAO-10710B-AS	RTAO-14710B-AS	RTO-10910B-AS2	RTO-12910B-AS2	RTO-14910B-AS3	RTO-16910B-AS3	RTX-13710B	RTX-16710B
RTAO-12710B-AC	RTAO-16710B-AC	RTO-10910B-AS3	RTO-12910B-AS3	RTO-16710B	RTX-11609P	RTX-13710B	
RTAO-12710B-AS	RTAO-16710B-AC	RTO-11908LL	RTO-14710B-AS2	RTO-16710B-AS2	RTX-11609R	RTX-14609R	

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489XXAHX-*3 (8)	91	Opp	365					Furnished							
680XFAHX-*3 (9)	288	Opp	114					Furnished							
680XQAHX-*3 (10)	206	Opp	160					Furnished							
680XSAHX-*3 (11)	150	Opp	220					Furnished							
823XBAHX-*3 (12)	423	Opp	78					Furnished							
823XJAHX-*3 (13)	279	Opp	118					Furnished							
823XMAHX-*3 (14)	238	Opp	139					Furnished							
823XRAHX-*3 (15)	172	Opp	191					Furnished							
823XTKTX-*3 (16)	142	Opp	231		8-A-165 (2)			Furnished							
880XBAHX-*3 (17)	423	Opp	78					Furnished							
880XDAHX-*3 (18)	357	Opp	92					Furnished							
880XGAHX-*3 (19)	329	Opp	100					Furnished							
880XJAHX-*3 (20)	279	Opp	118					Furnished							
880XMAHX-*3 (21)	238	Opp	139					Furnished							
880XQAHX-*3 (22)	203	Opp	162					Furnished							
880XRAHX-*3 (23)	172	Opp	191					Furnished							
880XTAHX-*3 (24)	134	Opp	246					Furnished							

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

230XAAJX-*3	250	Opp	60			328481X	Furnished	230XAAJX-*3	250	Opp	58				Furnished
230XBAJX-*3	250	Opp	78			328481X	Furnished	230XBAJX-*3	250	Opp	75				Furnished
230XDAJX-*3	250	Opp	91			328481X	Furnished	230XDAJX-*3	250	Opp	87				Furnished
230XKAJX-*3	250	Opp	123			328481X	Furnished	230XKAJX-*3	250	Opp	117				Furnished
230XQAJX-*3	203	Opp	163			328481X	Furnished	230XQAJX-*3	212	Opp	156				Furnished
230XUAJX-*3	126	Opp	261			328481X	Furnished	230XUAJX-*3	132	Opp	250				Furnished
236ZDAHX-*3 (8)	250	Opp	120			328564X	Furnished	236ZDAHX-*3 (8)	250	Opp	115				Furnished
236ZKAHX-*3 (8)	215	Opp	154			328564X	Furnished	236ZKAHX-*3 (8)	224	Opp	147				Furnished
236ZQAHX-*3 (8)	160	Opp	207			328564X	Furnished	236ZQAHX-*3 (8)	166	Opp	198				Furnished
236ZUAHX-*3 (8)	139	Opp	237			328564X	Furnished	236ZUAHX-*3 (8)	145	Opp	227				Furnished

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CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 100 series will not mount on the right side without an adapter gear due to output shaft interference with transmission housing.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

- (2) Filler block furnished with P.T.O.
 (8) Input Gear Part No. 5-P-1004
 (9) Input Gear Part No. 5-P-1242
 (10) Input Gear Part No. 5-P-1246
 (11) Input Gear Part No. 5-P-1322
 (12) Input Gear Part No. 5-P-285

- (13) Input Gear Part No. 5-P-325
 (14) Input Gear Part No. 5-P-283
 (15) Input Gear Part No. 5-P-721
 (16) Input Gear Part No. 5-P-1395
 (17) Input Gear Part No. 5-P-1100
 (18) Input Gear Part No. 5-P-1101

- (19) Input Gear Part No. 5-P-1135
 (20) Input Gear Part No. 5-P-1102
 (21) Input Gear Part No. 5-P-1103
 (22) Input Gear Part No. 5-P-1385
 (23) Input Gear Part No. 5-P-1104
 (24) Input Gear Part No. 5-P-1105

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F-6405B-DM3	RTAO-14710B-AC	RTAO-16710B-AS	RTO-12710B-AS2	RTO-14908LL	RTO-16908LL	RTX-12609P	RTX-14708LL
RTAO-10710B-AC	RTAO-14710B-AC	RTO-10710B-AS2	RTO-12910B-AS2	RTO-14910B-AS2	RTO-16910B-AS2	RTX-12609R	RTX-14710B
RTAO-10710B-AS	RTAO-14710B-AS	RTO-10910B-AS2	RTO-12910B-AS2	RTO-14910B-AS3	RTO-16910B-AS3	RTX-13710B	RTX-16710B
RTAO-12710B-AC	RTAO-16710B-AC	RTO-10910B-AS3	RTO-12910B-AS3	RTO-16710B	RTX-11609P	RTX-13710B	
RTAO-12710B-AS	RTAO-16710B-AC	RTO-11908LL	RTO-14710B-AS2	RTO-16710B-AS2	RTX-11609R	RTX-14609R	

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (17)	423	Opp	78				Furnished								
885XGAHX-*3 (19)	329	Opp	100				Furnished								
885XJAHX-*3 (20)	279	Opp	118				Furnished								
885XMAHX-*3 (21)	238	Opp	139				Furnished								

ONE SPEED - FORWARD & REVERSE

340SFAHX-*5 (25)	200	Opp	100	105	7-A-032(P) 7-A-140 (26)	310778X	Furnished	340XFAHX-*5 (25)	200	Opp	96	101	7-A-140 (2)		Furnished
352ZSAHX-*3 (8)	140	Opp	223	288		328564X	Furnished	352XSAHX-*3 (8)	140	Opp	213	276			Furnished
863XBAHX-*5	423	Opp	78	97			Furnished								

ONE SPEED - DUAL SHAFT

452ZSAHX-*3 (8)	140	Opp	223			328564X	Furnished	452XSAHX-*3 (8)	140	Opp	213				Furnished
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GEARED ADAPTERS

628XAHX-3AH					8-A-032		Furnished	626XAHX-3AH							Furnished
								630XAHX-3AH							Furnished
								645XAHX-3AH							Furnished

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CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 100 series will not mount on the right side without an adapter gear due to output shaft interference with transmission housing.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

(2) Filler block furnished with P.T.O.

