

# **GOLD CUP<sup>®</sup>** **P/M11-14 Variable Displacement** Spare Parts and Exploded Views

HY28-2677-03/GC/US      Effective: June 2023



ENGINEERING YOUR SUCCESS.

## Hydraulic Pump Division and Denison Hydraulics

The Hydraulic Pump Division of Parker Hannifin was formed in 2004 when our significant piston pump business was expanded through the acquisition of **Denison Hydraulics**. The addition of Denison allowed us to marry the wealth of knowledge that both companies have in the design, manufacture, and application of piston products in both open circuit and closed circuit system applications. Since before WWII, Denison products have been chosen for Military test stand applications and for shipboard hydraulic applications being recognized as technology leaders.

The heavy duty **GOLD CUP**<sup>®</sup> series of pumps and motors in this catalog represent a broadening of our product offering with hydrostatic transmission applications in marine, drilling, and shredding applications, among others. The tried and true design of the **GOLD CUP**<sup>®</sup> product line incorporates features such as integral servo and replenishing pump, hot oil shuttle, and a unique servo control system; all of which combine to provide a rugged self contained package which can withstand the harshest of conditions and continue to perform with trouble free long life.

The division is a leading worldwide manufacturer of hydraulic components and systems for earthmoving and construction vehicles; for mining equipment; for pulp and paper, chemical and other processing equipment; for ships and ordnance equipment; and for such in-plant machines as machine tools, plastic molding, die casters, and stamping presses.



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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**

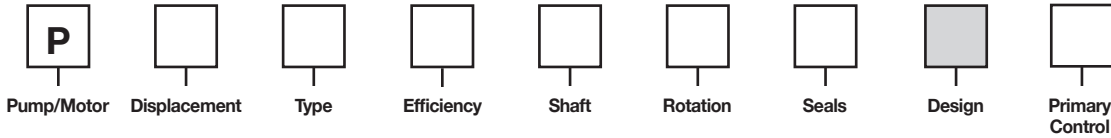
The items described in this document are hereby offered for sale by Parker-Hannifin Corporation, its subsidiaries or its authorized distributor. This offer and its acceptance are governed by the provisions stated in the detailed "Offer of Sale" elsewhere in this document.

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Notes:

1. Parts list and associated drawings shown in this bulletin are for standard variable volume model pump and motors only. All documentation for special "M2" modification model numbers must be verified with HPD Factory Representative prior to ordering parts for such products.
2. \* Indicates Special instructions or Considerations.
3. \*\* Indicates Common Parts.
4. N/A Indicates Not Available or Not Applicable.
5. All documentation represented in this bulletin is for standard production models only, (as follows):
  - 5.1. P11 = Design Level "C" Model Pump
  - 5.2. P14 = Design Level "C" Model Pump
  - 5.3. M11 = Design Level "A" Model Motor
  - 5.4. M14 = Design Level "A" Model Motor
6. See ordering code for configuration options.
7. All orientation references are described when viewing unit from main drive shaft.
8. Assembly part numbers with -0 suffixes, indicate Buna N (Nitrile) seal compound. For Ethylene Propylene, (EPR), compound, use -4 suffix. For Fluorocarbon compound, use -5 suffixes.
9. Detail part numbers for O-rings with 671/691 prefix, indicates Buna N (Nitrile) seal compound. For Ethylene Propylene, (EPR), compound, use -4 suffix. For Fluorocarbon compound, use -5 suffixes.
10. Drawings with items marked with double balloons indicate assemblies.





Code	Pump/Motor
<b>P</b>	Pump
<b>M</b>	Motor

Code	Displacement
<b>11</b>	11.0 in <sup>3</sup> /rev (180 cc/rev)
<b>14</b>	14.0 in <sup>3</sup> /rev (229 cc/rev)

Code	Type
<b>P</b>	Variable displacement, closed circuit (Pumps only)
<b>X</b>	Variable displacement with medium torque thru-drive, closed circuit (Pumps only)
<b>S</b>	Variable displacement with medium torque thru-drive & shuttle package, closed circuit (Pumps only)
<b>R</b>	Variable displacement with high torque thru-drive
<b>L</b>	Variable displacement with high torque thru-drive & shuttle package
<b>V</b>	Variable displacement, open circuit (Pumps only) Variable displacement (Motors only)
<b>H</b>	Variable displacement with medium torque thru-drive & shuttle package, closed circuit (Motors only)

Code	Efficiency
<b>Omit</b>	Standard Efficiency
<b>E</b>	Extreme Duty Barrel Bearing/Standard Efficiency

Code	Shaft
<b>1</b>	Splined SAE - floating shaft w/mechanical seal
<b>2</b>	Keyed SAE - mechanical shaft seal
<b>3</b>	Splined SAE - mechanical shaft seal
<b>7</b>	Keyed SAE - double lip shaft seal
<b>8</b>	Splined SAE - double lip shaft seal
<b>9</b>	Keyed (long) SAE - double lip shaft seal
<b>10</b>	Keyed (long) SAE - mechanical shaft seal

<sup>1</sup> Not ATEX approved

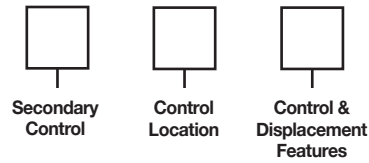
Code	Rotation
<b>R</b>	Clockwise (Pumps only)
<b>L</b>	Counterclockwise (Pumps only)
<b>N</b>	Bidirectional (Motors only)

Code	Seals
<b>1</b>	Nitrile (Buna N)
<b>4</b>	EPR (not available with "5A" or "5C" primary controls or "E" secondary control) (unpainted pump unless otherwise specified)
<b>5</b>	Flourocarbon (Viton)

**Design letter (assigned by manufacturer)**

Code	Primary Control
<b>10</b>	Screw adjustment (spring offset to maximum displacement) (Pumps only)
<b>2A</b>	Cylinder control w/ adjustable maximum volume stops
<b>2H</b>	Cylinder control - 3 position (spring centered with zero adjustment) (Pumps only)
<b>2M</b>	Cylinder control - 2 position electro-hydraulic w/ adjustable maximum volume stop (spring offset to minimum displacement)
<b>2N</b>	Cylinder control - 3 position (spring centered) electro-hydraulic (Pumps only)
<b>40</b>	Rotary servo - spring centered (Pumps only)
<b>4A</b>	Rotary servo - spring centered w/ adjustable maximum volume stops (Pumps only)
<b>4B</b>	Rotary servo - spring centered w/ automatic brake control (Pumps only)
<b>4C</b>	Rotary servo - spring centered w/ adjustable maximum volume stops & automatic brake control (Pumps only)
<b>5A</b>	Electro-hydraulic stroker w/ adjustable maximum volume stops
<b>5C</b>	Electro-hydraulic stroker w/ adjustable maximum volume stops & automatic brake control (Pumps only)
<b>7D</b>	High IQ with 10 gpm servovalve & volume indicator (Pumps only)
<b>7F</b>	High IQ with 10 gpm servovalve & 4A (rotary servo) control (Pumps only)
<b>7J</b>	High IQ with DF+ valve & volume indicator (Pumps only)
<b>7K</b>	High IQ with DF+ valve & 4A (rotary servo) control (Pumps only)
<b>7Q</b>	High IQ with digital DF+ valve & volume indicator (Only with "8" secondary control) (Pumps only)
<b>7R</b>	High IQ with digital DF+ valve & 4A (rotary servo) control (Only with "8" secondary control) (Pumps only)
<b>8A</b>	Hydraulic stroker w/ adjustable maximum volume stops
<b>8C</b>	Hydraulic stroker w/ adjustable maximum volume stops & automatic brake control (Pumps only)
<b>9A</b>	Electro-hydraulic stroker w/ adjustable maximum volume stops <sup>1</sup>
<b>9C</b>	Electro-hydraulic stroker w/ adjustable maximum volume stops & automatic brake control 1 (Pumps only)
<b>9D</b>	Electro-hydraulic stroker w/ adjustable maximum volume stops (Pumps only)





Code	Secondary Control
0	Volume indicator (Motors only)
2	Volume indicator (Pumps only)
3	Reverse Compensator (Spring Offset Max. + Volume Indicator (Motors only)
4	Torque limiter & volume indicator (Pumps only)
5	Reverse Compensator (Spring Offset Min. + Volume Indicator (Motors only)
6	Cam position feedback potentiometer
7	Cam position feedback RVDT (AC)
8	Cam position feedback RVDT (DC)
9	Hall Effect Cam position feedback
E	Intelligence Enable w/ sensors (only P,X,S,R,L,V Type and with only 9A Primary Control) (Pumps only)
U	Reverse compensator (3) + cam position feedback potentiometer (6) (Motors only)
V	Reverse compensator (3) + cam position feedback RVDT (7) (Motors only)
W	Reverse compensator (3) + cam position feedback RVDT (8) (Motors only)
X	Reverse compensator (5) + cam position feedback potentiometer (6) (Motors only)
Y	Reverse compensator (5) + cam position feedback RVDT (7) (Motors only)
Z	Reverse compensator (5) + cam position feedback RVDT (8) (Motors only)

Code	Control Location
A	Primary control on port A side
B	Primary control on port B side

Control	Pump Codes	Motors Codes	Control & Displacement Features
2M*	00	0	4D01 valve, 110VAC/60Hz with Hirschmann connector
	01	1	4D01 valve, 12VDC with Hirschmann connector
	02	2	4D01 valve, 240VAC/50Hz with Hirschmann connector
	03	3	4D01 valve, 110VAC/60Hz, wiring box
	04	4	4D01 valve, 12VDC, wiring box
	05	5	Cetop3 (D03)(NG6) interface, no directional valve
	06	6	4D01 valve, 24VDC with Hirschmann connector
	07	7	4D01 valve, 110VAC/50Hz with Hirschmann connector
2N*	00	-	4D01 valve, 110VAC/60Hz with Hirschmann connector (Pumps only)
	01	-	4D01 valve, 12VDC with Hirschmann connector (Pumps only)
	02	-	4D01 valve, 240VAC/50Hz with Hirschmann connector (Pumps only)
	03	-	4D01 valve, 110VAC/60Hz, wiring box (Pumps only)
	04	-	4D01 valve, 12VDC, wiring box (Pumps only)
	05	-	Cetop3 (D03)(NG6) interface, no directional valve (Pumps only)
	06	-	4D01 valve, 24VDC with Hirschmann connector (Pumps only)
5**	00	0	with deadband
	01	1	without deadband
7**	00	-	without manual override shutoff (Pumps only)
	01	-	with manual override shutoff (required for F, G, L, K & R primary options) (Pumps only)
8**	00	0	75 - 350 psi (5 - 24 bar)
	01	1	75 - 435 psi (5 - 30 bar)
	02	-	100 - 380 psi (7 - 26 bar) (Pumps only)
	03	-	150 - 400 psi (10 - 28 bar) (Pumps only)
9**	00	0	24VDC
	01	1	12VDC
All Other	00	0	None





Shuttle  
Features



Internal  
Pump



External  
Drive



External  
Mounting



Special  
Modifications

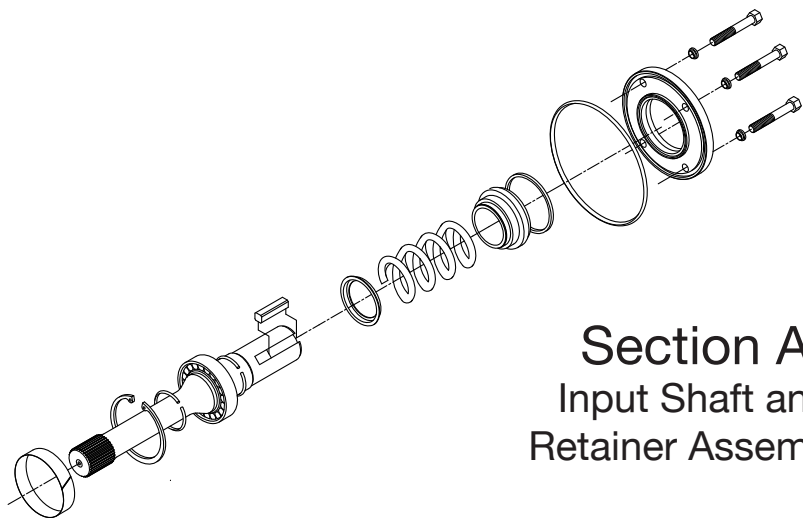
Code	Shuttle Features (Motors only)
Omit	(Pumps only)
0	Without Orifices
1	With Orifices

Code	Internal Pump
Omit	All Motors
0	2.14 in <sup>3</sup> /rev. (35 cc/rev.) (P/S/X only)
X	No Internal Pump (Standard on R/L and Pumps)

Code	External Drive
Omit	None
M	Steel Blanking Plate Less Coupling (S/X/R/L only)
A	SAE-A (SAE 82-2) (S/X/R/L/M only)
B	SAE-B (SAE 101-2) (S/X/R/L/M only) SAE-B (SAE 101-4) (R/L/M only)
C	SAE-B (SAE 127-2) (R/L/M only) SAE-B (SAE 127-4) (R/L/M only)

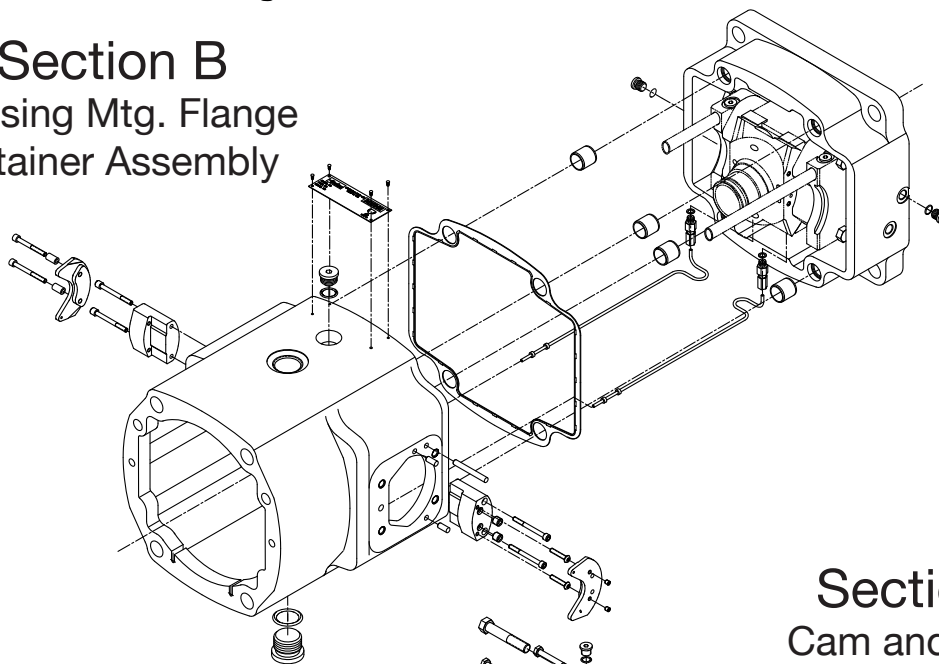
Code	External Mounting
Omit	No external mount
0	No external pump mounted
1	External pump mounted (requires special modification "-M2") (must be separately specified)
2	Hazardous Rated pump mounted (requires special modification "-EX") (must be separately specified)

Code	Special Modifications
Omit	None (Unit Painted Black)
NP	No Paint
EX	ATEX APPROVED PUMPS without "E" secondary control (EX: Bronze Caged Barrel Bearing Pumps, etc.)
M2	Other special modification (example: bronze caged barrel bearing for low viscosity fluids, tandem pumps, etc.)

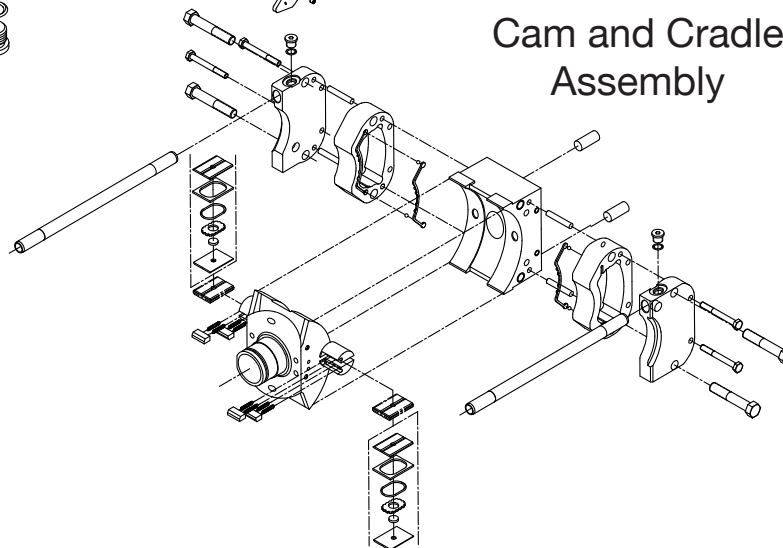


**Section A**  
Input Shaft and  
Retainer Assembly

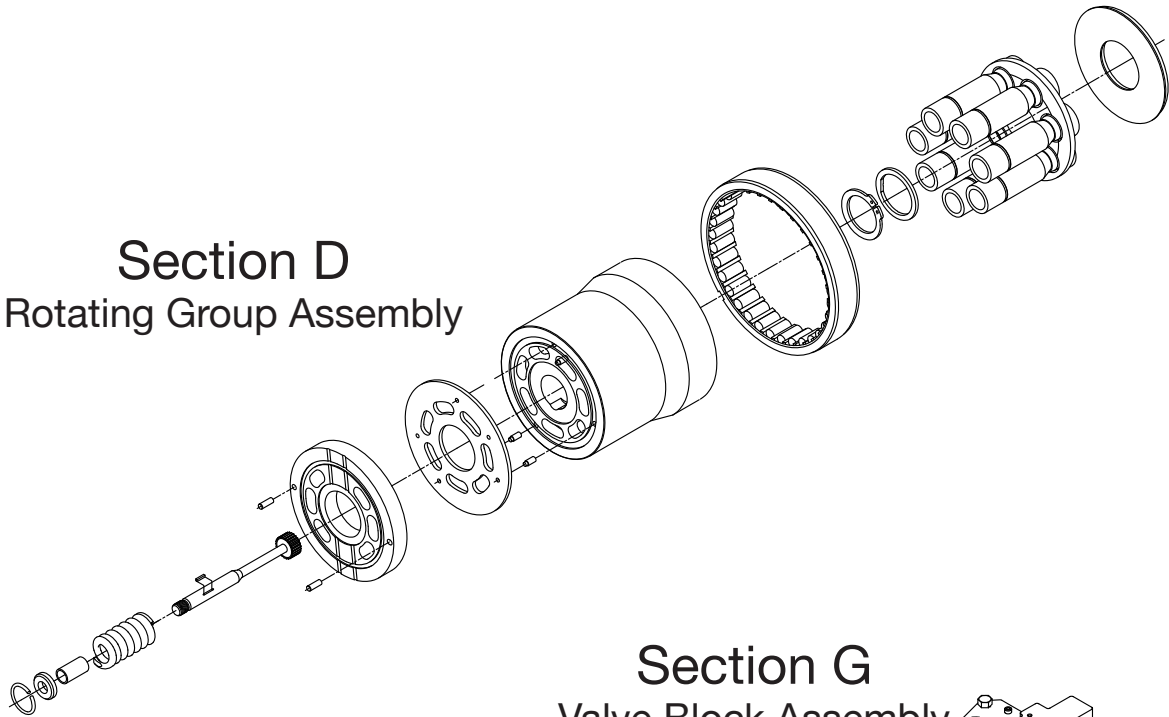
**Section B**  
Housing Mtg. Flange  
Retainer Assembly



