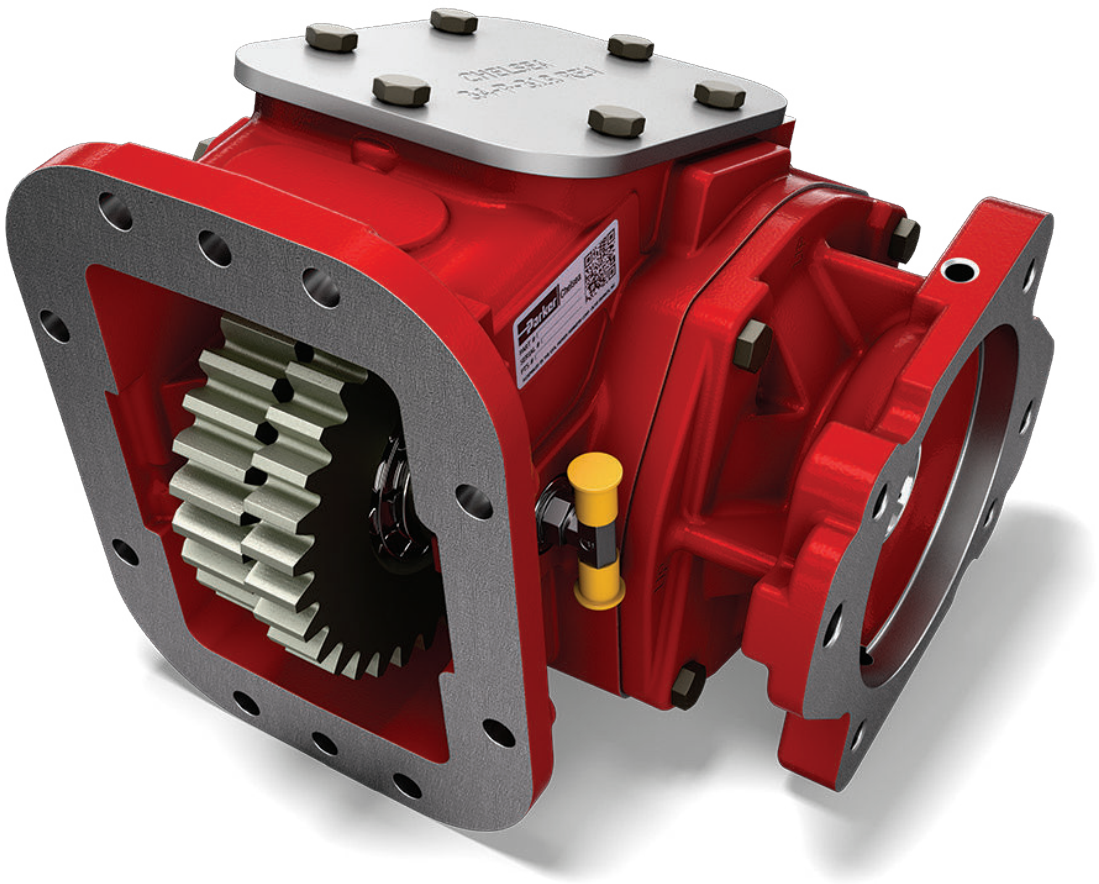


Power Take-Offs Parts List

880 Series

Effective: HY25-2880-M1/US September 15, 2026
Supersedes: HY25-2880-M1/US June 15, 2026

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⚠ WARNING — User Responsibility

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

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

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

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Offer of Sale

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

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Chelsea Products Division
Olive Branch, MS 38654 USA

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Model Number Designator

880	X	B	AK	P	-	M	4	XV
Basic Model	Mounting Option	Gear Ratio	Input Option	Lube Option		Shift Option	Assembly Arrangement	Output Option

Basic Model
880

Option Code
B
D
G
J
M
◆ P
Q
R
T

Option Code	
	Pressure Lube
P	Pressure Lube
	No Pressure Lube
X	No Pressure Lube

Option Code
3
4
5
6

Option Code	
[1] A	Air Shift
D	12VDC Elec/Air Shift Eaton Endurant™
H	No Shifter Kit
M	Constant Mesh
[1] P	12VDC Elec/Air Shift
V	Air Shift w/o Installation Kit
Y	Lever Shift

Option Code	
G	Standard Mount w/ Metric Studs
K	Standard Mount w/o Stud Kit
L	Deep Mount w/o Stud Kit
Q	Eaton Endurant™
X	Standard Mount
Z	Deep Mount

Input Gear Designator	
880*BAH	880*MME
880*BAK	880*QAH
880*BDA	880*QLZ
880*DAH	880*QME
880*DAK	880*RAH
880*GAH	880*RDA
880*GAK	880*TAH
880*GDA	880*TDA
880*GLZ	880*BIT
880*GME	880*DIT
880*JAH	880*GIT
880*JAK	880*JIT
880*JLZ	880*MIT
880*MAH	880*QIT
880*MAK	880*RIT
880*MDA	880*TIT

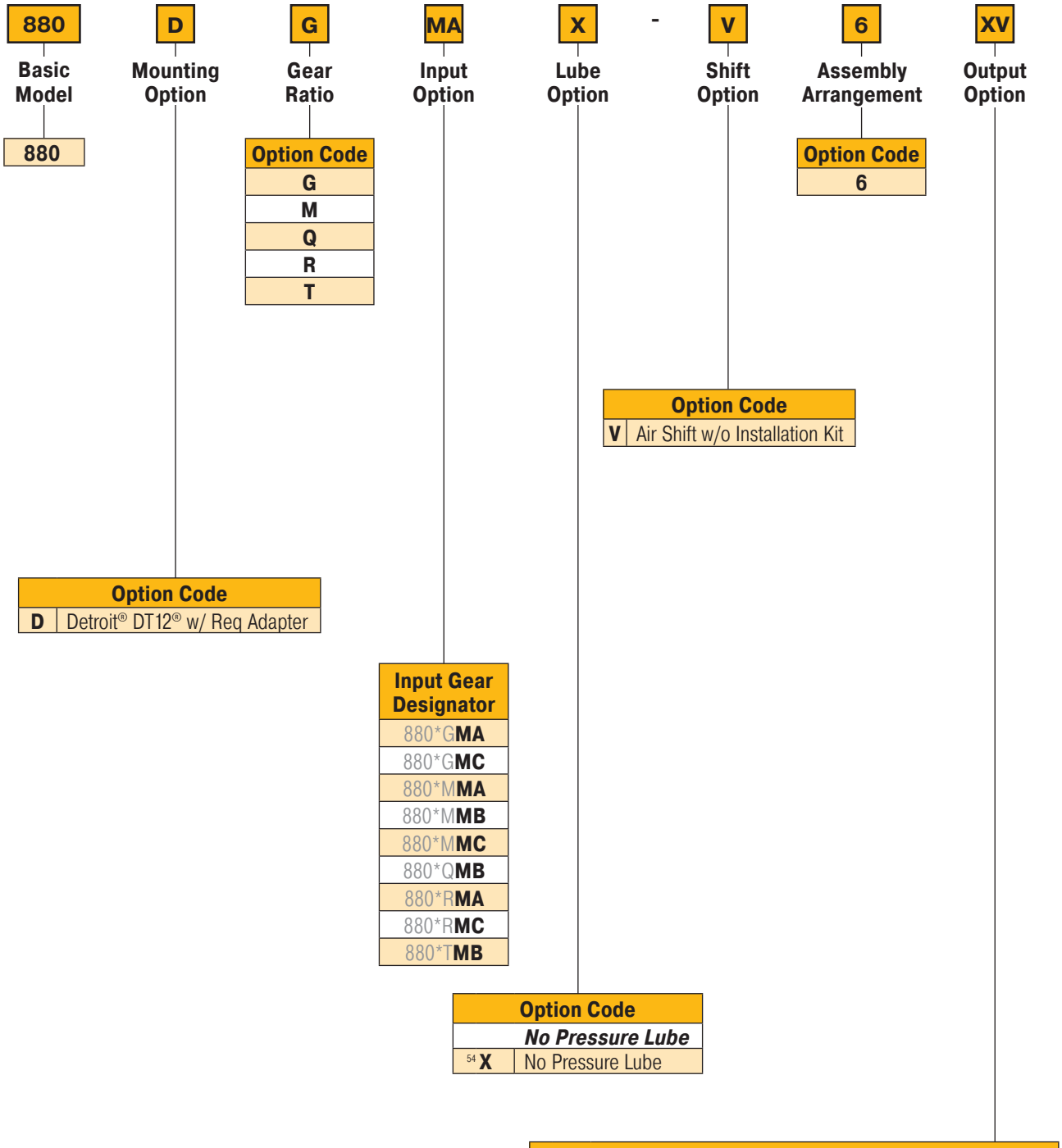
Option Code	
	Driveline Output
◆ AB	DIN 120 Flange
◆ AC	DIN 100 Flange
XV	1410 Series Companion Flange
	Pump Mount
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[80] GS	Greaseable SAE C 2 or 4-Bolt, SAE C Shaft (1-1/4" - 14T)
◆ L	Self Lube
◆ SK	Double Pump Output - SAE B 2 & 4-Bolt Flanges, (7/8" - 13T) Shafts
◆ SS	Double Pump Output - SAE C 2 & 4-Bolt Flange, (1-1/4" - 14T) Shafts
◆ VV	Double 1410 Series Output
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XS	SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
XY	DIN 5462 Pump Mount, DIN 5462 Shaft (B8x32x36)
◆ YY	Double Pump Mount DIN 80

[1] Includes mounting parts
[80] No Pressure Lube Only

◆No longer a current option per Chelsea Suggested List Price.

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Model Number Designator



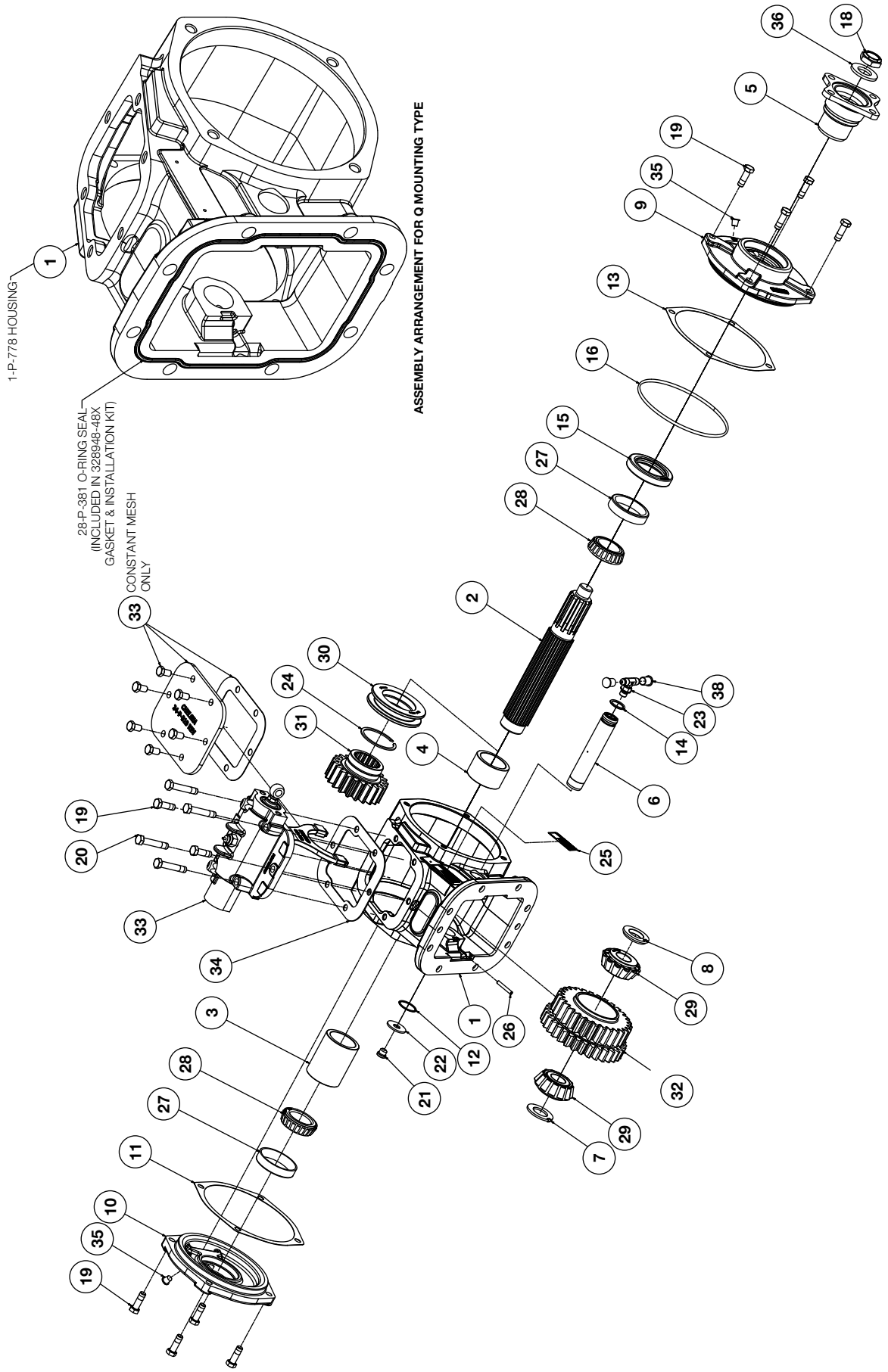
[54] X Lube option only

Option Code	
	Driveline Output
❖ AB	DIN 120 Flange
❖ AC	DIN 100 Flange
XV	1410 Series Companion Flange
	Pump Mount
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
GS	Greaseable SAE C 2 or 4-Bolt, SAE C Shaft (1-1/4" - 14T)
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XS	SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
XY	DIN 5462 Pump Mount, DIN 5462 Shaft (B8x32x36)

❖No longer a current option per Chelsea Suggested List Price.

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Exploded View



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Item	Part Number	Description	Qty.
1	**1-P-507**	Housing (X Standard Mount) (D, X, G & K Mounting)	1 or
	1-P-509	Housing (Z Deep Mount) (Z & L Mounting)	1 or
	1-P-778	Housing (Q Standard Mount) (Q Mounting)	1
2	**3-P-872**	Output Shaft 10T Straight (XV Output Only)	1
3	**4-P-163**	Spacer (1.753" x 2.250" x 2.828") (M Shifter Only)	1 or
4	**4-P-164**	Spacer (1.753" x 2.250" x 1.395") (M Shifter Only)	1
5	**3-1-3431**	1410 Companion Flange (XV Output)	1
6	**9-P-79**	Idler Shaft (1.000") (X Lube)	1 or
	9-P-80	Idler Shaft (1.000") (P Lube)	1
7	**14-P-80-1**	Spacer (1.014" x 1.750" x .111") (Thickness as Required)	1
	14-P-80-2	Spacer (1.014" x 1.750" x .116")	1
	14-P-80-3	Spacer (1.014" x 1.750" x .121")	1
	14-P-80-4	Spacer (1.014" x 1.750" x .125")	1
8	**14-P-81**	Spacer (1.014" x 1.750" x .255")	1
9	**21-P-517**	Bearing Cap (X Lube) (XV Output)	1 or
	21-P-596	Bearing Cap (P Lube) (XV Output)	1
10	**21-P-546**	Bearing Cap (X Lube) (AZ, AF, XV, XK, XS, XY & *AB Output)	1 or
	21-P-597	Bearing Cap (P Lube) (AZ, AF, XV, XK, XS, XY & *AB Output)	1
11	**22-P-98**	Gasket	1
12	**28-P-42**	O-ring (1.051" x .070")	1
13	**55-P-20-1**	Bearing Cover Shim (.003") (Green)	1 or
	55-P-20-2	Bearing Cover Shim (.010") (Brown)	1 or
	55-P-20-3	Bearing Cover Shim (.020") (Yellow)	1
14	**28-P-198**	O-ring (.798" x .103")	1
15	**28-P-211**	Oil Seal (3.001" x 2.000" x .375")	1
16	**28-P-196**	O-ring (6.000" x .138") (2 for *SS, *SK, *YY, *VV)	1
18	**380486**	1-1/4" Nut-Nylon Lock - Thin (.875"-14) (XV Output)	1
19	**378431-11**	9/16" Hex Head Cap Screw (.375"-16 x 1.125")	10
20	**378431-18**	9/16" Hex Head Cap Screw (.375"-16 x 2.000")	4
21	**379484**	O-ring Boss Plug (.438"-20)	1
22	**379505**	O-ring Retainer	1
23	**379556**	Tee (.438"-20)	1
24	**379592**	Lockring	1
25	**68-P-51-1**	Adhesive Label	1
26	**500597-16**	Roll Pin (.188" x 1.250")	1
27	**560982**	Bearing Cup Tapered (2.563" x .550")	2
28	**560986**	Bearing Cone Tapered (XV Output)	2
29	**560978**	Bearing Cone Tapered (1.000" x .845") (B, D, G & J Ratios)	2 or
	560987	Bearing Cone Tapered (1.000" x .960") (M, P, Q, R & T Ratios)	2
30	**61-P-1**	Hub Shifter	1
31	See page 7	Output Gear	1
32	See page 7	Input Gear	1

Continued on Next Page

*No longer a current option per Chelsea Suggested List Price.

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Item	Part Number	Description	Qty.
33	**329777X**	Air Shifter Cover ASSY (D Shifter Type)	1 or
	329772X	Air Shifter Cover ASSY (A Shifter Type)	1 or
	329774X	Lever Shifter Cover ASSY (Y Shifter Type)	1 or
	329800X	Cover Kit (6-Bolt) (M Shifter Type)	1
34	**35-P-59**	Gasket (Except M Shifter Type)	1
35	**500897-5**	Shipping Plug (P Lube)	2
36	**380076-13**	Flat Hardened Washer (.950" x 1.762" x .157")	1
38	**379564-2**	Cap Thread (.438")	2
	See page 21	DT12® HD Adapter Assembly	1
	See pages 40-48 **for Bill of Materials for the below loose parts.**		
N.S.	**379640**	Booted Connector (V Shifter Type Only)	1
N.S.	**378414**	Pressured Protected Valve (V Shifter Type Only)	1
N.S.	**69-P-30**	No Harness Caution Tag (V Shifter Type Only)	1
N.S.	**69-P-37**	Compatibility Caution Tag (D Mounting Type)	1
		STUD KITS	
	328170-179X	Stud Kit (X Standard Mount)	1 or
	328170-195X	Stud Kit (Z Deep Mount)	1 or
	328170-201X	Stud Kit (G Metric)	1 or
	328170-217X	Stud Kit (Q Eaton Endurant)	1 or
	328170-220X	Stud Kit DT12® 8-Bolt (D Mount)	1
		INSTALLATION INSTRUCTION KIT	
	328948-8X	Gasket & Installation Instructions (All Except Q & D Mount)	1
	328948-48X	Gasket & Installation Instructions (Q Mount)	1
	328948-53X	Gasket & Installation Instructions DT12® Adapter (D Mount)	
		INSTALLATION KITS	
	328388-61X	Air Shift Installation Kit (A Shifter Type Only)	1
	328388-93X	Elec/Air Shift Installation Kit (P Shifter Type Only)	1
	328751-1X	Indicator Light Kit (Y Shifter Type Only)	1
	329874-2X	12VDC Elec/Air Kit (Eaton Endurant) (D Shifter Type Only)	1
	329896X	Eaton Endurant Installation Kit (D Shifter Type Only)	

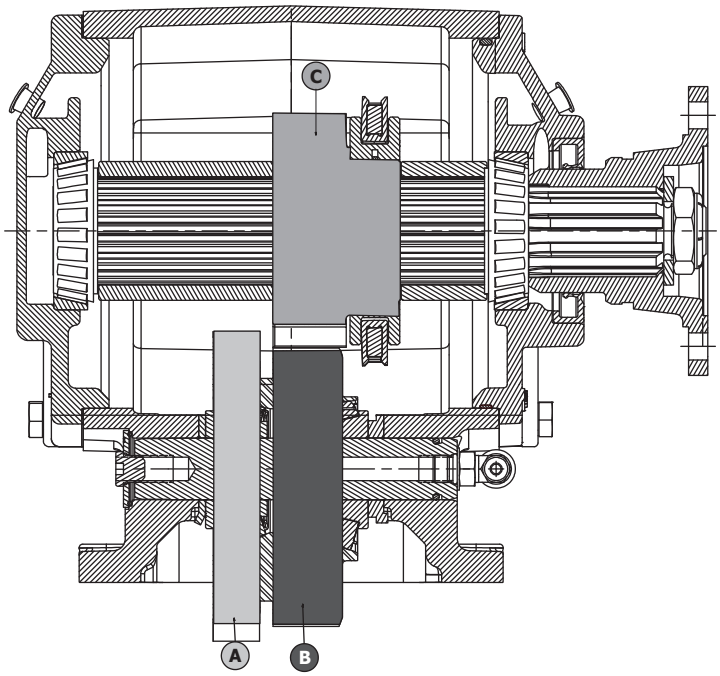
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Item	Part Number	Description	Qty.
		SERVICE KITS	
	328356-51X	Gasket & Seal Kit (Standard XV Output)	
	328356-52X	Gasket & Seal Kit (Pump Output)	
	328356-53X	Gasket & Seal Kit (Y Shifter Type)	
	328356-54X	Gasket & Seal Kit (2 Sided Shifter) (A Shifter Type)	
	328356-72X	Gasket & Seal Kit (1 Sided Shifter) (A Shifter Type)	
	328594-3X	Bearing & Spacer Kit (Pressure Lube for B, D, G & J Ratios)	
	328594-5X	Bearing & Spacer Kit (Pressure Lube for M, P, Q, R & T Ratios)	
	329183X	Overhaul Kit	
	329216-2X	Shifter Kit (Lever Shift)	
	329216-3X	Shifter Kit (Air Shift)	
	329216-4X	Constant Mesh Kit (Standard)	
		HOSE ASSEMBLIES	
	329129X	Hose Assembly (All Other Outputs)	1
	329129-1X	Hose Assembly (L Outputs)	1
	329130-1X	Hose Assembly (Idler Tee to Bearing Cap)	1
	329130-3X	Hose Assembly (Front Bearing Cap to Rear Bearing Cap)	1
	329224X	Pressure Lube Fittings Bag	1
		CONVERSION KITS	
	See pages 43-48	Conversion Kits	

N.S. – Not Shown

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Input Gear Chart



GEAR DESIGNATOR	INPUT GEAR	NO. TEETH A (32)	HELIX ANGLE	NO. TEETH B (32)	OUTPUT GEAR	NO. TEETH C (31)
880*BAH	5-P-1100	32	Spur	18	2-P-730X	32
880*DAH	5-P-1101	32	Spur	20	2-P-731X	30
880*GAH	5-P-1135	32	Spur	21	2-P-732X	29
880*JAH	5-P-1102	32	Spur	23	2-P-733X	27
880*MAH	5-P-1103	32	Spur	25	2-P-734X	25
880*PAH	5-P-1523	32	Spur	26	2-P-735X	24
880*QAH	5-P-1385	32	Spur	27	2-P-818X	23
880*RAH	5-P-1104	32	Spur	29	2-P-736X	21
880*TAH	5-P-1105	32	Spur	32	2-P-737X	18
880*BAK	5-P-1106	32	Spur	18	2-P-730X	32
880*DAK	5-P-1107	32	Spur	20	2-P-731X	30
880*GAK	5-P-1108	32	Spur	21	2-P-732X	29
880*JAK	5-P-1109	32	Spur	23	2-P-733X	27
880*MAK	5-P-1110	32	Spur	25	2-P-734X	25

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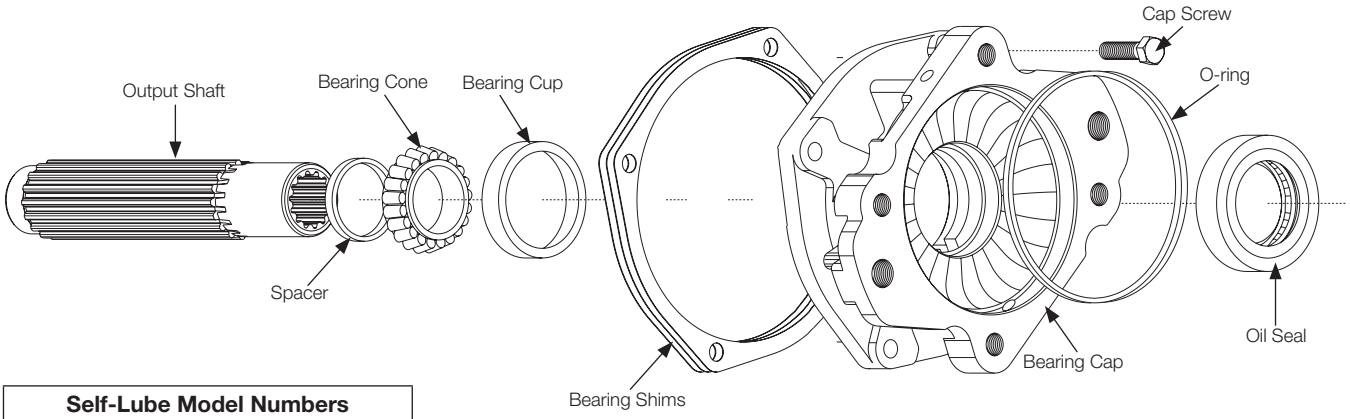
Input Gear Chart (Cont'd)

GEAR DESIGNATOR	INPUT GEAR	NO. TEETH A (2)	HELIX ANGLE	NO. TEETH B (2)	OUTPUT GEAR	NO. TEETH C (2)
880*GDA	5-P-1174	35	Spur	21	2-P-732X	29
880*BDA	5-P-1120	35	Spur	18	2-P-730X	32
880*MDA	5-P-1121	35	Spur	25	2-P-734X	25
880*RDA	5-P-1122	35	Spur	29	2-P-736X	21
880*TDA	5-P-1123	35	Spur	32	2-P-737X	18
880*GLZ	5-P-1574	39	Right Hand	21	2-P-732X	29
880*JLZ	5-P-1575	39	Right Hand	23	2-P-733X	27
880*QLZ	5-P-1577	39	Right Hand	27	2-P-818X	23
880**IT	Assembled without Input Gear					
880*GME (**DT12®**)	5-P-1670	33	Spur	21	2-P-732	29
880*MME (**DT12®**)	5-P-1671	33	Spur	25	2-P-734	25
880*QME (**DT12®**)	5-P-1672	33	Spur	27	2-P-818	23
880*GMA (**DT12®**)	5-P-1619	29	Left Hand	21	2-P-732	29
880*MMA (**DT12®**)	5-P-1621	29	Left Hand	25	2-P-734	25
880*RMA (**DT12®**)	5-P-1623	29	Left Hand	29	2-P-736	21
880*MMB (**DT12®**)	5-P-1627	29	Left Hand	25	2-P-734	25
880*QMB (**DT12®**)	5-P-1628	29	Left Hand	27	2-P-818	23
880*TMB (**DT12®**)	5-P-1658	29	Left Hand	32	2-P-737	18
880*GMC (**DT12®**)	5-P-1631	30	Left Hand	21	2-P-732	29
880*MMC (**DT12®**)	5-P-1633	30	Left Hand	25	2-P-734	25
880*RMC (**DT12®**)	5-P-1635	30	Left Hand	29	2-P-736	21

DT12® – Available with Detroit® DT12®.