(8) Input Gear Part No. 5-P-1004

(17) Input Gear Part No. 5-P-1100

(19) Input Gear Part No. 5-P-1135

(20) Input Gear Part No. 5-P-1102

(21) Input Gear Part No. 5-P-1103

(25) Input Gear Part No. 5-P-581

(26) Filler block furnished with P.T.O. but not required

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F-6405B-DM3	RTAO-14710B-AC	RTAO-16710B-AS	RTO-12710B-AS2	RTO-14908LL	RTO-16908LL	RTX-12609P	RTX-14708LL
RTAO-10710B-AC	RTAO-14710B-AC	RTO-10710B-AS2	RTO-12910B-AS2	RTO-14910B-AS2	RTO-16910B-AS2	RTX-12609R	RTX-14710B
RTAO-10710B-AS	RTAO-14710B-AS	RTO-10910B-AS2	RTO-12910B-AS2	RTO-14910B-AS3	RTO-16910B-AS3	RTX-13710B	RTX-16710B
RTAO-12710B-AC	RTAO-16710B-AC	RTO-10910B-AS3	RTO-12910B-AS3	RTO-16710B	RTX-11609P	RTX-13710B	
RTAO-12710B-AS	RTAO-16710B-AC	RTO-11908LL	RTO-14710B-AS2	RTO-16710B-AS2	RTX-11609R	RTX-14609R	

REAR SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

REAR -Bolt Opening Gear NON-STANDARD of Centerline

58 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.0000" (.0000MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

REAR Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

REAR MOUNT & THRUSHAFT

541-LAT	400	Eng	91				Furnished
541-LAU	400	Eng	91				Furnished
541-LBD	400	Eng	91				Furnished
541-MAT	350	Eng	117				Furnished
541-MAU	350	Eng	117				Furnished
541-MBD	350	Eng	117				Furnished
541-NAT	300	Eng	133				Furnished
541-NAU	300	Eng	133				Furnished
541-NBD	300	Eng	133				Furnished

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 100 series will not mount on the right side without an adapter gear due to output shaft interference with transmission housing.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

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FO-16D313E-LEP	RTAO-12710C-AS	RTLO-12913A	RTLO-14913-T2	RTLO-14918B-AS	RTLO-16913-T2	RTLO-16918A-AS3	RTLO-18913A
FOM-16D313E-LEP	RTAO-14710C-AC	RTLO-14713A	RTLO-14913A	RTLO-16713A	RTLO-16913A	RTLO-16918B	RTLO-18913A-T2
RTAO-10710C-AC	RTAO-14710C-AS	RTLO-14713A-T2	RTLO-14918A-AS2	RTLO-16713A-T2	RTLO-16913L-LHP	RTLO-16918B-AS	RTLO-18918A-AS2
RTAO-10710C-AS	RTAO-16710C-AS	RTLO-14718B	RTLO-14918A-AS3	RTLO-16718B	RTLO-16913LHS-D	RTLO-18718B	RTLO-18918B
RTAO-12710C-AC	RTLO-12713A	RTLO-14718B-T2	RTLO-14918B	RTLO-16718B-T2	RTLO-16918A-AS2	RTLO-18718B-T2	RTLO-18918B-AS

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - SINGLE GEAR - MECHANICAL SHIFT

100XRAHX-*3 (1) 125 Opp 148 7-A-2000(T) 329138X Furnished

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

442ZAAHX-*3 (4)	250	Opp	61		328564X	Furnished	221XCAHX-*3	250	Eng	66		7-A-032(P)(2)	329138X	Furnished
442ZCAHX-*3 (5)	250	Opp	78		328564X	Furnished	221XEAHX-*3	250	Eng	76			329138X	Furnished
442ZFAHX-*3 (6)	250	Opp	96		328564X	Furnished	221XLAHX-*3	200	Eng	102			329138X	Furnished
442ZHAHX-*3 (7)	250	Opp	111		328564X	Furnished	221XPAHX-*3	200	Eng	124			329138X	Furnished
442ZLAHX-*3 (8)	222	Opp	124		328564X	Furnished	442XAAHX-*3 (4)	250	Opp	58				Furnished
442ZQAHX-*3 (8)	206	Opp	134		328564X	Furnished	442XBAHX-*3 (3)	250	Eng	58		REQUIRED		Furnished
442ZRAHX-*3 (8)	178	Opp	155		328564X	Furnished	442XCAHX-*3 (5)	250	Opp	74				Furnished
442ZSAHX-*3 (8)	150	Opp	184		328564X	Furnished	442XFAHX-*3 (6)	250	Opp	92				Furnished
489XAAHX-*3 (4)	250	Opp	61			Furnished	442XHAHX-*3 (7)	250	Opp	107				Furnished
489XCAHX-*3 (5)	250	Opp	78			Furnished	442XLAHX-*3 (8)	233	Opp	119				Furnished
489XFAHX-*3 (6)	250	Opp	96			Furnished	442XQAHX-*3 (8)	216	Opp	128				Furnished
489XHAHX-*3 (7)	250	Opp	111			Furnished	442XRAHX-*3 (8)	187	Opp	148				Furnished
489XLAHX-*3 (8)	222	Opp	124			Furnished	660XFAHX-*3 (9)	301	Opp	92				Furnished
489XQAHX-*3 (8)	206	Opp	134			Furnished	660XQAHX-*3 (10)	216	Opp	128				Furnished
489XRAHX-*3 (8)	178	Opp	155			Furnished								
489XSAHX-*3 (8)	150	Opp	184			Furnished								
680XFAHX-*3 (9)	288	Opp	96			Furnished								
680XQAHX-*3 (10)	206	Opp	134			Furnished								
680XSAHX-*3 (11)	150	Opp	184			Furnished								
823XBAHX-*3 (12)	423	Opp	65			Furnished								
823XJAHX-*3 (13)	279	Opp	99			Furnished								
823XMAHX-*3 (14)	238	Opp	116			Furnished								
823XRAHX-*3 (15)	172	Opp	160			Furnished								
823XTKX-*3 (16)	142	Opp	194	8-A-165(T)(2)		Furnished								
880XBAHX-*3 (17)	423	Opp	65			Furnished								
880XDAHX-*3 (18)	357	Opp	77			Furnished								

Continued Next Page

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 880 Series "T" ratio will interfere with the adjacent gear in the transmission on the bottom opening.

NOTE: The 442 and 489 Series ratios "U", "W", & "X" will interfere with the adjacent gear in the transmission on the bottom opening.