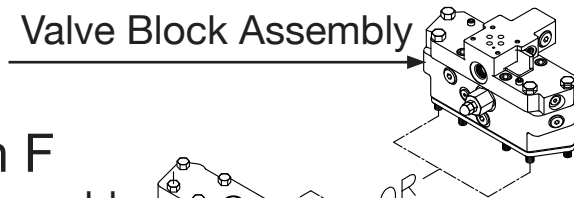
**Section C**  
Cam and Cradle  
Assembly



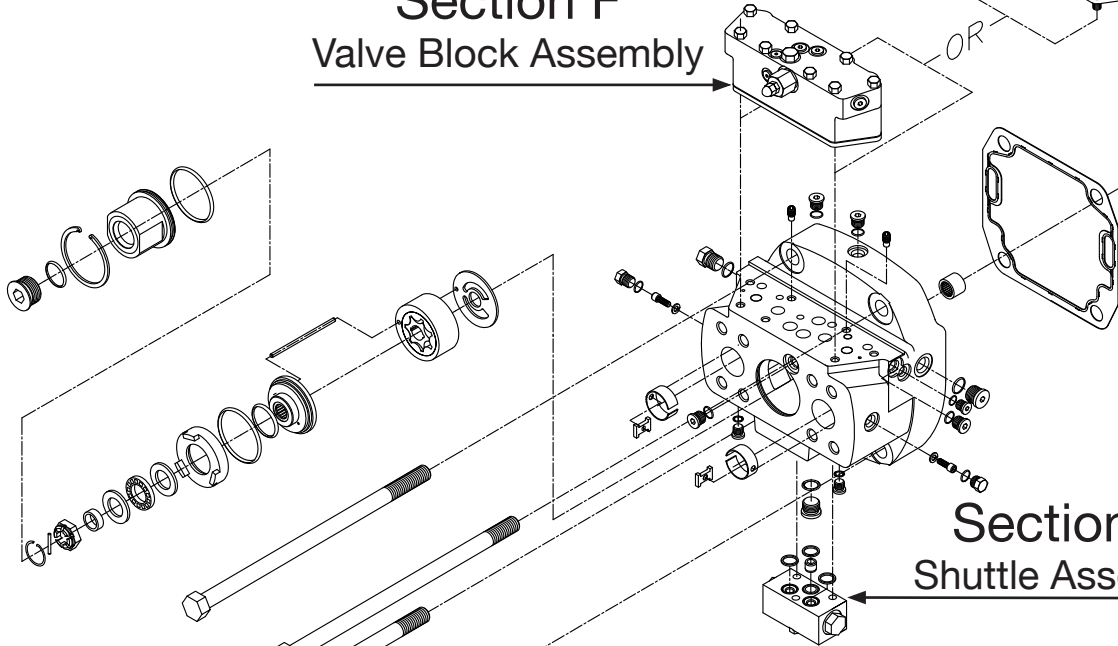
**Section D**  
Rotating Group Assembly



**Section G**  
Valve Block Assembly

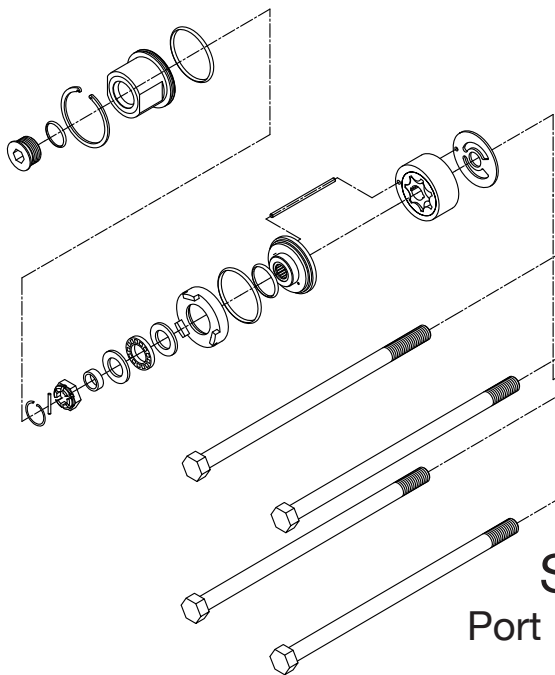


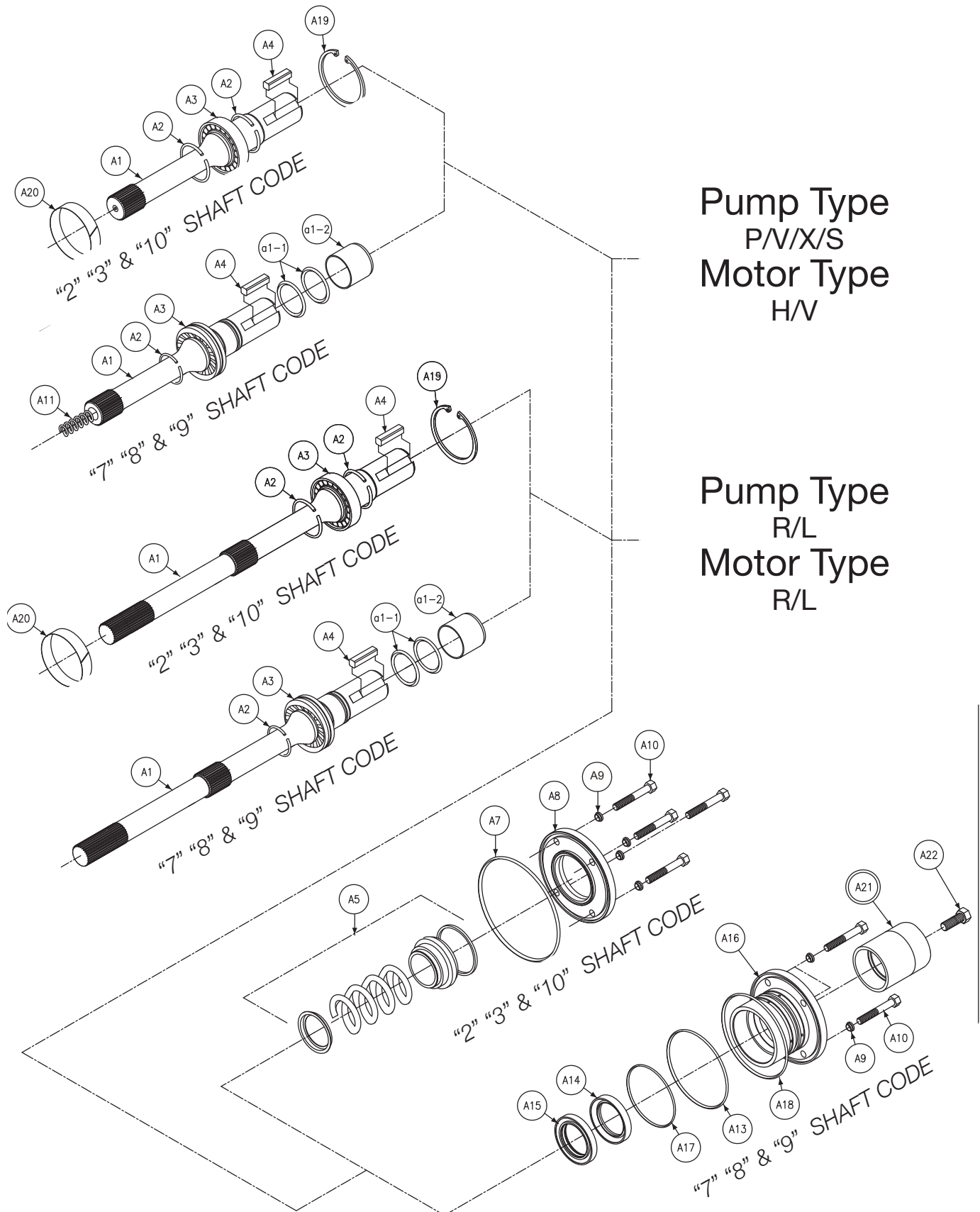
**Section F**  
Valve Block Assembly



**Section H**  
Shuttle Assembly

**Section E**  
Port Block Assembly





Section View - A - Input Shaft & Retainer Assembly

Section A P/M11/14 Input Shaft and Retainer Assembly								
Balloon #	Pump/Motor	Type	Shaft Code	Rotation	Seal Code	Item #	Description	Qty
A1	P	P/V/X/S	2	**	**	033-71601-0	SHAFT KEYED	1
	M	V/H						
	P	P/V/X/S	3	**	**	033-71604-0	SHAFT SPLINED	
	M	V/H						
	P	P/V/X/S	7	**	**	*033-94180-0	SHAFT KEYED	
	M	V/H						
	P	P/V/X/S	8	**	**	*033-94181-0	SHAFT SPLINED	
	M	V/H						
	P	P/V/X/S	9	**	**	*033-94220-0	SHAFT KEYED	
	M	V/H						
	P	P/V/X/S	10	**	**	033-93608-0	SHAFT KEYED	
	M	V/H						
	P/M	R/L	2	**	**	033-92619-0	SHAFT KEYED	
	P/M	R/L	3	**	**	033-92619-0	SHAFT SPLINED	
	P/M	R/L	7	**	**	*033-04182-0	SHAFT KEYED	
	P/M	R/L	8	**	**	*033-94183-0	SHAFT SPLINED	
	P/M	R/L	9	**	**	*033-94221-0	SHAFT KEYED	
	P/M	R/L	10	**	**	033-93614-0	SHAFT KEYED	
a1-1	P	P/V/X/S/ R/L	7/8/9	**	1	671-00131-0	O RING	2
	M	V/H/R/L						
	P	P/V/X/S/ R/L	7/8/9	**	4	674-00131-0		
	M	V/H/R/L						
	P	P/V/X/S/ R/L	7/8/9	**	5	675-00131-0		
	M	V/H/R/L						
a1-2	P	P/V/X/S/ R/L	7/8/9	**	**	033-71492-0	SLEEVE	1
	M	V/H/R/L						
A2	P/M	**	2/3/10	**	**	033-71641-0	RETAINING RING	2
	P/M	**	7/8/9	**	**	033-59504-0		1
A3	P/M	**	2/3/10	**	**	230-82148-0	SHAFT BEARING	1
	P/M	**	7/8/9	**	**	230-82214-0		
A4	P/M	**	2/7	**	**	033-71514-0	KEY	1
	P/M	**	9/10	**	**	033-93618-0		
A5	P/M	**	2/3/10	**	1	623-00016-0	SHAFT SEAL	1
	P/M	**	2/3/10	**	4	623-00016-4		
	P/M	**	2/3/10	**	5	623-00016-5		

Continued on next page.





Seal Kits Contain All Seals for the Following: NOTE: Seal kits for "M" mod pumps and for aux. pumps require part verification with HPD factory representatives. Standard Seal Kits below contain seals for the following: 1. Main Pump 2. Valve Block 3. Input/Output Controls 4. Shaft Seal					
Pump/Motor	Type	Shaft Code	Rotation	Seal Code	Part Number
P	P/V/X	1/2/3	**	1	S23-17032-0
				4	S23-17032-4
				5	S23-17032-5
P	S	1/2/3	**	1	S23-17035-0
				5	S23-17035-5
P	P/V/X/R	7/8/9	CW	1	S23-17033-0
				4	S23-17033-4
				5	S23-17033-5
P	S/L	7/8/9	CW	1	S23-17036-0
				5	S23-17036-5
P	P/V/X/R	7/8/9	CCW	1	S23-17034-0
				4	S23-17034-4
				5	S23-17034-5
P	S/L	7/8/9	CCW	1	S23-17037-0
				5	S23-17037-5
P	R/L	1/2/3	**	1	S53-10993-0

11/14 Shaft, Shaft Sleeve and O ring								
Pump/Motor	Type	Shaft	Item	Seal Code	Part Number	Description	Qty	
P	P/V/S/X	7/8/9	a1-1	1	671-00131-0	O RING	2	
M	H/V			4	674-00131-0			
				5	675-00131-0			
P	P/V/S/X	7	A	**	*033-94180-0	*SHAFT	1	
M	H/V							
P	P/V/S/X	8		**	*033-94181-0	*SHAFT	1	
M	H/V							
P	P/V/S/X	9		**	*033-94220-0	*SHAFT	1	
M	H/V							
P/M	R/L	7		**	*033-94182-0	*SHAFT	1	
P/M	R/L	8		**	*033-94183-0	*SHAFT	1	
P/M	R/L	9		**	*033-94221-0	*SHAFT	1	
P	P/V/S/X	7/8/9		a1-2	**	033-94184-0	SLEEVE	1
M	H/V							
P/M	R/L							

**Note:** Shaft P/N's, Item A, marked with \* are not usable without o'ring, Item a1-1 and sleeve, Item a1-2

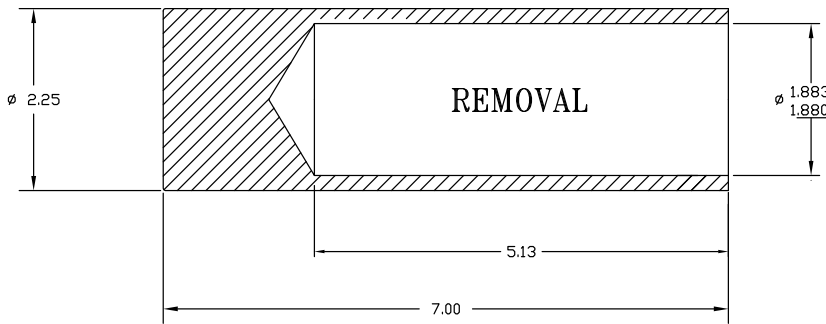
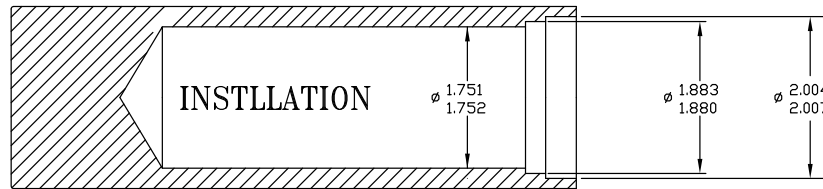
P/M11/14 Shaft and Bearing Assembly Kits Composed of Items: A1, a1-1, a1-2, A2, A3 and A4 as applicable			
Pump/Motor	Type	Shaft Code	Shaft Code
P	P/V/S/X	2	S13-43969-0
M	H/V		
P	P/V/S/X	3	S13-43968-0
M	H/V		
P	P/V/S/X	7	*S23-18182-0
M	H/V		
P	P/V/S/X	8	*S23-18183-0
M	H/V		
P	P/V/S/X	9	*S23-18268-0
M	H/V		
P	P/V/S/X	10	S23-17489-0
M	H/V		
P/M	R/L	2	S23-16255-0
P/M	R/L	3	S23-16257-0
P/M	R/L	7	*S23-18184-0
P/M	R/L	8	*S23-18185-0
P/M	R/L	9	*S23-18269-0
P/M	R/L	10	S23-17495-0

\*Replacement shaft sleeves & o rings are available for Pumps Type P/V/S/X/R/L and Motors Type H/V with 7/8/9 shafts. However special tool P/N 213-0-004203 is required to remove and install the sleeve.  
**Note:** See Page 14 for tool details.