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Self Lube Bill of Materials



Self-Lube Model Numbers	
*880****P- **LF	Similar to P- **XK
*880****P- **LG	Similar to P- **XV
*880****P- **LH	Similar to P- **XS
*880****P- **LL	Similar to P- **AC

PTO Output	Bearing Cap Open	Bearing Cap Closed (1)	Output Shaft	Oil Seal	Bearing Cone	Bearing Cup	Spacer	Idler Shaft
*LF	21-P-592	329127X	3-P-878	28-P-219	560976	560977	4-P-162	9-P-80
*LG	21-P-596	329127X	3-P-879	28-P-211	560986	560982	—	9-P-80
*LH	21-P-544	329127X	3-P-877	28-P-219	560976	560977	4-P-162	9-P-80
*LL	21-P-596	329127X	3-P-879	28-P-211	560986	560982	—	9-P-80

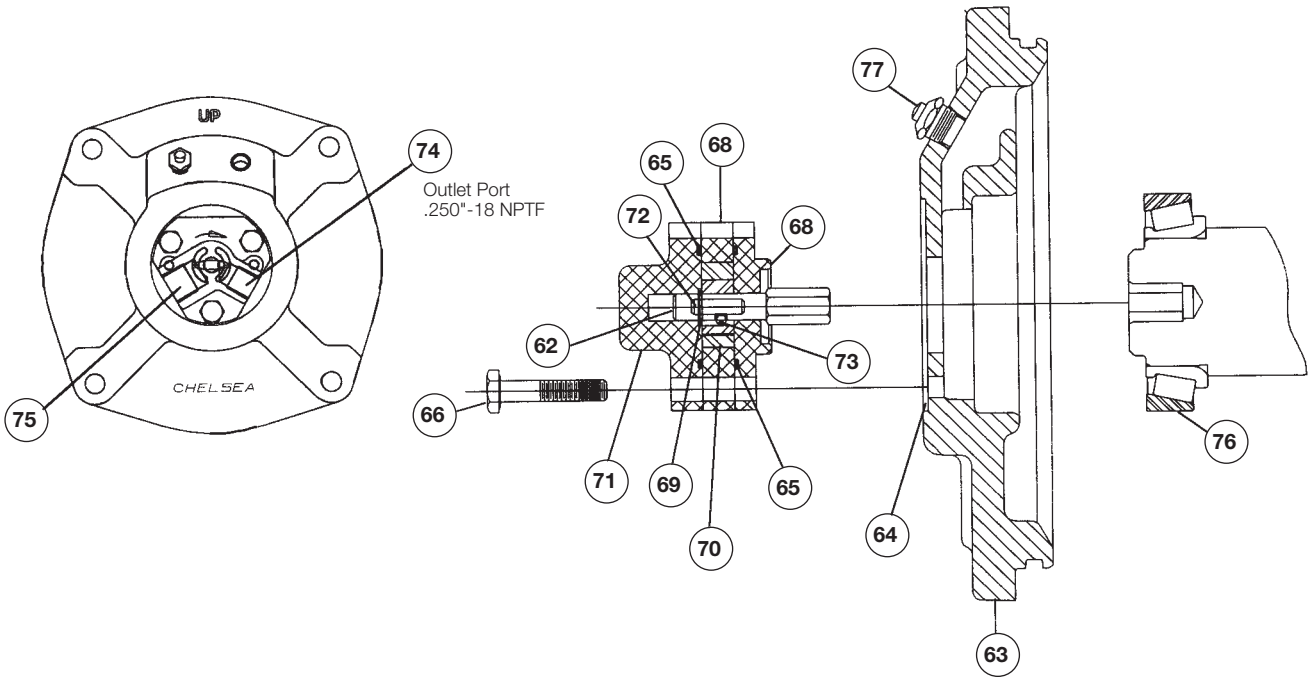
NOTE: Top Mount 912 Split Shaft applications are not flooded with oil as bottom or side mounted applications. When mounting an 880 Series on top of a 912 Split Shaft, one of the three self lube output types must be used.

(1) The Closed End Bearing Cap is where the self lube pump is attached.

*No longer a current option per Chelsea Suggested List Price.

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Lube Pump Bill of Materials

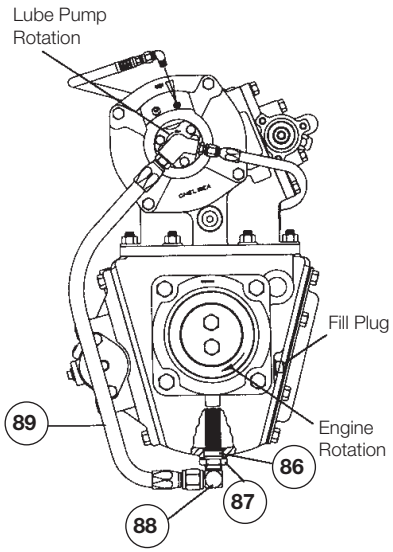


Item	Part Number	Description	Qty.
	329127X	**LUBE PUMP & BEARING CAP ASSEMBLY**	
		(Includes items 62 thru 77)	
62	**3-P-881**	Pump Driveshaft	1
63	**21-P-547**	Bearing Cap	1
64	**22-P-73**	Gasket	1
65	**28-P-249**	O-ring	2
66	**378429-12**	Cap Screw, Hex Head (.250"-20 x 1.250")	3
67	**379546**	Pump Adapter Plate	1
68	**379173**	Pump Plate	1
69	**379175**	Retaining Ring	1
70	**379176**	Gerotors	1
71	**379525**	Pump Cap, Dual Ported	1
72	**500037-7**	Dowel Pin (.188" x .625")	2
73	**500566-3**	Drive Ball (.125")	1
74	**500897-8**	Shipping Plug (Plastic)	1
75	**500897-11**	Shipping Plug (Plastic)	1
76	**560982**	Tapered Bearing Cup	1
77	**500167-1**	Breather	1
N.S.	**22-P-98**	Gasket, Bearing Cap	1
N.S.	**378431-11**	Hex Cap Screw (.375"-16 x 1.125")	4
N.S.	**379513-1**	Installation Instructions Tag	1

N.S. – Not Shown

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For Chelsea 912 Split Shaft Top Mount Applications



View from Front of Vehicle

Self-Lube Model Numbers
*880****P- **LF
*880****P- **LG
*880****P- **LH

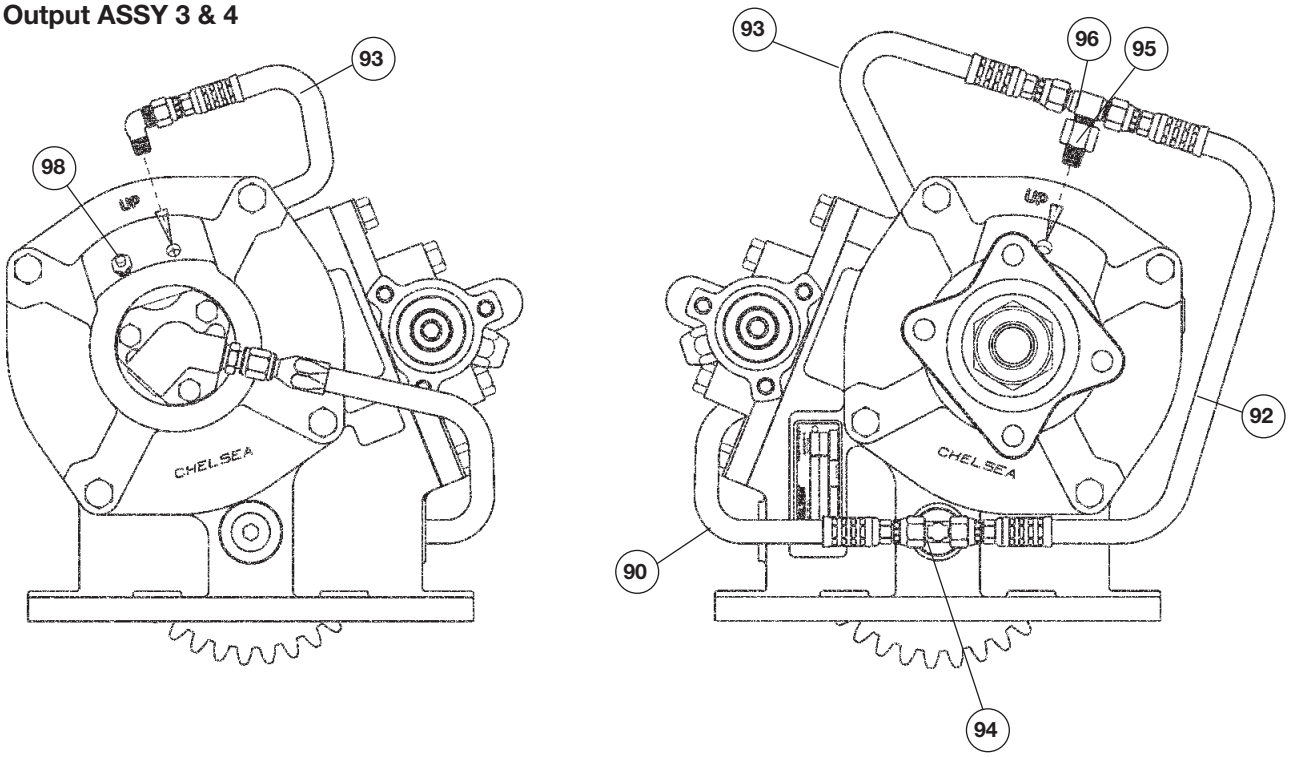
Item	Part Number	Description	Qty.
	329110-1X	Installation Kit, for mounting an 880 on a 912 Split Shaft	1
86	**378117**	Drain Plug Gasket	1
87	**379526**	Screened Strain Plug	1
88	**379273**	90° Elbow	1
89	**379181**	Hose Assembly, End to End Length (25.625")	1
N.S.	**379636**	Installation Instructions Tag	1

NOTE: When ordering the Self Lube option a P designator must be placed in the lubrication field of the part number. Ex: 880XBAHP-A3LH. 880 Series on top mount 912 Split Shaft applications can only have a single output due to self lube requirements.

*No longer a current option per Chelsea Suggested List Price.

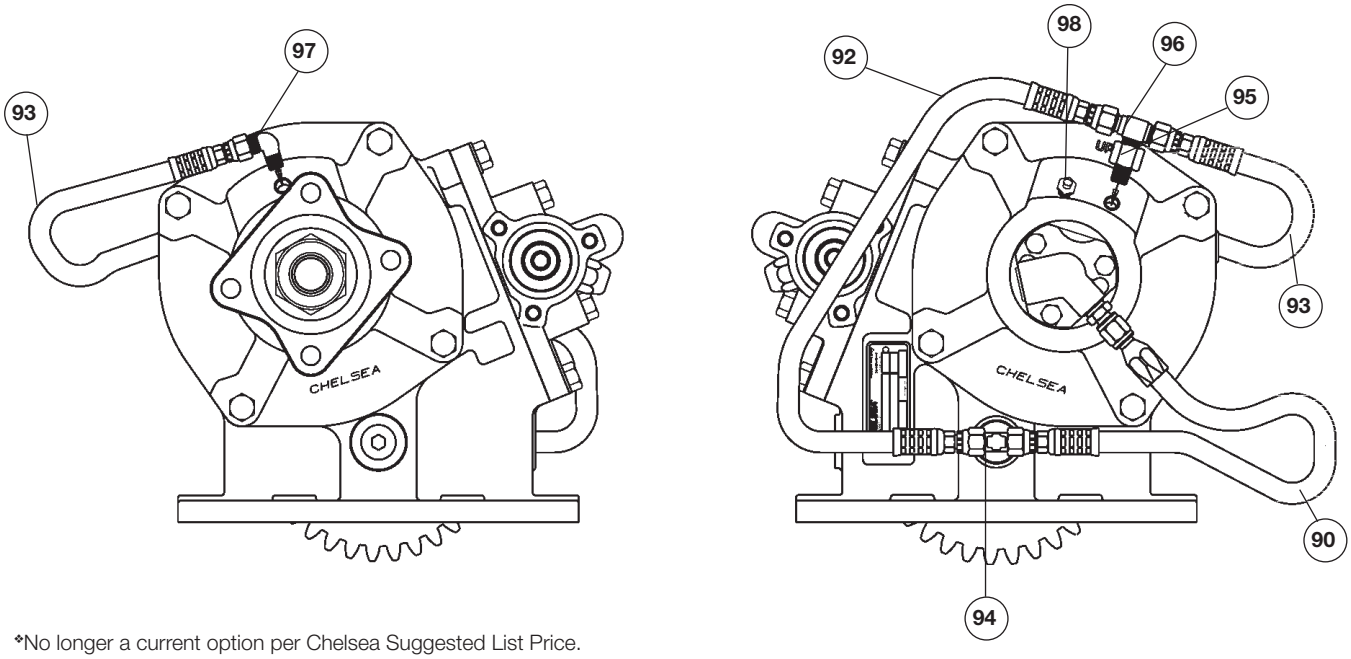
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◆LG Output ASSY 3 & 4



Item	Part Number	Description	Qty.
90	**329129X**	Hose Assembly, End to End Length (16.000")	1
92	**329130-1X**	Hose Assembly, End to End Length (16.250")	1
93	**329130-3X**	Hose Assembly, End to End Length (20.250")	1
94	**379556**	Tee, O-ring	1
95	**379594**	Pipe Adapter	2
96	**379627**	Tee	1
97	**379625**	Elbow	1
98	**500167**	Breather	1

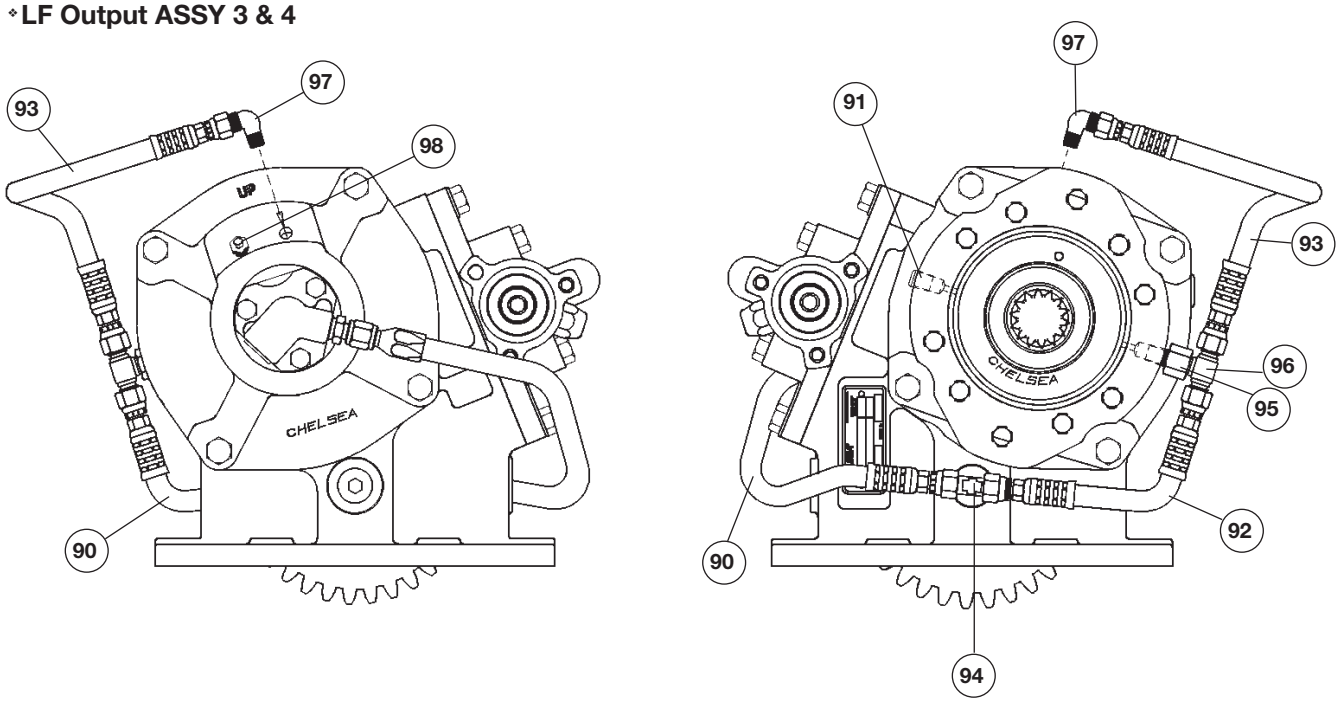
◆LG Output ASSY 5 & 6



◆No longer a current option per Chelsea Suggested List Price.

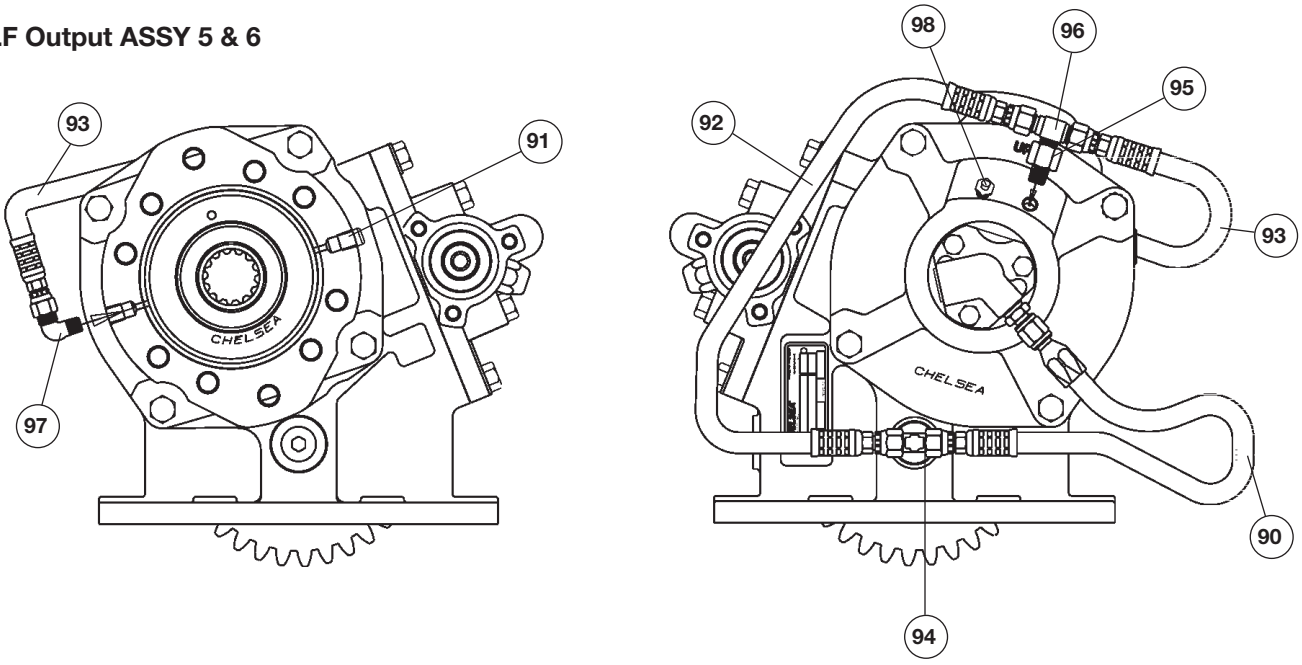
Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

*LF Output ASSY 3 & 4



Item	Part Number	Description	Qty.
90	**329129X**	Hose Assembly, End to End Length (16.000")	1
91	**379231**	Pipe Plug	1
92	**329130-1X**	Hose Assembly, End to End Length (16.250")	1
93	**329130-3X**	Hose Assembly, End to End Length (20.250")	1
94	**379556**	Tee, O-ring	1
95	**379594**	Pipe Adapter	2
96	**379627**	Tee	1
97	**379625**	Elbow	1
98	**500167**	Breather	1

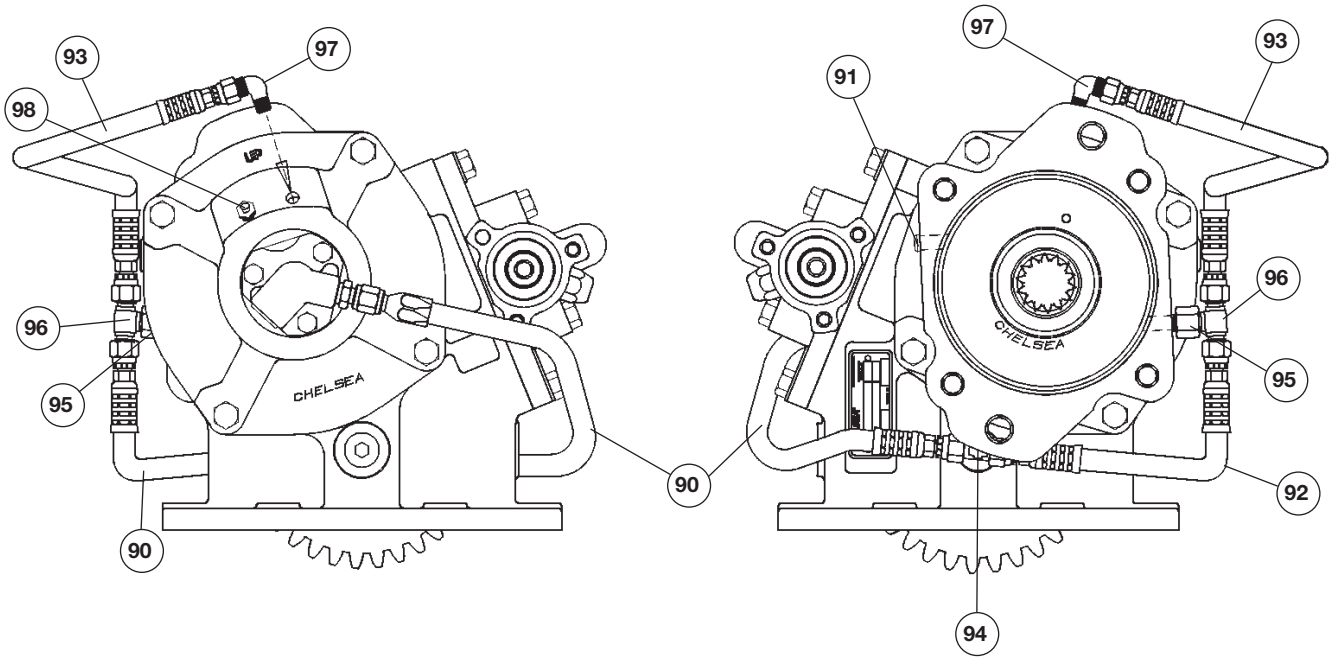
*LF Output ASSY 5 & 6



*No longer a current option per Chelsea Suggested List Price.

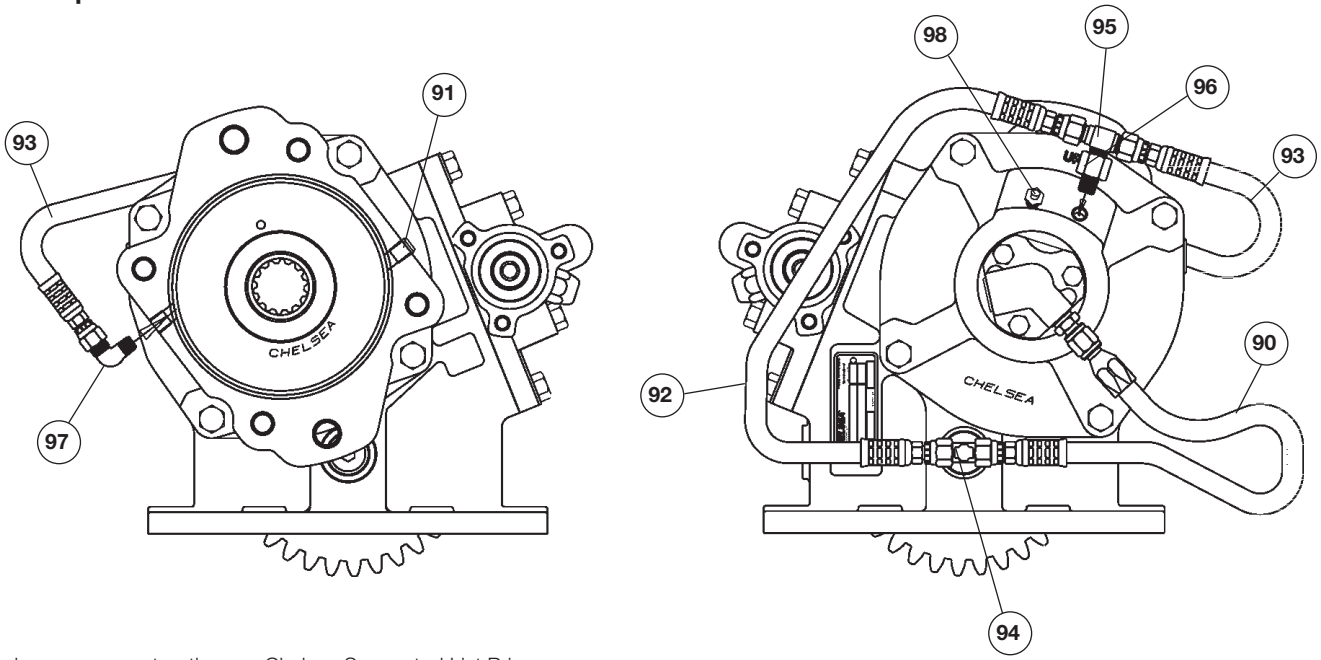
Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

◆LH Output ASSY 3 & 4



Item	Part Number	Description	Qty.
90	**329129X**	Hose Assembly, End to End Length (16.000")	1
91	**379231**	Pipe Plug	1
92	**329130-1X**	Hose Assembly, End to End Length (16.250")	1
93	**329130-3X**	Hose Assembly, End to End Length (20.250")	1
94	**379556**	Tee, O-ring	1
95	**379594**	Pipe Adapter	2
96	**379627**	Tee	1
97	**379625**	Elbow	1
98	**500167**	Breather	1

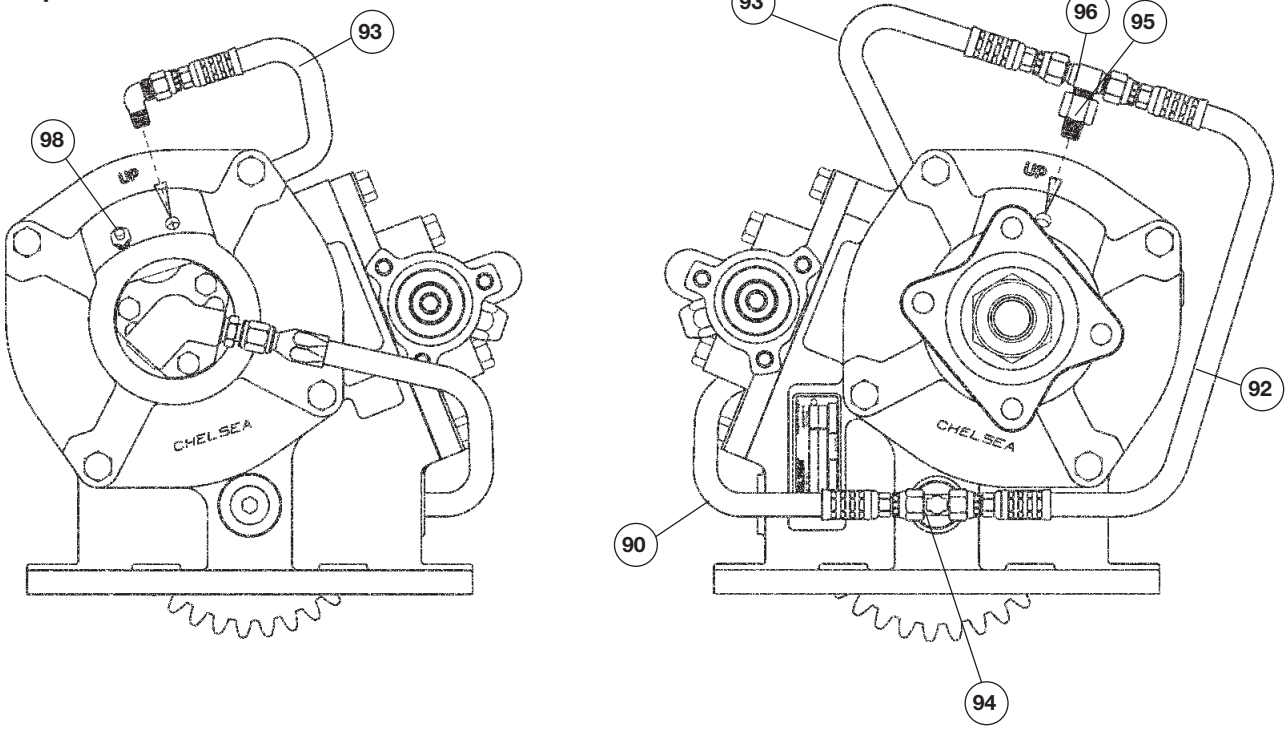
◆LH Output ASSY 5 & 6



◆No longer a current option per Chelsea Suggested List Price.