NOTE: The 442 Series ratios "S", "U", "W" and "X" will interfere with the adjacent gear in the transmission on the right opening.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

- (1) Gear and Shaft Kit No. KXA-2-P-565
 (2) Filler block furnished with P.T.O.
 (3) Input Gear Part No. 5-P-1418
 (4) Input Gear Part No. 5-P-1280
 (5) Input Gear Part No. 5-P-1287
 (6) Input Gear Part No. 5-P-1077

- (7) Input Gear Part No. 5-P-1364
 (8) Input Gear Part No. 5-P-1004
 (9) Input Gear Part No. 5-P-1242
 (10) Input Gear Part No. 5-P-1246
 (11) Input Gear Part No. 5-P-1322
 (12) Input Gear Part No. 5-P-285

- (13) Input Gear Part No. 5-P-325
 (14) Input Gear Part No. 5-P-283
 (15) Input Gear Part No. 5-P-721
 (16) Input Gear Part No. 5-P-1395
 (17) Input Gear Part No. 5-P-1100
 (18) Input Gear Part No. 5-P-1101

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FO-16D313E-LEP	RTAO-12710C-AS	RTLO-12913A	RTLO-14913-T2	RTLO-14918B-AS	RTLO-16913-T2	RTLO-16918A-AS3	RTLO-18913A
FOM-16D313E-LEP	RTAO-14710C-AC	RTLO-14713A	RTLO-14913A	RTLO-16713A	RTLO-16913A	RTLO-16918B	RTLO-18913A-T2
RTAO-10710C-AC	RTAO-14710C-AS	RTLO-14713A-T2	RTLO-14918A-AS2	RTLO-16713A-T2	RTLO-16913L-LHP	RTLO-16918B-AS	RTLO-18918A-AS2
RTAO-10710C-AS	RTAO-16710C-AS	RTLO-14718B	RTLO-14918A-AS3	RTLO-16718B	RTLO-16913LHS-D	RTLO-18718B	RTLO-18918B
RTAO-12710C-AC	RTLO-12713A	RTLO-14718B-T2	RTLO-14918B	RTLO-16718B-T2	RTLO-16918A-AS2	RTLO-18718B-T2	RTLO-18918B-AS

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

880XGAHX-*3 (19)	329	Opp	84				Furnished								
880XJAHX-*3 (20)	279	Opp	99				Furnished								
880XMAHX-*3 (21)	238	Opp	116				Furnished								
880XQAHX-*3 (22)	203	Opp	136				Furnished								
880XRAHX-*3 (23)	172	Opp	160				Furnished								

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

230XAAJX-*3	250	Opp	50			328481X	Furnished	230XAAJX-*3	250	Opp	48				Furnished
230XBAJX-*3	250	Opp	66			328481X	Furnished	230XBAJX-*3	250	Opp	63				Furnished
230XDAJX-*3	250	Opp	76			328481X	Furnished	230XDAJX-*3	250	Opp	73				Furnished
230XKAJX-*3	250	Opp	103			328481X	Furnished	230XKAJX-*3	250	Opp	98				Furnished
230XQAJX-*3	203	Opp	136			328481X	Furnished	230XQAJX-*3	212	Opp	131				Furnished
230XUAJX-*3 (24)	126	Opp	218			328481X	Furnished	230XUAJX-*3 (24)	132	Opp	210				Furnished
236ZDAHx-*3 (8)	250	Opp	100			328564X	Furnished	236ZDAHx-*3 (8)	250	Opp	96				Furnished
236ZKAHX-*3 (8)	215	Opp	129			328564X	Furnished	236ZKAHX-*3 (8)	224	Opp	123				Furnished
885XBAHX-*3 (17)	423	Opp	65				Furnished								
885XGAHX-*3 (19)	329	Opp	84				Furnished								
885XJAHX-*3 (20)	279	Opp	99				Furnished								
885XMAHX-*3 (21)	238	Opp	116				Furnished								

ONE SPEED - FORWARD & REVERSE

340SFAHX-*5 (25)	200	Opp	84	88	7-A-032(P) 7-A-140 (26)	310778X	7170-1X	340XFAHX-*5 (25)	200	Opp	80	84	7-A-140 (2)		Furnished
352ZSAHX-*3 (8)	140	Opp	187	241		328564X	Furnished	352ZSAHX-*3 (8)	140	Opp	179	231			Furnished
863XBAHX-*5	423	Opp	65	81			Furnished								

Continued Next Page

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 880 Series "T" ratio will interfere with the adjacent gear in the transmission on the bottom opening.

NOTE: The 442 and 489 Series ratios "U", "W", and "X" will interfere with the adjacent gear in the transmission on the bottom opening.

NOTE: The 442 Series ratios "S", "U", "W" and "X" will interfere with the adjacent gear in the transmission on the right opening.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

(2) Filler block furnished with P.T.O.
(8) Input Gear Part No. 5-P-1004
(17) Input Gear Part No. 5-P-1100
(19) Input Gear Part No. 5-P-1135
(20) Input Gear Part No. 5-P-1102
(21) Input Gear Part No. 5-P-1103

(22) Input Gear Part No. 5-P-1385
(23) Input Gear Part No. 5-P-1104
(24) Input Gear Part No. 5-P-1144
(25) Input Gear Part No. 5-P-581
(26) Filler block furnished with P.T.O. but not required

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FO-16D313E-LEP	RTAO-12710C-AS	RTLO-12913A	RTLO-14913-T2	RTLO-14918B-AS	RTLO-16913-T2	RTLO-16918A-AS3	RTLO-18913A
FOM-16D313E-LEP	RTAO-14710C-AC	RTLO-14713A	RTLO-14913A	RTLO-16713A	RTLO-16913A	RTLO-16918B	RTLO-18913A-T2
RTAO-10710C-AC	RTAO-14710C-AS	RTLO-14713A-T2	RTLO-14918A-AS2	RTLO-16713A-T2	RTLO-16913L-LHP	RTLO-16918B-AS	RTLO-18918A-AS2
RTAO-10710C-AS	RTAO-16710C-AS	RTLO-14718B	RTLO-14918A-AS3	RTLO-16718B	RTLO-16913LHS-D	RTLO-18718B	RTLO-18918B
RTAO-12710C-AC	RTLO-12713A	RTLO-14718B-T2	RTLO-14918B	RTLO-16718B-T2	RTLO-16918A-AS2	RTLO-18718B-T2	RTLO-18918B-AS

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - DUAL SHAFT

452ZSAHX-*3 (8)	140	Opp	187			328564X	Furnished	452XSAHX-*3 (8)	140	Opp	179				Furnished
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GEARED ADAPTERS

628XAHX-3AH					8-A-032	Furnished	626XAHX-3AH								Furnished
							630XAHX-3AH								Furnished
							645XAHX-3AH								Furnished

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CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 880 Series "T" ratio will interfere with the adjacent gear in the transmission on the bottom opening.