P/M11/14 Shaft and Seal Retainer Assembly Kits Composed of Items: A1, a1-1, a1-2, A2, A3, A4, A9, A10, A13, A14, A15, A16, A17, A18, A21, A22 and A23 as applicable					
Pump/Motor	Type	Rotation	Seal Code	Shaft Code	Part Number
P	P/V/S/X	CW	1	7	S23-15219-0
P	P/V/S/X	CW	1	8	S23-15923-0
P	P/V/S/X	CW	1	9	S23-19502-0
P	P/V/S/X	CW	5	7	S23-15219-5
P	P/V/S/X	CW	5	8	S23-15923-5
P	P/V/S/X	CW	5	9	S23-19502-5
P	P/V/S/X	CCW	1	7	S23-15350-0
P	P/V/S/X	CCW	1	8	S23-15891-0
P	P/V/S/X	CCW	1	9	S23-19503-0
P	P/V/S/X	CCW	5	7	S23-15350-5
P	P/V/S/X	CCW	5	8	S23-15891-5
P	P/V/S/X	CCW	5	9	S23-19503-5
P	R/L	CW	1	7	S23-16807-0
P	R/L	CW	1	8	S23-16805-0
P	R/L	CW	1	9	S23-19504-0
P	R/L	CW	5	7	S23-16807-5
P	R/L	CW	5	8	S23-16805-5
P	R/L	CW	5	9	S23-19504-5
P	R/L	CCW	1	7	S23-16808-0
P	R/L	CCW	1	8	S23-16806-0
P	R/L	CCW	1	9	S23-19505-0
P	R/L	CCW	5	7	S23-16808-5
P	R/L	CCW	5	8	S23-16806-5
P	R/L	CCW	5	9	S23-19505-5

P/M11/14 Seal Retainer Assembly Kits Composed of Items: A14, A15 and A16					
Pump/Motor	Type	Shaft	Rotation	Seal Code	Part Number
P	P/V/X/S/R/L	7/8/9	CW	1	S23-15215-0
P	P/V/X/S/R/L	7/8/9	CCW	1	S23-15217-0
M	H/V/R/L	7/8/9	N	1	S23-16041-0

MATERIAL: MEDIUM CARBON STEEL HEAT TREATED TO 27-34 Rc

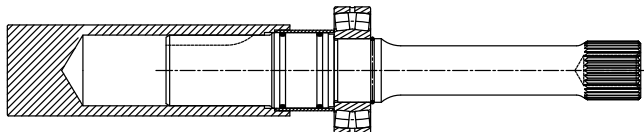


**INSTALLATION**

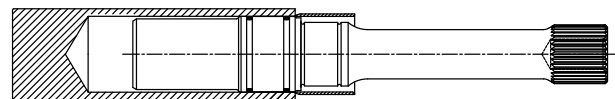
DO NOT HAMMER OR OTHERWISE IMPACT  
APPLY A CONSTANT PRESSING FORCE ONLY

**REMOVAL**

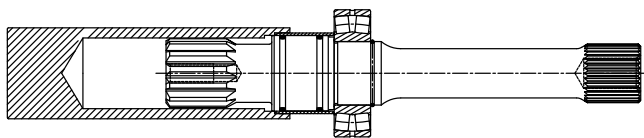
DO NOT PRESS OFF BEARING USING SLEEVE  
PRESS OFF BEARING AND THEN SLEEVE



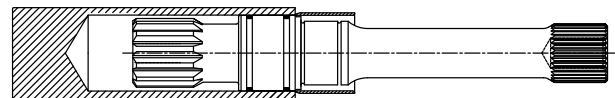
7 SHAFT



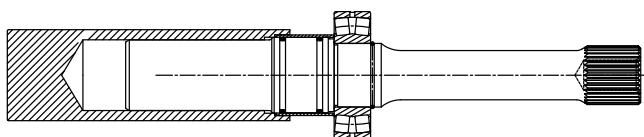
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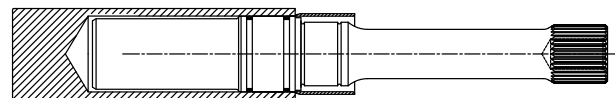
8 SHAFT



8 SHAFT

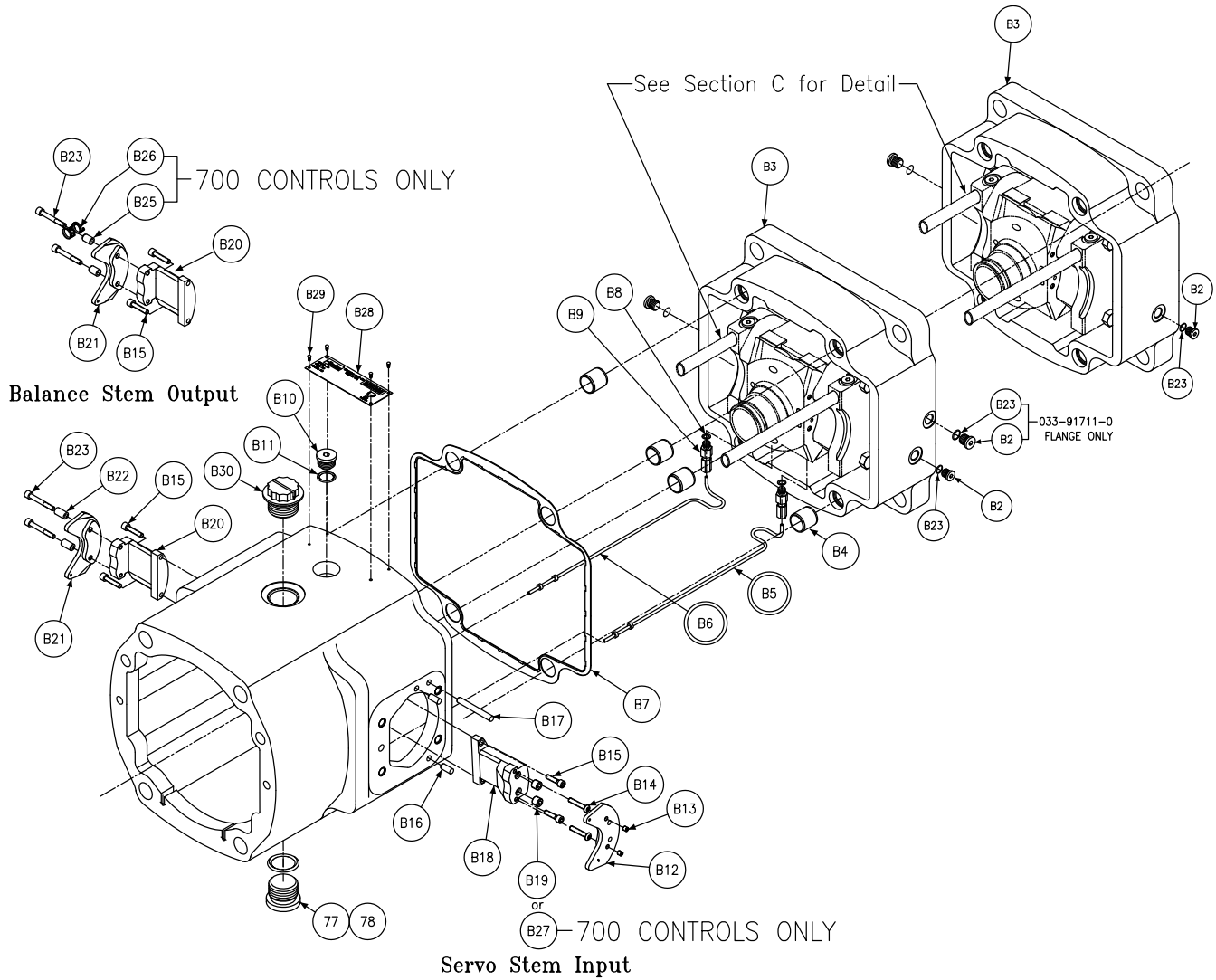


9 SHAFT



9 SHAFT

Pump Type  
P/V/X/S/L/R  
Motor Type  
H/V/L/R



Note: Above view shows input on "a" side of pump.



Section View - B - Housing, Mtg. Flange & Stem Assembly

Balloon #	Pump/Motor	Type	Shaft Code	Seal Code	Item #	Description	Qty
B3	P	P/V/S/X/R/L	2/3/10	**	033-71546-0	MOUNTING FLANGE	1
	M	V/H/R/L					
	P	P/V/S/X/R/L	7/8/9	**	033-91711-0		
	M	V/H/R/L					
B4	P/M	**	**	**	033-72664-0	MOUNTING SLEEVE	4
B5	P/M	**	**	**	S13-43966-0	RIGHT FEED TUBE	1
B6	P/M	**	**	**	S13-43967-0	LEFT FEED TUBE	1
B7	P/M	**	**	**	033-91076-0	MTG FLG GASKET	1
B8	P/M	**	**	1	691-00902-0	O RING	2
	P/M	**	**	4	694-00902-0		
	P/M	**	**	5	695-00902-0		
B9	P/M	**	**	**	492-15265-0	CONNECTOR	2
B10	P/M	**	**	**	033-91106-0	RETAINER BEARING	1
B11	P/M	**	**	1	691-00908-0	O RING	1
	P/M	**	**	4	694-00908-0		
	P/M	**	**	5	695-00908-0		
B12	P/M	**	**	**	033-53874-0	SERVO INPUT PLATE	1
B13	P/M	**	**	**	312-09032-0	SCREW	2
B14	P/M	**	**	**	353-25073-0	SCREW BUTTON HD	2
B15	P/M	**	**	**	359-09240-0	SCREW SHC	4
B16	P/M	**	**	**	325-16320-0	ROLL PIN	2
B17	P/M	**	**	**	324-21608-0	DOWEL PIN	4
B18	P/M	**	**	**	033-71596-0	SERVO STEM	1
B19	P	P/S/X/R/L	**	**	036-20641-0	ORIFICE .062	2
	M	V/H/R/L					
	P	V					
B20	P	P/V/S/X/R/L	**	**	033-71616-0	BALANCE STEM	1
	M	V/H/R/L					
B21	P/M	**	**	**	033-70546-0	BALANCE PLATE	1
B22	P/M	**	**	**	033-71247-0	SPACER	2
B23	P/M	**	**	**	359-09180-0	SCREW SHC	2
B24	P/M	**	**	**	033-91191-0	HOUSING VV	1
B25	P	P/S/X/R/L	**	**	033-57270-0	SPACER	2
B26	P	P/S/X/R/L	**	**	033-57271-0	FEEDBACK SPRING	1

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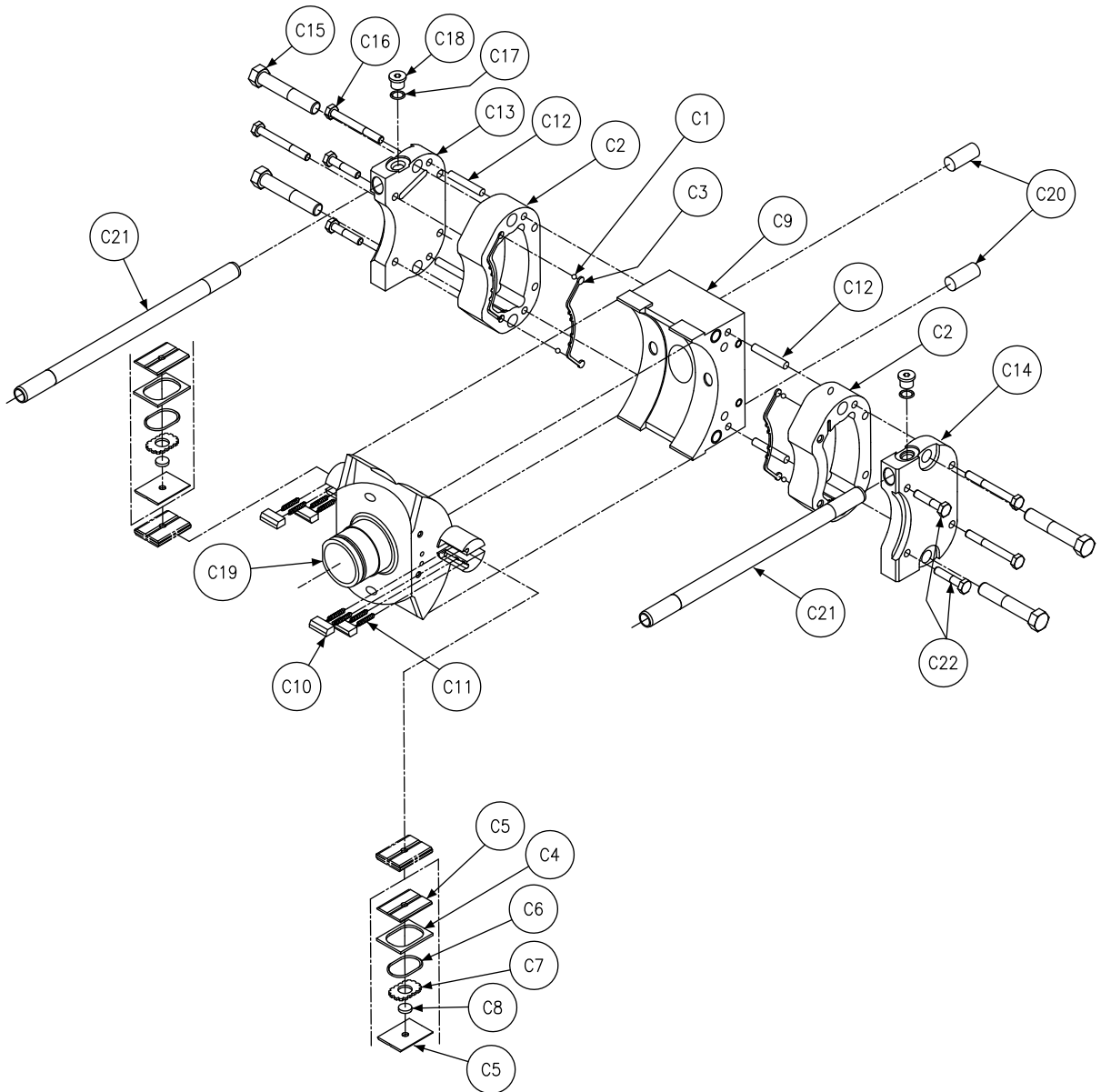


Section View - B - Housing, Mtg. Flange & Stem Assembly

Balloon #	Pump/Motor	Type	Shaft Code	Seal Code	Item #	Description	Qty
B27	P	P/S/X/R/L	**	**	033-93765-0	ORIFICE .043	2
B28	P	P/V/S/X/R/L	**	**	033-71907-0	NAMEPLATE	1
	M	V/H/R/L	**	**	033-71908-0		
B29	P/M	**	**	**	320-10203-0	DRIVE SCREW	4
B30	P/M	**	**	**	449-00019-0	SHIPPING PLUG	1

Stem Kits	
Input Stem Kits Include the Following: B12, B13, B14, B15, B18 and B19	
Input Stem Kits for 700 Control Include the Following: B12, B13, B14, B15, B18 and B27	
Output Stem Kits Include the Following: B15, B20, B21, B22 and B23	
Output Stem Kits for 700 Control Include the Following: B15, B20, B21, B23, B25 and B26	
Description	Part Number
Pump and Motor 11/14 Input Stem Kit	S23-12276-0
Pump and Motor 11/14 Output Stem Kit	S23-03782-0
Pump 11/14 Input Stem Kit for 700 Control	S23-03781-0
Pump 11/14 **V** Input Stem Kit	S23-17876-0
Pump 11/14 Output Stem Kit for 700 Control	S23-03948-0

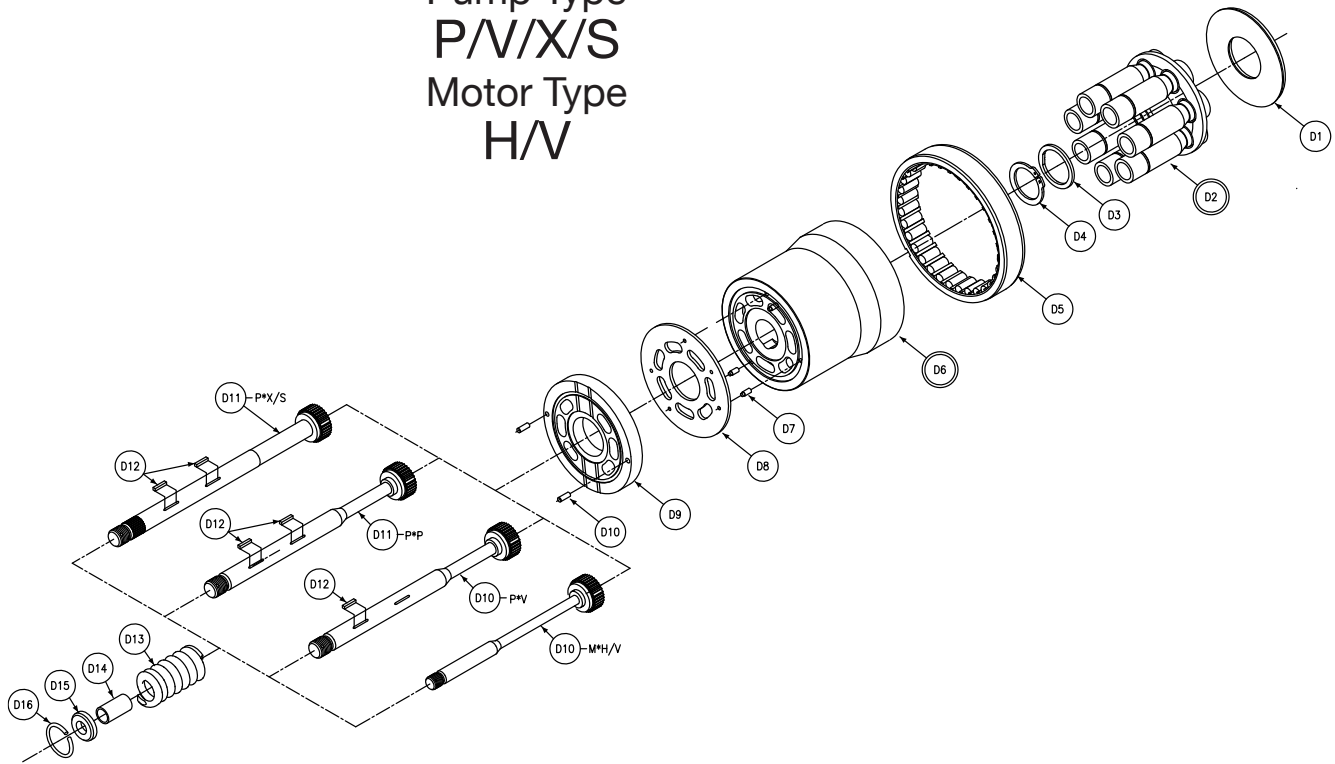
Pump Type  
P/V/X/S/R/L  
Motor Type  
H/V/R/L