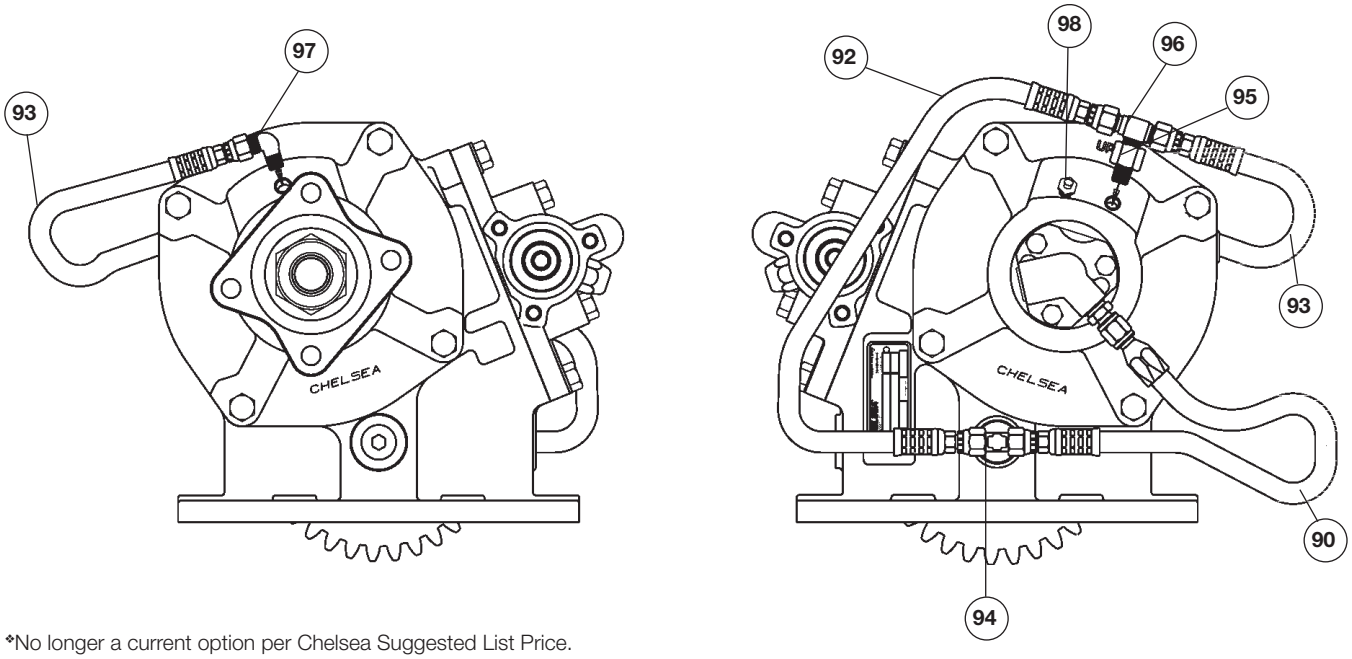
Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

◆LL Output ASSY 3 & 4



Item	Part Number	Description	Qty.
90	**329129X**	Hose Assembly, End to End Length (16.000")	1
92	**329130-1X**	Hose Assembly, End to End Length (16.250")	1
93	**329130-3X**	Hose Assembly, End to End Length (20.250")	1
94	**379556**	Tee, O-ring	1
95	**379594**	Pipe Adapter	2
96	**379627**	Tee	1
97	**379625**	Elbow	1
98	**500167**	Breather	1

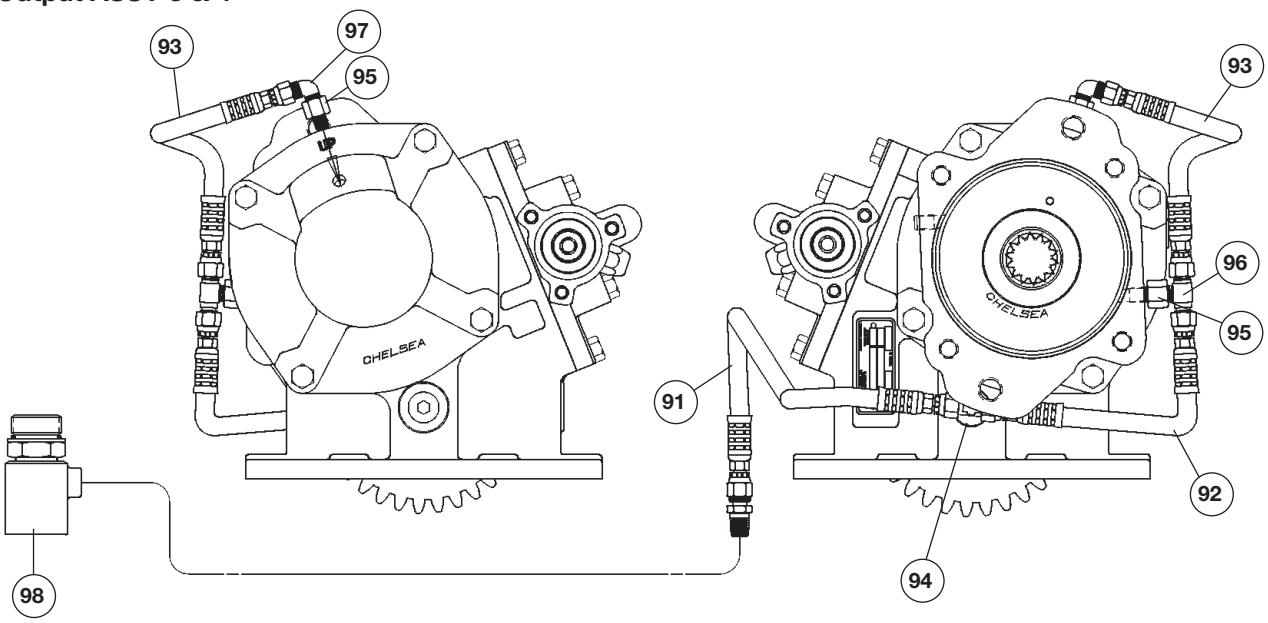
◆LL Output ASSY 5 & 6



◆No longer a current option per Chelsea Suggested List Price.

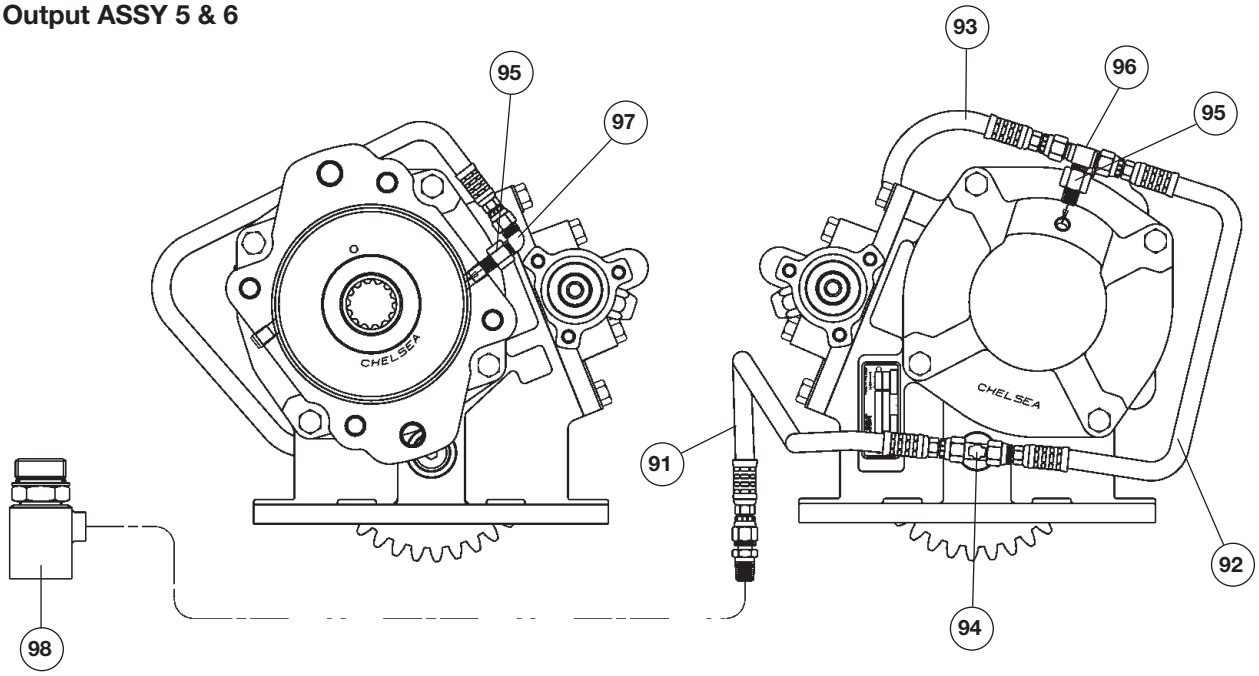
Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

XS Output ASSY 3 & 4



Item	Part Number	Description	Qty.
91	**329129-1X**	Hose Assembly, End to End Length (36.000")	1
92	**329130-1X**	Hose Assembly, End to End Length (16.250")	1
93	**329130-3X**	Hose Assembly, End to End Length (20.250")	1
94	**379556**	Tee, O-ring	1
95	**379594**	Pipe Adapter	2
96	**379627**	Tee	1
97	**379625**	Elbow	1
98	**378897**	Transmission Tee Fitting	1

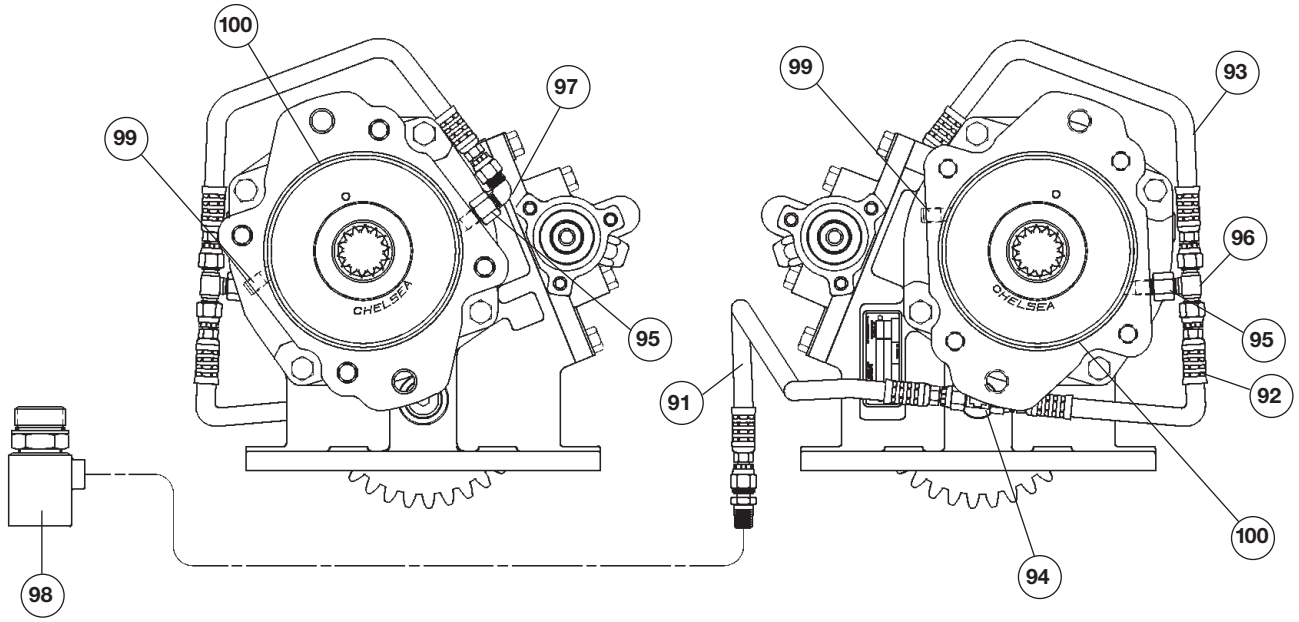
XS Output ASSY 5 & 6



*No longer a current option per Chelsea Suggested List Price.

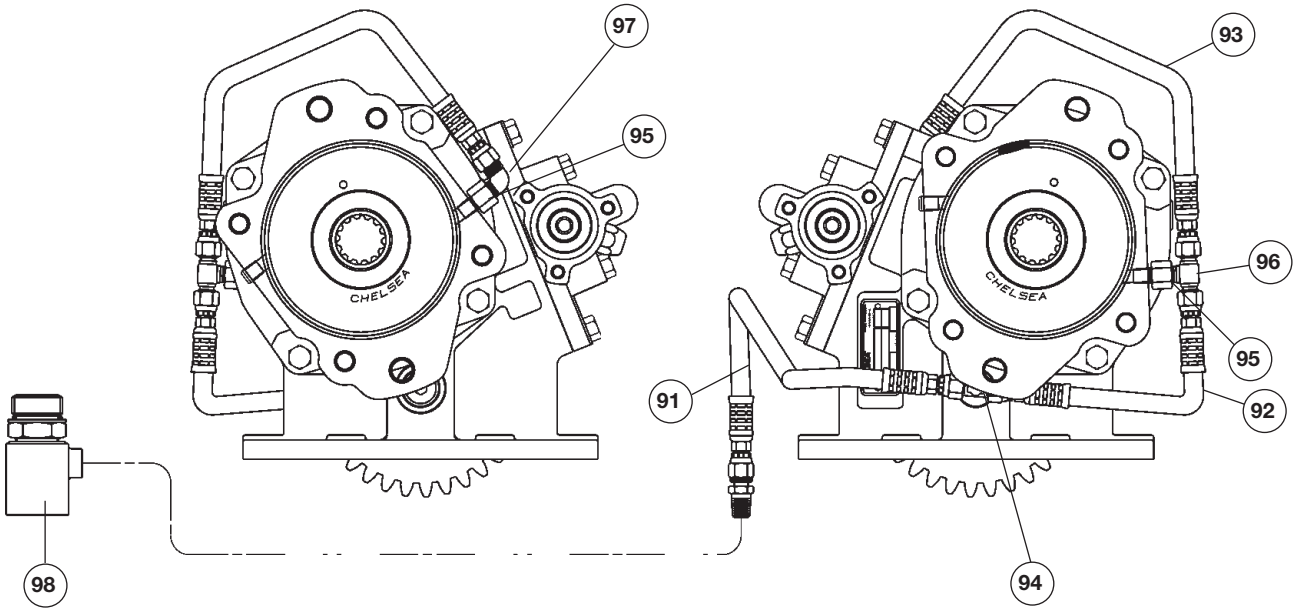
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Olive Branch, MS 38654 USA

*SS Output ASSY 5 & 6



Item	Part Number	Description	Qty.
91	**329129-1X**	Hose Assembly, End to End Length (36.000")	1
92	**329130-1X**	Hose Assembly, End to End Length (16.250")	1
93	**329130-3X**	Hose Assembly, End to End Length (20.250")	1
94	**379556**	Tee, O-ring	1
95	**379594**	Pipe Adapter	2
96	**379627**	Tee	1
97	**379625**	Elbow	1
98	**378897**	Transmission Tee Fitting	1
99	**329231**	Pipe Plug	1
100	**28-P-245**	O-ring	1

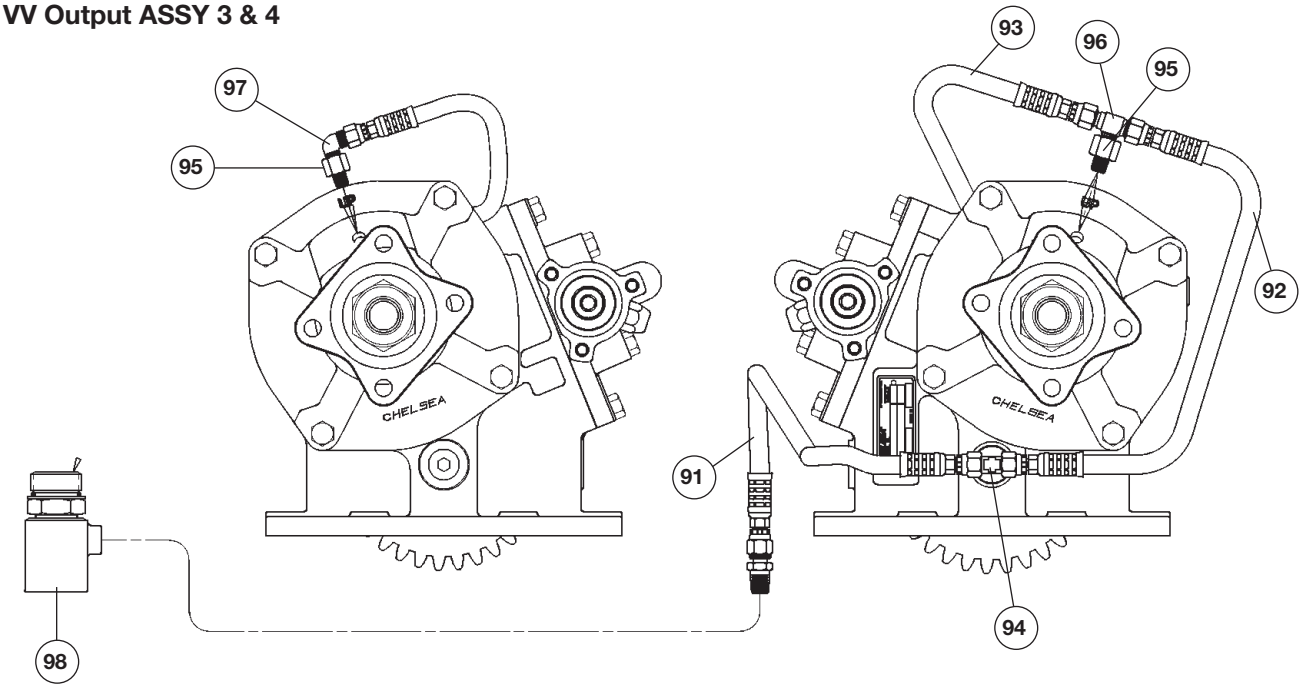
*SS Output ASSY 5 & 6



*No longer a current option per Chelsea Suggested List Price.

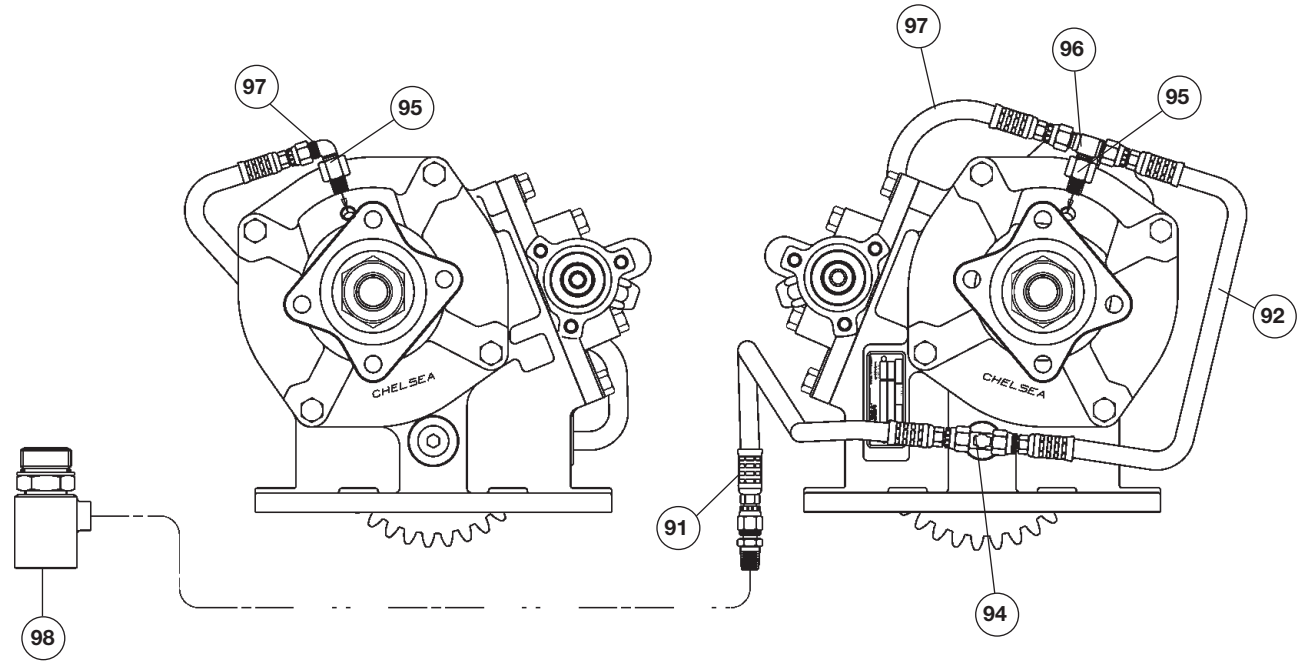
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Olive Branch, MS 38654 USA

◆VV Output ASSY 3 & 4



Item	Part Number	Description	Qty.
91	**329129-1X**	Hose Assembly, End to End Length (36.000")	1
92	**329130-1X**	Hose Assembly, End to End Length (16.250")	1
93	**329130-3X**	Hose Assembly, End to End Length (20.250")	1
94	**379556**	Tee, O-ring	1
95	**379594**	Pipe Adapter	2
96	**379627**	Tee	1
97	**379625**	Elbow	1
98	**379897**	Transmission Tee Fitting	1

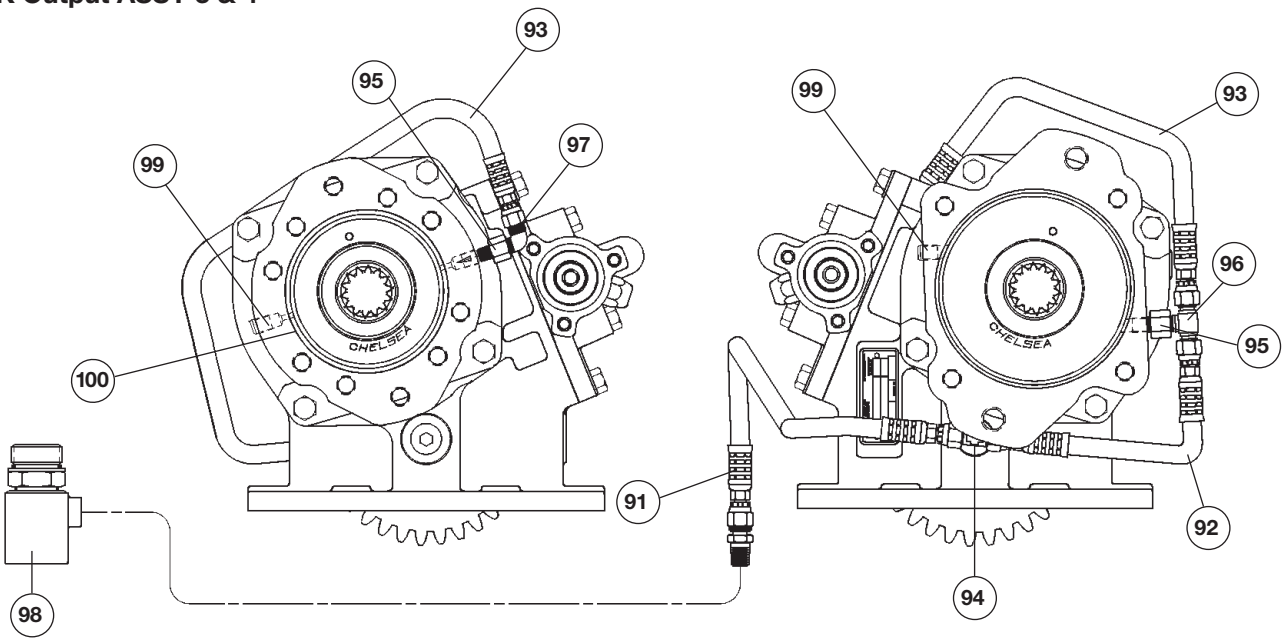
◆VV Output ASSY 5 & 6



◆No longer a current option per Chelsea Suggested List Price.