NOTE: The 442 and 489 Series ratios "U", "W", & "X" will interfere with the adjacent gear in the transmission on the bottom opening.

NOTE: The 442 Series ratios "S", "U", "W" and "X" will interfere with the adjacent gear in the transmission on the right opening.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

(8) Input Gear Part No. 5-P-1004

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FO-16D313E-LEP	RTAO-12710C-AS	RTLO-12913A	RTLO-14913-T2	RTLO-14918B-AS	RTLO-16913-T2	RTLO-16918A-AS3	RTLO-18913A
FOM-16D313E-LEP	RTAO-14710C-AC	RTLO-14713A	RTLO-14913A	RTLO-16713A	RTLO-16913A	RTLO-16918B	RTLO-18913A-T2
RTAO-10710C-AC	RTAO-14710C-AS	RTLO-14713A-T2	RTLO-14918A-AS2	RTLO-16713A-T2	RTLO-16913L-LHP	RTLO-16918B-AS	RTLO-18918A-AS2
RTAO-10710C-AS	RTAO-16710C-AS	RTLO-14718B	RTLO-14918A-AS3	RTLO-16718B	RTLO-16913LHS-D	RTLO-18718B	RTLO-18918B
RTAO-12710C-AC	RTLO-12713A	RTLO-14718B-T2	RTLO-14918B	RTLO-16718B-T2	RTLO-16918A-AS2	RTLO-18718B-T2	RTLO-18918B-AS

REAR SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

REAR -Bolt Opening Gear NON-STANDARD of Centerline

52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

0" (0MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

REAR Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

REAR MOUNT & THRUSHAFT

541-LAT	400	Eng	76				Furnished
541-LAU	400	Eng	76				Furnished
541-MAT	350	Eng	98				Furnished
541-MAU	350	Eng	98				Furnished
541-NAT	300	Eng	112				Furnished
541-NAU	300	Eng	112				Furnished

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 880 Series "T" ratio will interfere with the adjacent gear in the transmission on the bottom opening.

NOTE: The 442 and 489 Series ratios "U", "W", & "X" will interfere with the adjacent gear in the transmission on the bottom opening.

NOTE: The 442 Series ratios "S", "U", "W" and "X" will interfere with the adjacent gear in the transmission on the right opening.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

RTO-14915
RTO-16915
RTX-14715
RTX-15715

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.5700MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - SINGLE GEAR - MECHANICAL SHIFT

100XRAHX-*3 (1)	125	Eng	174			328481X	Furnished	100XRAHX-*3 (1)	125	Eng	166				Furnished
812XKAHX-*3	268	Eng	116				Furnished								

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250	Opp	77		7-A-032(P)(2)	328564X	Furnished	221XCAHX-*3	250	Opp	74		7-A-032 (2)		Furnished
221ZEAHX-*3	250	Opp	89			328564X	Furnished	221XEAHX-*3	250	Opp	86				Furnished
221ZLAHX-*3	200	Opp	120			328564X	Furnished	221XLAHX-*3	200	Opp	115				Furnished
221ZPAHX-*3	200	Opp	145			328564X	Furnished	221XPAHX-*3	200	Opp	139				Furnished
442ZAAHX-*3 (4)	250	Opp	68			328564X	Furnished	442XAAHX-*3 (4)	250	Opp	65				Furnished
442ZCAHX-*3 (5)	250	Opp	87			328564X	Furnished	442XBAHX-*3 (3)	250	Eng	65		REQUIRED		Furnished
442ZFAHX-*3 (6)	250	Opp	108			328564X	Furnished	442XCAHX-*3 (5)	250	Opp	83				Furnished
442ZHAHX-*3 (7)	250	Opp	125			328564X	Furnished	442XFAHX-*3 (6)	250	Opp	103				Furnished
442ZLAHX-*3 (8)	222	Opp	139			328564X	Furnished	442XHAHX-*3 (7)	250	Opp	119				Furnished
442ZQAHX-*3 (8)	206	Opp	150			328564X	Furnished	442XLAHX-*3 (8)	233	Opp	134				Furnished
442ZRAHX-*3 (8)	178	Opp	174			328564X	Furnished	442XQAHX-*3 (8)	216	Opp	144				Furnished
442ZSAHX-*3 (8)	150	Opp	207			328564X	Furnished	442XRAHX-*3 (8)	187	Opp	166				Furnished
442ZUAHX-*3 (8)	126	Opp	247			328564X	Furnished	442XSAHX-*3 (8)	156	Opp	198				Furnished
442ZWAHX-*3 (8)	107	Opp	290			328564X	Furnished	442XUAHX-*3 (8)	132	Opp	236				Furnished
442ZXAHX-*3 (8)	91	Opp	343			328564X	Furnished	442XWAHX-*3 (8)	112	Opp	278				Furnished
489XAAHX-*3 (4)	250	Opp	68				Furnished	442XXAHX-*3 (8)	94	Opp	329				Furnished
489XCAHX-*3 (5)	250	Opp	87				Furnished	660XFAHX-*3 (9)	301	Opp	103				Furnished
489XFAHX-*3 (6)	250	Opp	108				Furnished	660XQAHX-*3 (10)	216	Opp	144				Furnished
489XHAHX-*3 (7)	250	Opp	125				Furnished	660XSAHX-*3 (11)	156	Opp	198				Furnished
489XLAHX-*3 (8)	222	Opp	139				Furnished								
489XQAHX-*3 (8)	206	Opp	150				Furnished								
489XRAHX-*3 (8)	178	Opp	174				Furnished								
489XSAHX-*3 (8)	150	Opp	207				Furnished								
489XUAHX-*3 (8)	126	Opp	247				Furnished								
489XWAHX-*3 (8)	107	Opp	290				Furnished								

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CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. Torque Limit Chart in the front section of this catalog for complete torque limit information.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

(1) Gear and Shaft Kit No. KXA-2-P-565
(2) Filler block furnished with P.T.O.
(3) Input Gear Part No. 5-P-1418
(4) Input Gear Part No. 5-P-1280
(5) Input Gear Part No. 5-P-1287
(6) Input Gear Part No. 5-P-1077

(7) Input Gear Part No. 5-P-1364
(8) Input Gear Part No. 5-P-1004
(9) Input Gear Part No. 5-P-1242
(10) Input Gear Part No. 5-P-1246
(11) Input Gear Part No. 5-P-1322