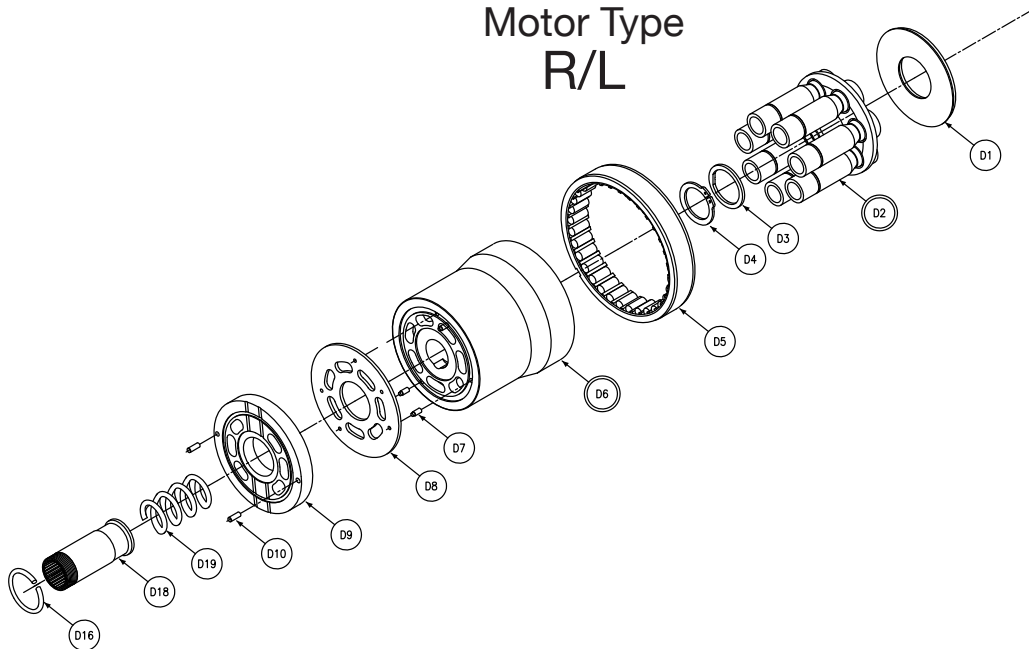
Section C 11/14 Cam and Cradle Assembly								
Balloon #	Pump/Motor	Type	Shaft Code	Rotation	Seal Code	Item #	Description	Qty
C1	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	201-06001-0	CHECK BALL	4
C2	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	033-71615-0	VANE CHAMBER	2
C3	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	1	606-25040-0	MOLDED SEAL	2
					4	606-25040-4		
					5	606-25040-5		
C4	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	033-71611-0	VANE SEAL	2
C5	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	033-71608-0	VANE SEAL BACKUP PLATE	4
C6	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	1	691-00125-0	O RING	2
					4	694-00125-0		
					5	695-00125-0		
C7	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	033-71607-0	VANE SPACER	2
C8	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	033-70803-0	CHECK VALVE	2
C9	P/M	P/V/X/S/L/R/H	2/3/10	**	**	033-57879-0	ROCKER CRADLE	1
			7/8/9			033-91712-0		
C10	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	033-72234-0	VANE HOLDDOWN	4
C11	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	033-72233-0	SPRING HOLDDOWN	8
C12	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	324-22428-0	DOWEL PIN	4
C13	P	P/D/V/X/S/L/R	2/3/7/8/9/10	CCW	**	033-71595-0	RIGHT CONTROL COVER	1
	P	P/D/V/X/S/L/R		CW		033-71598-0		
	M	V/H		N				
C14	P	P/D/V/X/S/L/R	2/3/7/8/9/10	CCW	**	033-71593-0	LEFT CONTROL COVER	1
	P	P/D/V/X/S/L/R		CW		033-71597-0		
	M	V/H		N				
C15	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	306-40189-0	HHCS 1/2-13 UNC X 3	4
C16	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	306-40140-0	HHCS 3/8-16 UNC X 2 3/4	4
C17	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	1	691-00905-0	O RING	2
				**	4	694-00905-0		
				**	5	695-00905-0		
C18	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	488-35020-0	HEX SOCKET PLUG	2
C19	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	S23-12107-0	CAM ROCKER	1
C20	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	324-23216-0	DOWEL PIN	2
C21	P/M	P/V/X/S/L/R/H	2/3/7/8/9/10	**	**	033-71609-0	OVERRIDE TUBE	2

P/M11/14 Cam & Cradle Assembly Kits Includes Items C1 Thru C22				
Pump/Motor	Type	Shaft Code	Rotation	Part Number
P	P/V/X/S	2/3/10	CW	S23-17240-0
P	P/V/X/S	2/3/10	CCW	S23-17241-0
M	H/V	2/3/10	N	S23-17240-0
P	P/V/X/S	7/8/9	CW	S23-18966-0
P	P/V/X/S	7/8/9	CCW	S23-18967-0
M	H/V	7/8/9	N	S23-18966-0

Pump Type  
P/V/X/S  
Motor Type  
H/V



Pump Type  
R/L  
Motor Type  
R/L



Section View - D - Rotating Group Assembly

Section D 11/14 Rotating Group							
Balloon #	Displacement	Pump/Motor	Type	Rotation	Item #	Description	Qty
D1	**	P	P/V/X/S/L/R	**	033-71569-0	CREEP PLATE	1
	**	M	H/V/R/L				
D2	11	P	P/X/S/L/R	**	S13-45544-0	PISTON SHOE & RETAINER ASSEMBLY	1
		M	H/V/R/L	**			
	14	P	P/X/S/L/R/H	**	S13-43970-0		
		M	H/V/R/L	**			
D3	**	P	P/V/X/S/L/R	**	033-91706-0	THRUST WASHER	1
	**	M	H/V/R/L	**			
D4	**	P/M	P/V/X/S/L/R/H	**	033-71556-0	RET RING - .109/.107 THK YELLOW	SELECT FIT ONE ONLY
	**	P/M	P/V/X/S/L/R/H	**	033-71557-0	RET RING - .107/.105 THK GREEN	
	**	P/M	P/V/X/S/L/R/H	**	033-71558-0	RET RING - .105/.103 THK RED	
	**	P/M	P/V/X/S/L/R/H	**	033-71559-0	RET RING - .103/.101 THK BLUE	
	**	P/M	P/V/X/S/L/R/H	**	035-91231-0	RET RING - .100/.098 THK WHITE	
D5	**	P/M	P/V/X/S/L/R/H	**	033-91190-0	BARREL BEARING	1
D6	11	P/M	P/V/X/S/L/R/H	**	S13-45381-0	CYLINDER BARREL	1
	14	P/M	P/V/X/S/L/R/H	**	S13-43965-0		
D7	**	P/M	P/V/X/S/L/R/H	**	033-49825-0	FACE PLATE PIN	3
D8	11	P/M	P/V/X/S/L/R/H	**	033-71921-0	FACE PLATE	1
	14	P/M	P/V/X/S/L/R/H	**	033-71575-0		
D9	11	P	P/X/S/L/R	CW	033-71915-0	PORT PLATE	1
	11	P	P/X/S/L/R	CCW	033-71914-0		
	14	P	P/X/S/L/R	CW	033-71617-0		
	14	P	P/X/S/L/R	CCW	033-71600-0		
	11	M	H/V/L/R	N	033-71551-0		
	14	M	H/V/L/R	N	033-71916-0		
	11	P	V	CW	031-91195-0		
	11	P	V	CCW	031-91224-0		
	14	P	V	CW	031-91241-0		
	14	P	V	CCW	031-91242-0		
D10	**	P/M	P/V/X/S/L/R/H	**	324-21910-0	DOWEL PIN	2

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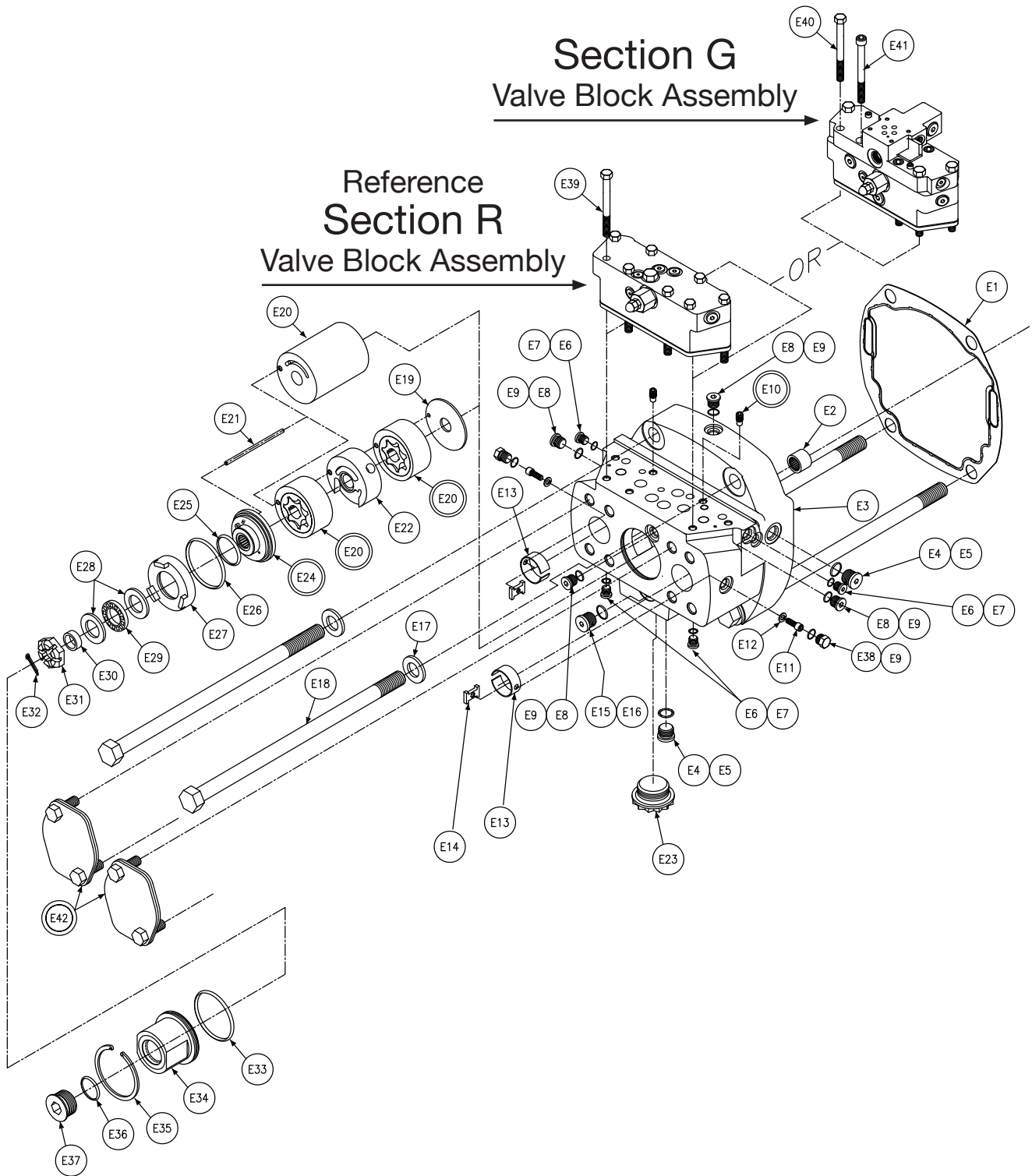


Section View - D - Rotating Group Assembly

Section D 11/14 Rotating Group							
Balloon #	Displacement	Pump/Motor	Type	Rotation	Item #	Description	Qty
D11	**	P	P/V	**	033-71603-0	AUXILIARY SHAFT	1
	**	P	S/X	**	033-91053-0		
	**	M	H/V	**	033-71573-0		
D12	**	P	V	**	211-22034-0	SQUARE KEY	1
	**	P	P/S/X	**			2
	**	M	H/V	**			2
D13	**	P	P/V/X/S	**	033-71562-0	HOLDDOWN SPRING	1
	**	M	H/V	**			
D14	**	P	P/V/X/S	**	033-71561-0	BARREL STOP	1
	**	M	H/V	**			
D15	**	P/M	P/V/X/S/H	**	033-71560-0	SPRING RETAINER	1
D16	**	P/M	P/V/X/S/H	**	033-71564-0	RETAINING RING	1
D18	**	P/M	R/L	**	033-92687-0	HOLDDOWN SLEEVE	1
D19	**	P/M	R/L	**	033-92686-0	HOLDDOWN SPRING	1

Major Rotating Group Kits Composed of Items: D1, D2, D5, D6, D7, D8, D9 and D10				
Displacement	Pump/Motor	Type	Rotation	Part number
11	P	P/X/S/ R/L	CW	S23-17101-0
11	P	P/X/S/ R/L	CCW	S23-17102-0
11	P	V	CW	S23-17105-0
11	P	V	CCW	S23-17106-0
14	P	P/X/S/ R/L	CW	S23-17103-0
14	P	P/X/S/ R/L	CCW	S23-17104-0
14	P	V	CW	S23-17107-0
14	P	V	CCW	S23-17108-0
11	M	H/V/R/L	N	S23-17109-0
14	M	H/V/R/L	N	S23-17110-0

Barrel Holddown Kits Composed of Items: D11, D13, D14, D15 and D16 For P/V/X/S/H No Kit Available for R/L Versions			
Displacement	Pump/Motor	Type	Part Number
11/14	P	P/V	S23-17250-0
11/14	P	X/S	S23-17251-0
11/14	M	H/V	S23-17252-0



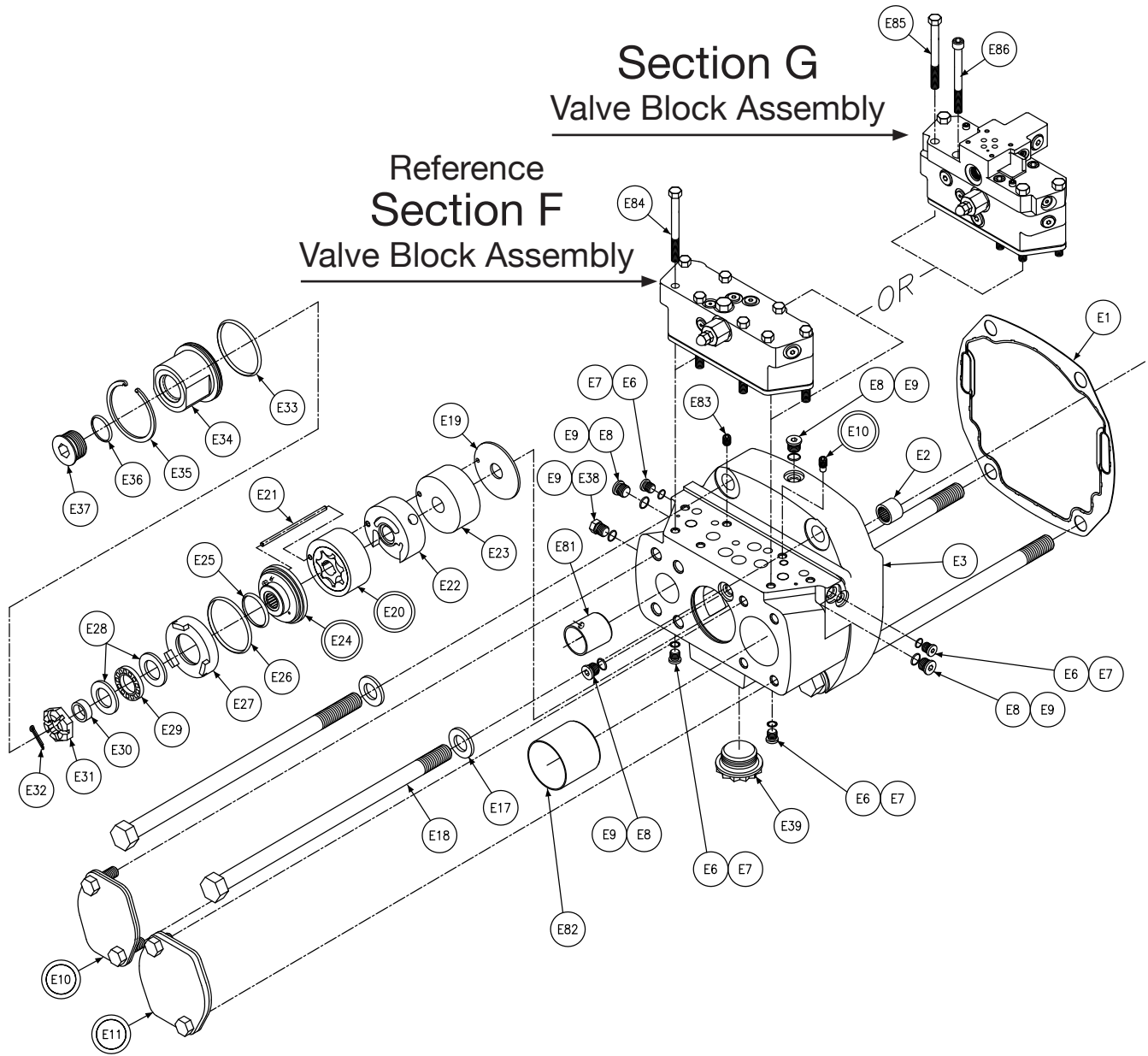
## Section View - E - Pump Type - P - Port Block Assembly

Section E P11/14 P Port Block								
Balloon #	Pump/Motor	Type	Rotation	Seal Code	Internal Pump	Item #	Description	Qty
E1	P	P	**	**	0/X	033-91079-0	PORT BLOCK GASKET	1
E2	P	P	**	**	0/X	230-82146-0	NEEDLE BEARING	1
E3	P	P	**	**	0/X	033-57912-0	PORT BLOCK	1
E4	P	P	**	**	0/X	488-35018-0	HEX HD PLUG	2
E5	P	P	**	1	0/X	691-00908-0	O RING	2
	P	P	**	4	0/X	694-00908-0		
	P	P	**	5	0/X	695-00908-0		
E6	P	P	**	**	0/X	488-35001-0	PLUG	4
E7	P	P	**	1	0/X	691-00904-0	O RING	4
	P	P		4	0/X	694-00904-0		
	P	P		5	0/X	695-00904-0		
E8	P	P	**	**	0/X	488-35041-0	PLUG	4
E9	P	P	**	1	0/X	691-00906-0	O RING	6
	P	P		4	0/X	694-00906-0		
	P	P		5	0/X	695-00906-0		
E10	P	P	**	**	0/X	S13-40266-0	CHECK VALVE ASSY	2
E11	P	P	**	**	0/X	033-70908-0	SCREW	2
E12	P	P	**	**	0/X	348-10016-0	LOCK WASHER	2
E13	P	P	**	**	0/X	033-70502-0	RING CHECK	2
E14	P	P	**	**	0/X	033-70489-0	CLAMP 6.0__	2
E15	P	P	**	**	0/X	488-35055-0	PLUG	1
E16	P	P	**	**	0/X	691-00910-0	O RING	1
	P	P			0/X	694-00910-0		
	P	P			0/X	695-00910-0		
E17	P	P	**	**	0/X	350-10109-0	WASHER	4
E18	P	P	**	**	0/X	306-40172-0	HHCS 3/4-10 UNC X 13	4
E19	P	P	**	**	0	033-71619-0	SIDE PLATE	1
E20	P	P	**	**	0	S13-43334-0	ECCENTRIC RING & GEROTOR	2
	P	P	**	**	X	033-53758-0	PLUG GEROTOR	1
E21	P	P	**	**	0/X	033-71620-0	DOWEL PIN	1
E22	P	P	**	**	0	S13-43963-0	CENTER PORT PLATE ASSY	1
E23	P	P	**	**	0/X	449-00020-0	SHIPPING PLUG	1

Continued on next page.