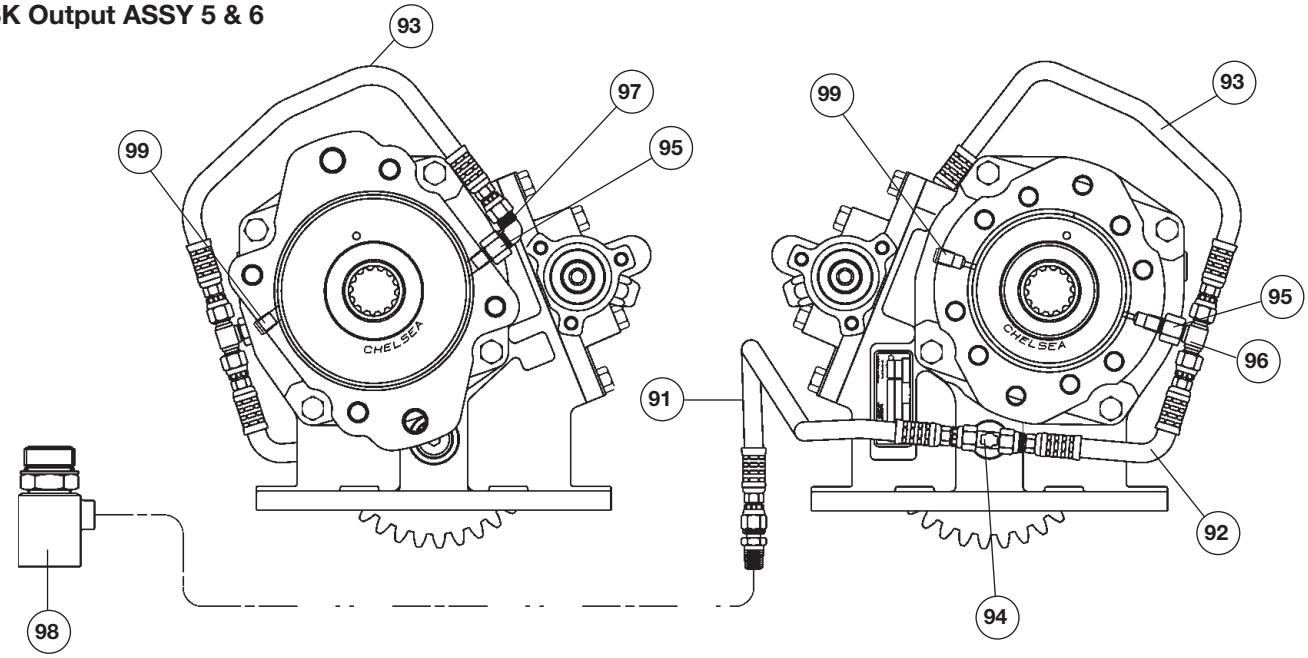
Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

*SK Output ASSY 3 & 4



Item	Part Number	Description	Qty.
91	**329129-1X**	Hose Assembly, End to End Length (36.000")	1
92	**329130-1X**	Hose Assembly, End to End Length (16.250")	1
93	**329130-3X**	Hose Assembly, End to End Length (20.250")	1
94	**379556**	Tee, O-ring	1
95	**379594**	Pipe Adapter	2
96	**379627**	Tee	1
97	**379625**	Elbow	1
98	**378897**	Transmission Tee Fitting	1
99	**379231**	Pipe Plug	1
100	**28-P-245**	O-ring	1

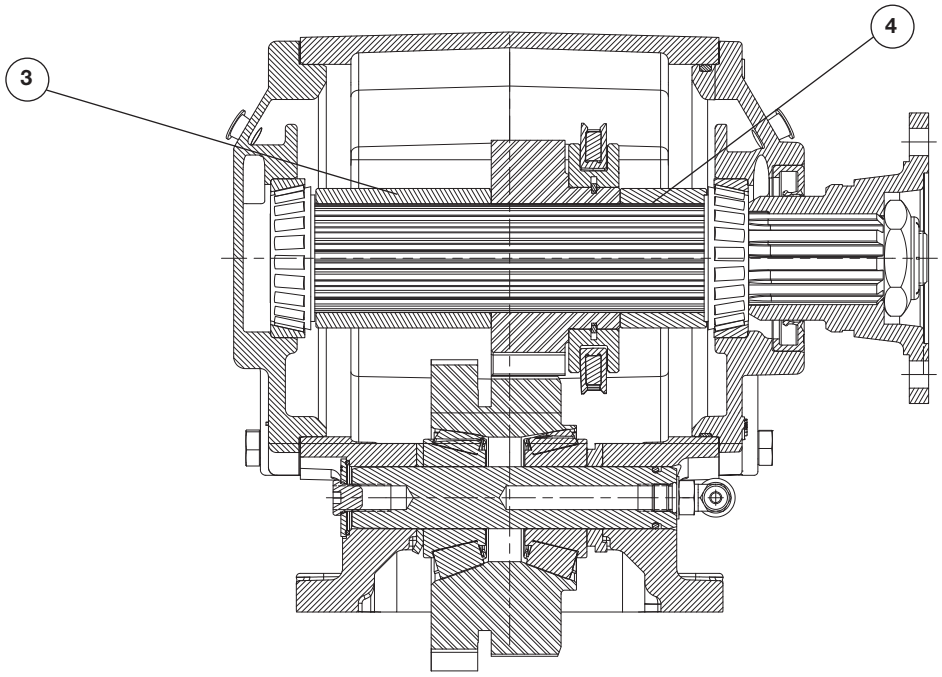
*SK Output ASSY 5 & 6



*No longer a current option per Chelsea Suggested List Price.

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Constant Mesh Parts

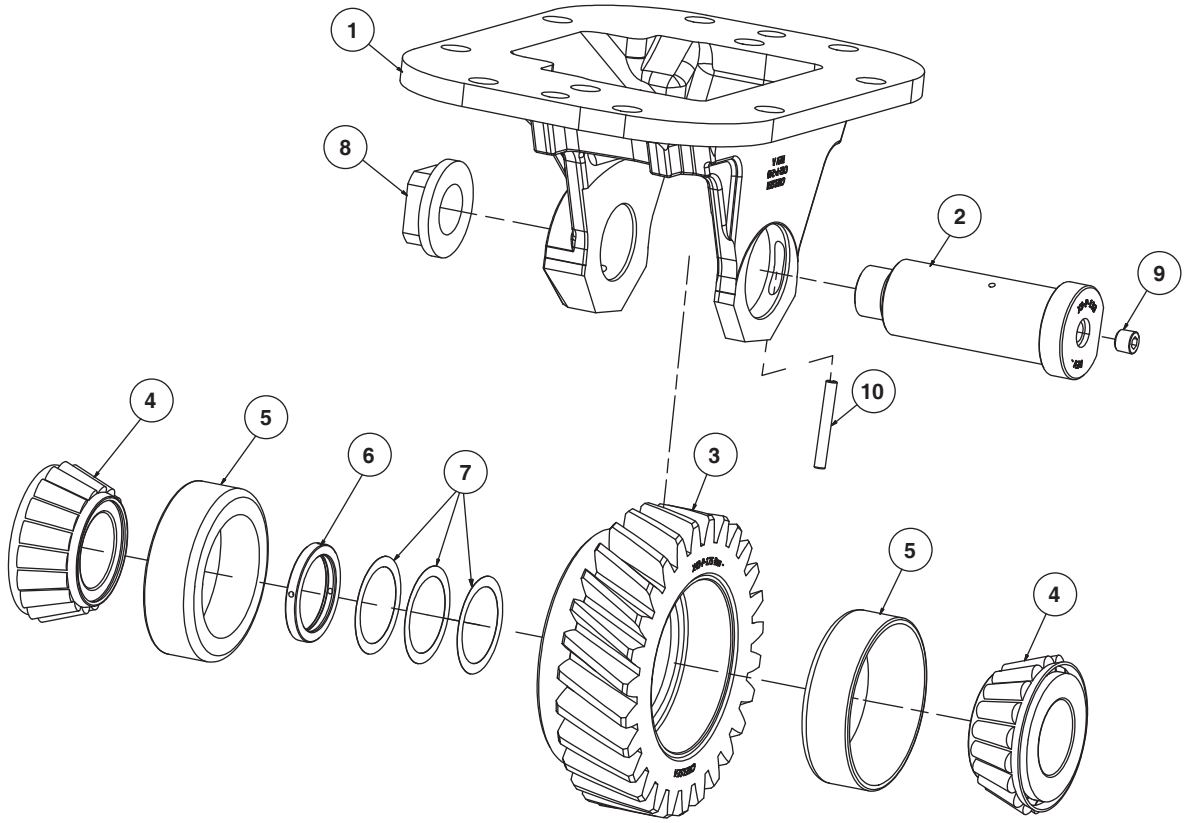


Item	Part Number	Description	Qty.
	329216-1X	**Constant Mesh Kit, Fuller CEEMAT™**	
3	**4-P-171**	Spacer, Output Shaft (2.825" width), Constant mesh only	1
4	**4-P-164**	Spacer, Output Shaft (1.392" width), Constant mesh only	1
N.S.	**55-P-20-1**	Shim, Bearing Cover (Green)	1 or
	55-P-20-2	Shim, Bearing Cover (Brown)	1 or
	55-P-20-3	Shim, Bearing Cover (Yellow)	1 or
N.S.	**34-P-319**	6-Bolt Cover Plate - Thick	1
N.S.	**35-P-117**	6-Bolt Gasket	1
	329216-4X	**Constant Mesh Kit, Standard**	
	378431CR-6	Hex Head Cap Screw (.375"-16 x .625")	6
3	**4-P-163**	Spacer, Output Shaft (2.825" width), Constant mesh only	1
4	**4-P-164**	Spacer, Output Shaft (1.392" width), Constant mesh only	1
	34-P-319	6-Bolt Cover Plate - Thick	1
	35-P-117	6-Bolt Gasket	1
N.S.	**55-P-20-1**	Shim, Bearing Cover (Green)	1 or
	55-P-20-2	Shim, Bearing Cover (Brown)	1 or
	55-P-20-3	Shim, Bearing Cover (Yellow)	1 or

N.S. – Not Shown

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Olive Branch, MS 38654 USA

DT12® HD Adapter Assembly

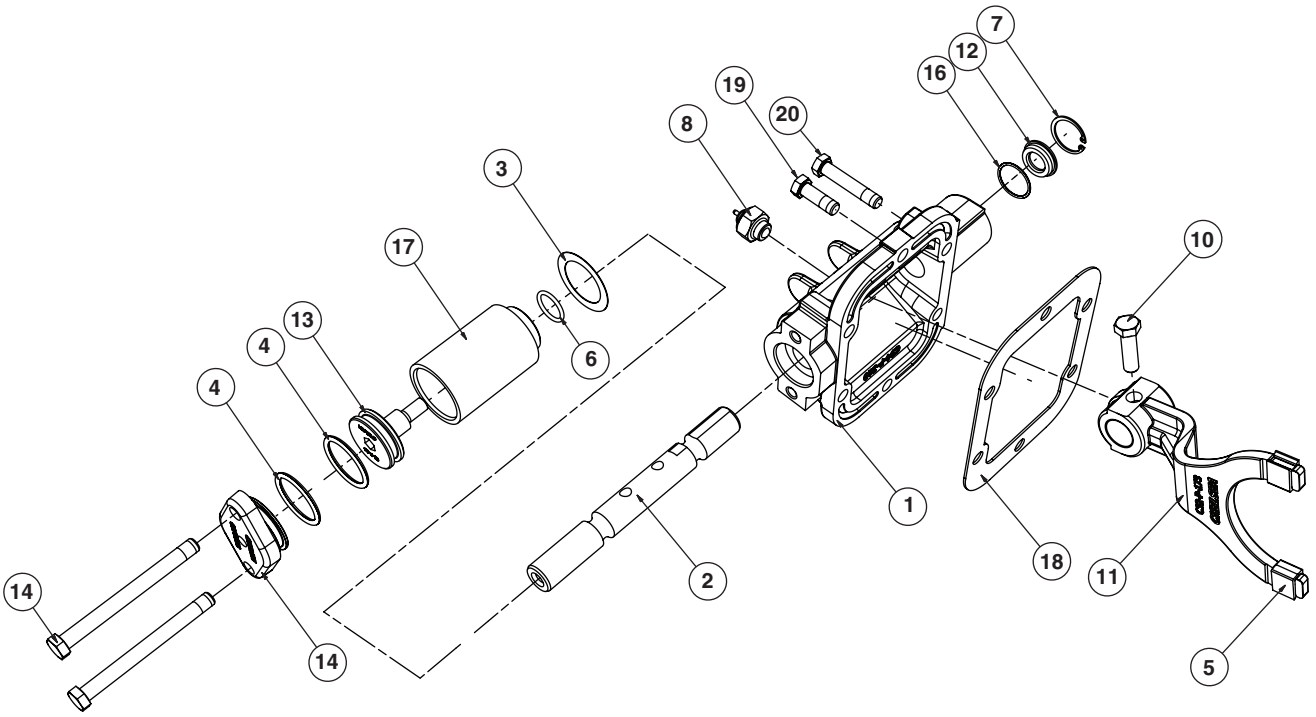


Item	Part Number	Description	Qty.
1	**42-P-255**	Input Designator (330032X MA)	1 or
	42-P-256	Input Designator (330033X MB)	1 or
	42-P-255	Input Designator (330034X MC)	1
2	**9-P-130**	Adapter Shaft DT12® HD	1
3	**43-P-175**	Adapter Gear (330032X MA)	1
	43-P-176	Adapter Gear (330033X MB)	1
	43-P-177	Adapter Gear (330034X MC)	1
4	**562004**	Cone Bearing Assembly (1.312" x 3.000" x 1.156")	2
5	**562005**	Cup Bearing (1.312" x 3.000" x 1.156")	2
6	**14-P-93**	Bearing Spacer (1.314 x 1.700" x .200")	1
7	**55-P-45-1**	Shim (1.328" x 1.700" x .001")	A.R.
	55-P-45-2	Shim (1.328" x 1.700" x .003")	A.R.
	55-P-45-3	Shim (1.328" x 1.700" x .006")	A.R.
	55-P-45-4	Shim (1.328" x 1.700" x .009")	A.R.
	55-P-45-5	Shim (1.328" x 1.700" x .012")	A.R.
	55-P-45-6	Shim (1.328" x 1.700" x .015")	A.R.
8	**380675.CHD**	Flange Nut DT12®	1
9	**379231**	Pipe Plug (.125"-27)	1
10	**500597-18**	Roll Pin (.188" x 1.500")	1
11	**69-P-37**	Caution Tag	1

A.R. – As Required

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Air Shift Control Parts
Option A

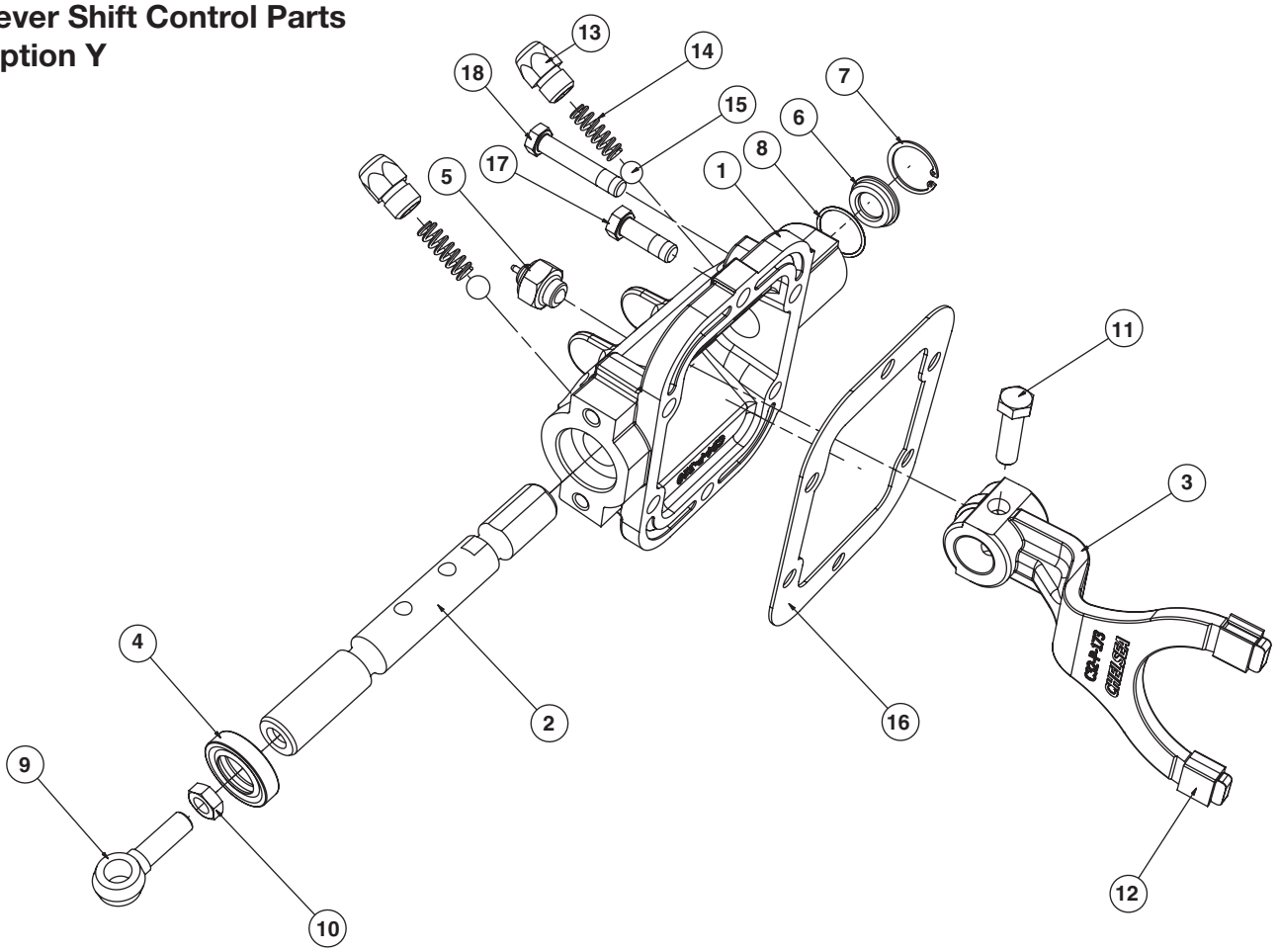


Item	Part Number	Description	Qty.
	329216-3X	**Air Shifter Kit**	
	328388-61X	Installation Kit	1
	329772X	Air Shift Cover Assembly (Includes items 1 thru 17)	
1	**34-P-311**	Cover Shifter	1
2	**11-P-165**	Shaft Shifter	1
3	**22-P-113**	Gasket (.823")	1
4	**28-P-61**	O-ring (1.359" x .139")	2
5	**64-P-9**	Clip Shifter Fork	1
6	**28-P-198**	O-ring (.798" x .103")	1
7	**378316**	Lockring Internal	1
8	**380515**	Switch Indicator	1
N.S.	**500897-5**	Plug Shipping	2
10	**378431-12**	Hex Head Cap Screw (.375"-16 x 1.250")	2
11	**32-P-172**	Fork Shifter	1
12	**378315**	Plug Cover	1
13	**66-P-24**	Piston Shifter	1
14	**379027**	Cap Cylinder	1
15	**378431-30**	Hex Head Cap Screw (.375"-16 x 4.000")	2
16	**28-P-42**	O-ring (1.051" x .070")	1
17	**65-P-43**	Cylinder Air Shift	1
18	**35-P-59**	Gasket	1
19	**378431-11**	Hex Head, Cap Screw (.375"-16 x 1.125")	2
20	**378431-18**	Hex Head, Cap Screw (.375"-16 x 2.000")	4

N.S. – Not Shown

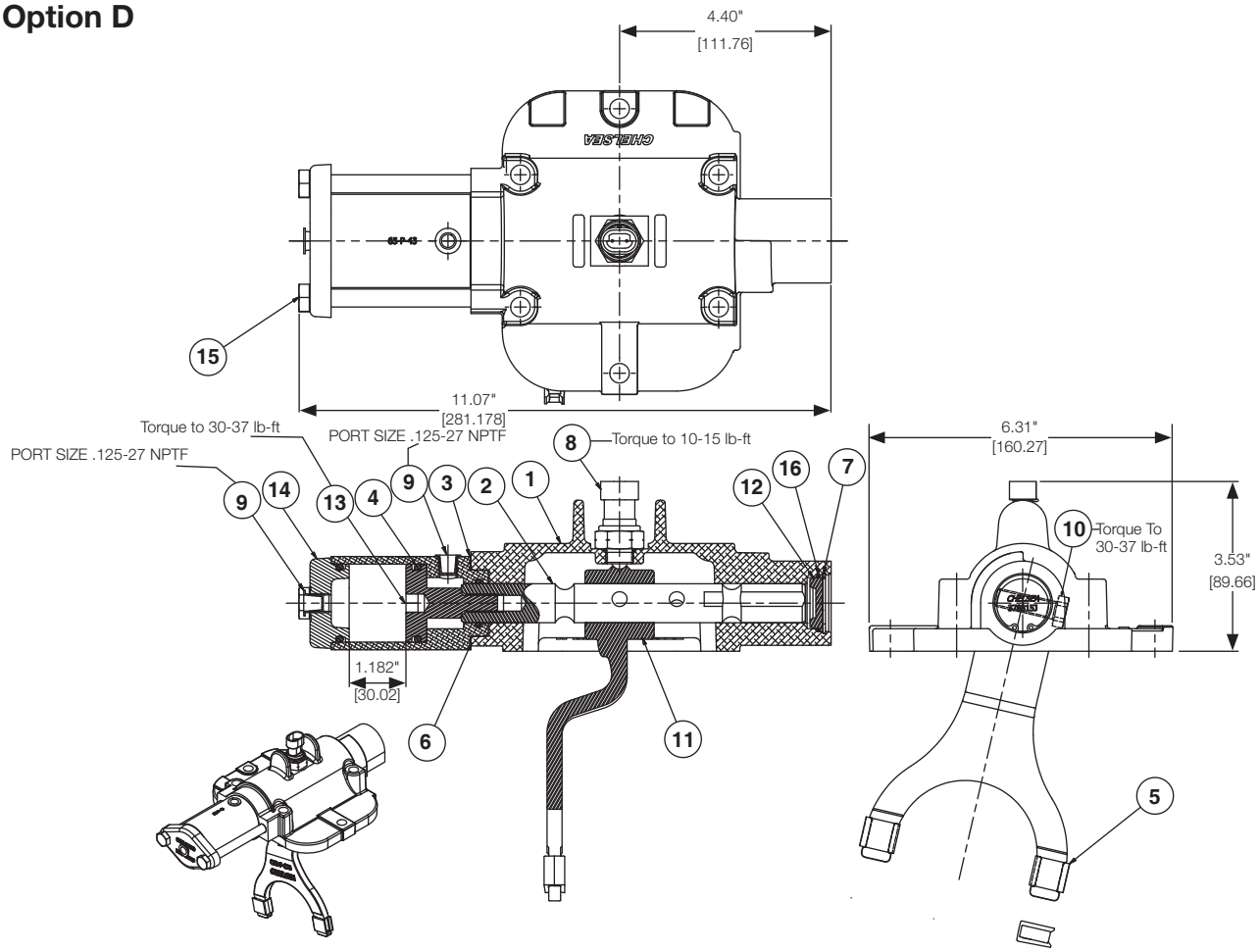
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Olive Branch, MS 38654 USA

Lever Shift Control Parts
Option Y



Item	Part Number	Description	Qty.
	329216-2X	**Lever Shifter Kit**	
	328751-1X	Installation Kit	1
	329774X	Lever Control Assembly (Includes items 1 thru 15)	
1	**34-P-312**	Cover Shifter	1
2	**11-P-165**	Shaft Shifter	1
3	**32-P-172**	Fork Shifter	1
4	**28-P-218**	Oil Seal	1
5	**380515**	Switch Indicator	1
6	**378315**	Plug Cover	1
7	**378316**	Lock ring, Internal	1
8	**28-P-42**	O-ring	1
9	**36-P-1**	Eye Bolt	1
10	**500381-3**	Hex Jamb Nut (.375"-24)	1
11	**378431-12**	Hex Head Cap Screw (.375"-16 x 1.250")	2
12	**64-P-9**	Clip Shifter Fork	2
13	**378554**	Cap Poppet	2
14	**37-P-41**	Spring (.406" x 1.125")	2
15	**378002**	Ball Shifter (.437")	2
16	**35-P-59**	Gasket	1
17	**378431-11**	Hex Head Cap Screw (.375"-16 x 1.125")	2
18	**378431-18**	Hex Head Cap Screw (.375"-16 x 2.000")	4

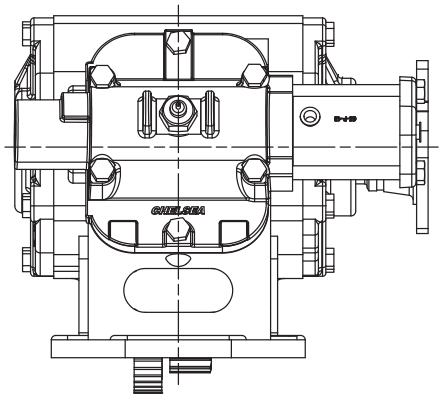
Electric Over Air Shift Control Parts
Option D



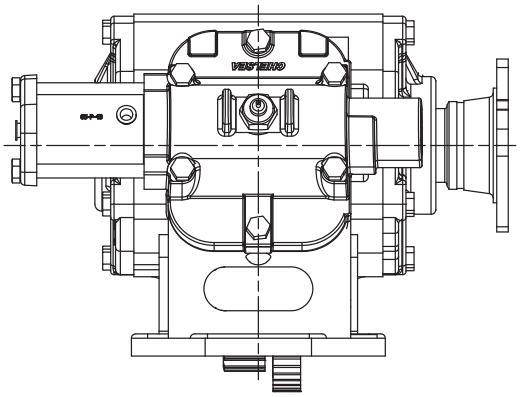
Item	Part Number	Description	Qty.
	329777X	**COVER ASSEMBLY** (Includes items 1 thru 17)	
1	**34-P-311**	Cover Shifter	1
2	**11-P-165**	Shaft Shifter	1
3	**22-P-113**	Gasket (1.386" x 1.937" x .015")	1
4	**28-P-61**	O-ring (1.359" x .139")	2
5	**64-P-9**	Clip Shifter Fork	2
6	**28-P-198**	O-ring (.798" x .103")	1
7	**378316**	Lockring Internal	1
8	**379990**	Switch Indicator	1
9	**500897-5**	Plug Shipping	2
10	**378431-12**	Hex Head Cap Screw (.375"-16 x 1.250")	1
11	**32-P-172**	Fork Shifter	1
12	**378315**	Plug Cover	1
13	**66-P-24**	Piston Shifter	1
14	**379027**	Cap Cylinder	1
15	**378431-30**	Hex Head Cap Screw (.375"-16 x 4.000")	2
16	**28-P-42**	O-ring (1.051" x .070")	1
17	**65-P-43**	Cylinder Air Shift	1

NOTE: Use connector harness 330037X to connect to item, 379990 indicator switch.