January 2008

RTO-14915
RTO-16915
RTX-14715
RTX-15715

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.5700MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489XXAHX-*3 (8)	91	Opp	343					Furnished							
680XFAHX-*3 (9)	288	Opp	108					Furnished							
680XQAHX-*3 (10)	206	Opp	150					Furnished							
680XSAHX-*3 (11)	150	Opp	207					Furnished							
823XBAHX-*3 (12)	423	Opp	73					Furnished							
823XJAHX-*3 (13)	279	Opp	111					Furnished							
823XMAHX-*3 (14)	238	Opp	130					Furnished							
823XRAHX-*3 (15)	172	Opp	180					Furnished							
823XTKTX-*3 (16)	142	Opp	218		8-A-165 (2)			Furnished							
880XBAHX-*3 (17)	423	Opp	73					Furnished							
880XDAHX-*3 (18)	357	Opp	87					Furnished							
880XGAHX-*3 (19)	329	Opp	94					Furnished							
880XJAHX-*3 (20)	279	Opp	111					Furnished							
880XMAHX-*3 (21)	238	Opp	130					Furnished							
880XQAHX-*3 (22)	203	Opp	153					Furnished							
880XRAHX-*3 (23)	172	Opp	180					Furnished							
880XTAHX-*3 (24)	134	Opp	232					Furnished							

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

230XAAJX-*3	250	Opp	57			328481X	Furnished	230XAAJX-*3	250	Opp	54				Furnished
230XBAJX-*3	250	Opp	74			328481X	Furnished	230XBAJX-*3	250	Opp	71				Furnished
230XDAJX-*3	250	Opp	85			328481X	Furnished	230XDAJX-*3	250	Opp	82				Furnished
230XKAJX-*3	250	Opp	115			328481X	Furnished	230XKAJX-*3	250	Opp	110				Furnished
230XQAJX-*3	203	Opp	153			328481X	Furnished	230XQAJX-*3	212	Opp	147				Furnished
230XUAJX-*3	126	Opp	246			328481X	Furnished	230XUAJX-*3	132	Opp	235				Furnished
236ZDAHX-*3 (8)	250	Opp	113			328564X	Furnished	236ZDAHX-*3 (8)	250	Opp	109				Furnished
236ZKAHX-*3 (8)	215	Opp	145			328564X	Furnished	236ZKAHX-*3 (8)	224	Opp	138				Furnished
236ZQAHX-*3 (8)	160	Opp	195			328564X	Furnished	236ZQAHX-*3 (8)	166	Opp	187				Furnished
236ZUAHX-*3 (8)	139	Opp	223			328564X	Furnished	236ZUAHX-*3 (8)	145	Opp	214				Furnished

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CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. Torque Limit Chart in the front section of this catalog for complete torque limit information.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

(2) Filler block furnished with P.T.O.
(8) Input Gear Part No. 5-P-1004
(9) Input Gear Part No. 5-P-1242
(10) Input Gear Part No. 5-P-1246
(11) Input Gear Part No. 5-P-1322
(12) Input Gear Part No. 5-P-285

(13) Input Gear Part No. 5-P-325
(14) Input Gear Part No. 5-P-283
(15) Input Gear Part No. 5-P-721
(16) Input Gear Part No. 5-P-1395
(17) Input Gear Part No. 5-P-1100
(18) Input Gear Part No. 5-P-1101

(19) Input Gear Part No. 5-P-1135
(20) Input Gear Part No. 5-P-1102
(21) Input Gear Part No. 5-P-1103
(22) Input Gear Part No. 5-P-1385
(23) Input Gear Part No. 5-P-1104
(24) Input Gear Part No. 5-P-1105

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RTO-14915
RTO-16915
RTX-14715
RTX-15715

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.5700MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (17)	423	Opp	73				Furnished								
885XGAHX-*3 (19)	329	Opp	94				Furnished								
885XJAHX-*3 (20)	279	Opp	111				Furnished								
885XMAHX-*3 (21)	238	Opp	130				Furnished								

ONE SPEED - FORWARD & REVERSE

340SFAHX-*5 (25)	200	Opp	94	99	7-A-032(P) 7-A-140 (26)	310778X	Furnished	340XFAHX-*5 (25)	200	Opp	90	95	7-A-140 (2)		Furnished
352ZSAHX-*3 (8)	140	Opp	210	271		328564X	Furnished	352XSAHX-*3 (8)	140	Opp	201	260			Furnished
863XBAHX-*5	423	Opp	73	91			Furnished								

ONE SPEED - DUAL SHAFT

452ZSAHX-*3 (8)	140	Opp	210			328564X	Furnished								
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GEARED ADAPTERS

628XAHX-3AH					8-A-032		Furnished	626XAHX-3AH 630XAHX-3AH 645XAHX-3AH							Furnished Furnished Furnished
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CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. Torque Limit Chart in the front section of this catalog for complete torque limit information.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

(2) Filler block furnished with P.T.O.
(8) Input Gear Part No. 5-P-1004
(17) Input Gear Part No. 5-P-1100
(19) Input Gear Part No. 5-P-1135
(20) Input Gear Part No. 5-P-1102
(21) Input Gear Part No. 5-P-1103

(25) Input Gear Part No. 5-P-581
(26) Filler block furnished with P.T.O. but not required

January 2008

RTO-14915
RTO-16915
RTX-14715
RTX-15715

REAR SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

REAR -Bolt Opening Gear NON-STANDARD of Centerline

54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.0000" (.0000MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

REAR Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

REAR MOUNT & THRUSHAFT

541-LBD	400	Eng	86				Furnished
541-MBD	350	Eng	111				Furnished
541-NBD	300	Eng	126				Furnished

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. Torque Limit Chart in the front section of this catalog for complete torque limit information.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

AT-1202

BOTTOM SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 6-Bolt Opening Gear FORWARD of Centerline

30 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0500" (26.6700MM)

TRANSMISSION GEAR DATA:

TOP 8-Bolt Opening Gear FORWARD of Centerline

30 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.7750" (19.6900MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	TOP Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - SINGLE GEAR - MECHANICAL SHIFT