## Section View - E - Pump Type - P - Port Block Assembly

Section E P11/14 P Port Block								
Balloon #	Pump/Motor	Type	Rotation	Seal Code	Internal Pump	Item #	Description	Qty
E24	P	P	CW	**	0/X	S13-46762-0	SIDE PLATE AND BEARING	1
	P	P	CCW	**	0/X	S13-46763-0		
E25	P	P	**	1	0/X	671-00129-0	O RING	1
	P	P	**	4	0/X	674-00129-0		
	P	P	**	5	0/X	675-00129-0		
E26	P	P	**	1	0/X	671-00144-0	O RING	1
	P	P	**	4	0/X	674-00144-0		
	P	P	**	5	0/X	675-00144-0		
E27	P	P	**	**	0/X	033-70531-0	PRESSURE PLATE	1
E28	P	P	**	**	0/X	350-10081-0	THRUST WASHER	2
E29	P	P	**	**	0/X	230-82164-0	THRUST BEARING	1
E30	P	P	**	**	0/X	033-72101-0	RING SEAL	1
E31	P	P	**	**	0/X	033-72026-0	HOLDDOWN NUT	1
E32	P	P	**	**	0/X	322-04324-0	COTTER PIN	1
E33	P	P	**	1	0/X	671-00147-0	O RING	1
	P	P	**	4	0/X	674-00147-0		
	P	P	**	5	0/X	675-00147-0		
E34	P	P	**	**	0/X	033-72100-0	AUXILIARY END COVER	1
E35	P	P	**	**	0/X	356-65082-0	RETAINING RING	1
E36	P	P	**	1	0/X	691-00916-0	O RING	1
	P	P	**	4	0/X	694-00916-0		
	P	P	**	5	0/X	695-00916-0		
E37	P	P	**	**	0/X	488-35024-0	HEX SOCKET PLUG	1
E38	P	P	**	**	0/X	488-35003-0	HEX HD PLUG	2
E39	P	P	**	**	0/X	306-40242-0	SCREW HHC 3/8-16UNC x 3-1/4	8
E40	P	P	**	**	0/X	306-40132-0	SCREW HHC 3/8-16 UNC x 4 1/4	4
E41	P	P	**	**	0/X	358-16360-0	SCREW SHC 3/8-16 UNC x 4	4
E42	P	P	**	**	0/X	S13-26133-0	ASSY SHIPPING COVER	2

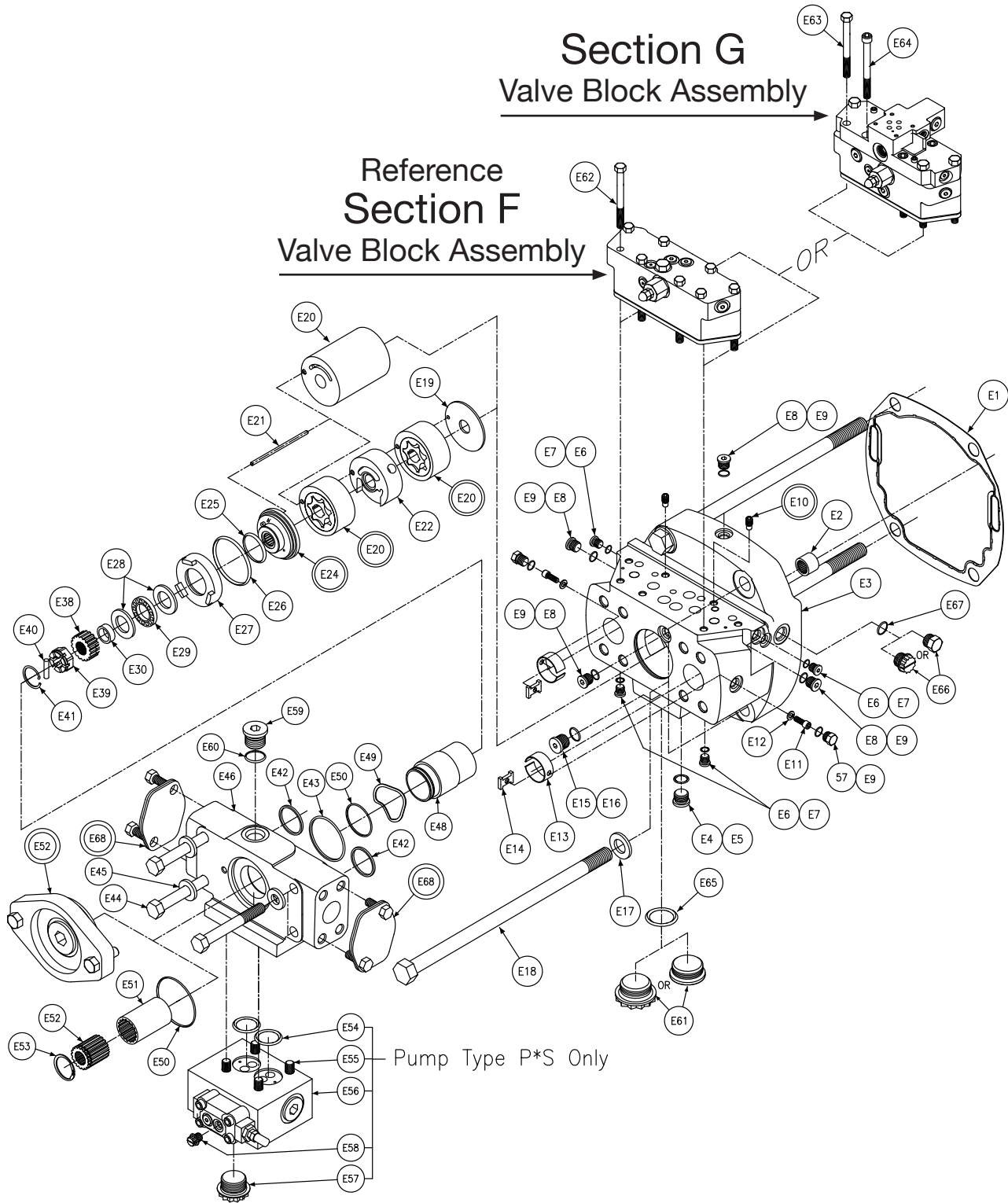


Section E P6/7/8 V Port Block					
Balloon #	Rotation	Seal Code	Item #	Description	Qty
E1	**	**	033-91079-0	GASKET PORT BLOCK	1
E2	**	**	230-82146-0	NEEDLE BEARING	1
E3	**	**	033-91194-0	PORT BLOCK	1
E6	**	**	488-35001-0	PLUG	4
E7	**	1	691-00904-0	O RING	4
	**	4	694-00904-0		
	**	5	695-00904-0		
E8	**	**	488-35041-0	PLUG	4
E9	**	1	691-00906-0	O RING	5
	**	4	674-00906-0		
	**	5	695-00906-0		
E10	**	**	S13-26133-0	ASSY SHIPPING COVER 1 1/2	1
E11	**	**	S15-28201-0	ASSY SHIPPING COVER 2 1/2	1
E17	**	**	350-10109-0	WASHER	4
E18	**	**	306-40172-0	HHCS 3/4-10 UNC X 13	4
E19	**	**	033-71619-0	SIDE PLATE	1
E20	**	**	S13-43334-0	ECCENTRIC RING AND GEROTOR	1
E21	**	**	033-71620-0	DOWEL PIN	1
E22	**	**	S13-43963-0	CENTER PORT PLATE	1
E23	**	**	033-72620-0	GEROTOR PLUG	1
E24	CW	**	S13-46762-0	SIDE PLATE AND BEARING	1
	CCW	**	S13-46763-0		
E25	**	1	671-00129-0	O RING	1
	**	4	674-00129-0		
	**	5	675-00129-0		
E26	**	1	671-00144-0	O RING	1
	**	4	674-00144-0		
	**	5	675-00144-0		
E27	**	**	033-70531-0	PRESSURE PLATE	1
E28	**	**	350-10081-0	THRUST WASHER	2
E29	**	**	230-82164-0	THRUST BEARING	1
E30	**	**	033-72101-0	RING SEAL	1
E31	**	**	033-72026-0	HOLDDOWN NUT	1
E32	**	**	322-04324-0	COTTER PIN	1

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Section E P6/7/8 V Port Block					
Balloon #	Rotation	Seal Code	Item #	Description	Qty
E33	**	1	671-00147-0	O RING	1
	**	4	674-00147-0		
	**	5	675-00147-0		
E34	**	**	033-72100-0	AUXILIARY END COVER	1
E35	**	**	356-65082-0	RETAINING RING	1
E36	**	1	691-00916-0	O RING	1
	**	4	694-00916-0		
	**	5	695-00916-0		
E37	**	**	488-35024-0	PLUG	1
E38	**	**	488-35003-0	PLUG	1
E39	**	**	449-00020-0	SHIPPING PLUG	1
E81	**	**	033-57893-0	SOLID CHECK 1.5 INCH	1
E82	**	**	033-57324-0	SOLID CHECK 2.5 INCH	1
E83	**	**	353-25037-0	SCREW HEX SOCKET	1
E84	**	**	306-40242-0	HHCS 3/8-16UNC X 3-1/4	8
E85	**	**	306-40235-0	HHCS 3/8-16UNC X 5-1/2	4
E86	**	**	358-16360-0	SHCS 3/8-16 UNC X 4	4



Section View - E - Pump Type - S & X - Port Block Assembly

Section E P11/14 S/X Port Block									
Balloon #	Pump/Motor	Type	Rotation	Seal Code	Internal Pump	Thru Drive	Item #	Description	Qty
E1	P	S/X	**	**	0/X	**	033-91079-0	PORT BLOCK GASKET	1
E2	P	S/X	**	**	0/X	**	230-82146-0	NEEDLE BEARING	1
E3	P	S/X	**	**	0/X	**	033-57912-0	PORT BLOCK	1
E4	P	S/X	**	**	0/X	**	488-35018-0	HEX HD PLUG	1
E5	P	S/X	**	1	0/X	**	691-00908-0	O RING	1
				4	0/X	**	694-00908-0		
				5	0/X	**	695-00908-0		
E6	P	S/X	**	**	0/X	**	488-35001-0	PLUG	4
E7	P	S/X	**	1	0/X	**	691-00904-0	O RING	4
				4	0/X		694-00904-0		
				5	0/X		695-00904-0		
E8	P	S/X	**	**	0/X	**	488-35041-0	PLUG	4
E9	P	S/X	**	1	0/X	**	691-00906-0	O RING	6
				4	0/X		694-00906-0		
				5	0/X		695-00906-0		
E10	P	S/X	**	**	0/X	**	S13-40266-0	CHECK VALVE ASSY	2
E11	P	S/X	**	**	0/X	**	033-70908-0	SCREW	2
E12	P	S/X	**	**	0/X	**	348-10016-0	LOCK WASHER	2
E13	P	S/X	**	**	0/X	**	033-70502-0	RING CHECK	2
E14	P	S/X	**	**	0/X	**	033-70489-0	CLAMP 6.0__	2
E15	P	S/X	**	**	0/X	**	488-35055-0	PLUG	1
E16	P	S/X	**	1	0/X	**	691-00910-0	O RING	1
				4	0/X	**	694-00910-0		
				5	0/X	**	695-00910-0		
E17	P	S/X	**	**	0/X	**	350-10109-0	WASHER	4
E18	P	S/X	**	**	0/X	**	306-40172-0	HHCS 3/4-10 UNC X 13	4
E19	P	S/X	**	**	0	**	033-71619-0	SIDE PLATE	1
E20	P	S/X	**	**	0	**	S13-43334-0	ECCENTRIC RING & GEROTOR	2
	P	S/X	**	**	X	**	033-53758-0	PLUG GEROTOR	1
E21	P	S/X	**	**	0/X	**	033-71620-0	DOWEL PIN	1
E22	P	S/X	**	**	0	**	S13-43963-0	CENTER PORT PLATE ASSY	1
E24	P	S/X	CW	**	0/X	**	S13-46762-0	SIDE PLATE AND BEARING	1
	P	S/X	CCW	**	0/X	**	S13-46763-0		
E25	P	S/X	**	1	0/X	**	671-00129-0	O RING	1
				4	0/X	**	674-00129-0		
				5	0/X	**	675-00129-0		

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Section E P11/14 S/X Port Block									
Balloon #	Pump/Motor	Type	Rotation	Seal Code	Internal Pump	Thru Drive	Item #	Description	Qty
E26	P	S/X	**	1	0/X	**	671-00144-0	O RING	1
				4	0/X	**	674-00144-0		
				5	0/X	**	675-00144-0		
E27	P	S/X	**	**	0/X	**	033-70531-0	PRESSURE PLATE	1
E28	P	S/X	**	**	0/X	**	350-10081-0	THRUST WASHER	2
E29	P	S/X	**	**	0/X	**	230-82164-0	THRUST BEARING	1
E30	P	S/X	**	**	0/X	**	033-72101-0	RING SEAL	1
E38	P	S/X	**	**	0/X	**	033-91051-0	INSERT SPLINE	1
E39	P	S/X	**	**	0/X	**	033-91052-0	HOLDDOWN NUT	1
E40	P	S/X	**	**	0/X	**	033-53921-0	RETAINING PIN	1
E41	P	S/X	**	**	0/X	**	033-53923-0	RETAING RING	1
E42	P	S/X	**	1	0/X	**	691-10131-0	O RING	2
				4	0/X	**	694-10131-0		
				5	0/X	**	695-10131-0		
E43	P	S/X	**	1	0/X	**	671-00147-0	O RING	1
				4	0/X	**	674-00147-0		
				5	0/X	**	675-00147-0		
E44	P	S/X	**	**	0/X	**	306-40088-0	HHCS 5/8-11 UNC X 4 1/4	4
E45	P	S/X	**	**	0/X	**	350-10136-0	WASHER	4
E46	P	S	**	**	0/X	A	033-91015-0	SAE-A RDR ADAPTER	1
	P	S	**	**	0/X	B/M	033-57967-0	SAE-B RDR ADAPTER	
	P	X	**	**	0/X	A	033-57958-0	SAE-A RDR ADAPTER	
	P	X	**	**	0/X	B/M	033-57957-0	SAE-B RDR ADAPTER	
E47	P	S/X	**	1	0/X	**	671-00033-0	O RING	1
				4	0/X	**	674-00033-0		
				5	0/X	**	675-00033-0		
E48	P	S/X	**	**	0/X	**	033-57966-0	REPLENISH ISOLATION TUBE	1
E49	P	S/X	**	**	0/X	**	225-92093-0	WAVE SPRING	1
E50	P	S/X	**	1	0/X	A	671-00152-0	O RING	1
	P	S/X	**	4	0/X	A	674-00152-0		
	P	S/X	**	5	0/X	A	675-00152-0		
	P	S/X	**	1	0/X	B	671-00155-0		
	P	S/X	**	4	0/X	B	674-00155-0		
	P	S/X	**	5	0/X	B	675-00155-0		
E51	P	S/X	**	**	0/X	A/B	033-57963-0	COUPLING	1

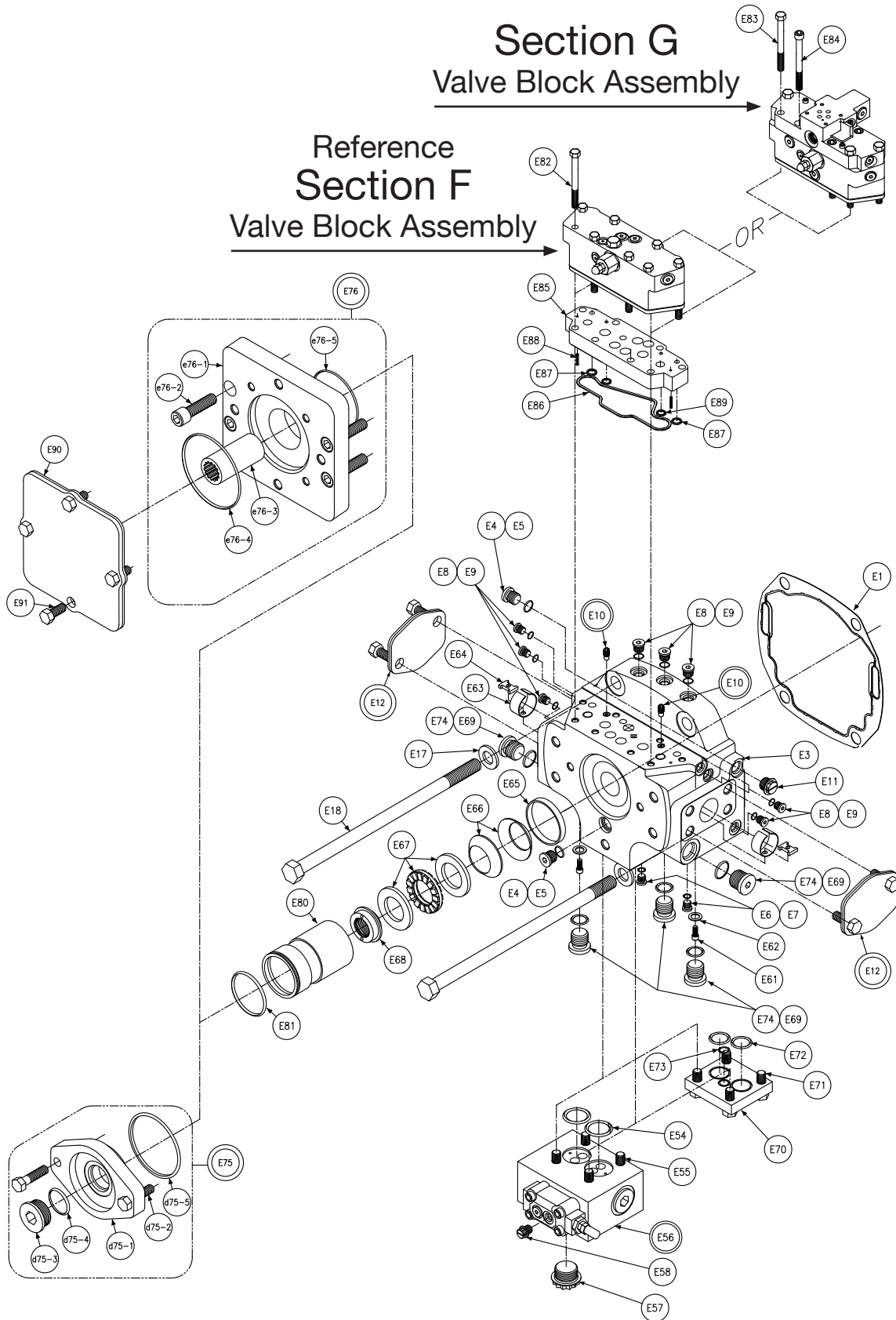
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Section View - E - Pump Type - S & X - Port Block Assembly