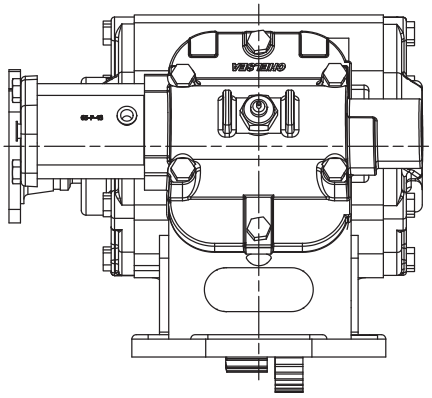
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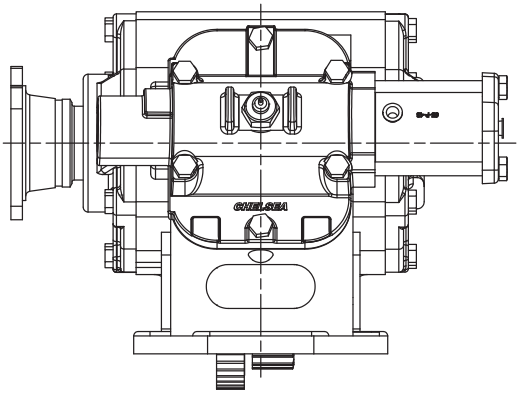
Assembly 3



Assembly 4

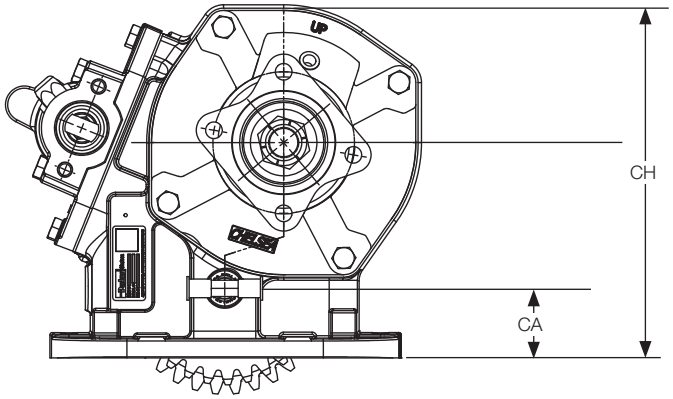


Assembly 5



Assembly 6

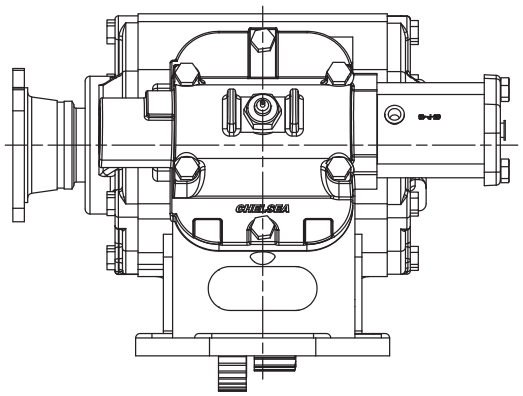
PTO Housing Dimensions



PTO Series	Housing Number	CA	CH
880G	1-P-507X	1.840"	9.350"
880K	1-P-507X	1.840"	9.350"
880L	1-P-509X	0.920"	9.350"
880Q	1-P-778X	1.670"	9.350"
880X	1-P-507X	1.840"	9.350"
880Z	1-P-509X	0.920"	9.350"
880D	1-P-507X	1.840"	9.350"

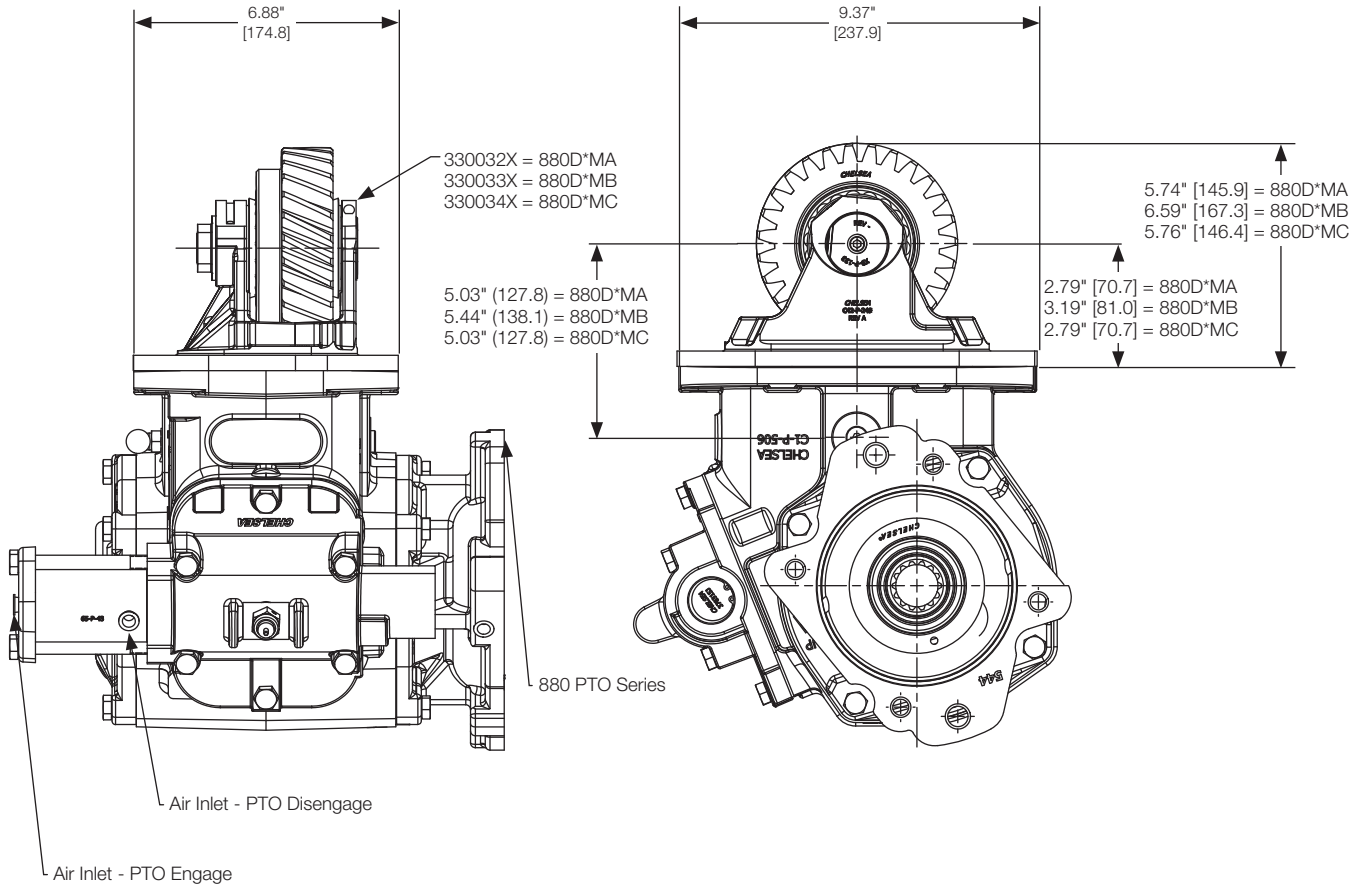
Parker Hannifin Corporation
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Olive Branch, MS 38654 USA

Detroit® DT12® Adapter



Assembly 6

PTO Dimensions Detroit® DT12® Adapter



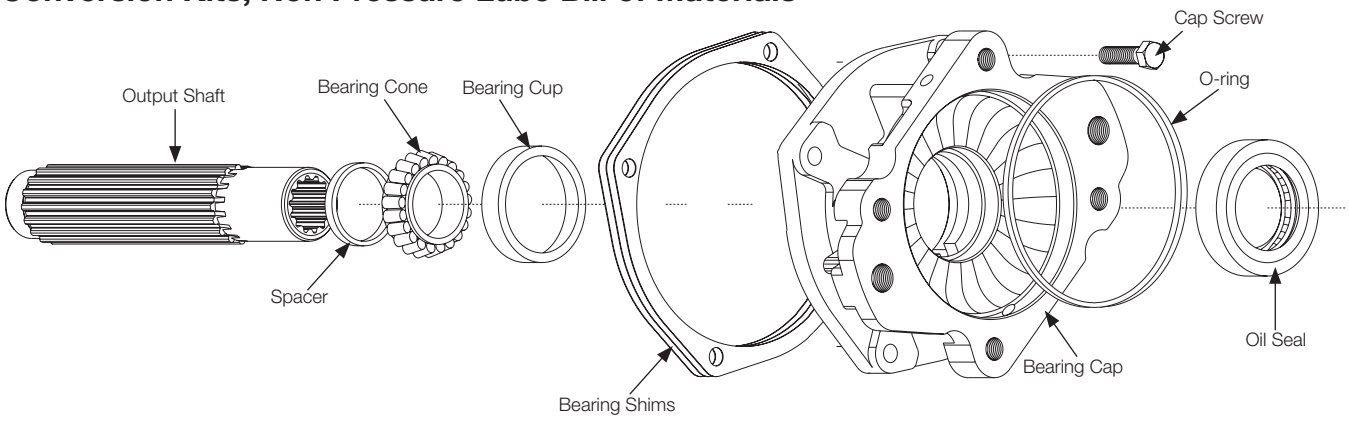
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Chelsea Products Division
Olive Branch, MS 38654 USA

Direct Mount Pump Option Description

For Bottom or Side Mounted Transmissions (Fuller, Mack or Spicer)
Output Option Conversion Kits (Splash Lube)

Flange Suffix	Flange Type	Shaft Type	Conversion Kit (From XV)
AF	SAE B 2 & 4-Bolt	SAE BB (1" - 15T)	328591-104X (Splash Lube) 328591-105X (Pressure Lube)
AZ	SAE B 2 & 4-Bolt	SAE C (1-1/4" - 14T)	328591-127X (Splash Lube) 328591-128X (Pressure Lube)
XK	SAE B 2 & 4-Bolt	SAE B (7/8" - 13T)	328591-32X (Splash Lube) 328591-58X (Pressure Lube)
XS	SAE C 2 & 4-Bolt	SAE C (1-1/4" - 14T)	328591-31X (Splash Lube) 328591-49X (Pressure Lube)
XY	ISO 7653	DIN 5462 Spline	328591-34X (Splash Lube)
GS	Greaseable Output Shaft SAE C 2 or 4-Bolt	SAE C (1-1/4" - 14T)	328591-135X (XV to GS) 328591-133X (XS to GS)

Conversion Kits, Non Pressure Lube Bill of Materials



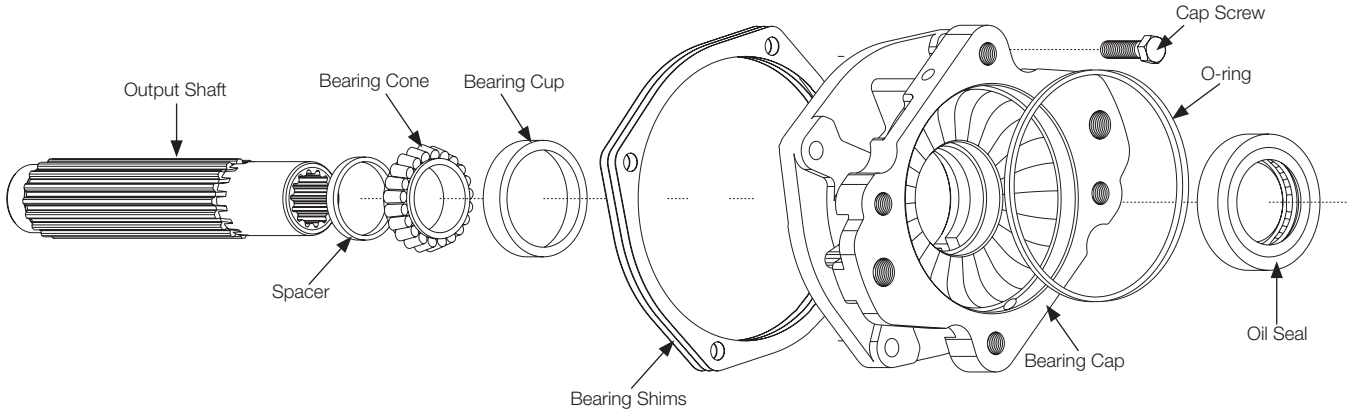
PTO Output	Conversion Kit	Bearing Cap	Output Shaft	Oil Seal	Bearing Cone/Cup	Spacer	O-ring
AF (XV to AF)	328591-104X	21-P-539	3-P-940	28-P-219	560976/560977	4-P-162	28-P-259
AZ (XV to AZ)	328591-127X	21-P-539	3-P-873	28-P-219	560976/560977	4-P-162	28-P-259
GS (XV to GS)	328591-135X	21-P-515 (O) 21-P-653X (R)	3-P-949X	28-P-219 28-P-226	560976/560977 560986/560982	4-P-162	28-P-245
GS (XS to GS)	328591-133X	21-P-653X (R)	3-P-949X	28-P-219 (O) 28-P-226 (R)	560976/560977 560986/560982	4-P-162	28-P-245 (O)
XK	328591-32X	21-P-539	3-P-874	28-P-219	560976/560977	4-P-162	28-P-259
* XK		21-P-539	3-P-901*	28-P-219	560976/560977	4-P-162	28-P-259
XS	328591-31X	21-P-515	3-P-873	28-P-219	560976/560977	4-P-162	28-P-245
* XS		21-P-515	3-P-900*	28-P-219	560976/560977	4-P-162	28-P-245
* XY	328591-34X	21-P-541	3-P-878	28-P-267	560985/560984 (O) 560986/560982 (R)		28-P-196

* Special pump shaft, housing (1-P-530) and closed end bearing cap (21-P-590), required for 880F when used with Fuller CEEMAT™ transmission. This option is only available in the 5 assembly arrangement. No Conversion Kit is currently available. Parts must be ordered separately.

FOOTNOTES: **O** = Output Bearing Cap **R** = Rear Bearing Cap

NOTE: The Conversion Kits include all the items shown plus two each of the Bearing Shims 55-P-20-1, 55-P-20-2, 55-P-20-3, 560977 Bearing Cup, and four Hex Head Cap Screws 379286-11.
NOTE: These options and conversion kits are normally used on the bottom or side openings of Fuller, Mack & Spicer Transmissions.
NOTE: See Kits Bills of Material in back of book for complete Conversion Kit BOM.

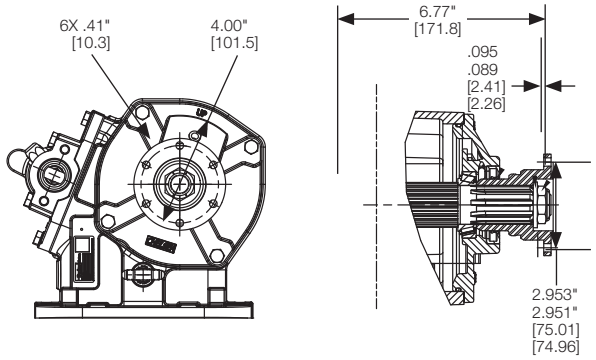
Conversion Kits, Pressure Lube Bill of Materials



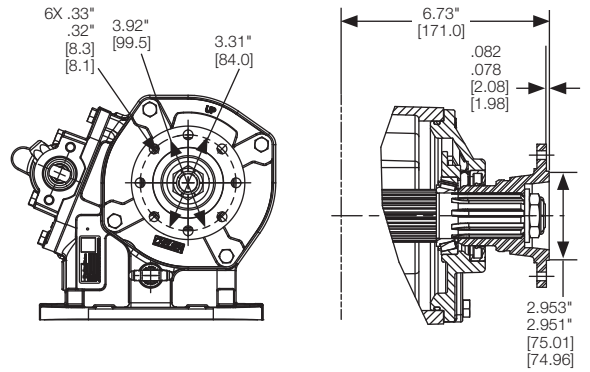
PTO Output	Conversion Kit	Bearing Cap	Output Shaft	Oil Seal	Bearing Cone/Cup	Spacer	O-ring
AF	328591-105X (Pressure Lube)	21-P-592	3-P-940	28-P-219	560976/560977	4-P-162	28-P-259
AZ	328591-128X (Pressure Lube)	21-P-592	3-P-873	28-P-219	560976/560977	4-P-162	28-P-259
XK	328591-58X (Pressure Lube)	21-P-592	3-P-874	28-P-219	560976/560977	4-P-162	28-P-259
XS	328591-49X (Pressure Lube)	21-P-544	3-P-873	28-P-219	560976/560977	4-P-162	28-P-245

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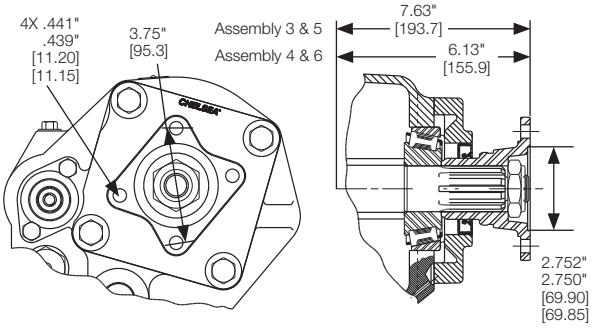
Bill of Materials - Driveline Output



❖ AB Output Option DIN 120 Flange		
Part Number	**Description**	**Qty.**
3-P-872	Output Shaft	1
21-P-517	Bearing Cap, Output	1
21-P-596	Bearing Cap, Output (For Pressure Lube)	1
28-P-211	Oil Seal	1
378558	Hex Nut	1
379558	Companion Flange	1
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1
†328591-59X	**Conversion Kit (XV to AB) (Splash Lube)**	
†328591-60X	**Conversion Kit (XV to AB) (Pressure Lube)**	



❖ AC Output Option DIN 100 Flange		
Part Number	**Description**	**Qty.**
3-P-872	Output Shaft	1
21-P-517	Bearing Cap, Output	1
21-P-596	Bearing Cap, Output (For Pressure Lube)	1
28-P-211	Oil Seal	4
380486	Hex Nut	1
379742	Companion Flange (DIN 100)	1
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1
†328591-119X	**Conversion Kit (XV to AC) (X Lube Option)**	
†328591-120X	**Conversion Kit (XV to AC) (P Lube Option)**	



XV Output Option 1410 Series Companion Flange		
Part Number	**Description**	**Qty.**
3-P-872	Output Shaft (1-1/2"-10T)	1
28-P-211	Oil Seal	1
21-P-517	Bearing Cap (X Lube)	1
21-P-595	Bearing Cap (P Lube)	1
378431-11	Socket Hex Cap Screw (.375"-16 x 1.125")	4
380486	Hex Nut (.875"-14)	1
3-1-3431	Companion Flange 1410 Series	1
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1

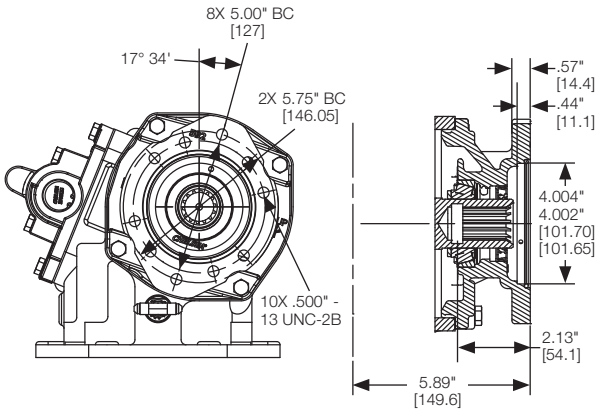
❖ No longer a current option per Chelsea Suggested List Price.

†Conversion Kits do not include all parts listed above. See pages 43-48 for Conversion Kit BOMs.

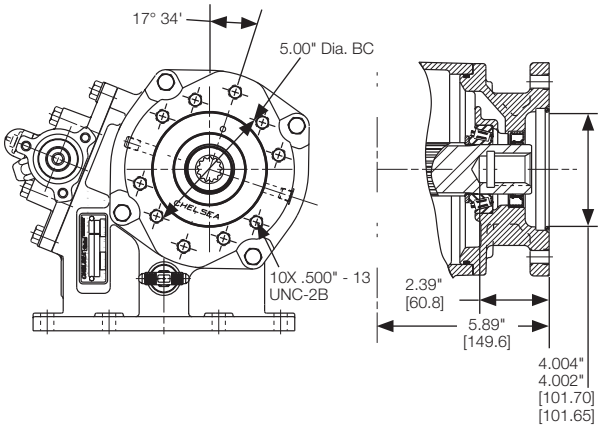
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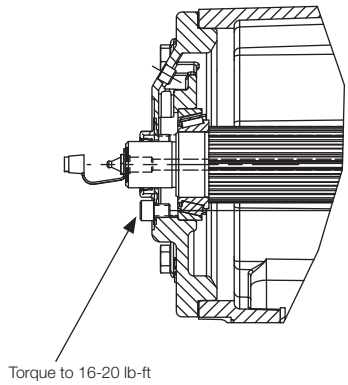
Bill of Materials - Pump Mount Output



AF Output Option SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)		
Part Number	**Description**	**Qty.**
28-P-219	Oil Seal	1
28-P-259	O-ring	1
560976	Bearing Cone	1
560977	Bearing Cup	1
379231	Pipe Plug (Pressure Lube Only)	1
500897-3	Shipping Plug (Pressure Lube Only)	2
21-P-592	Bearing Cap - Output (Pressure Lube)	1
21-P-539	Bearing Cap - Output	1
3-P-940	Output Shaft	1
4-P-162	Spacer	1
†**328591-104X**	**Conversion Kit (XV to AF) (Splash Lube)**	
†**328591-105X**	**Conversion Kit (XV to AF) (Pressure Lube)**	



AZ Output Option SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)		
Part Number	**Description**	**Qty.**
3-P-873	Output Shaft	1
28-P-219	Oil Seal	1
21-P-539	Bearing Cap, Output	1
21-P-592	Bearing Cap, Output (Pressure Lube Only)	1
28-P-259	O-ring	1
500007-29	Woodruff Key	1
379231	Pipe Plug (Pressure Lube Only)	1
500897-3	Shipping Plug (Pressure Lube Only)	1
†**328591-127X**	**Conversion Kit (XV to AZ) (Splash Lube)**	
†**328591-128X**	**Conversion Kit (XV to AZ) (Pressure Lube)**	



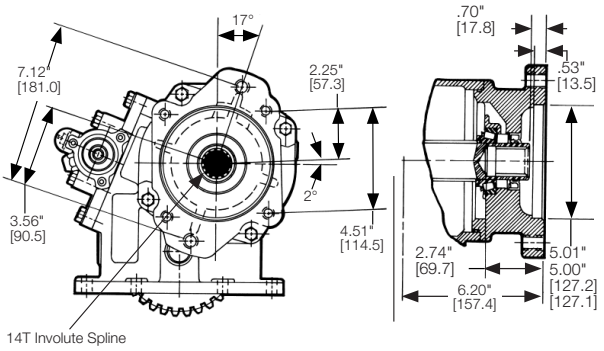
G* Output Option Greaseable		
Part Number	**Description**	**Qty.**
3-P-949X	Greaseable Output Shaft ASSY (GS Output)	1
379432-1	Socket Head Cap Screw (.312"-18 x .375")	3
28-P-226	Shaft Seal	1
21-P-653	Bearing Cap	1
379231	Pipe Plug	1
†**328591-133X**	**Conversion Kit (XS to GS)**	
†**328591-135X**	**Conversion Kit (XV to GS)**	

†Conversion Kits do not include all parts listed above. See pages 43-48 for Conversion Kit BOMs.

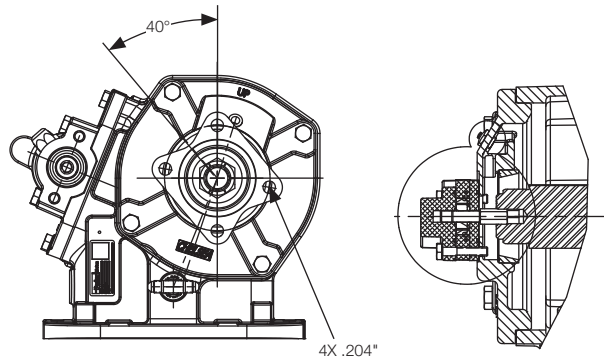
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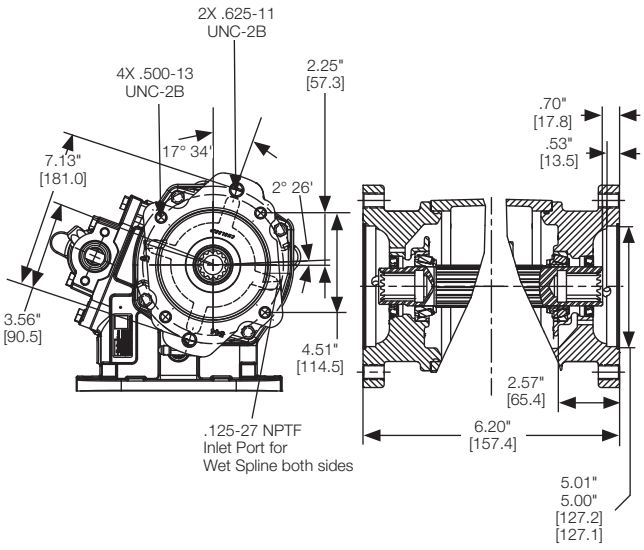
Bill of Materials - Pump Mount Output (Cont'd)



GS Output Option Greaseable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)		
Part Number	**Description**	**Qty.**
3-P-949X	Output Shaft (1-1/4" Round w/5/16" Keyway)	1
28-P-216	Oil Seal	1
329273X	Bearing Cap ASSY	1
378447-6	Socket Hex Cap Screw (.312"-18 x 1.000")	4
500007-29	Woodruff Key	1
379828	Companion Flange	1
378454-7	Set Screw	1
†328591-135X	**Conversion Kit (XV to GS)**	
†328591-133X	**Conversion Kit (XS to GS)**	



L* Output Option Self Lube		
Part Number	**Description**	**Qty.**
	Output Shaft	1
3-P-878	Output Shaft (LF Output)	
3-P-879	Output Shaft (LG Output)	
3-P-877	Output Shaft (LH Output)	
3-P-879	Output Shaft (LL Output)	
329127X	Bearing Cap & Lube Pump ASSY	1
500897-3	Plastic Plug	2
500167-1	Relief Valve Fitting	2
†329111-1X	**Conversion Kit (LG)**	
†329111-2X	**Conversion Kit (LH)**	
†329111-2X	**Conversion Kit (LF)**	



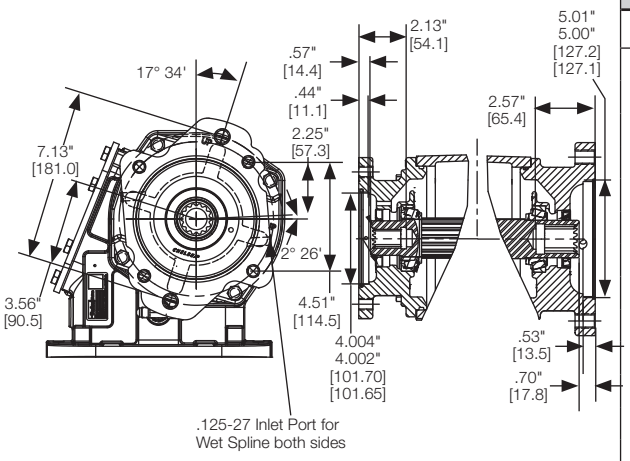
❖ SS Output Option SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T Both Ends)		
Part Number	**Description**	**Qty.**
3-P-875	Output Shaft	1
4-P-162	Spacer	2
21-P-515	Output Bearing Cap	1
21-P-544	Output Bearing Cap (For Pressure Lube)	1
21-P-515	Rear Bearing Cap	1
21-P-544	Rear Bearing Cap (For Pressure Lube)	1
28-P-219	Oil Seal	1
28-P-214	Oil Seal	1
28-P-245	O-ring	2
560977	Tapered Bearing Cup	2
560976	Tapered Bearing Cone	2
379231	Pipe Plug (Pressure Lube)	2
500897-3	Shipping Plug (Pressure Lube)	2
69-P-18	Tag (Wet Spline Only)	1
†328591-50X	**Conversion Kit (XV to SS) (Splash Lube)**	
†328591-51X	**Conversion Kit (XV to SS) (Pressure Lube)**	

†Conversion Kits do not include all parts listed above. See pages 43-48 for Conversion Kit BOMs.