100XRABX-*3 (1)	125	Eng	140		7-A-032		Furnished	100XRABX-*3 (1)	125	Eng	140		7-A-032(P)	328481X	Furnished
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ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221XCABX-*3	250	Opp	64		7-A-032		Furnished	221ZCABX-*5	250	Opp	64		7-A-032(P)	328564X	Furnished
221XEABX-*3	250	Opp	71		7-A-032		Furnished	221ZEABX-*5	250	Opp	71		7-A-032(P)	328564X	Furnished
221XLABX-*3	200	Opp	96		7-A-032		Furnished	221ZLABX-*5	200	Opp	96		7-A-032(P)	328564X	Furnished
221XPABX-*3	200	Opp	116		7-A-032		Furnished	221ZPABX-*5	200	Opp	116		7-A-032(P)	328564X	Furnished
442XAABX-*3 (2)	250	Opp	53		7-A-032		Furnished	442ZAABX-*5 (2)	250	Opp	53		7-A-032(P)	328564X	Furnished
442XCABX-*3 (3)	250	Opp	68		7-A-032		Furnished	442ZCABX-*5 (3)	250	Opp	68		7-A-032(P)	328564X	Furnished
442XFABX-*3 (4)	250	Opp	84		7-A-032		Furnished	442ZFABX-*5 (4)	250	Opp	84		7-A-032(P)	328564X	Furnished
442XLABX-*3 (5)	250	Opp	108		7-A-032		Furnished	442ZLABX-*5 (5)	250	Opp	108		7-A-032(P)	328564X	Furnished
442XQABX-*3 (5)	225	Opp	117		7-A-032		Furnished	442ZQABX-*5 (5)	225	Opp	117		7-A-032(P)	328564X	Furnished
442XRABX-*3 (5)	225	Opp	135		7-A-032		Furnished	442ZRABX-*5 (5)	225	Opp	135		7-A-032(P)	328564X	Furnished
442XSABX-*3 (5)	200	Opp	161		7-A-032		Furnished	442ZSABX-*5 (5)	200	Opp	161		7-A-032(P)	328564X	Furnished
442XUABX-*3 (5)	195	Opp	192		7-A-032		Furnished	442ZUABX-*5 (5)	195	Opp	192		7-A-032(P)	328564X	Furnished
442XWABX-*3 (5)	175	Opp	225		7-A-032		Furnished	442ZWABX-*5 (5)	175	Opp	225		7-A-032(P)	328564X	Furnished
442XXABX-*3 (5)	140	Opp	267		7-A-032		Furnished	442ZXABX-*5 (5)	140	Opp	267		7-A-032(P)	328564X	Furnished
								489XAABX-*5 (2)	250	Opp	53				Furnished
								489XCABX-*5 (3)	250	Opp	68				Furnished
								489XFABX-*5 (4)	250	Opp	84				Furnished
								489XLABX-*5 (5)	250	Opp	108				Furnished
								489XQABX-*5 (5)	225	Opp	117				Furnished
								489XRABX-*5 (5)	225	Opp	135				Furnished
								489XSABX-*5 (5)	200	Opp	161				Furnished
								489XUABX-*5 (5)	195	Opp	192				Furnished
								489XWABX-*5 (5)	175	Opp	225				Furnished
								489XXABX-*5 (5)	140	Opp	267				Furnished
								880XBABX-*5 (6)	500	Opp	58				Furnished

Continued Next Page

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O. due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

- (1) Gear and Shaft Kit No. KXA-2-P-563
 (2) Input Gear Part No. 5-P-1279
 (3) Input Gear Part No. 5-P-1286
 (4) Input Gear Part No. 5-P-1076
 (5) Input Gear Part No. 5-P-1001
 (6) Input Gear Part No. 5-P-1099

January 2008

AT-1202

BOTTOM SIDE ONLY

TOP SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 6-Bolt Opening Gear FORWARD of Centerline

30 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0500" (26.6700MM)

TRANSMISSION GEAR DATA:

TOP 8-Bolt Opening Gear FORWARD of Centerline

30 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.7750" (19.6900MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	TOP Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

236XDABX-*3 (5)	250	Opp	88		7-A-032		Furnished	236ZDABX-*5 (5)	250	Opp	88		7-A-032(P)	328564X	Furnished
236XKABX-*3 (5)	250	Opp	112		7-A-032		Furnished	236ZKABX-*5 (5)	250	Opp	112		7-A-032(P)	328564X	Furnished
236XQABX-*3 (5)	250	Opp	151		7-A-032		Furnished	236ZQABX-*5 (5)	250	Opp	151		7-A-032(P)	328564X	Furnished
236XUABX-*3 (5)	225	Opp	174		7-A-032		Furnished	236ZUABX-*5 (5)	225	Opp	174		7-A-032(P)	328564X	Furnished

ONE SPEED - FORWARD & REVERSE

340XFABX-*5 (7)	200	Opp	76	80	7-A-140 (8)		Furnished	340SFABX-*5 (7)	200	Opp	76	80	7-A-032(P)	310778X	Furnished
352XSABX-*3 (5)	140	Opp	163	211	7-A-032		Furnished	352ZSABX-*5 (5)	140	Opp	163	211	7-A-032(P)	328564X	Furnished
								863XBABX-*5	500	Opp	58	72			Furnished

ONE SPEED - DUAL SHAFT

452XSABX-*3 (5)	140	Opp	163		7-A-032		Furnished	452ZSABX-*3 (5)	140	Opp	163		7-A-032(P)	328564X	Furnished
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GEARED ADAPTERS

626XABX-3AB					7-A-032		Furnished	628XABX-3AB							Furnished
630XABX-3AB					7-A-032		Furnished								
645XABX-3AB					7-A-032		Furnished								

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O. due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

(5) Input Gear Part No. 5-P-1001

(7) Input Gear Part No. 5-P-579

(8) Filler block furnished with P.T.O.

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RT-8608L

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - SINGLE GEAR - MECHANICAL SHIFT

100XRAHX-*3 (1)	125	Eng	113			328481X	Furnished	100XRAHX-*3 (1)	125	Opp	108			329138X	Furnished
812XKAHX-*3	268	Eng	75				Furnished								