Section E P11/14 S/X Port Block									
Balloon #	Pump/Motor	Type	Rotation	Seal Code	Internal Pump	Thru Drive	Item #	Description	Qty
E52	P	S/X	**	**	0/X	A	033-57965-0	SAE-A INSERT	1
	P	S/X	**	**	0/X	B	033-57964-0	SAE-B INSERT	
	P	S/X	**	**	0/X	M	S23-19371-0	BLANKING PLATE	
E53	P	S/X	**	**	0/X	A/B	356-65128-0	RETAINING RING	1
E54	P	S	**	1	0/X	**	691-10221-0	O RING	2
				4	0/X	**	694-10221-0		
				5	0/X	**	695-10221-0		
E55	P	S	**	**	0/X	**	306-40224-0	HHCS 1/2-13 UNC X 3 1/2	4
E56	P	S	**	1	0/X	**	080030100001	HOT OIL SHUTTLE EXT PILOT DRAIN	1
	P	S	**	5	0/X	**	080030100002		
E57	P	S	**	**	0/X	**	449-00019-0	SHIPPING PLUG	1
E58	P	S	**	**	0/X	**	449-00013-0	SHIPPING PLUG	1
E59	P	S/X	**	**	0/X	**	488-35003-0	PLUG	1
E60	P	S/X	**	1	0/X	**	691-00912-0	O RING	1
				4	0/X	**	694-00912-0		
				5	0/X	**	695-00912-0		
E61	P	S/X	**	**	0	**	449-00020-0	SHIPPING PLUG	1
					X	**	488-35019-0	PLUG	
E62	P	S/X	**	**	0/X	**	306-40242-0	HHCS 3/8-16UNC X 3-1/4	8
E63	P	S/X	**	**	0/X	**	306-40235-0	HHCS 3/8-16UNC X 5-1/2	4
E64	P	S/X	**	**	0/X	**	358-16360-0	SHCS 3/8-16 UNC X 4	4
E65	P	S/X	**	1	X	**	691-00920-0	O RING	1
				4	X	**	694-00920-0		
				5	X	**	695-00920-0		
E66	P	S/X	**	**	0	**	488-35002-0	PLUG	1
					X	**	449-00016-0	SHIPPING PLUG	
E67	P	S/X	**	1	0	**	691-00908-0	O RING	1
				4	0	**	694-00908-0		
				5	0	**	695-00908-0		
E68	P	S/X	**	**	0/X	**	S13-26133-0	ASSY SHIPPING COVER 1 1/2	2





Section View - E - Pump Type - R & L - Port Block Assembly

Section E P11/14 R & L Port Block						
Balloon #	Motor Type	Seal Code	External Drive	Item #	Description	Qty
E1	R/L	**	**	033-91079-0	GASKET PORT BLOCK	1
E3	R/L	**	**	033-92426-0	PORT BLOCK	1
E4	R/L	**	**	488-35018-0	PLUG	2
E5	R/L	1	**	691-00908-0	O RING	2
	R/L	4	**	674-00908-0		
	R/L	5	**	695-00908-0		
E6	R/L	**	**	488-35001-0	PLUG	2
E7	R/L	1	**	691-00904-0	O RING	2
	R/L	4	**	694-00904-0		
	R/L	5	**	695-00904-0		
E8	R/L	**	**	488-35041-0	PLUG	9
E9	R/L	1	**	691-00906-0	O RING	9
	R/L	4	**	674-00906-0		
	R/L	5	**	695-00906-0		
E10	R/L	**	**	S13-40266-0	CHECK VALVE	2
E11	R/L	**	**	449-00516-0	SHIPPING PLUG	1
E12	R/L	**	**	S13-26133-0	ASSY SHIPPING COVER 1 1/2	1
E17	R/L	**	**	350-10109-0	WASHER	4
E18	R/L	**	**	306-40172-0	SCREW HHC	4
E54	L	1	**	691-10221-0	O RING	2
		4	**	694-10221-0		
		5	**	695-10221-0		
E55	L	**	**	306-40224-0	SCREW HHC	4
E56	L	1	**	080030100001	SHUTTLE	1
		5	**	080030100002		
E57	L	**	**	449-00019-0	SHIPPING PLUG	1
E58	L	**	**	449-00013-0	SHIPPING PLUG	1
E61	R/L	**	**	359-11100-0	SCREW	2
E62	R/L	**	**	033-57450-0	LOCKWASHER	2
E63	R/L	**	**	033-95533-0	RING CHECK	2
E64	R/L	**	**	033-95534-0	CLAMP	2
E65	R/L	**	**	033-92688-0	LOCATING RACE	1
E66	R/L	**	**	033-92689-0	DISC SPRING	2
E67	R/L	**	**	230-82222-0	THRUST BEARING	1
E68	R/L	**	**	033-92690-0	HOLDDOWN NUT	1
E69	R/L	1	**	691-00912-0	O RING	5
		4		694-00912-0		
		5		695-00912-0		

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Section E P11/14 R & L Port Block						
Balloon #	Motor Type	Seal Code	External Drive	Item #	Description	Qty
E70	R	**	**	033-57642-0	COVER SHUTTLE PAD	1
E71	R	**	**	306-40080-0	SCREW HHC	4
E72	R	1	**	691-00024-0	O RING	2
		4		N/A		
		5		695-00024-0		
E73	R	**	**	691-00015-0	O RING	1
	R	**	**	N/A		
	R	**	**	695-00015-0		
E74	R/L	**	**	488-35018-0	PLUG	5
E80	R/L	**	**	033-92691-0	SLEEVE REPL ISOLATION	1
E81	R/L	1	**	671-00147-0	O RING	1
		4		674-00147-0		
		5		675-00147-0		
E82	R/L	**	M/A/B/C/D	306-40242-0	HHCS 3/8-16UNC X 3-1/4	8
	R/L	**	E	306-40095-0	HHCS 3/8-16 UNC X 4 1/2	
E83	R/L	**	M/A/B/C/D	306-40132-0	HHCS 3/8-16 UNCX 4 1/4	4
	R/L	**	E	306-40235-0	HHCS 3/8-16UNC X 5-1/2	
E84	R/L	**	M/A/B/C/D	358-16360-0	SHCS 3/8-16 UNC X 4	4
	R/L	**	E	358-16400-0	SHCS 3/8-16 UNC X 5	
E85	R/L	**	E	033-92692-0	SPACER VALVE BLOCK	1
E86	R/L	1	E	671-00050-0	O RING	1
	R/L	4	E	674-00050-0		
	R/L	5	E	675-00050-0		
E87	R/L	1	E	671-00014-0	O RING	2
	R/L	4	E	674-00014-0		
	R/L	5	E	675-00014-0		
E88	R/L	**	E	325-08120-0	ROLL PIN	2
E89	R/L	1	E	671-00013-0	O RING	2
	R/L	4	E	674-00013-0		
	R/L	5	E	675-00013-0		
E90	R/L	**	A	034-59555-0	SHIPPING COVER SAE-A 2 BOLT	1
			B	034-59556-0	SHIPPING COVER SAE-B 2 BOLT	
			C	031-57252-0	SHIPPING COVER SAE-C 2-4 BOLT	
			D	031-57250-0	SHIPPING COVER SAE-D 4 BOLT	
			E	032-91405-0	SHIPPING COVER SAE-E 4 BOLT	

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Section View - E - Pump Type - R & L - Port Block Assembly

Section E P11/14 R & L Port Block						
Balloon #	Motor Type	Seal Code	External Drive	Item #	Description	Qty
E91	R/L	**	A	306-16120-0	HHCS 3/8-16UNC x 3/4	2
			B	306-20120-0	HHCS 1/2-13UNC x 3/4	2
			C	306-24160-0	HHCS 5/8-11 UNC x 1	4
			D	306-26160-0	HHCS 3/4-10 UNC x 1	2
			E	306-26160-0	HHCS 3/4-10 UNC x 1	2

M OPERATING COVER				
Balloon #	Seal Code	Item #	Description	Qty
E75	1	S21-04526-0	OPERATING COVER SAE-B 2-BOLT ASSY	1
	4	S21-04526-4		
	5	S21-04526-5		
e75-1	**	P2-075-1009-03	COVER	1
e75-2	**	306-40077-0	SCREW, HHC	2
e75-3	**	488-35019-0	PLUG	1
e75-4	1	691-00920-0	O RING	1
	4	694-00920-0		
	5	695-00920-0		
e75-5	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		

SAE-A ADAPTOR				
Balloon #	Seal Code	Item #	Description	Qty
E76	1	S23-16250-0	KIT REAR ADAPTOR SAE-A	1
	4	S23-16250-4		
	5	S23-16250-5		
e76-1	**	033-92684-0	SAE-A ADAPTOR	1
e76-2	**	358-20200-0	SHCS 1/2-13 UNC X 1 1/2	2
e76-3	**	033-92693-0	SAE-A COUPLING	1
e76-4	1	671-00152-0	O RING	1
	4	674-00152-0		
	5	675-00152-0		
e76-5	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		



## Section View - E - Pump Type - R &amp; L - Port Block Assembly

SAE-B ADAPTOR				
Balloon #	Seal Code	Item #	Description	Qty
E76	1	S23-16251-0	KIT REAR ADAPTOR SAE-B	1
	4	S23-16251-4		
	5	S23-16251-5		
e76-1	**	033-92981-0	SAE-B ADAPTOR	1
e76-2	**	358-24220-0	SHCS 1/2-13 UNC X 1 1/2	4
e76-3	**	033-92982-0	SAE-B COUPLING	2
e76-4	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		
e76-5	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		

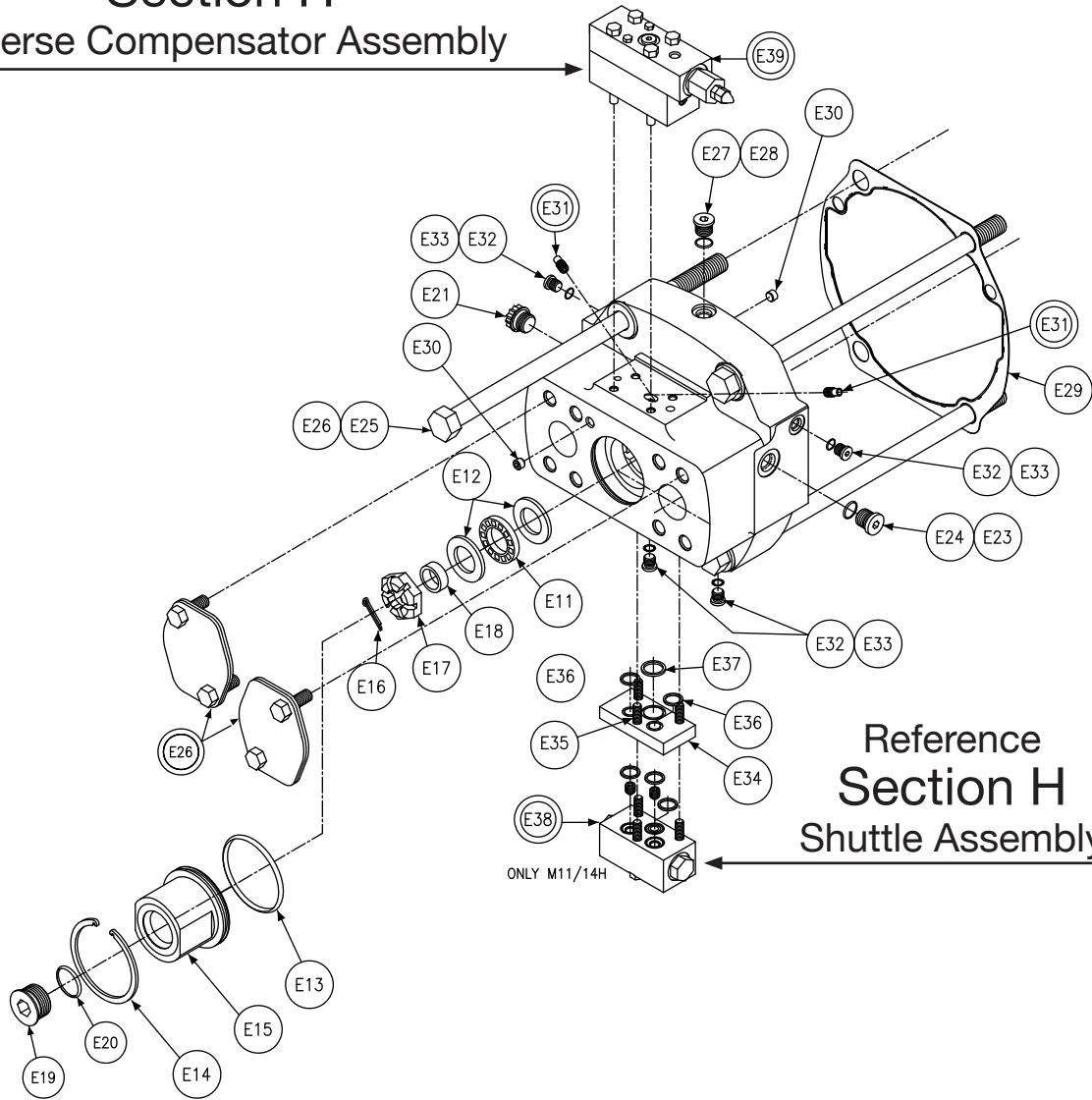
SAE-C ADAPTOR				
Balloon #	Seal Code	Item #	Description	Qty
E76	1	S23-16252-0	KIT REAR ADAPTOR SAE-C	1
	4	S23-16252-4		
	5	S23-16252-5		
e76-1	**	033-92555-0	SAE-C ADAPTOR	1
e76-2	**	358-24220-0	SHCS 1/2-13 UNC X 1 1/2	4
e76-3	**	033-92607-0	SAE-C COUPLING	1
e76-4	1	671-00159-0	O RING	1
	4	674-00159-0		
	5	675-00159-0		
e76-5	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		

Section View - E - Pump Type - R & L - Port Block Assembly

SAE-D ADAPTOR				
Balloon #	Seal Code	Item #	Description	Qty
E76	1	S23-16253-0	KIT REAR ADAPTOR SAE-D	1
	4	S23-16253-4		
	5	S23-16253-5		
e76-1	**	033-92558-0	SAE-D ADAPTOR	1
e76-2	**	358-24260-0	SHCS 5/8-11 UNC x 2 1/4	4
e76-3	**	033-92482-0	SAE-D/E COUPLING	1
e76-4	1	671-00163-0	O RING	1
	4	674-00163-0		
	5	675-00163-0		
e76-5	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		

SAE-E ADAPTOR				
Balloon #	Seal Code	Item #	Description	Qty
E76	1	S23-16254-0	KIT REAR ADAPTOR SAE-E	1
	4	S23-16254-4		
	5	S23-16254-5		
e76-1	**	033-92467-0	SAE-E ADAPTOR	1
e76-2	**	358-24260-0	SHCS 5/8-11 UNC x 2 1/4	5
e76-3	**	033-92482-0	SAE-D/E COUPLING	2
e76-4	1	671-00165-0	O RING	1
	4	674-00165-0		
	5	675-00165-0		
e76-5	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		

Reference  
Section H  
Reverse Compensator Assembly



Reference  
Section H  
Shuttle Assembly

Section View - E - Motor Type - H & V - Port Block Assembly

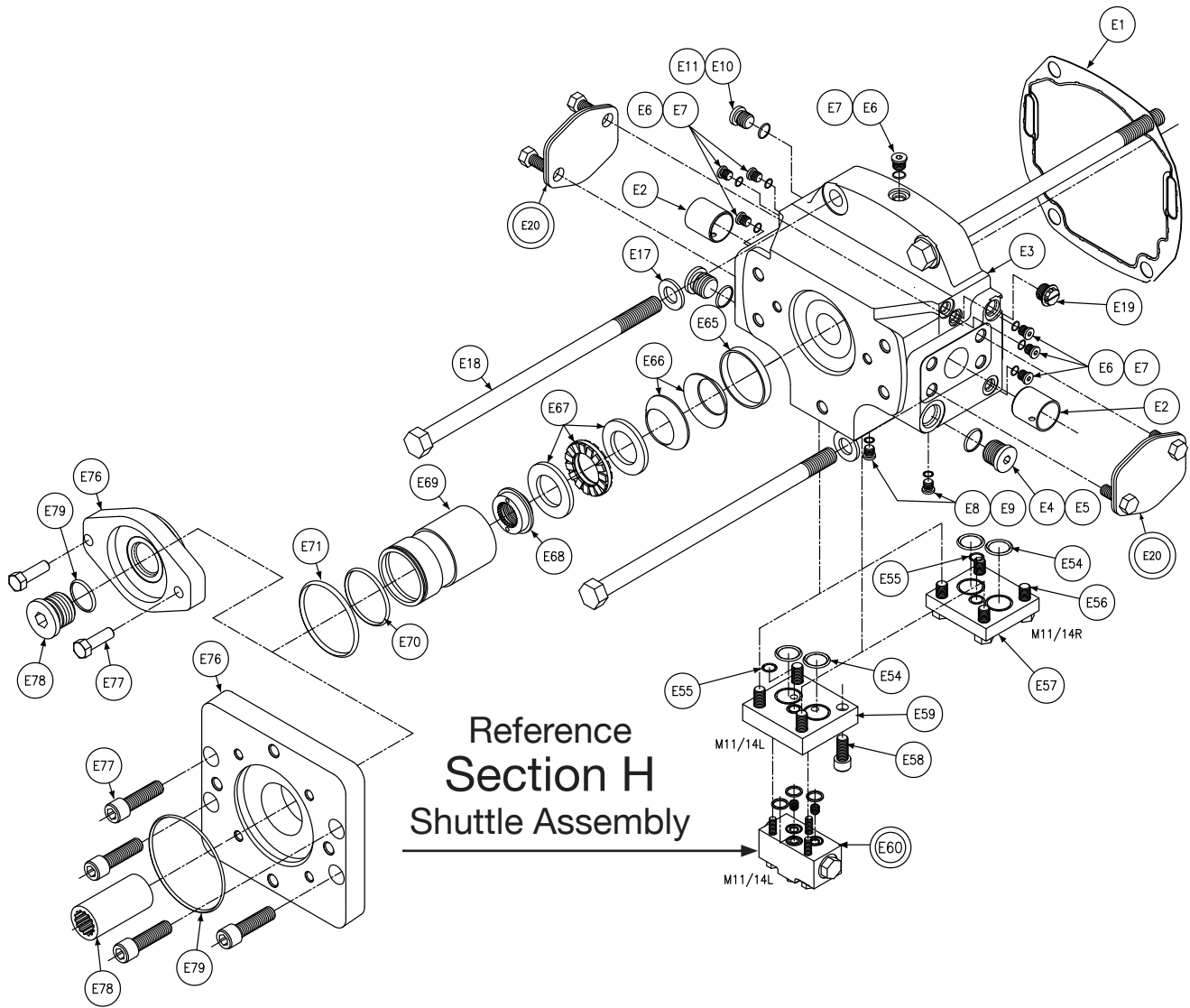
Section E M11/14 H & V Port Block						
Balloon #	Motor Type	Secondary Control	Seal Code	Item #	Description	Qty
E10	M11/14 H/V	0/6/7/8/ U/V/W/X/Y/Z	**	033-71521-0	PORT BLOCK	1
	M11/14 H/V	3/5	**	033-57783-0	REV COMP PORT BLK	
E11	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	230-82164-0	THRUST BEARING	1
E12	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	350-10081-0	THRUST WASHER	2
E13	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	1	671-00138-0	O-RING	1
			4	674-00138-0		
			5	675-00138-0		
E14	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	356-65095-0	SNAP RING	1
E15	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	033-70537-0	END COVER	1
E16	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	322-03324-0	COTTER PIN	1
E17	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	033-72026-0	NUT	1
E18	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	033-72101-0	RING SEAL	1
E19	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	488-35014-0	PLUG	1
E20	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	1	691-00912-0	O RING	1
			4	674-00912-0		
			5	695-00912-0		
E21	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	449-00016-0	SHIPPING PLUG	1
E22	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	S13-26133-0	ASSY SHIPPING COVER 1 1/2	1
E23	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	1	691-00908-0	O RING	1
			4	674-00908-0		
			5	695-00908-0		
E24	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	488-35018-0	PLUG	1
E25	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	306-40172-0	HHCS 3/4-10 UNC X 13	4
E26	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	350-10109-0	WASHER	4

Continued on next page.