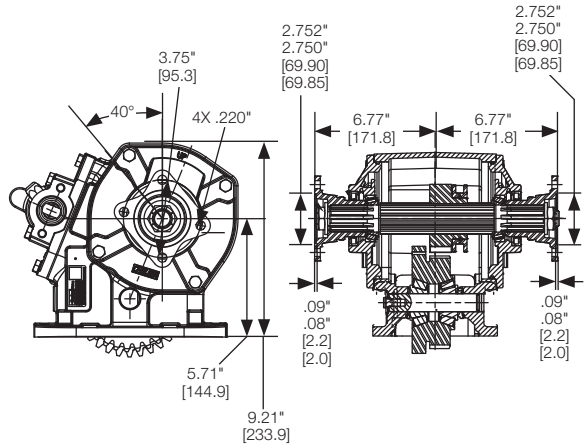
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Bill of Materials - Pump Mount Output (Cont'd)



❖ SK Output Option SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T Right Side) SAE B 2 or 4-Bolt Flange, SAE C Shaft (7/8" - 13T Left Side)		
Part Number	**Description**	**Qty.**
3-P-902	Output Shaft	1
4-P-162	Spacer	2
21-P-515	Output Bearing Cap	1
21-P-593	Output Bearing Cap (For Pressure Lube)	1
21-P-539	Rear Bearing Cap	1
21-P-592	Rear Bearing Cap (For Pressure Lube)	1
28-P-219	Oil Seal	1
28-P-214	Oil Seal	1
28-P-245	O-ring	1
28-P-259	O-ring	1
560977	Tapered Bearing Cup	1
560976	Tapered Bearing Cone	1
379231	Pipe Plug	2
500897-3	Shipping Plug	2
69-P-18	Tag (Wet Spline Only)	1
†328591-67X	**Conversion Kit (XV to SK) (Pressure Lube)**	



❖ VV Output Option 1410 Companion Flanges (Both Sides)		
Part Number	**Description**	**Qty.**
3-P-916	Output Shaft (1-1/2" - 10T) (Both Sides)	1
21-P-517	Output Bearing Cap	1
21-P-596	Output Bearing Cap (For Pressure Lube)	1
21-P-517	Rear Bearing Cap	1
21-P-596	Rear Bearing Cap (For Pressure Lube)	1
28-P-211	Oil Seal	2
380486	Hex Nut	2
380503	Companion Flange 1410 Series	2
560982	Tapered Bearing Cup	2
560986	Tapered Bearing Cone	2
†328591-68X	**Conversion Kit (XV to VV) (Splash Lube)**	
†328591-69X	**Conversion Kit (XV to VV) (Splash Lube)**	

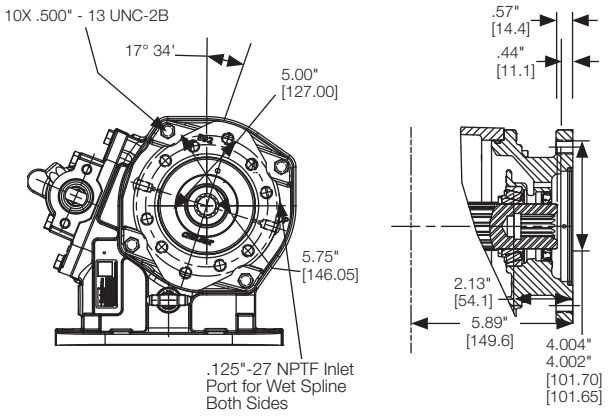
❖ No longer a current option per Chelsea Suggested List Price.

†Conversion Kits do not include all parts listed above. See pages 43-48 for Conversion Kit BOMs.

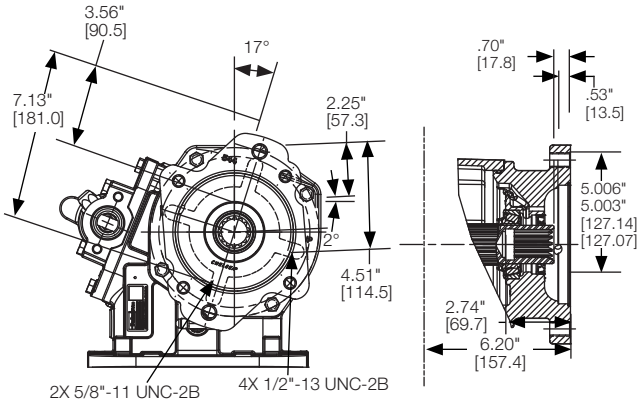
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Bill of Materials - Pump Mount Output (Cont'd)



XK Output Option SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		
Part Number	**Description**	**Qty.**
3-P-901	Output Shaft (F Mounting Type)	1
3-P-874	Output Shaft (All Other Mounting Types)	1
28-P-219	Oil Seal	1
4-P-162	Spacer	1
21-P-539	Bearing Cap, Output	1
21-P-592	Bearing Cap, Output (For Pressure Lube)	1
378447-6	Socket Hex Cap Screw (.312"-18 x 1.000")	4
28-P-259	O-ring	1
560977	Tapered Bearing Cup	1
560976	Tapered Bearing Cone	1
379231	Pipe Plug (Pressure Lube Only)	1
500897-3	Shipping Plug (Pressure Lube Only)	1
†328591-32X	**Conversion Kit (XV to XK) (Splash Lube)**	
†328591-58X	**Conversion Kit (XV to XK) (Pressure Lube)**	



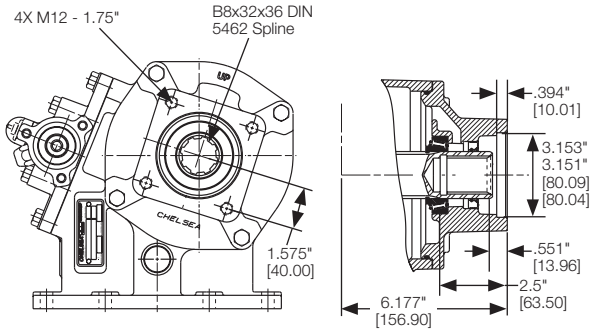
XS Output Option SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)		
Part Number	**Description**	**Qty.**
3-P-873	Output Shaft	1
28-P-216	Oil Seal	1
329273X	Bearing Cap ASSY	1
378447-6	Socket Hex Cap Screw (.312"-18 x 1.000")	4
500007-29	Woodruff Key	1
379828	Companion Flange	1
378454-7	Set Screw	1
†328591-31X	**Conversion Kit (XV to XS) (Splash Lube)**	
†328591-49X	**Conversion Kit (XV to XS) (Pressure Lube)**	

❖ No longer a current option per Chelsea Suggested List Price.

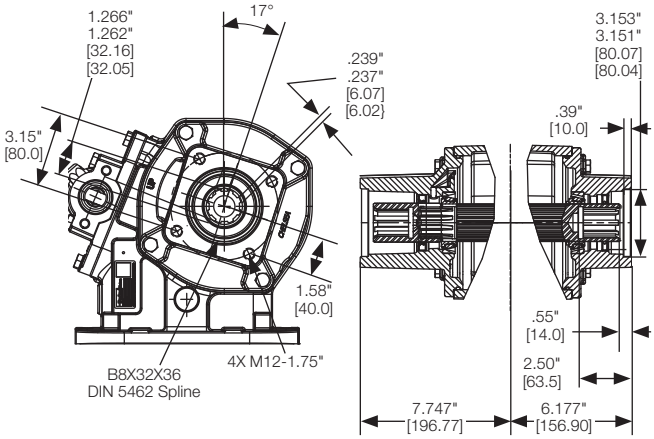
†Conversion Kits do not include all parts listed above. See pages 43-48 for Conversion Kit BOMs.

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Bill of Materials - Pump Mount Output (Cont'd)



XY Output Option ISO 7653 Pump Mount DIN 5462 Shaft		
Part Number	**Description**	**Qty.**
3-P-876	Output Shaft (DIN 5462-10T)	1
28-P-267	Oil Seal	1
329273X	Bearing Cap ASSY	1
378447-6	Socket Hex Cap Screw (.312"-18 x 1.000")	4
†328591-34X	**Conversion Kit (XV to XY) (Splash Lube)**	



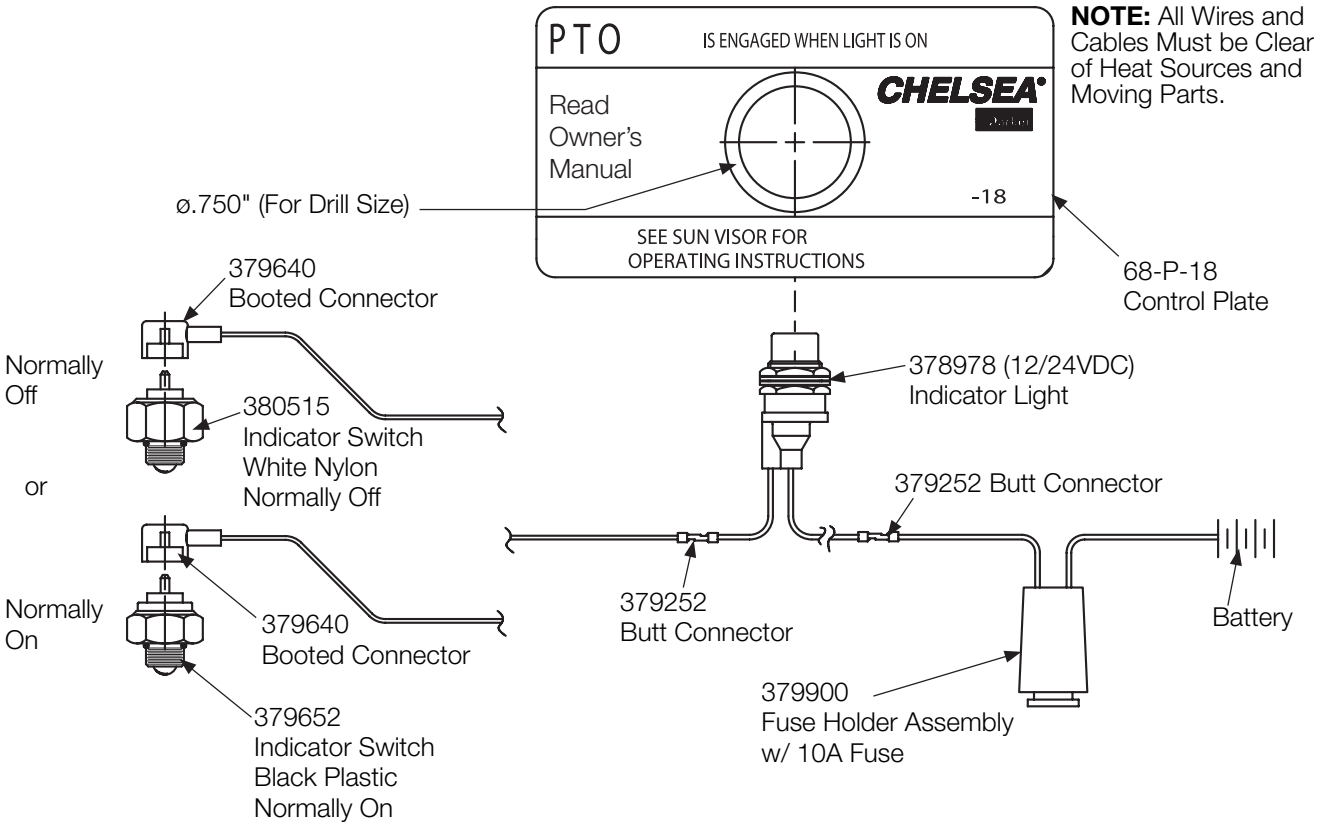
❖ YY Output Option DIN 80mm Flange, DIN 5462 Shaft (Both Ends)		
Part Number	**Description**	**Qty.**
3-P-880	Output Shaft	1
21-P-541	Output Bearing Cap	1
21-P-652	Rear Bearing Cap	1
28-P-287	Oil Seal	1
28-P-275	Oil Seal	1
379555	Lockring	1
560984	Tapered Bearing Cup	1
560985	Tapered Bearing Cone	1
561012	Tapered Bearing Cup	1
561011	Tapered Bearing Cup	1
378898	Flat Hex Cap Screw (.438"-14 x 1.000")	1
379560	Spline Coupling	1
†328591-61X	**Conversion Kit (XV to YY) (Splash Lube)**	

❖ No longer a current option per Chelsea Suggested List Price.

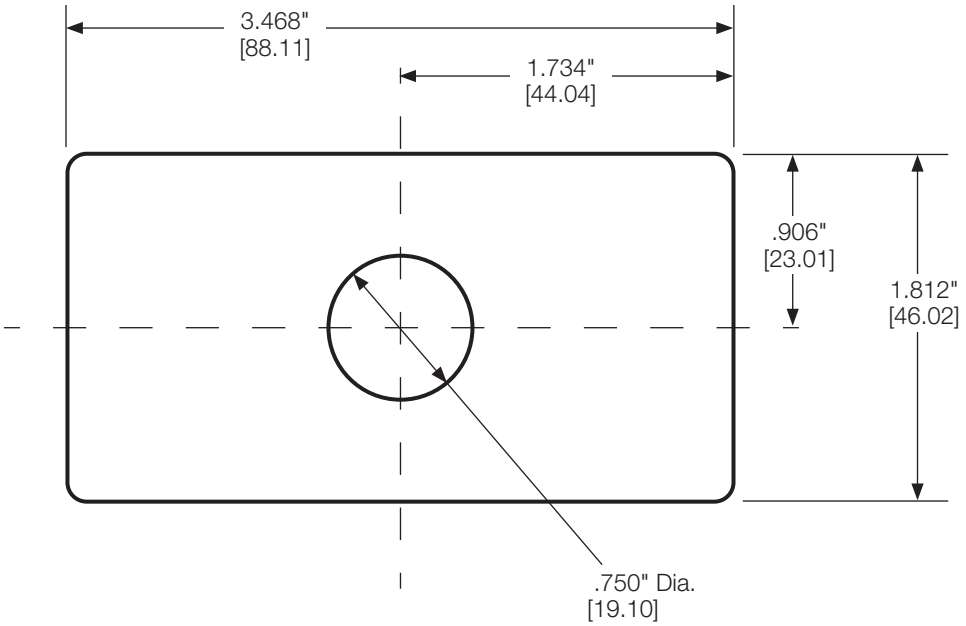
†Conversion Kits do not include all parts listed above. See pages 43-48 for Conversion Kit BOMs.

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Indicator Light Installation Instructions (SK-286 Rev H)



Dash Drilling Template (SK-168 Rev A)

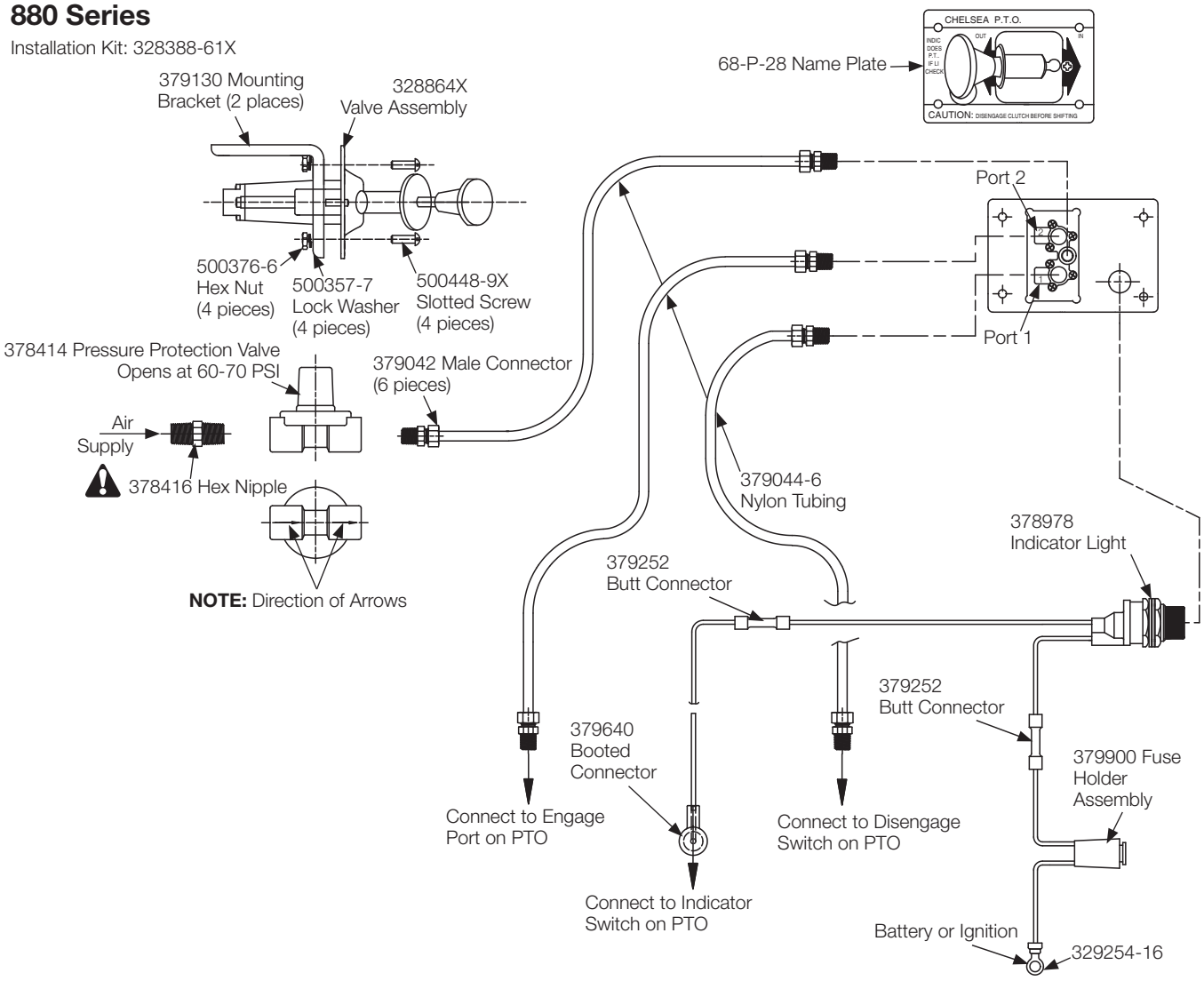


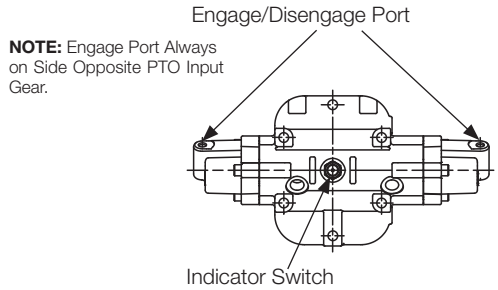
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Shift Option A
Air Shift
880 Series

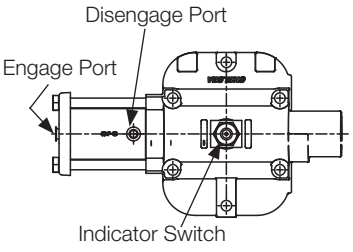
(SK-276 Rev M)

Installation Kit: 328388-61X





PORT LOCATIONS for **880 Series**
(Two Piston Style)



PORT LOCATIONS for **880 Series**
(Dual-Acting Style)

WARNING: Connect directly to the air supply. Do not use tubing between the air supply and the pressure protection valve.

CAUTION: When installing nylon tubing avoid sharp angles, exhaust, and manifold systems.

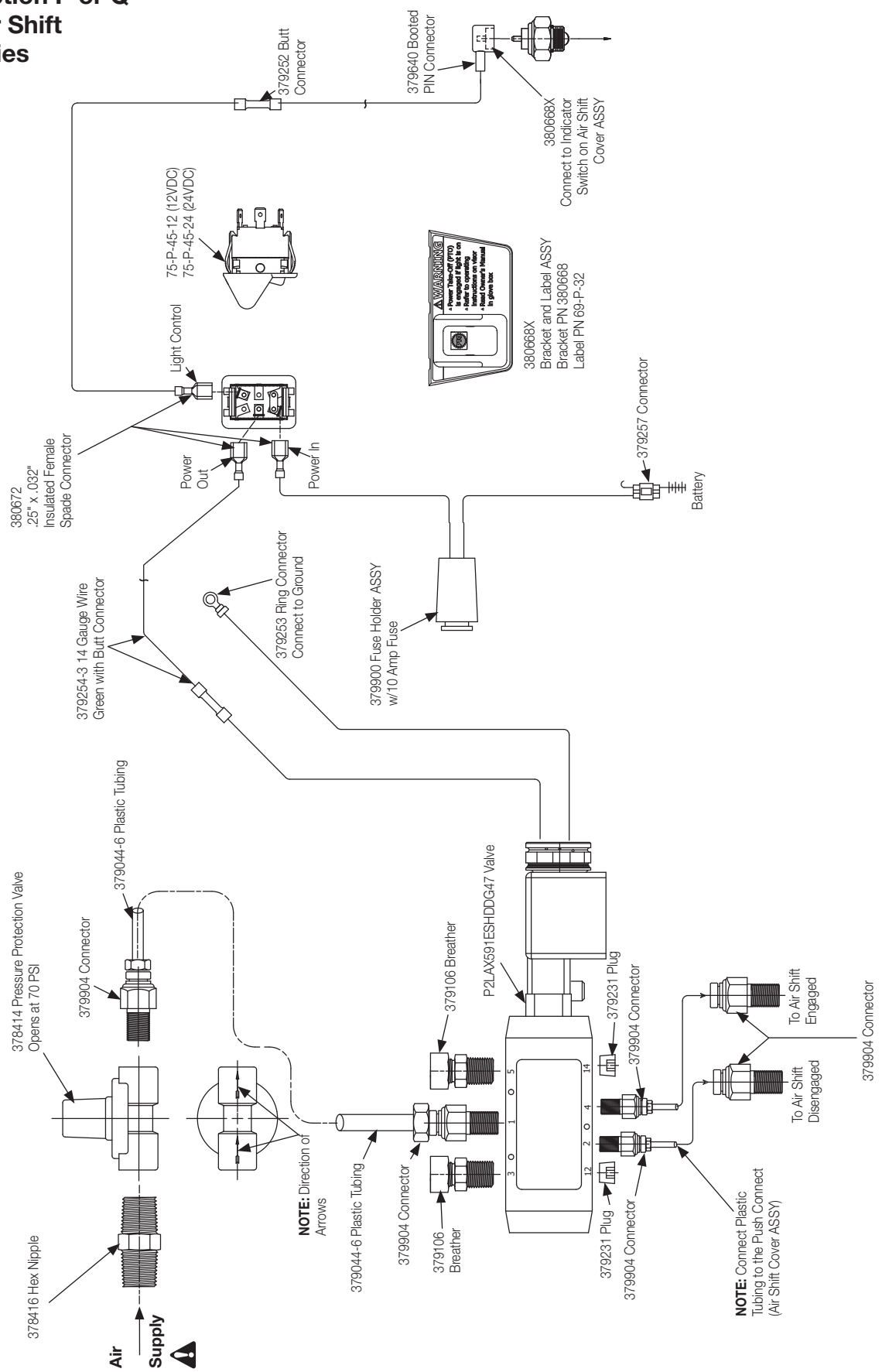
IMPORTANT: When this installation is used on vehicles with automatic transmissions, the PTO drive gear must be stopped before shifting.

NOTE: Tube nut is reusable as long as nylon tubing is not removed from the tube nut.

NOTE: The template for the control plate is on page 35

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Shift Option P or Q
Elec/Air Shift
880 Series



(SK-447 Rev D)

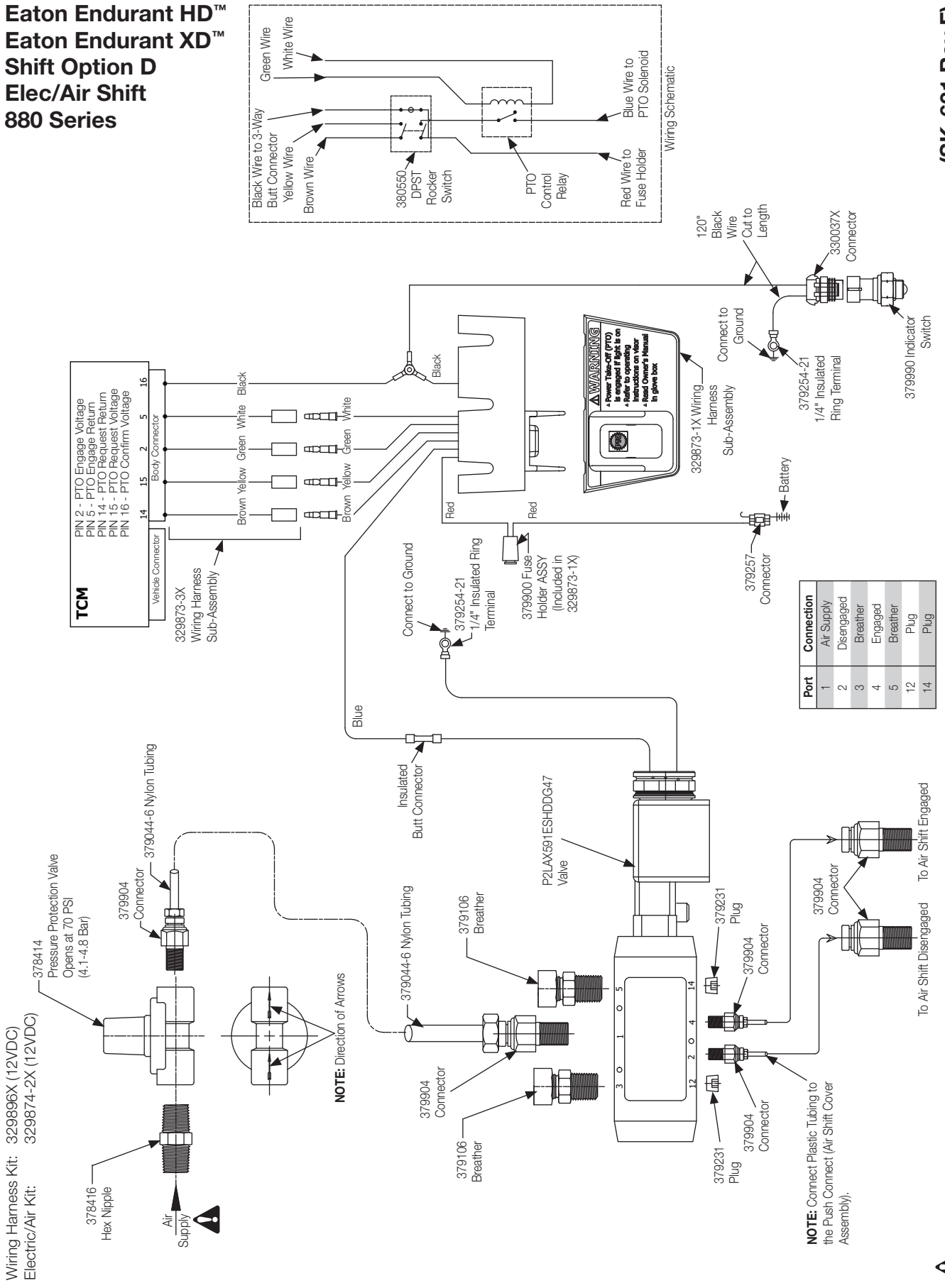
Installation Kit: 328388-93X (12VDC)

WARNING: Connect directly to air supply. Do not use tubing between air supply and pressure protection valve.