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221ZCAHX-*3	250	Opp	50		7-A-032(P)(2)	328564X	Furnished	221XCAHX-*3	250	Opp	48		7-A-032 (2)		Furnished
221ZEAHX-*3	250	Opp	58			328564X	Furnished	221XEAHX-*3	250	Opp	56				Furnished
221ZLAHX-*3	200	Opp	78			328564X	Furnished	221XLAHX-*3	200	Opp	75				Furnished
221ZPAHX-*3	200	Opp	94			328564X	Furnished	221XPAHX-*3	200	Opp	90				Furnished
442ZAAHX-*3 (4)	250	Opp	44			328564X	Furnished	442XAAHX-*3 (4)	250	Opp	42				Furnished
442ZCAHX-*3 (5)	250	Opp	57			328564X	Furnished	442XBAHX-*3 (3)	250	Eng	42		REQUIRED		Furnished
442ZFAHX-*3 (6)	250	Opp	70			328564X	Furnished	442XCAHX-*3 (5)	250	Opp	54				Furnished
442ZHAHX-*3 (7)	250	Opp	81			328564X	Furnished	442XFAHX-*3 (6)	250	Opp	67				Furnished
442ZLAHX-*3 (8)	222	Opp	91			328564X	Furnished	442XHAHX-*3 (7)	250	Opp	78				Furnished
442ZQAHX-*3 (8)	206	Opp	98			328564X	Furnished	442XLAHX-*3 (8)	233	Opp	87				Furnished
442ZRAHX-*3 (8)	178	Opp	113			328564X	Furnished	442XQAHX-*3 (8)	216	Opp	94				Furnished
442ZSAHX-*3 (8)	150	Opp	135			328564X	Furnished	442XRAHX-*3 (8)	187	Opp	108				Furnished
442ZUAHX-*3 (8)	126	Opp	161			328564X	Furnished	442XSAHX-*3 (8)	156	Opp	129				Furnished
442ZWAHX-*3 (8)	107	Opp	189			328564X	Furnished	442XUAHX-*3 (8)	132	Opp	154				Furnished
442ZXAHX-*3 (8)	91	Opp	223			328564X	Furnished	442XWAHX-*3 (8)	112	Opp	181				Furnished
489XAAHX-*3 (4)	250	Opp	44				Furnished	442XXAHX-*3 (8)	94	Opp	214				Furnished
489XCAHX-*3 (5)	250	Opp	57				Furnished	660XFAHX-*3 (9)	301	Opp	67				Furnished
489XFAHX-*3 (6)	250	Opp	70				Furnished	660XQAHX-*3 (10)	216	Opp	94				Furnished
489XHAHX-*3 (7)	250	Opp	81				Furnished	660XSAHX-*3 (11)	156	Opp	129				Furnished
489XLAHX-*3 (8)	222	Opp	91				Furnished								
489XQAHX-*3 (8)	206	Opp	98				Furnished								
489XRAHX-*3 (8)	178	Opp	113				Furnished								
489XSAHX-*3 (8)	150	Opp	135				Furnished								
489XUAHX-*3 (8)	126	Opp	161				Furnished								
489XWAHX-*3 (8)	107	Opp	189				Furnished								

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CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 100 series will not mount on the right side without an adapter gear due to output shaft interference with transmission housing.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

- (1) Gear and Shaft Kit No. KXA-2-P-565
 (2) Filler block furnished with P.T.O.
 (3) Input Gear Part No. 5-P-1418
 (4) Input Gear Part No. 5-P-1280
 (5) Input Gear Part No. 5-P-1287
 (6) Input Gear Part No. 5-P-1077

- (7) Input Gear Part No. 5-P-1364
 (8) Input Gear Part No. 5-P-1004
 (9) Input Gear Part No. 5-P-1242
 (10) Input Gear Part No. 5-P-1246
 (11) Input Gear Part No. 5-P-1322

January 2008

RT-8608L

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

489XXAHX-*3 (8)	91	Opp	223					Furnished							
680XFAHX-*3 (9)	288	Opp	70					Furnished							
680XQAHX-*3 (10)	206	Opp	98					Furnished							
680XSAHX-*3 (11)	150	Opp	135					Furnished							
823XBAHX-*3 (12)	423	Opp	48					Furnished							
823XJAHX-*3 (13)	279	Opp	72					Furnished							
823XMAHX-*3 (14)	238	Opp	85					Furnished							
823XRAHX-*3 (15)	172	Opp	117					Furnished							
823XTKTX-*3 (16)	142	Opp	142		8-A-165 (2)			Furnished							
880XBAHX-*3 (17)	423	Opp	48					Furnished							
880XDAHX-*3 (18)	357	Opp	57					Furnished							
880XGAHX-*3 (19)	329	Opp	61					Furnished							
880XJAHX-*3 (20)	279	Opp	72					Furnished							
880XMAHX-*3 (21)	238	Opp	85					Furnished							
880XQAHX-*3 (22)	203	Opp	99					Furnished							
880XRAHX-*3 (23)	172	Opp	117					Furnished							
880XTAHX-*3 (24)	134	Opp	151					Furnished							

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

230XAAJX-*3	250	Opp	37			328481X	Furnished	230XAAJX-*3	250	Opp	35				Furnished
230XBAJX-*3	250	Opp	48			328481X	Furnished	230XBAJX-*3	250	Opp	46				Furnished
230XDAJX-*3	250	Opp	55			328481X	Furnished	230XDAJX-*3	250	Opp	53				Furnished
230XKAJX-*3	250	Opp	75			328481X	Furnished	230XKAJX-*3	250	Opp	72				Furnished
230XQAJX-*3	203	Opp	100			328481X	Furnished	230XQAJX-*3	212	Opp	96				Furnished
230XUAJX-*3	126	Opp	160			328481X	Furnished	230XUAJX-*3	132	Opp	153				Furnished
236ZDAHX-*3 (8)	250	Opp	74			328564X	Furnished	236ZDAHX-*3 (8)	250	Opp	70				Furnished
236ZKAHX-*3 (8)	215	Opp	94			328564X	Furnished	236ZKAHX-*3 (8)	224	Opp	90				Furnished
236ZQAHX-*3 (8)	160	Opp	127			328564X	Furnished	236ZQAHX-*3 (8)	166	Opp	122				Furnished
236ZUAHX-*3 (8)	139	Opp	145			328564X	Furnished	236ZUAHX-*3 (8)	145	Opp	139				Furnished

Continued Next Page

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 100 series will not mount on the right side without an adapter gear due to output shaft interference with transmission housing.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

(2) Filler block furnished with P.T.O.
(8) Input Gear Part No. 5-P-1004
(9) Input Gear Part No. 5-P-1242
(10) Input Gear Part No. 5-P-1246
(11) Input Gear Part No. 5-P-1322
(12) Input Gear Part No. 5-P-285

(13) Input Gear Part No. 5-P-325
(14) Input Gear Part No. 5-P-283
(15) Input Gear Part No. 5-P-721
(16) Input Gear Part No. 5-P-1395
(17) Input Gear Part No. 5-P-1100
(18) Input Gear Part No. 5-P-1101

(19) Input Gear Part No. 5-P-1135
(20) Input Gear Part No. 5-P-1102
(21) Input Gear Part No. 5-P-1103
(22) Input Gear Part No. 5-P-1385
(23) Input Gear Part No. 5-P-1104
(24) Input Gear Part No. 5-P-1105

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RT-8608L

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8050" (20.4500MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0850" (27.5600MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - TWO GEAR - POWERSHIFT (AIR)