## Section View - E - Motor Type - H &amp; V - Port Block Assembly

Section E M11/14 H & V Port Block						
Balloon #	Motor Type	Secondary Control	Seal Code	Item #	Description	Qty
E27	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	488-35041-0	PLUG	1
E28	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	1	691-00906-0	O'RING	1
			4	674-00906-0		
			5	695-00906-0		
E29	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	033-91079-0	GASKET	1
E30	M11/14 H/V	3/5	**	431-90204-0	PLUG 1/8 PIPE	2
E31	M11/14 H/V	3/5	**	S13-40266-0	CHECK VALVE	2
E32	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	488-35001-0	PLUG	4
E33	M11/14 H/V	0/3/5/6/7/8/ U/V/W/X/Y/Z	1	691-00904-0	O RING	4
			4	674-00904-0		
			5	695-00904-0		
E34	M11/14V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	033-71649-0	COVER PLATE	1
E35	M11/14V	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	306-40071-0	HHCS 5/16-18 UNC X 1	3
E36	M11/14V	0/3/5/6/7/8/ U/V/W/X/Y/Z	1	691-10014-0	GASKET	2
			4	674-00014-0		
			5	695-10014-0		
E37	M11/14V	0/3/5/6/7/8/ U/V/W/X/Y/Z	1	691-10019-0	GASKET	1
			4	674-00019-0		
			5	695-10019-0		
E38	M11/14H	0/3/5/6/7/8/ U/V/W/X/Y/Z	**	SEE SECTION H	SHUTTLE WITHOUT ORIFICES	1
	M11/14H	0/3/5/6/7/8/ U/V/W/X/Y/Z	**		SHUTTLE WITH ORIFICES	
E39	M11/14H/V	3/5	**	SEE SECTION H	COMPENSATOR REV PRESS	1



Section View - E - Motor Type - R & L - Port Block Assembly

Section E M11/14 R & L Port Block						
Balloon #	Motor Type	External Drive	Seal Code	Item #	Description	Qty
E1	R/L	**	**	033-91079-0	GASKET PORT BLOCK	1
E2	R/L	**	**	033-57893-0	SLEEVE SOLID	2
E3	R/L	**	**	033-93644-0	PORT BLOCK	1
E4	R/L	**	**	488-35012-0	PLUG	2
E5	R/L	**	1	691-00912-0	O RING	2
			4	674-00912-0		
			5	695-00912-0		
E6	R/L	**	**	488-35041-0	PLUG	7
E7	R/L	**	1	691-00906-0	O RING	7
	R/L	**	4	674-00906-0		
	R/L	**	5	695-00906-0		
E8	R/L	**	**	488-35001-0	PLUG	2
E9	R/L	**	1	691-00904-0	O RING	2
	R/L	**	4	674-00904-0		
	R/L	**	5	695-00904-0		
E11	R/L	**	**	488-35018-0	PLUG	1
E12	R/L	**	1	691-00908-0	O RING	1
			4	674-00908-0		
			5	695-00908-0		
E17	R/L	**	**	350-10109-0	WASHER	4
E18	R/L	**	**	306-40172-0	HHCS 3/4-10 UNC X 13	4
E19	R/L	**	**	449-00016-0	SHIPPING PLUG	1
E20	R/L	**	**	S13-26133-0	ASSY SHIPPING COVER 1 1/2	2
E54	R/L	**	1	691-00024-0	O RING	2
	R/L	**	4	N/A		
	R/L	**	5	695-00024-0		
E55	R/L	**	1	691-00015-0	O RING	1
			4	N/A		
			5	695-00015-0		
E56	R	**	**	306-40080-0	HHCS 1/2-13 UNC X 1 1/4	3
E57	R	**	**	033-57642-0	COVER SHUTTLE PAD	1
E58	L	**	**	358-20160-0	SHCS 1/2-13 UNC X 1	3
E59	L	**	**	033-93734-0	ADAPTER SHUTTLE	1

Continued on next page.



## Section View - E - Motor Type - R &amp; L - Port Block Assembly

Section E M11/14 R & L Port Block						
Balloon #	Motor Type	External Drive	Seal Code	Item #	Description	Qty
E60	L	**	**	SEE SECTION H	SHUTTLE VALVE	1
E65	R/L	**	**	033-92688-0	LOCATING RACE	1
E66	R/L	**	**	033-92689-0	DISC SPRING	2
E67	R/L	**	**	230-82222-0	THRUST BEARING	1
E68	R/L	**	**	033-92690-0	HOLDDOWN NUT	1
E69	R/L	**	**	033-92691-0	SLEEVE REPL ISOLATION	1
E70	R/L	**	1	671-00147-0	O RING	1
			4	674-00147-0		
			5	675-00147-0		
E71	R/L	**	1	671-00155-0	O RING	1
			4	674-00155-0		
			5	675-00155-0		
E72	R/L	A	**	034-59555-0	SHIPPING COVER SAE-A 2 BOLT	1
		B	**	034-59556-0	SHIPPING COVER SAE-B 2 BOLT	
		C	**	031-57252-0	SHIPPING COVER SAE-C 2-4 BOLT	
		D	**	031-57250-0	SHIPPING COVER SAE-D 4 BOLT	
		E	**	032-91405-0	SHIPPING COVER SAE-E 4-BOLT	
E73	R/L	A	**	306-16120-0	HHCS 3/8-16 UNC x 3/4	2
		B	**	306-20120-0	HHCS 1/2-13 UNC x 3/4	2
		C	**	306-24160-0	HHCS 5/8-11 UNC x 1	4
		D	**	306-26160-0	HHCS 3/4-10 UNC x 1	2
		E	**	306-26160-0	HHCS 3/4-10 UNC x 1	2

## Section View - E - Motor Type - R &amp; L - Port Block Assembly

M OPERATING COVER				
Balloon #	Seal Code	Item #	Description	Qty
E75	1	S21-04526-0	OPERATING COVER SAE-B 2-BOLT ASSY	1
	4	S21-04526-4		
	5	S21-04526-5		
e75-1	**	P2-075-1009-03	COVER	1
e75-2	**	306-40077-0	HHCS 1/2-13 UNC X 1 3/4	2
e75-3	**	488-35019-0	PLUG	1
e75-4	1	691-00920-0	O RING	1
	4	694-00920-0		
	5	695-00920-0		
e75-5	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		

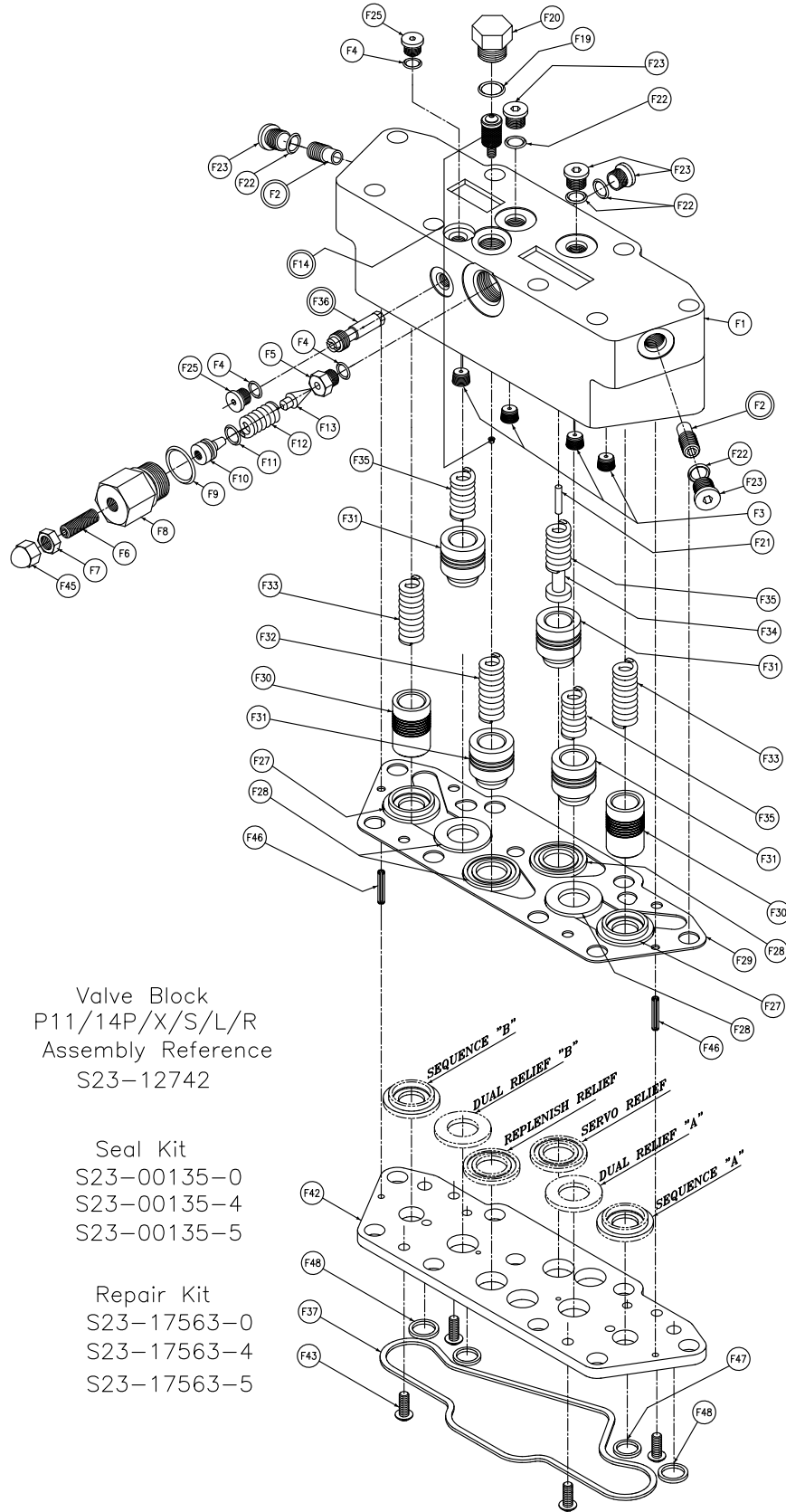
SAE-A ADAPTOR				
Balloon #	Seal Code	Item #	Description	Qty
E76	1	S23-16250-0	KIT REAR ADAPTOR SAE-A	1
	4	S23-16250-4		
	5	S23-16250-5		
e76-1	**	033-92684-0	SAE-A ADAPTOR	1
e76-2	**	358-20200-0	SHCS 1/2-13 UNC X 1 1/2	2
e76-3	**	033-92693-0	SAE-A COUPLING	2
e76-4	1	671-00152-0	O RING	1
	4	674-00152-0		
	5	675-00152-0		
e76-5	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		

SAE-B ADAPTOR				
Balloon #	Seal Code	Item #	Description	Qty
E76	1	S23-16251-0	KIT REAR ADAPTOR SAE-B	1
	4	S23-16251-4		
	5	S23-16251-5		
e76-1	**	033-92981-0	SAE-B ADAPTOR	1
e76-2	**	358-24220-0	SHCS 1/2-13 UNC X 1 1/2	2
e76-3	**	033-92982-0	SAE-B COUPLING	2
e76-4	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		
e76-5	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		

SAE-C ADAPTOR				
Balloon #	Seal Code	Item #	Description	Qty
E76	1	S23-16252-0	KIT REAR ADAPTOR SAE-C	1
	4	S23-16252-4		
	5	S23-16252-5		
e76-1	**	033-92555-0	SAE-C ADAPTOR	1
e76-2	**	358-24220-0	SHCS 1/2-13 UNC X 1 1/2	2
e76-3	**	033-92607-0	SAE-C COUPLING	2
e76-4	1	671-00159-0	O RING	1
	4	674-00159-0		
	5	675-00159-0		
e76-5	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		

SAE-D ADAPTOR				
Balloon #	Seal Code	Item #	Description	Qty
E76	1	S23-16253-0	KIT REAR ADAPTOR SAE-D	1
	4	S23-16253-4		
	5	S23-16253-5		
e76-1	**	033-92558-0	SAE-D ADAPTOR	1
e76-2	**	358-24260-0	SHCS 5/8-11 UNC x 2 1/4	4
e76-3	**	033-92482-0	SAE-D/E COUPLING	2
e76-4	1	671-00163-0	O RING	1
	4	674-00163-0		
	5	675-00163-0		
e76-5	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		

SAE-E ADAPTOR				
Balloon #	Seal Code	Item #	Description	Qty
E76	1	S23-16254-0	KIT REAR ADAPTOR SAE-E	1
	4	S23-16254-4		
	5	S23-16254-5		
e76-1	**	033-92467-0	SAE-E ADAPTOR	1
e76-2	**	358-24260-0	SHCS 5/8-11 UNC x 2 1/4	5
e76-3	**	033-92482-0	SAE-D/E COUPLING	2
e76-4	1	671-00165-0	O RING	1
	4	674-00165-0		
	5	675-00165-0		
e76-5	1	671-00155-0	O RING	1
	4	674-00155-0		
	5	675-00155-0		



Valve Block  
P11/14P/X/S/L/R  
Assembly Reference  
S23-12742

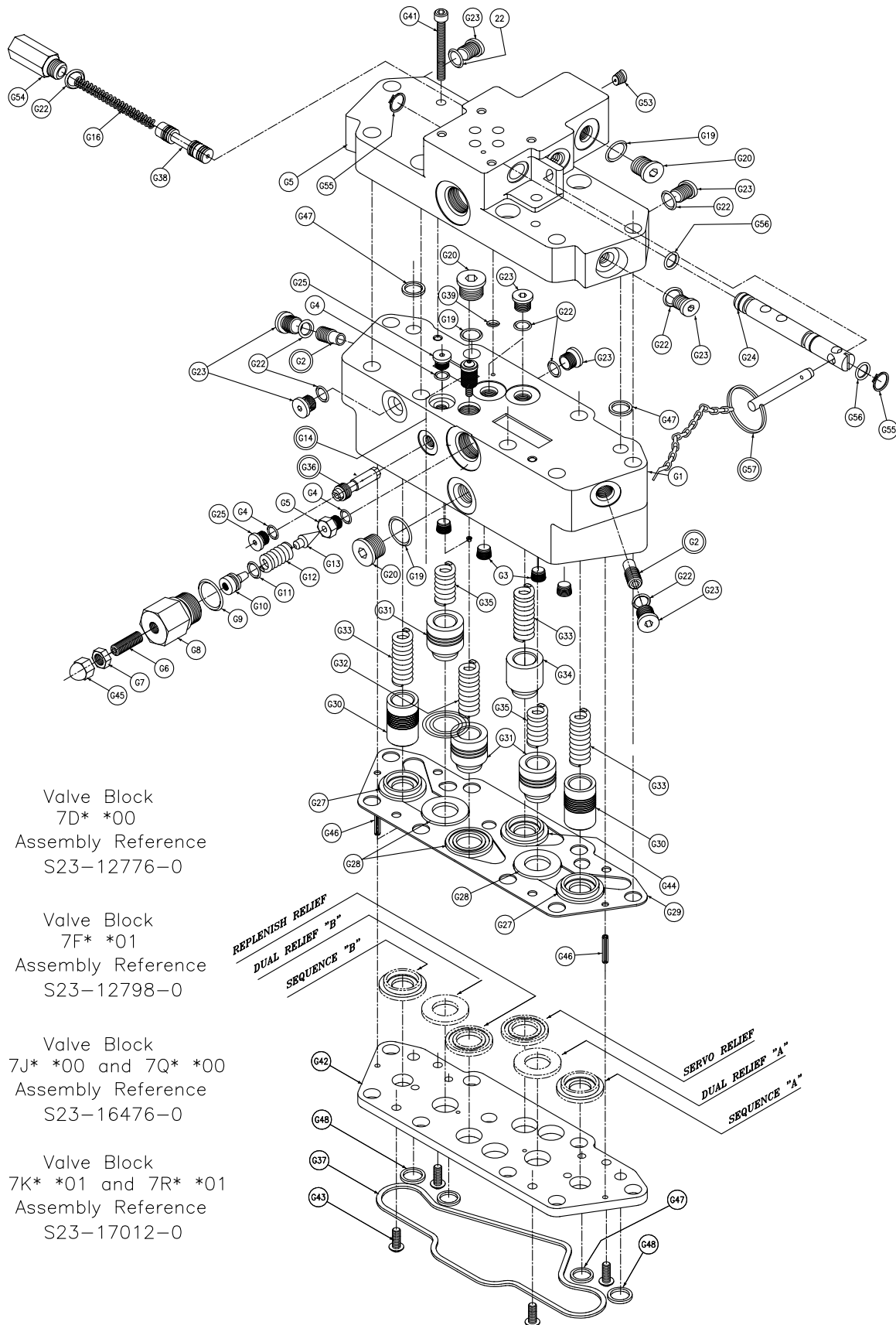
Seal Kit  
S23-00135-0  
S23-00135-4  
S23-00135-5