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

Eaton Endurant HD™
Eaton Endurant XD™
Shift Option D
Elec/Air Shift
880 Series

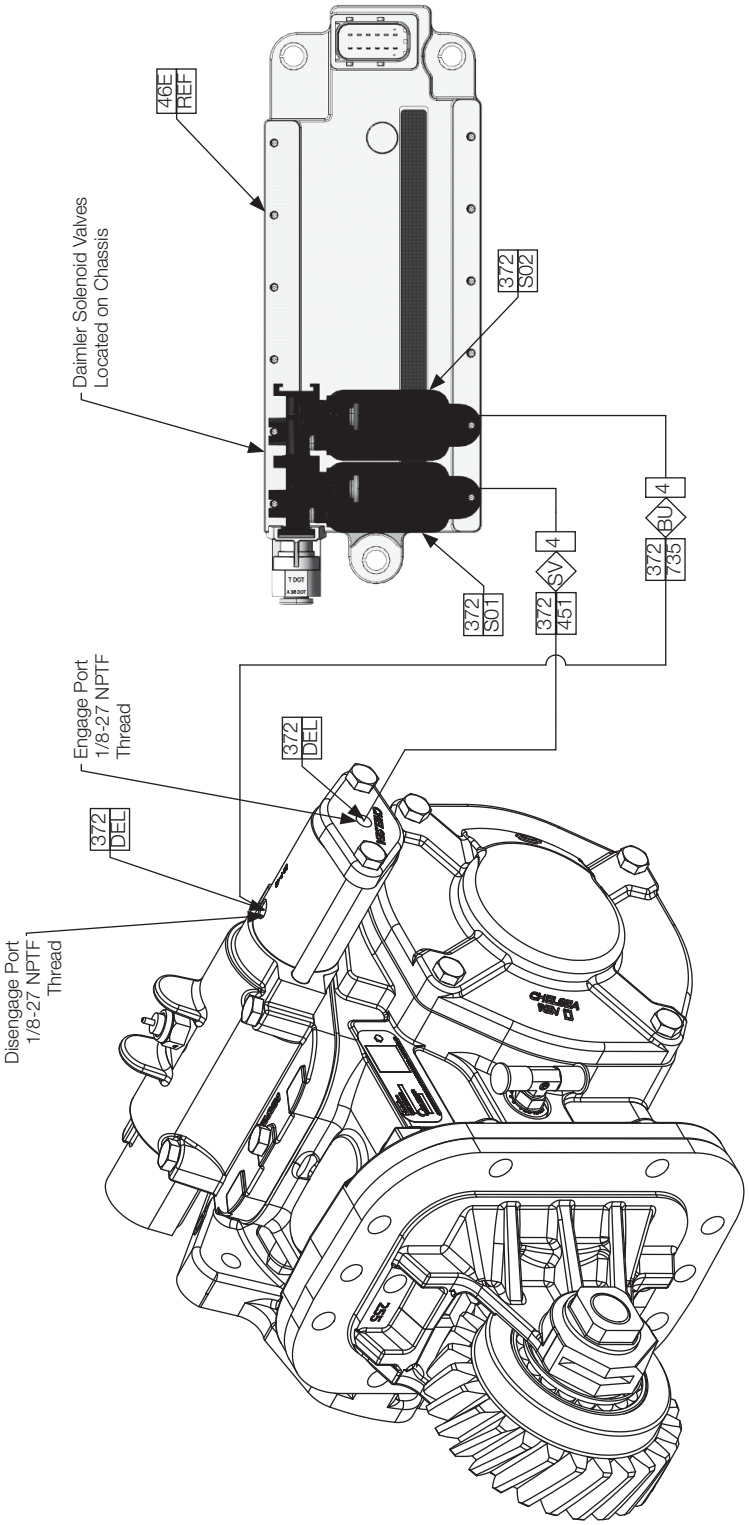
(SK-631 Rev F)



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

Detroit® DT12®
Elec/Air Shift - V Shift

(SK-675)



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

Kits Bill of Materials

Part Number	Description	Qty.
STUD KITS		
328170-179X	**Stud Kit (X Mount)**	
379424-21	Stud (.438"-14 x .438"-20 x 2.250")	8
379745	Flange Nut (.438"-20)	8
328170-195X	**Stud Kit (Z Deep Mount)**	
379424-18	Stud	2
379745	Nut Flange (.438"-20)	8
379424-21	Stud (.438")	8
328170-201X	**Stud Kit (G Mount)**	
379745	Nut Flange (.438"-20)	8
379429-19	Stud (M12-1.500 x 2.000")	8
328170-217X	**Stud Kit (Eaton Endurant Q Mount)**	
380605	Locking Patch Stud (M12-1.750 x .438"-20)	8
379745	Nut Flange (.438"-20)	8
328170-220X	**Stud Kit (Detroit® DT12® D Mount)**	
379745	Flange Nut (.438"-20)	8
380652	Stud (M12-1.750 x 3.000")	8
380644	Dowel Pin (.472" x .435" x 1.605")	2

Part Number	Description	Qty.
INSTALLATION INSTUCTION KITS		
328948-8X	**Gasket & Installation Instructions (All Except Q Mount)**	
328946X	Caution Label Kit	1
35-P-15-1	Gasket (.010")	2
35-P-15-2	Gasket (.020")	2
379085-1	PTO Instructions Decal	1
379624	Product Warranty Card	1
Owners Manual	HY25-1135-M1/US	1
Safety Guide	HY25-1002 Safety Guide	1
328948-48X	**Gasket & Installation Instructions (Q Mount)**	
328946X	Caution Label Kit	1
379085-1	PTO Instructions Decal	1
28-P-381	O-ring Mounting Seal	1
379624	Product Warranty Card	1
Owner's Manual	HY25-1135-M1/US	1
Safety Guide	HY25-1002-M1/US	1
69-P-27	Supplemental Install Instructions	1
328948-53X	**Gasket and Installation Instructions (D Mount)**	
328946X	Caution Label Kit 6 & 8-Bolt	1
35-P-129-1	Mounting Gasket DT12® (.010")	4
35-P-129-2	Mounting Gasket DT12® (.020")	4
379624	Warranty Card	1
Owners Manual	HY25-1135D-M1/US	1
Safety Guide	HY25-1002-M1/US	1
69-P-39	DA Supplemental Sheet Instruction	1

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BOMs in each kit group are listed in order based on part number.

Parker Chelsea
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Kits Bill of Materials

Part Number	Description	Qty.
	INSTALLATION KITS	
328388-61X	**Air Shift (A Shifter Type Only)**	
68-P-28	Name Plate	1
328388-45X	Air Shift Kit	1
328864X	Shifter Control Valve	1
378414	Pressure Protection Valve	1
379044-6	Nylon Tubing	1
379130	Air Shifter Support Bracket	2
379252	Speed Limiter Butt Connector	2
379640	Booted Connector	1
379254-16	Butt Connector Ring	1
328388-93X	**Elec/Air Shift Kit (P Shifter Type Only)**	
328388-94X	Valve and Connector Kit	1
378414	Air Shifter Pressure Protection Valve	1
379044-6	Tubing (.253" x .179" x 30 ft)	1
379252	Electrical Butt Connector	2
380668X	Air Shifter Switch Bracket	1
75-P-45-12	12VDC Rocker Switch	1
75-P-46X	Wire and Connectors Kit	1
379640	Booted Connector	1
328751-1X	**Indicator Light Kit (Y Shifter Type Only)**	
378978	12VDC Indicator Light	1
379252	Speed Limiter Butt Connect	2
68-P-18	Name Plate	1
379640	Booted Connector	1
379900	Fuse Holder	1
329874-2X	**Elec/Air Shift Kit (D Shifter Type Only)**	
378416	Hex Nipple	1
378414	Pressure Protection	1
379044-7	Nylon Tubing (.250" x 35 lb-ft)	1
379106	Breather	2
SK-631	Installation Sketch	1
379904	Push Connector	6
P2LAX891ESHDDG47	Elec/Air Valve	1
379231	Pipe Plug (.125"-27)	2
329896X	**Eaton Endurant (D Shifter Type Only)**	
329873-1X	Subassembly Wiring Kit	1
329873-3X	Subassembly Wiring Kit	1
80601110028	Scotchlok 801 IDC Tap Connector, 14-18 AWG	1
2-320571-2	1/4" Insulated Ring Terminal, 18 AWG, Red	2
2-320554-1	#8 Insulated Ring Terminal, 18 AWG, Red	2
192000025	Insulated Butt Connector, 18 AWG, Pink	1
19038-0006	4.57 mm Female Bullet Connector	4
N/A	Gxl Wire, 18 AWG, Black, 24"	1
N/A	Gxl Wire, 18 AWG, Black, 120"	1

Part Number	Description	Qty.
	SERVICE KITS	
328356-51X	**Gasket & Seal Kit (Standard XV Output)**	
22-P-98	Gasket (.200")	1
28-P-196	O-ring (6.000" x .138")	1
28-P-198	O-ring (.098" x .103")	1
28-P-211	Oil Seal (3.001" x 2.000" x .375")	1
28-P-42	O-ring (1.050"1 x .070")	1
35-P-15-1	Mounting Gasket (8-Bolt & 10-Bolt)	2
35-P-15-2	Mounting Gasket (8-Bolt & 10-Bolt)	2
35-P-59	Gasket 6-Bolt (.062")	1
55-P-20-1	Shim, Bearing Cover (Green) (.003")	2
55-P-20-2	Shim, Bearing Cover (Brown) (.010")	2
55-P-20-3	Shim, Bearing Cover (Yellow) (.020")	2
328356-52X	**Gasket & Seal Kit (Pump Output)**	
22-P-98	Gasket (.020")	1
28-P-196	O-ring (6.000" x .138")	1
28-P-198	O-ring. (098" x .103")	1
28-P-219	Oil Seal (2.506" x 1.625" x .375")	1
28-P-42	O-ring (1.050" x .070")	1
35-P-15-1	Mounting Gasket (8-Bolt & 10-Bolt)	2
35-P-15-2	Mounting Gasket (8-Bolt & 10-Bolt)	2
35-P-59	Gasket (6-Bolt) (.062")	1
55-P-20-1	Shim, Bearing Cover (Green) (.003")	2
55-P-20-2	Shim, Bearing Cover (Brown) (.010")	2
55-P-20-3	Shim, Bearing Cover (Yellow) (.020")	2
328356-53X	**Gasket & Seal Kit (Y Shifter Type)**	
28-P-218	Oil Seal (1.379" x .812" x 312")	2
35-P-59	Gasket (6-Bolt) (.062")	1
28-P-42	O-ring (1.051" x .070")	1
328356-54X	**Gasket & Seal Kit (2 Sided Shifter) (A Shifter Type)**	
22-P-96	Gasket	2
28-P-61	O-ring (1.359" x .139")	4
35-P-59	Gasket (6-Bolt) (.062")	1

Continued on Next Page

BOMs in each kit group are listed in order based on part number.

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

Part Number	Description	Qty.
	SERVICE KITS (Cont'd)	
328356-72X	**Gasket & Seal Kit (1 Sided Shifter) (A Shifter Type)**	
22-P-113	Gasket (.823")	1
28-P-61	O-ring (1.359" x .139")	2
28-P-198	O-ring (.798" x .103")	1
28-P-42	O-ring (1.051" x .070")	1
35-P-59	Gasket	1
328594-3X	**Bearing & Spacer Kit (Pressure Lube for B, D, G & J Ratios)**	
14-P-65-1	Spacer (1.012" x 1.500" x .055")	2
14-P-65-2	Spacer (1.012" x 1.500" x .060")	2
14-P-65-3	Spacer (1.012" x 1.500" x .065")	2
28-P-198	O-ring (.798" x .103")	1
28-P-42	O-ring (1.051" x .070")	1
379484	O-ring Boss Plug (.438"-20)	1
379486	90° Elbow (.438"-20)	1
379505	O-ring Retainer	1
379564-2	Thread Cap	2
379556	Tee (.438"-20)	1
560978	Bearing Cone (Tapered)	2
9-P-80	Idler Shaft	1
14-P-81	Washer	1
328594-5X	**Bearing & Spacer Kit (Pressure Lube for M, P, Q, R & T Ratios)**	
14-P-65-1	Spacer (1.012" x 1.500" x .055")	2
14-P-65-2	Spacer (1.012" x 1.500" x .060")	2
14-P-65-3	Spacer (1.012" x 1.500" x .065")	2
28-P-198	O-ring (.798" x .103")	1
28-P-42	O-ring (1.051" x .070")	1
379484	O-ring Plug (.438-20)	1
379486	90° Elbow	1
379505	O-ring Retainer	1
379564-2	Thread Cap	2
379556	Tee (.438"-20)	1
560987	Tapered Bearing Cone (1.000" x .900")	2
9-P-80	Idler Shaft	1
14-P-81	Washer	1

Part Number	Description	Qty.
	SERVICE KITS (Cont'd)	
329183X	**Repair Kit/Overhaul**	
14-P-65-1	Spacer (1.012" x 1.500" x .055")	2
14-P-65-2	Spacer (1.012" x 1.500" x .060")	2
14-P-65-3	Spacer (1.012" x 1.500" x .065")	2
14-P-80-1	Washer Bearing Adjusting	1
14-P-80-2	Washer Bearing Adjusting	1
14-P-80-3	Washer Bearing Adjusting	1
14-P-80-4	Washer Bearing Adjusting	1
14-P-81	Washer	1
22-P-96	Gasket	2
22-P-98	Gasket	1
28-P-196	O-ring (6.000" x .138")	1
28-P-198	O-ring (.798" x .103")	1
28-P-211	Oil Seal (3.001" x 2.000" x .375")	1
28-P-218	Oil Seal (1.379" x .812" x .312")	2
28-P-219	Oil Seal (2.506" x 1.625" x .375")	1
28-P-42	O-ring (1.051" x .070")	1
28-P-61	O-ring (1.359" x .139")	4
35-P-15-1	Mounting Gasket (8-Bolt & 10-Bolt)	2
35-P-15-2	Mounting Gasket (8-Bolt & 10-Bolt)	2
35-P-59	Gasket	1
55-P-20-1	Bearing Cover Shim (.003")	2
55-P-20-2	Bearing Cover Shim (.010")	2
55-P-20-3	Bearing Cover Shim (.020")	2
560976	Tapered Bearing Cone (1.625" x .700")	1
560977	Tapered Bearing Cup (2.892 x .580")	1
560978	Tapered Bearing Cone	2
560982	Tapered Bearing Cup	2
560986	Tapered Bearing Cone	2
560987	Tapered Bearing Cone (1.000" x .900")	2
329216-2X	**Shifter Kit (Lever Shift)**	
328751-1X	Install Kit	1
329774X	Lever Shifter Cover Assembly	1
35-P-59	Gasket (6-Bolt)	1
378431-11	Hex Head Cap Screw (.375"-16 x 1.125")	2
378431-18	Hex Head Cap Screw (.375"-16 x 2.000")	4
329216-3X	**Shifter Kit (Air Shift)**	
328388-61X	Install Kit	1
329772	Air Shifter Cover Assembly	1
35-P-59	Gasket (6-Bolt)	1
378431-11	Hex Head Cap Screw (.375"-16 x 1.125")	2
378431-18	Hex Head Cap Screw (.375"-16 x 2.000")	4
329216-4X	**Constant Mesh Kit (Standard)**	
34-P-319	Cover Thick (6-Bolt)	1
35-P-117	Beaded Gasket (6-Bolt)	1
378431CR-6	Hex Head Cap Screw (.375"-16 x .625")	6
380463	Cover Installation Card (6-Bolt)	1
4-P-163	Spacer	1
4-P-164	Spacer	1
55-P-20-1	Bearing Cover Shim (.003")	2
55-P-20-2	Bearing Cover Shim (.010")	2
55-P-20-3	Bearing Cover Shim (.020")	2

Continued on Next Page

BOMs in each kit group are listed in order based on part number.

Kits Bill of Materials

Part Number	Description	Qty.
CONVERSION KITS		
328591-31X	**Conversion Kit (XV to XS) (Splash Lube)**	
378422-1	Drive Screw	2
21-P-515	Bearing Cap	1
22-P-98	Gasket	1
28-P-198	O-ring	1
28-P-219	Oil Seal	1
3-P-873	Output Shaft	1
328948-8X	Gasket & Installation Instructions	1
378431-11	Hex Cap Screw	4
379688	Lubricant	1
4-P-162	Spacer	1
55-P-20-1	Shim, Bearing Cover (Green)	2
55-P-20-2	Shim, Bearing Cover (Brown)	3
55-P-20-3	Shim, Bearing Cover (Yellow)	2
560976	Bearing Tape	1
560977	Bearing Tape	1
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1
68-P-2	Name Plate	1
328591-32X	**Conversion Kit (XV to XK) (Splash Lube)**	
21-P-539	Flange	1
22-P-98	Gasket	1
28-P-198	O-ring	1
28-P-219	Oil Seal	1
3-P-874	Output Shaft	1
328948-8X	Gasket & Installation Instructions	1
378431-11	Hex Cap Screw	4
379688	Lubricant	1
4-P-162	Spacer	1
55-P-20-1	Shim, Bearing Cover (Green)	2
55-P-20-2	Shim, Bearing Cover (Brown)	3
55-P-20-3	Shim, Bearing Cover (Yellow)	2
560976	Bearing Tape	1
560977	Bearing Tape	1
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1
378422-1	Drive Screw	2
68-P-2	Name Plate	1

Part Number	Description	Qty.
CONVERSION KITS (Cont'd)		
328591-34X	**Conversion Kit (XV to XY) (Splash Lube)**	
378422-1	Drive Screw	2
21-P-541	Pump Flange	1
22-P-98	Gasket	1
28-P-198	O-ring	1
3-P-876	Output Shaft	1
328948-8X	Gasket & Installation Instructions	1
378431-11	Hex Cap Screw	4
379555	Lock ring	1
379688	Lubricant	1
55-P-20-1	Shim, Bearing Cover (Green)	2
55-P-20-2	Shim, Bearing Cover (Brown)	3
55-P-20-3	Shim, Bearing Cover (Yellow)	2
560982	Tapered Bearing Cup	1
560984	Bearing Tapered Cup	1
560985	Bearing Tapered Cone	1
560986	Tapered Bearing Cone	1
28-P-267	Oil Seal	1
68-P-2	Name Plate	1
328591-49X	**Conversion Kit (XV to XS) (Pressure Lube)**	
378422-1	Drive Screw	2
379688	Lubricant	1
21-P-544	Flange	1
22-P-98	Gasket	1
28-P-198	O-ring	1
28-P-198	O-ring	1
28-P-219	Oil Seal	1
28-P-42	O-ring	1
3-P-873	Output Shaft	1
328948-8X	Gasket & Installation Instructions	1
329129-1X	Pressure Lube	1
329130-1X	Pressure Lube	1
329130-3X	20 Inch Hose Assembly	1
329224X	Loose Part	1
379231	Plug Pipe	1
378431-11	Hex Cap Screw	4
379484	Plug O-ring	1
379505	Retainer, O-ring	1
379556	Tee (.438"-20)	1
379564-2	Cap Thread	1
4-P-162	Spacer (XV)	1
55-P-20-1	Shim, Bearing Cover (Green)	1
55-P-20-2	Shim, Bearing Cover (Brown)	3
55-P-20-3	Shim, Bearing Cover (Yellow)	1
560976	Bearing Tape	1
560977	Bearing Tape	1
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1
9-P-80	Idler Shaft	1
21-P-597	Bearing Cap	1
28-P-245X	O-ring Kit	1
68-P-2	Name Plate	1

Continued on Next

BOMs in each kit group are listed in order based on part number.

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

Part Number	Description	Qty.
CONVERSION KITS (Cont'd)		
328591-50X ❖	**Conversion Kit (XV to SS) (Splash Lube)**	
3-P-875	Output Shaft	1
4-P-162	Spacer	2
21-P-515	Output Bearing Cap	1
21-P-544	Output Bearing Cap (For Pressure Lube)	1
21-P-515	Rear Bearing Cap	1
21-P-544	Rear Bearing Cap (For Pressure Lube)	1
28-P-219	Oil Seal	1
28-P-245	O-ring	2
560977	Tapered Bearing Cup	2
560976	Tapered Bearing Cone	2
379231	Pipe Plug	2
500897-3	Shipping Plug	2
69-P-18	Tag (Wet Spline Only)	1
328591-51X ❖	**Conversion Kit (XV to SS) (Pressure Lube)**	
3-P-875	Output Shaft	1
4-P-162	Spacer	2
21-P-515	Output Bearing Cap	1
21-P-544	Output Bearing Cap (For Pressure Lube)	1
21-P-515	Rear Bearing Cap	1
21-P-544	Rear Bearing Cap (For Pressure Lube)	1
28-P-219	Oil Seal	1
28-P-245	O-ring	2
560977	Tapered Bearing Cup	2
560976	Tapered Bearing Cone	2
379231	Pipe Plug	2
500897-3	Shipping Plug	2
69-P-18	Tag (Wet Spline Only)	1

Part Number	Description	Qty.
CONVERSION KITS (Cont'd)		
328591-58X	**Conversion Kit (XV to XK) (Pressure Lube)**	
21-P-592	Special Bracket	1
22-P-98	Gasket	1
28-P-198	O-ring	1
28-P-198	O-ring	1
28-P-219	Oil Seal	1
28-P-259	O-ring	1
28-P-42	O-ring	1
3-P-874	Output Shaft	1
328948-8X	Gasket & Installation Instructions	1
329129-1X	Pressure Lube	1
329130-1X	Pressure Lube	1
329130-3X	20 Inch Hose Assembly	1
329224X	Loose Part	1
379231	Plug Pipe	1
378431-11	Hex Cap Screw	4
379484	Plug O-ring	1
379505	Retainer, O-ring	1
379556	Tee (.438"-20)	1
379564-2	Cap Thread	1
379688	Lubricant	1
4-P-162	Spacer	1
55-P-20-1	Shim, Bearing Cover (Green)	1
55-P-20-2	Shim, Bearing Cover (Brown)	3
55-P-20-3	Shim, Bearing Cover (Yellow)	1
560976	Bearing Tape	1
560977	Bearing Tape	1
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1
9-P-80	Idler Shaft	1
378422-1	Drive Screw	2
21-P-597	Bearing Cap	1
68-P-2	Name Plate	1
328591-59X ❖	**Conversion Kit (XV to AB) (Splash Lube)**	
3-P-872	Output Shaft	1
28-P-216	Output Bearing Cap	1
329273X	Output Bearing Cap (For Pressure Lube)	1
378447-6	Oil Seal	1
500007-29	Hex Nut	2
379558	Companion Flange	2
560982	Tapered Bearing Cup	2
560986	Tapered Bearing Cone	2
328591-60X ❖	**Conversion Kit (XV to AB) (Pressure Lube)**	
3-P-872	Output Shaft	1
28-P-216	Output Bearing Cap	1
329273X	Output Bearing Cap (For Pressure Lube)	1
378447-6	Oil Seal	1
500007-29	Hex Nut	2
379558	Companion Flange	2
560982	Tapered Bearing Cup	2
560986	Tapered Bearing Cone	2

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❖ No longer a current option per Chelsea Suggested List Price.

BOMs in each kit group are listed in order based on part number.

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

Kits Bill of Materials

Part Number	Description	Qty.
CONVERSION KITS (Cont'd)		
328591-61X ❖	**Conversion Kit (XV to YY) (Splash Lube)**	
3-P-880	Output Shaft	1
21-P-541	Output Bearing Cap	1
21-P-652	Rear Bearing Cap	1
28-P-287	Oil Seal	1
379555	Lockring	1
560984	Tapered Bearing Cup	1
560985	Tapered Bearing Cone	1
561012	Tapered Bearing Cup	1
561011	Tapered Bearing Cup	1
378898	Flat Hex Cap Screw (.438"-14 x 1.000")	1
379555	Spline Coupling	1
328591-67X ❖	**Conversion Kit (XV to SK) (Pressure Lube)**	
3-P-902	Output Shaft	1
4-P-162	Spacer	2
21-P-515	Output Bearing Cap (For Pressure Lube)	1
21-P-593	Rear Bearing Cap	1
21-P-539	Rear Bearing Cap (For Pressure Lube)	1
21-P-592	Rear Bearing Cap	1
28-P-219	Oil Seal	1
28-P-245	O-ring	1
28-P-259	O-ring	1
560977	Tapered Bearing Cup	1
560976	Tapered Bearing Cone	1
379231	Pipe Plug	2
500897-3	Shipping Plug	2
69-P-18	Tag (Wet Spline Only)	1
328591-68X ❖	**Conversion Kit (XV to VV) (Splash Lube)**	
3-P-916	Output Shaft	1
21-P-517	Output Bearing Cap	1
21-P-596	Output Bearing Cap (For Pressure Lube)	1
21-P-517	Rear Bearing Cap	1
21-P-596	Rear Bearing Cap (For Pressure Lube)	1
28-P-211	Oil Seal	2
380486	Hex Nut	2
3-1-3431	Companion Flange	2
560982	Tapered Bearing Cup	2
560986	Tapered Bearing Cone	2
328591-69X ❖	**Conversion Kit (XV to VV) (Splash Lube)**	
3-P-916	Output Shaft	1
21-P-517	Output Bearing Cap	1
21-P-596	Output Bearing Cap (For Pressure Lube)	1
21-P-517	Rear Bearing Cap	1
21-P-596	Rear Bearing Cap (For Pressure Lube)	1
28-P-211	Oil Seal	2
380486	Hex Nut	2
3-1-3431	Companion Flange	2
560982	Tapered Bearing Cup	2
560986	Tapered Bearing Cone	2

Part Number	Description	Qty.
CONVERSION KITS (Cont'd)		
328591-104X	**Conversion Kit (XV to AF) (Splash Lube)**	
3-P-940	Output Shaft	1
378422-1	Drive Screw	2
55-P-20-2	Shim, Bearing Cover (Brown)	3
28-P-198	O-ring	1
560977	Bearing Tape	1
560976	Bearing Tape	1
55-P-20-3	Shim, Bearing Cover (Yellow)	2
21-P-539	Flange	1
22-P-98	Gasket	1
378431-11	Hex Cap Screw	4
328948-8X	Gasket & Installation Instructions	1
28-P-219	Oil Seal	1
379688	Lubricant	1
4-P-162	Spacer	1
55-P-20-1	Shim, Bearing Cover (Green)	2
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1
68-P-2	Name Plate	1
328591-105X	**Conversion Kit (XV to AF) (Pressure Lube)**	
21-P-592	Special Bracket	1
21-P-597	Bearing Cap	1
22-P-98	Gasket	1
28-P-198	O-ring	1
28-P-198	O-ring	1
28-P-219	Oil Seal	1
28-P-259	O-ring	1
28-P-42	O-ring	1
328948-8X	Gasket & Installation Instructions	1
329129-1X	Pressure Lube	1
329130-1X	Pressure Lube	1
329130-3X	20 Inch Hose Assembly	1
329224X	Loose Part	1
379231	Plug Pipe	1
378431-11	Hex Cap Screw	4
379484	Plug O-ring	1
379505	Retainer, O-ring	1
379556	Tee (.438"-20)	1
379564-2	Cap Thread	1
379688	Lubricant	1
4-P-162	Spacer	1
55-P-20-1	Shim, Bearing Cover (Green)	1
55-P-20-2	Shim, Bearing Cover (Brown)	3
55-P-20-3	Shim, Bearing Cover (Yellow)	1
560976	Bearing Tape	1
560977	Bearing Tape	1
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1
9-P-80	Idler Shaft	1
3-P-940	Output Shaft	1
378422-1	Drive Screw	2
68-P-2	Name Plate	1

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❖ No longer a current option per Chelsea Suggested List Price.

BOMs in each kit group are listed in order based on part number.