885XBAHX-*3 (17)	423	Opp	48				Furnished								
885XGAHX-*3 (19)	329	Opp	61				Furnished								
885XJAHX-*3 (20)	279	Opp	72				Furnished								
885XMAHX-*3 (21)	238	Opp	85				Furnished								

ONE SPEED - FORWARD & REVERSE

340SFAHX-*5 (25)	200	Opp	61	64	7-A-032(P) 7-A-140 (26)	310778X	Furnished	340XFAHX-*5 (25)	200	Opp	59	62	7-A-140 (2)		Furnished
352ZSAHX-*3 (8)	140	Opp	136	177		328564X	Furnished	352XSAHX-*3 (8)	140	Opp	131	169			Furnished
863XBAHX-*5	423	Opp	48	59			Furnished								

ONE SPEED - DUAL SHAFT

452ZSAHX-*3 (8)	140	Opp	136			328564X	Furnished	452XSAHX-*3 (8)	140	Opp	131				Furnished
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GEARED ADAPTERS

628XAHX-3AH					8-A-032		Furnished	626XAHX-3AH							Furnished
								630XAHX-3AH							Furnished
								645XAHX-3AH							Furnished

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission P.T.O. 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 500 Ft-lbs [678 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 P.T.O. Drive Gear. Refer to the Chelsea P.T.O. 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.

CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

NOTE: The 100 series will not mount on the right side without an adapter gear due to output shaft interference with transmission housing.

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: The 422XBAH 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.

(2) Filler block furnished with P.T.O.
(8) Input Gear Part No. 5-P-1004
(17) Input Gear Part No. 5-P-1100
(19) Input Gear Part No. 5-P-1135
(20) Input Gear Part No. 5-P-1102
(21) Input Gear Part No. 5-P-1103

(25) Input Gear Part No. 5-P-581
(26) Filler block furnished with P.T.O. but not required

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RT-6609A
RT-7608LL
RT-8609

BOTTOM SIDE ONLY

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:

BOT 8-Bolt Opening Gear FORWARD of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

.8100" (20.5700MM)

TRANSMISSION GEAR DATA:

R.H. 6-Bolt Opening Gear FORWARD of Centerline

33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:

1.0900" (27.6900MM)

Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.

BOTTOM Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	RIGHT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

ONE SPEED - SINGLE GEAR - MECHANICAL SHIFT

100XRAHX-*3 (1)	125	Eng	99		328481X	Furnished		100XRAHX-*3 (1)	125	Eng	99				Furnished
812XKAHX-*3	400	Eng	66			Furnished									

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

221XCAHX-*3	250	Opp	44	7-A-032(P)(2)	328481X	Furnished		221XCAHX-*3	250	Opp	44	7-A-032 (2)			Furnished
221XEAHX-*3	250	Opp	51	7-A-032(P)	328481X	Furnished		221XEAHX-*3	250	Opp	51				Furnished
221XLAHX-*3	200	Opp	68	7-A-032(P)	328481X	Furnished		221XLAHX-*3	200	Opp	68				Furnished
221XPAHX-*3	200	Opp	83	7-A-032(P)	328481X	Furnished		221XPAHX-*3	200	Opp	83				Furnished
442ZAAHX-*3 (5)	250	Opp	39		328564X	Furnished		442ZAAHX-*3 (5)	250	Opp	39				Furnished
442ZCAHX-*3 (6)	250	Opp	50		328564X	Furnished		442ZBAHX-*3 (3)	250	Eng	39		REQUIRED		Furnished
442ZFAHX-*3 (7)	250	Opp	61		328564X	Furnished		442ZCAHX-*3 (6)	250	Opp	50				Furnished
442ZHAHX-*3 (8)	250	Opp	71		328564X	Furnished		442ZFAHX-*3 (7)	250	Opp	61				Furnished
442ZLAHX-*3 (4)	250	Opp	79		328564X	Furnished		442ZHAHX-*3 (8)	250	Opp	71				Furnished
442ZQAHX-*3 (4)	225	Opp	85		328564X	Furnished		442ZLAHX-*3 (4)	250	Opp	79				Furnished
442ZRAHX-*3 (4)	225	Opp	99		328564X	Furnished		442ZQAHX-*3 (4)	225	Opp	85				Furnished
442ZSAHX-*3 (4)	200	Opp	118		328564X	Furnished		442ZRAHX-*3 (4)	225	Opp	99				Furnished
489XAAHX-*3 (5)	250	Opp	39			Furnished		442ZSAHX-*3 (4)	225	Opp	99				Furnished
489XCAHX-*3 (6)	250	Opp	50			Furnished		442XSAHX-*3 (4)	200	Opp	118				Furnished
489XFAHX-*3 (7)	250	Opp	61			Furnished		442XUAHX-*3 (4)	195	Opp	140				Furnished
489XHAHX-*3 (8)	250	Opp	71			Furnished		442XWAHX-*3 (4)	175	Opp	165				Furnished
489XLAHX-*3 (4)	250	Opp	79			Furnished		442XXAHX-*3 (4)	140	Opp	195				Furnished
489XQAHX-*3 (4)	225	Opp	85			Furnished		660XFAHX-*3 (9)	375	Opp	61				Furnished
489XRAHX-*3 (4)	225	Opp	99			Furnished		660XQAHX-*3 (10)	375	Opp	85				Furnished
489XSAHX-*3 (4)	200	Opp	118			Furnished		660XSAHX-*3 (11)	325	Opp	118				Furnished
489XUAHX-*3 (4)	195	Opp	140			Furnished									
489XWAHX-*3 (4)	175	Opp	165			Furnished									
489XXAHX-*3 (4)	140	Opp	195			Furnished									
680XFAHX-*3 (9)	375	Opp	61			Furnished									
680XQAHX-*3 (10)	375	Opp	85			Furnished									

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CAUTION: 660/680 Series: Applications above 1500 RPM output shaft speed, contact Chelsea Technical Service for approval.

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

NOTE: The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series P.T.O.s due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

NOTE: If Ordering the 230/231 Series with the Shaft Brake Option, order the "BA" Output for Automatic Transmissions and the "BD" Output for Manual Transmissions.

NOTE: 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.

(1) Gear and Shaft Kit No. KXA-2-P-565
(2) Filler block furnished with P.T.O.
(3) Input Gear Part No. 5-P-1418
(4) Input Gear Part No. 5-P-1004
(5) Input Gear Part No. 5-P-1280
(6) Input Gear Part No. 5-P-1287

(7) Input Gear Part No. 5-P-1077
(8) Input Gear Part No. 5-P-1364
(9) Input Gear Part No. 5-P-1242
(10) Input Gear Part No. 5-P-1246
(11) Input Gear Part No. 5-P-1322

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