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

Part Number	Description	Qty.
	CONVERSION KITS (Cont'd)	
328591-119X ❖	**Conversion Kit (XV to AC) (X Lube Option)**	
3-P-872	Output Shaft	1
28-P-217	Output Bearing Cap	1
21-P-596	Output Bearing Cap (For Pressure Lube)	1
28-P-211	Oil Seal	1
380486	Hex Nut	4
379742	Companion Flange	1
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1
328591-120X ❖	**Conversion Kit (XV to AC) (P Lube Option)**	
3-P-872	Output Shaft	1
28-P-216	Output Bearing Cap	1
329273X	Output Bearing Cap (For Pressure Lube)	1
378447-6	Oil Seal	1
500007-29	Hex Nut	4
379558	Companion Flange	1
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1
328591-127X	**Conversion Kit (XV to AZ) (Splash Lube)**	
378422-1	Drive Screw	2
560986	Tapered Bearing Cone	1
560977	Bearing Tape	1
560976	Bearing Tape	1
55-P-20-3	Shim, Bearing Cover (Yellow)	2
55-P-20-2	Shim, Bearing Cover (Brown)	2
55-P-20-1	Shim, Bearing Cover (Green)	2
4-P-162	Spacer	1
379688	Lubricant	1
3-P-873	Output Shaft	1
28-P-219	Oil Seal	1
28-P-198	O-ring	1
21-P-539	Flange	1
378431-11	Hex Cap Screw	4
68-P-2	Name Plate	1

Part Number	Description	Qty.
	CONVERSION KITS (Cont'd)	
328591-128X	**Conversion Kit (XV to AZ) (Pressure Lube)**	
3-P-873	Output Shaft	1
28-P-42	O-ring	1
28-P-259	O-ring	1
28-P-219	Oil Seal	1
28-P-198	O-ring	1
28-P-198	O-ring	1
22-P-98	Gasket	1
21-P-597	Bearing Cap	1
21-P-592	Special Bracket	1
9-P-80	Idler Shaft	1
560986	Tapered Bearing Cone	1
560982	Tapered Bearing Cup	1
560977	Bearing Tape	1
560976	Bearing Tape	1
55-P-20-3	Shim, Bearing Cover (Yellow)	2
55-P-20-2	Shim, Bearing Cover (Brown)	2
55-P-20-1	Shim, Bearing Cover (Green)	2
4-P-162	Spacer	1
379556	Tee (.438"-20)	1
379505	Retainer, O-ring	1
379484	Plug O-ring	1
378431-11	Hex Cap Screw	4
379231	Plug Pipe	1
378422-1	Drive Screw	2
329224X	Loose Part	1
329130-3X	20 Inch Hose Assembly	1
329130-1X	Pressure Lube	1
329129-1X	Pressure Lube	1
68-P-2	Name Plate	1
328591-133X	**Conversion Kit (XS to GS)**	
28-P-198	O-ring	1
379432-1	Cap Screw	3
28-P-226	Thrust Bearing	1
28-P-219	Oil Seal	1
22-P-98	Gasket	1
21-P-653X	Bearing Cap Assembly	1
3-P-949X	Output Shaft	1
379688	Lubricant	1
3-P-949	Output Shaft	1
379819	Grease Fit	1
500168-2	Fitting	1
379231	Pipe Plug	1
560986	Tapered Bearing Cone	1
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1

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Part Number	Description	Qty.
CONVERSION KITS (Cont'd)		
328591-135X	**Conversion Kit (XV to GS)**	
379432-1	Cap Screw	3
28-P-198	O-ring	1
55-P-20-2	Shim, Bearing Cover (Brown)	2
28-P-226	Thrust Bearing	1
28-P-219	Oil Seal	1
22-P-98	Gasket	1
55-P-20-3	Shim, Bearing Cover (Yellow)	2
21-P-515	Bearing Cap	1
55-P-20-1	Shim, Bearing Cover (Green)	2
21-P-653X	Bearing Cap Assembly	1
3-P-949X	Output Shaft	1
379688	Lubricant	2
3-P-949	Output Shaft	1
379819	Grease Fit	1
500168-2	Fitting	1
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1
560976	Bearing Tape	1
560977	Bearing Tape	1
4-P-162	Spacer	1
329111-1X ❖	**Conversion Kit (LG)**	
21-P-596	Bearing Cap	1
28-P-194	O-ring (1.424" x .103")	1
28-P-196	O-ring (5.859" x .139")	1
28-P-198	O-ring (.798" x .103")	1
28-P-211	Oil seal (3.001" x 2.000" x .375")	1
3-P-879	Output Shaft	1
329110-1X	Installation Kit	1
378117	Drain Plug	1
379181	Hose assembly	1
379273	90° Elbow	1
379526	Strain Plug	1
379636	Installation Instructions	1
329127X	Bearing Cap & Lube Pump Assembly	1
329129X	Hose Assembly	1
329130-1X	Pressure Lube	1
329130-3X	20 Inch Hose Assembly	1
329224X	Loose Parts Kit	1
379516-1	Install Sketch	1
379556	Tee (.438"-20)	1
55-P-20-1	Shim, Bearing Cover (Green)	3
55-P-20-2	Shim, Bearing Cover (Brown)	3
55-P-20-3	Shim, Bearing Cover (Yellow)	3
560982	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	2
9-P-80	Idler Shaft	1
378422-1	Driven Screw	2
68-P-2	Name Plate	1

Part Number	Description	Qty.
CONVERSION KITS (Cont'd)		
329111-2X ❖	**Conversion Kit (LF & LH)**	
21-P-544	Pump Flange	1
28-P-196	O-ring (5.859" x .139")	1
28-P-198	O-ring (.798" x .103")	1
28-P-219	Oil seal (2.506" x 1.625" x .375")	1
3-P-877	Output Shaft	1
329110-1X	Installation Kit	1
378117	Drain Plug	1
379181	Hose assembly	1
379273	90° Elbow	1
379526	Strain Plug	1
379636	Installation Instructions	1
329127X	Bearing Cap & Lube Pump Assembly	1
329129X	Hose Assembly	1
329130-1X	Pressure Lube	1
329130-3X	20 Inch Hose Assembly	1
329224X	Loose Parts Kit	1
379231	Pipe Plug	1
379516-1	Install Sketch	1
379556	Tee (.438"-20)	1
379688	Lubricant	1
4-P-162	Spacer (XV)	1
55-P-20-1	Shim, Bearing Cover (Green)	3
55-P-20-2	Shim, Bearing Cover (Brown)	3
55-P-20-3	Shim, Bearing Cover (Yellow)	3
560976	Tapered Bearing Cone	1
560977	Tapered Bearing Cup	2
560986	Tapered Bearing Cone	1
9-P-80	Idler Shaft	1
378422-1	Driven Screw	2
28-P-42	O-ring (1.051" x .070")	1
28-P-245X	O-ring (5.071" x .103")	1
68-P-2	Name Plate	1

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Kits Bill of Materials

Part Number	Description	Qty.
	CONVERSION KITS (Cont'd)	
329111-3X ❖	**Conversion Kit (LL)**	
378422-1	Driven Screw	2
379231	Pipe Plug	1
379516-1	Install Sketch	1
379556	Tee (.438"-20)	1
379688	Lubricant	1
4-P-162	Spacer (XV)	1
55-P-20-1	Shim, Bearing Cover (Green)	3
55-P-20-2	Shim, Bearing Cover (Brown)	3
55-P-20-3	Shim, Bearing Cover (Yellow)	3
560976	Tapered Bearing Cone	1
560977	Tapered Bearing Cup	1
560986	Tapered Bearing Cone	1
9-P-80	Idler Shaft	1
21-P-592	Bearing Cap	1
28-P-194	O-ring (1.424" x .103")	1
28-P-196	O-ring (5.859" x .139")	1
28-P-198	O-ring (.798 " x .103")	1
28-P-219	Oil Seal (2.506" x 1.625" x .375")	1
28-P-259	O-ring	1
3-P-878	Output Shaft	1
329110-1X	Installation Kit	1
378117	Drain Plug	1
379181	Hose Assembly	1
379273	90° Elbow	1
379526	Strain Plug	1
379636	Installation Instructions	1
329127X	Bearing Cap & Lube Pump Assembly	1
329129X	Hose Assembly	1
329130-1X	Pressure Lube	1
329130-3X	20 Inch Hose Assembly	1
329224X	Loose Part	1
68-P-2	Name Plate	1

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BOMs in each kit group are listed in order based on part number.

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Chelsea Products Division
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Notes

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

Offer of Sale

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

1. Definitions. As used herein, the following terms have the meanings indicated.

Buyer: means any customer receiving a Quote for Products.

Buyer's Property: means any tools, patterns, plans, drawings, designs, specifications materials, equipment, or information furnished by Buyer, or which are or become Buyer's property.

Confidential Information: means any technical, commercial, or other proprietary information of Seller, including, without limitation, pricing, technical drawings or prints and/or part lists, which has been or will be disclosed, delivered, or made available, whether directly or indirectly, to Buyer.

Goods: means any tangible part, system or component to be supplied by Seller.

Intellectual Property Rights: means any patents, trademarks, copyrights, trade dress, trade secrets or similar rights.

Products: means the Goods, Services and/or Software as described in a Quote.

Quote: means the offer or proposal made by Seller to Buyer for the supply of Products.

Seller: means Parker-Hannifin Corporation, all divisions, subsidiaries and businesses selling products under these terms.

Seller's IP: means patents, trademarks, copyrights, or other intellectual property rights relating to the Products, including without limitation, names, designs, images, drawings, models, software, templates, information, any improvements or creations or other intellectual property developed prior to or during the relationship contemplated herein.

Services: means any services to be provided by Seller.

Software: means any software related to the Goods, whether embedded or separately downloaded.

Special Tooling: means equipment acquired by Seller or otherwise owned by Seller necessary to manufacture Goods, including but not limited to tools, jigs, and fixtures.

Terms: means the terms and conditions of this Offer of Sale.

2. Terms. All sales of Products by Seller will be governed by, and are expressly conditioned upon Buyer's assent to, these Terms. These Terms are incorporated into any Quote provided by Seller to Buyer. Buyer's order for any Products whether communicated to Seller verbally, in writing, by electronic data interface or other electronic commerce, shall constitute acceptance of these Terms. Seller objects to any contrary or additional terms or conditions of Buyer. Reference in Seller's order acknowledgement to Buyer's purchase order or purchase order number shall in no way constitute an acceptance of any of Buyer's terms or conditions of purchase. Any Quote made by Seller to Buyer shall be considered a firm and definite offer and shall not be deemed to be otherwise despite any language on the face of the Quote. Seller reserves all rights to accept or reject any purported acceptance by Buyer to Seller's Quote if such purported acceptance attempts to vary the terms of the Quote. If Seller ships Products after Buyer issues an acceptance to the Quote, any additional or different terms proposed by Buyer will not become part of the parties' business relationship unless agreed to in a writing that is signed by an authorized representative of Seller, excluding email correspondence. If the transaction proceeds without such agreement on the part of Seller, the business relationship will be governed solely by these Terms and the specific terms in Seller's Quote.

3. Price; Payment. The Products set forth in the Quote are offered for sale at the prices indicated in the Quote. Unless otherwise specifically stated in the Quote, prices are valid for thirty (30) days and do not include any sales, use, or other taxes or duties. Seller reserves the right to modify prices for any reason and at any time by giving ten (10) days prior written notice. Unless otherwise specified by Seller, all prices are F.C.A. Seller's facility (INCOTERMS 2020). All sales are contingent upon credit approval and full payment for all purchases is due thirty (30) days from the date of invoice (or such date as may be specified in the Quote). Under any circumstances, Buyer may not withhold or suspend payment of any amounts due and payable as a deduction, set-off or recoupment of any amount, claim or dispute with Seller. Unpaid invoices beyond the specified payment date incur interest at the rate of 1.5% per month or the maximum allowable rate under applicable law. Seller reserves the right to require advance payment or provision of securities for first and subsequent deliveries if there is any doubt, in Seller's sole determination, regarding the Buyer's creditworthiness or for other business reasons. If the requested advance payment or securities are not provided to Seller's satisfaction, Seller reserves the right to suspend performance or reject the purchase order, in whole or in part, without prejudice to Seller's other rights or remedies, including the right to full compensation. Seller may revoke or shorten any payment periods previously granted in Seller's sole determination. The rights and remedies herein reserved to Seller are cumulative and in addition to any other or further rights and remedies available at law or in equity. No waiver by Seller of any breach by Buyer of any provision of these terms will constitute a waiver by Seller of any other breach of such provision.

4. Shipment; Delivery; Title and Risk of Loss. All delivery dates are approximate, and Seller is not responsible for damages or additional costs resulting from any delay. All deliveries are subject to our ability to procure materials from our suppliers. Regardless of the manner of shipment, delivery occurs and title and risk of loss or damage pass to Buyer, upon placement of the Products with the carrier at Seller's facility. Unless otherwise agreed prior to shipment and for domestic delivery locations only, Seller will select and arrange, at Buyer's sole expense, the carrier and means of delivery. When Seller selects and arranges the carrier and means of delivery, freight and insurance costs for shipment to the designated delivery location will be prepaid by Seller and added as a separate line item to the invoice. Buyer shall be responsible for any additional shipping charges incurred by Seller due to Buyer's acts or omissions. Buyer shall not return or repackage any Products without the prior written authorization from Seller, and any return shall be at the sole cost and expense of Buyer.

5. Warranty. The warranty for the Products is as follows: (i) Seller warrants that all products sold conform to the applicable Parker Chelsea standard specification for the lesser period of 2 years (24 Months) from date of service or 2-1/2 years (30 Months) from date of build (as marked on the product name plate; (ii) Services shall be performed in accordance with generally accepted practices and using the degree of care and skill that is ordinarily exercised and customary in the field to which the Services pertain and are warranted for a period of six (6) months from the date of completion of the Services; and (iii) Software is only warranted to perform in accordance with applicable specifications provided by Seller to Buyer for ninety (90) days from the date of delivery or, when downloaded by a Buyer or end-user, from the date of the initial download. All prices are based upon the exclusive limited warranty stated above, and upon the following disclaimer: **EXEMPTION CLAUSE; DISCLAIMER OF WARRANTY, CONDITIONS, REPRESENTATIONS: THIS WARRANTY IS THE SOLE AND ENTIRE WARRANTY, CONDITION, AND REPRESENTATION, PERTAINING TO PRODUCTS. SELLER DISCLAIMS ALL OTHER WARRANTIES, CONDITIONS,**

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Parker Chelsea

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

Offer of Sale (Cont'd)

AND REPRESENTATIONS, WHETHER STATUTORY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THOSE RELATING TO DESIGN, NONINFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE. SELLER DOES NOT WARRANT THAT THE SOFTWARE IS ERROR-FREE OR FAULT-TOLERANT, OR THAT BUYER'S USE THEREOF WILL BE SECURE OR UNINTERRUPTED, UNLESS OTHERWISE AUTHORIZED IN WRITING BY SELLER, THE SOFTWARE SHALL NOT BE USED IN CONNECTION WITH HAZARDOUS OR HIGH-RISK ACTIVITIES OR ENVIRONMENTS. EXCEPT AS EXPRESSLY STATED HEREIN, ALL PRODUCTS ARE PROVIDED "AS IS".

6. Claims; Commencement of Actions. Buyer shall promptly inspect all Products upon receipt. No claims for shortages will be allowed unless reported to Seller within ten (10) days of delivery. Buyer shall notify Seller of any alleged breach of warranty within thirty (30) days after the date the non-conformance is or should have been discovered by Buyer. Any claim or action against Seller based upon breach of contract or any other theory, including tort, negligence, or otherwise must be commenced within twelve (12) months from the date of the alleged breach or other alleged event, without regard to the date of discovery.

7. LIMITATION OF LIABILITY. IN THE EVENT OF A BREACH OF WARRANTY, SELLER WILL, AT ITS OPTION, REPAIR OR REPLACE THE NON-CONFORMING PRODUCTS, RE-PERFORM THE SERVICES, OR REFUND THE PURCHASE PRICE PAID WITHIN A REASONABLE PERIOD OF TIME. IN NO EVENT IS SELLER LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING ANY LOSS OF REVENUE OR PROFITS, WHETHER BASED IN CONTRACT, TORT OR OTHER LEGAL THEORY. IN NO EVENT SHALL SELLER'S LIABILITY UNDER ANY CLAIM MADE BY BUYER EXCEED THE PURCHASE PRICE PAID FOR THE PRODUCTS.

8. Confidential Information. Buyer acknowledges and agrees that Confidential Information has been and will be received in confidence and will remain the property of Seller. Buyer further agrees that it will not use Seller's Confidential Information for any purpose other than for the benefit of Seller and shall return all such Confidential Information to Seller within thirty (30) days upon request.

9. Loss to Buyer's Property. Buyer's Property will be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer ordering the Products manufactured using Buyer's Property. Also, Seller shall not be responsible for any loss or damage to Buyer's Property while it is in Seller's possession or control.

10. Special Tooling. Seller may impose a tooling charge for any Special Tooling. Special Tooling shall be and remain Seller's property. In no event will Buyer acquire any interest in the Special Tooling, even if such Special Tooling has been specially converted or adapted for manufacture of Goods for Buyer and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller has the right to alter, discard or otherwise dispose of any Special Tooling or other property owned by Seller in its sole determination at any time.

11. Security Interest. To secure payment of all sums due from Buyer, Seller retains a security interest in all Products delivered to Buyer and, Buyer's acceptance of these Terms is deemed to be a Security Agreement under the Uniform Commercial Code. Buyer authorizes Seller as its attorney to execute and file on Buyer's behalf all documents Seller deems necessary to perfect Seller's security interest.

12. User Responsibility. Buyer, through its own analysis and testing, is solely responsible for making the final selection of the Products and assuring that all performance, endurance, maintenance, safety and warning requirements of the application of the Products are met. Buyer must analyze all aspects of the application and follow applicable industry standards, specifications, and any technical information provided with the Quote or the Products, such as Seller's instructions, guides and specifications. If Seller provides options of or for Products based upon data or specifications provided by Buyer, Buyer is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the Products. In the event Buyer is not the end-user of the Products, Buyer will ensure such end-user complies with this paragraph.

13. Use of Products, Indemnity by Buyer. Buyer shall comply with all instructions, guides and specifications provided by Seller with the Quote or the Products. If Buyer uses or resells the Products in any way prohibited by Seller's instructions, guides or specifications, or Buyer otherwise fails to comply with Seller's instructions, guides and specifications, Buyer acknowledges that any such use, resale, or non-compliance is at Buyer's sole risk. Further, Buyer shall indemnify, defend, and hold Seller harmless from any losses, claims, liabilities, damages, lawsuits, judgments and costs (including attorney fees and defense costs), whether for personal injury, property damage, intellectual property infringement or any other claim, arising out of or in connection with: (a) improper selection, design, specification, application, or any misuse of Products; (b) any act or omission, negligent or otherwise, of Buyer; (c) Seller's use of Buyer's Property; (d) damage to the Products from an external cause, repair or attempted repair by anyone other than Seller, failure to follow instructions, guides and specifications provided by Seller, use with goods not provided by Seller, or opening, modifying, deconstructing, tampering with or repackaging the Products; or (e) Buyer's failure to comply with these Terms, including any legal or administrative proceedings, collection efforts, or other actions arising from or relating to such failure to comply. Seller shall not indemnify Buyer under any circumstance except as otherwise provided in these Terms.

14. Cancellations and Changes. Buyer may not cancel or modify, including but not limited to movement of delivery dates for the Products, any order for any reason except with Seller's written consent and upon terms that will indemnify, defend and hold Seller harmless against all direct, incidental and consequential loss or damage and any additional expense. Seller, at any time, may change features, specifications, designs and availability of Products.

15. Assignment. Buyer may not assign its rights or obligations without the prior written consent of Seller.

16. Force Majeure. Seller is not liable for delay or failure to perform any of its obligations by reason of any events or circumstances beyond its reasonable control. Such circumstances include without limitation: accidents, labor disputes or stoppages, government acts or orders, acts of nature, pandemics, epidemics, other widespread illness, or public health emergency, cyber related disruptions, cyber-attacks, ransomware sabotage, delays or failures in delivery from carriers or suppliers, shortages of materials, sudden increases in the price of raw material or components, shutdowns or slowdowns affecting the supply of raw materials or components, or the transportation thereof, oil shortages or oil price increases, energy crisis, energy or fuel interruption, war (whether declared or not) or the serious threat of same, riots, rebellions, acts of terrorism, embargoes, fire or any reason whether similar to the foregoing or otherwise. Seller will resume performance as soon as practicable after the event of force majeure has been removed. All delivery dates affected by an event of force majeure shall be tolled for the duration of such event of force majeure and rescheduled for mutually agreed dates as soon as practicable after the event of force majeure ceases to exist. The right to allocate capacity is in the Seller's sole discretion. An event of force majeure shall not include financial distress, insolvency, bankruptcy, or other similar conditions affecting one of the parties, affiliates and/or subcontractors. An event of force majeure in the meaning of these Terms means any circumstances beyond Seller's control that permanently or temporarily hinders performance, even where that circumstance was already foreseen. Buyer shall not be entitled to cancel any orders following its claim of an event of force majeure.

17. Waiver and Severability. Failure to enforce any provision of these Terms will not invalidate that provision; nor will any such failure prejudice either party's right to enforce that provision in the future. Invalidation of any provision of these Terms shall not

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

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

invalidate any other provision herein and, the remaining provisions will remain in full force and effect.

18. Duration. Unless otherwise stated in the Quote, any agreement governed by or arising from these Terms shall: (a) be for an initial duration of one (1) year; and (b) shall automatically renew for successive one-year terms unless terminated by Buyer with at least 180-days written notice to Seller or if Seller terminates the agreement pursuant to Section 19 of these Terms

19. Termination. Seller may, without liability to Buyer, terminate any agreement governed by or arising from these Terms for any reason and at any time by giving Buyer thirty (30) days prior written notice. Seller may immediately terminate, in writing, if Buyer: (a) breaches any provision of these Terms, (b) becomes or is deemed insolvent, (c) appoints or has appointed a trustee, receiver or custodian for all or any part of Buyer's property, (d) files a petition for relief in bankruptcy on its own behalf, or one is filed against Buyer by a third party, (e) makes an assignment for the benefit of creditors; or (f) dissolves its business or liquidates all or a majority of its assets

20. Ownership of Rights. Buyer agrees that (a) Seller (and/or its affiliates) owns or is the valid licensee of Seller's IP and (b) the furnishing of information, related documents or other materials by Seller to Buyer does not grant or transfer any ownership interest or license in or to Seller's IP to Buyer, unless expressly agreed in writing. Without limiting the foregoing, Seller retains ownership of all Software supplied to Buyer. In no event shall Buyer obtain any greater right in and to the Software than a right in a license limited to the use thereof and subject to compliance with any other terms provided with the Software. Buyer further agrees that it will not, directly or through intermediaries, reverse engineer, decompile, or disassemble any Software (including firmware) comprising or contained within a Product, except and only to the extent that such activity may be expressly permitted, either by applicable law or, in the case of open-source software, the applicable open source license.

21. Indemnity for Infringement of Intellectual Property Rights. Seller is not liable for infringement of any Intellectual Property Rights except as provided in this Section. Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on a third-party claim that one or more of the Products infringes the Intellectual Property Rights of a third party in the country of delivery of the Products by Seller to Buyer. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of any such claim, and Seller having sole control over the defense of the claim including all negotiations for settlement or compromise. If one or more Products is subject to such a claim, Seller may, at its sole expense and option, procure for Buyer the right to continue using the Products, replace or modify the Products to render them non-infringing, or offer to accept return of the Products and refund the purchase price less a reasonable allowance for depreciation. Seller has no obligation or liability for any claim of infringement: (i) arising from information provided by Buyer (including Seller's use of Buyer's Property); or (ii) directed to any Products for which the designs are specified in whole or part by Buyer; or (iii) resulting from the modification, combination or use in a system of any Products. The foregoing provisions of this Section constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for claims of infringement of Intellectual Property Rights.

22. Governing Law. These Terms, the terms of any Quote, and the sale and delivery of all Products are deemed to have taken place in, and shall be governed and construed in accordance with, the laws of the State of Ohio, as applicable to contracts executed and wholly performed therein and without regard to conflicts of laws principles. Buyer irrevocably agrees and consents to the exclusive jurisdiction and venue of the courts of Cuyahoga County, Ohio with respect to any dispute, controversy or claim arising out of or relating to the sale and delivery of the Products.

23. Entire Agreement. These Terms, along with the terms set forth in the Quote, forms the entire agreement between the Buyer and Seller and constitutes the final, complete and exclusive expression of the terms of sale and purchase. In the event of a conflict between any term set forth in the Quote and these Terms, the terms set forth in the Quote shall prevail. All prior or contemporaneous written or oral agreements or negotiations with respect to the subject matter shall have no effect. No modification to these Terms will be binding on Seller unless agreed to in a writing that is signed by an authorized representative of Seller, excluding email correspondence, 'clickwrap' or other purported electronic assent to different or additional terms. Sections 2-25 of these Terms shall survive termination or cancellation of any agreement governed by or arising from these Terms.

24. No 'Wrap' Agreements/No Authority to Bind. Seller's clicking any buttons or any similar action, such as clicking "I Agree" or "Confirm," to utilize Buyer's software or webpage for the placement of orders, is NOT an agreement to Buyer's Terms and Conditions. **NO EMPLOYEE, AGENT OR REPRESENTATIVE OF SELLER HAS THE AUTHORITY TO BIND SELLER BY THE ACT OF CLICKING ANY BUTTON OR SIMILAR ACTION ON BUYER'S WEBSITE OR PORTAL.**

25. Compliance with Laws. Buyer agrees to comply with all applicable laws, regulations, and industry and professional standards, including those of the United States of America, and the country or countries in which Buyer may operate, including without limitation the U.S. Foreign Corrupt Practices Act ("FCPA"), the U.S. Anti-Kickback Act ("Anti-Kickback Act"), U.S. and E.U. export control and sanctions laws ("Export Laws"), the U.S. Food Drug and Cosmetic Act ("FDCA"), and the rules and regulations promulgated by the U.S. Food and Drug Administration ("FDA"), each as currently amended. Buyer agrees to indemnify, defend, and hold harmless Seller from the consequences of any violation of such laws, regulations and standards by Buyer, its employees or agents. Buyer represents that it is familiar with all applicable provisions of the FCPA, the Anti-Kickback Act, Export Laws, the FDCA and the FDA and certifies that Buyer will adhere to the requirements thereof and not take any action that would make Seller violate such requirements. Buyer represents and agrees that Buyer will not make any payment or give anything of value, directly or indirectly, to any governmental official, foreign political party or official thereof, candidate for foreign political office, or commercial entity or person, for any improper purpose, including the purpose of influencing such person to purchase Products or otherwise benefit the business of Seller. Buyer further represents and agrees that it will not receive, use, service, transfer or ship any Products from Seller in a manner or for a purpose that violates Export Laws or would cause Seller to be in violation of Export Laws. Buyer agrees to promptly and reliably provide Seller all requested information or documents, including end-user statements and other written assurances, concerning Buyer's ongoing compliance with Export Law.

09/22



Parker-Hannifin Corporation
Chelsea Products Division
8225 Hacks Cross Rd
Olive Branch, MS 38654
United States

Email: chd_support@support.parker.com

www.Parker.com/Chelsea

PN: HY25-2880-M1/US
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