Repair Kit  
S23-17563-0  
S23-17563-4  
S23-17563-5

Section F P11/14 Valve Blocks Assembly					
Balloon #	Pump Type	Seal Code	Item #	Description	Qty
F1	P/X/S/L/R	**	033-91221-0	VALVE BLK	1
F2	P/X/S/L/R	**	S13-40266-0	VALVE CHECK	2
F3	P/X/S/L/R	**	033-91249-0	ORIFICE (.0465 DIA.) PLUG	4
F4	P/X/S/L/R	1	691-00903-0	O RING	3
		4	674-00903-0		
		5	695-00903-0		
F5	P/X/S/L/R	**	033-70508-0	SEAT	1
F6	P/X/S/L/R	**	312-13160-0	SCREW, SOC HD	1
F7	P/X/S/L/R	**	335-13100-0	NUT, HEX JAM	1
F8	P/X/S/L/R	**	033-70545-0	GUIDE-HOUSING	1
F9	P/X/S/L/R	1	691-00910-0	O RING	1
		4	674-00910-0		
		5	695-00910-0		
F10	P/X/S/L/R	**	036-21767-0	PISTON SEAL	1
F11	P/X/S/L/R	1	671-00012-0	O RING	2
		4	674-00012-0		
		5	675-00012-0		
F12	P/X/S/L/R	**	032-91798-0	SPRING	1
F13	P/X/S/L/R	**	036-12288-0	CONE	1
F14	P/X/S/L/R	**	S13-43240-0	SERVO STRAINER	1
F19	P/X/S/L/R	1	691-00906-0	O RING	1
		4	674-00906-0		
		5	695-00906-0		
F20	P/X/S/L/R	**	488-35003-0	PLUG	1
F21	P/X/S/L/R	**	230-82226-0	PIN 1/8 X 4/8	1
F22	P/X/S/L/R	1	691-00904-0	O RING	5
		4	674-00904-0		
		5	695-00904-0		
F23	P/X/S/L/R	**	488-35001-0	PLUG	5
F25	P/X/S/L/R	**	488-35049-0	PLUG	2
F27	P/X/S/L/R	**	033-70507-0	SEAT SEQ REL	2
F28	P/X/S/L/R	**	033-70500-0	REPL. + SERVO SEAT	4
F29	P/X/S/L/R	**	033-91193-0	GASKET	1
F30	P/X/S/L/R	**	033-72378-0	POPPET, SEQ.	2

Section F P11/14 Valve Blocks Assembly					
Balloon #	Pump Type	Seal Code	Item #	Description	Qty
F31	P/X/S/L/R	**	033-72379-0	POPPET, DUAL + REPL	4
F32	P/X/S/L/R	**	033-22141-0	SPRING, REPL	1
F33	P/X/S/L/R	**	033-70512-0	SPRING, SEQ./SERVO	2
F34	P/X/S/L/R	**	033-70482-0	SPRING RETAINER	1
F35	P/X/S/L/R	**	033-71086-0	SPRING, DUAL RELIEF	3
F36	P/X/S/L/R	**	S23-12814-0	VALVE, REPLEN PILOT	1
F37	P/X/S/L/R	1	671-00050-0	O RING	1
		4	674-00050-0		
		5	675-00050-0		
F42	P/X/S/L/R	**	033-91422-0	RETAINER PLATE	1
F43	P/X/S/L/R	**	353-25078-0	SCREW, BUTTON HD	4
F45	P/X/S/L/R	**	327-25006-0	NUT, ACORN	1
F46	P/X/S/L/R	**	325-08120-0	PIN, ROLL 1/8 X 3/4 LG	2
F47	P/X/S/L/R	1	671-00013-0	O RING	2
		4	674-00013-0		
		5	675-00013-0		
F48	P/X/S/L/R	1	671-00014-0	O RING	2
		4	674-00014-0		
		5	675-00014-0		
F49	P/X/S/L/R	**	306-40169-0	SCREW HHC	8

Section View - G - Valve Block Assembly for 700 Control



Valve Block  
7D\* \*00  
Assembly Reference  
S23-12776-0

Valve Block  
7F\* \*01  
Assembly Reference  
S23-12798-0

Valve Block  
7J\* \*00 and 7Q\* \*00  
Assembly Reference  
S23-16476-0

Valve Block  
7K\* \*01 and 7R\* \*01  
Assembly Reference  
S23-17012-0



## Section View - G - Valve Block Assembly for 700 Control

Section G P11/14 Valve Blocks Assemblies for 700 Control					
Balloon #	Primary 700 Control	Seal Code	Item #	Description	Qty
G1	ALL	**	033-91335-0	VALVE BLK	1
G2	ALL	**	S13-40266-0	VALVE CHECK	2
G3	ALL	**	033-91249-0	ORIFICE (.0465 DIA.) PLUG	4
G4	ALL	1	691-00903-0	O RING	3
	ALL	4	674-00903-0		
	ALL	5	695-00903-0		
G5	ALL	**	033-70508-0	SEAT	1
G6	ALL	**	312-13160-0	SCREW, SOC HD	1
G7	ALL	**	335-13100-0	NUT, HEX JAM	1
G8	ALL	**	033-70545-0	GUIDE-HOUSING	1
G9	ALL	1	691-00910-0	O RING	1
	ALL	4	674-00910-0		
	ALL	5	695-00910-0		
G10	ALL	**	036-21767-0	PISTON SEAL	1
G11	ALL	1	671-00012-0	O RING	2
	ALL	4	674-00012-0		
	ALL	5	675-00012-0		
G12	ALL	**	032-91798-0	SPRING	1
G13	ALL	**	036-12288-0	CONE	1
G14	ALL	**	S13-43240-0	SERVO STRAINER	1
G15	7F* **01	**	033-54446-0	MANIFOLD FOR SHUTOFF	1
	7D* **00	**	033-54389-0	MANIFOLD LESS SHUTOFF	
	7K* **01, 7R* **01	**	033-93376-0	MANIFOLD FOR SHUTOFF	
	7J* **00, 7Q* **00	**	033-92887-0	MANIFOLD LESS SHUTOFF	
G16	ALL	**	225-92083-0	SPRING	1
G19	ALL	1	691-00906-0	O RING	3
	ALL	4	674-00906-0		
	ALL	5	695-00906-0		
G20	ALL	**	488-35041-0	PLUG	3
G22	ALL	1	691-00904-0	O RING	11
	ALL	4	674-00904-0		
	ALL	5	695-00904-0		
G23	ALL	**	488-35001-0	PLUG	10
G24	ALL	**	033-93866-0	SERVO SPOOL	1
G25	ALL	**	488-35049-0	PLUG	2
G27	ALL	**	033-70507-0	SEAT SEQ REL	2

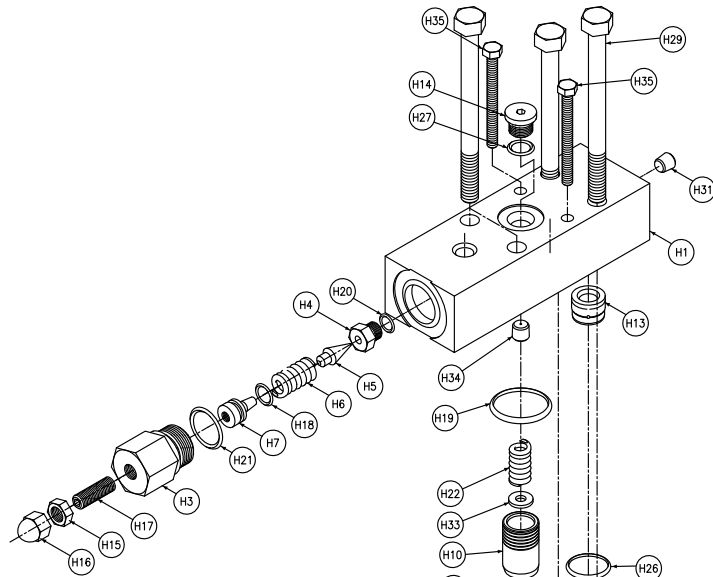
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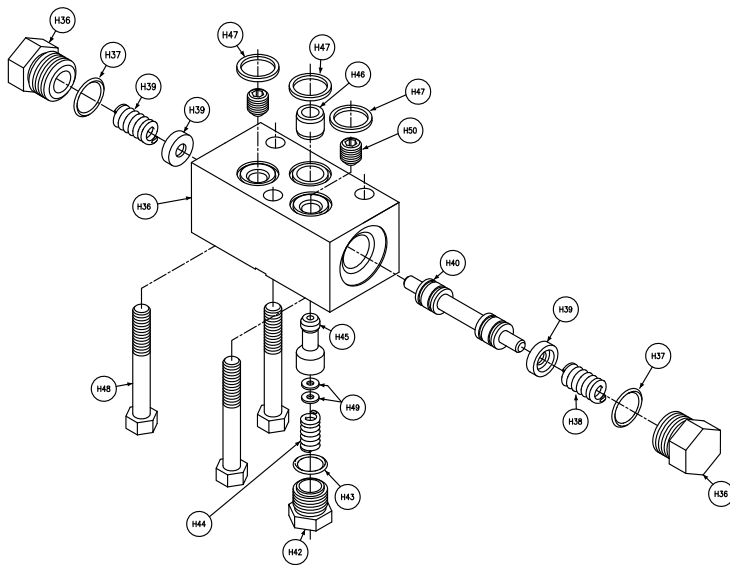
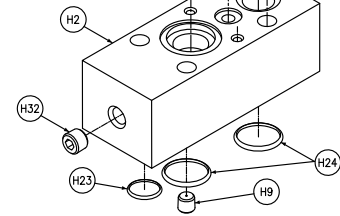
## Section View - G - Valve Block Assembly for 700 Control

Section G P11/14 Valve Blocks Assemblies for 700 Control					
Balloon #	Primary 700 Control	Seal Code	Item #	Description	Qty
G28	ALL	**	033-70500-0	REPL. + SERVO SEAT	3
G29	ALL	**	033-91193-0	GASKET	1
G30	ALL	**	033-72378-0	POPPET, SEQ.	2
G31	ALL	**	033-72379-0	POPPET, DUAL + REPL	3
G32	ALL	**	033-22141-0	SPRING, REPL	1
G33	ALL	**	033-70512-0	SPRING, SEQ./SERVO	3
G34	ALL	**	033-54398-0	POPPET SERVO	1
G35	ALL	**	033-71086-0	SPRING, DUAL RELIEF	2
G36	ALL	**	S23-12814-0	VALVE, REPLEN PILOT	1
G37	ALL	1	671-00050-0	O RING	1
	ALL	4	674-00050-0		
	ALL	5	675-00050-0		
G38	ALL	**	033-54392-0	SPOOL	1
G39	ALL	1	671-00008-0	O RING	2
	ALL	4	674-00008-0		
	ALL	5	675-00008-0		
G41	ALL	**	358-10180-0	SCREW SHC	2
G42	ALL	**	033-91422-0	RETAINER PLATE	1
G43	ALL	**	353-25078-0	SCREW, BUTTON HD	4
G44	ALL	**	033-54399-0	SERVO SEAT	1
G45	ALL	**	327-25006-0	NUT, ACORN	1
G46	ALL	**	325-08120-0	PIN, ROLL 1/8 X 3/4 LG	2
G47	ALL	1	671-00013-0	O RING	2
	ALL	4	674-00013-0		
	ALL	5	675-00013-0		
G48	ALL	1	671-00014-0	O RING	2
	ALL	4	674-00014-0		
	ALL	5	675-00014-0		
G50	ALL	**	449-00013-0	PLUG SHIPPING	1
G53	ALL	**	033-25528-0	ORIFICE	1
G54	ALL	**	035-54400-0	PLUG	1
G55	7F* *01, 7K* *01, 7R* *01	**	356-31043-0	RING RETAINING	2
G56	7F* *01, 7K* *01, 7R* *01	1	671-00011-0	O RING	2
		4	674-00011-0		
		5	675-00011-0		
G57	7F* *01, 7K* *01, 7R* *01	**	S23-02208-0	PIN	1

Section View - H - Motor Shuttle & Reverse Compensator Assembly



Reverse Compensator  
Valve Assembly  
Assembly Reference  
S23-00532



Shuttle Valve  
Assembly Reference  
S13-48776

Shuttle Valve Less H50  
Assembly Reference  
S13-48273

Section H M11/14 Shuttle & Reverse Compensator Assemblies					
Balloon #	Motor Type	Seal Code	Item #	Description	Qty
H1	H/V	**	033-53832-0	COVER	1
H2	H/V	**	033-53833-0	BODY REVERSE COMPENSATOR	1
H3	H/V	**	033-70545-0	GUIDE-HOUSING	1
H4	H/V	**	033-70508-0	SEAT	1
H5	H/V	**	036-12288-0	CONE	1
H6	H/V	**	032-91798-0	SPRING COMP	1
H7	H/V	**	036-21767-0	PISTON SEAL	1
H9	H/V	**	035-43275-0	ORIFICE #51(.067) 1/16 PT	1
H10	H/V	**	036-38466-0	PISTON	1
H11	H/V	**	036-38464-0	SLEEVE	1
H12	H/V	**	035-49407-0	POPPET	1
H13	H/V	**	035-49406-0	SEAT	1
H14	H/V	**	488-35001-0	PLUG	1
H15	H/V	**	335-13100-0	NUT, HEX JAM	1
H16	H/V	**	327-13005-0	NUT, ACORN	1
H17	H/V	**	312-13160-0	SCREW, SOCHD	1
H18	H/V	1	671-00012-0	O RING	2
	H/V	4	674-00012-0		
	H/V	5	675-00012-0		
H19	H/V	1	691-00022-0	O RING	1
	H/V	4	674-00022-0		
	H/V	5	675-00022-0		
H20	H/V	1	691-00903-0	O RING	1
	H/V	4	674-00903-0		
	H/V	5	695-00903-0		
H21	H/V	1	691-00910-0	O RING	1
	H/V	4	674-00910-0		
	H/V	5	695-00910-0		
H22	H/V	**	036-38449-0	SPRING	2
H23	H/V	1	691-10014-0	GASKET	1
	H/V	4	674-00014-0		
	H/V	5	695-10014-0		
H24	H/V	1	691-00018-0	O RING	4
	H/V	4	674-00018-0		
	H/V	5	695-00018-0		

Continued on next page.



Section H M11/14 Shuttle & Reverse Compensator Assemblies					
Balloon #	Motor Type	Seal Code	Item #	Description	Qty
H26	H/V	1	691-00017-0	O RING	1
	H/V	4	674-00017-0		
	H/V	5	675-00017-0		
H27	H/V	1	691-00904-0	O RING	1
	H/V	4	674-00904-0		
	H/V	5	695-00904-0		
H29	H/V	**	306-40197-0	SCREW, HHC	4
H31	H/V	**	431-90104-0	1/16 PIPE PLUG	1
H32	H/V	**	431-90204-0	1/8 PIPE PLUG	1
H33	H/V	**	345-10008-0	WASHER	1
H34	H/V	**	800599	ORFICE .033/036 1/16 PIPE	1
H35	H/V	**	306-40167-0	SCREW, HHC	2
H36	H/L	**	033-93510-0	PLUG	2
H37	H/L	**	691-00908-0	O RING	2
	H/L	**	674-00908-0		
	H/L	**	695-00908-0		
H38	H/L	**	033-70515-0	SPRING	2
H39	H/L	**	033-70495-0	WASHER	2
H40	H/L	**	033-70529-0	SPOOL	1
H41	H/L	**	033-53117-0	SHUTTLE VALVE BODY	1
H42	H/L	**	033-72129-0	PLUG	1
H43	H/L	**	691-00906-0	O RING	1
	H/L	**	674-00906-0		
	H/L	**	695-00906-0		
H44	H/L	**	033-71923-0	SPRING	1
H45	H/L	**	033-71925-0	SPOOL	1
H46	H/L	**	033-53154-0	SEAT	1
H47	H/L	1	691-10016-0	GASKET	3
	H/L	4	674-10016-0		
	H/L	5	695-20016-0		
H48	H/L	**	306-40106-0	SCREW, HHC	3
H49	H/L	**	345-20004-0	WASHER BRASS	2
H50	H/L	**	033-53523-0	ORFICE .078	2

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11. Buyer's Obligation; Rights of Seller. To secure payment of all sums due or otherwise, Seller shall retain a security interest in the goods delivered and this agreement shall be deemed 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 its security interest. Seller shall have a security interest in, and lien upon, any property of Buyer in Seller's possession as security for the payment of any amounts owed to Seller by Buyer.
12. Improper Use and Indemnity. Buyer shall indemnify, defend, and hold Seller harmless from any claim, liability, damages, lawsuits, and costs (including attorney fees), whether for personal injury, property damage, patent, trademark or copyright infringement or any other claim, brought by or incurred by Buyer, Buyer's employees, or any other person, arising out of: (a) improper selection, improper application or other misuse of Products purchased by Buyer from Seller; (b) any act or omission, negligent or otherwise, of Buyer; (c) Seller's use of patterns, plans, drawings, or specifications furnished by Buyer to manufacture Product; or (d) Buyer's failure to comply with these terms and conditions. Seller shall not indemnify Buyer under any circumstance except as otherwise provided.
13. Cancellations and Changes. Orders shall not be subject to cancellation or change by Buyer 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. Seller may change product features, specifications, designs and availability with notice to Buyer.
14. Limitation on Assignment. Buyer may not assign its rights or obligations under this agreement without the prior written consent of Seller.
15. Entire Agreement. This agreement contains the entire agreement between the Buyer and Seller and constitutes the final, complete and exclusive expression of the terms of the agreement. All prior or contemporaneous written or oral agreements or negotiations with respect to the subject matter are herein merged.
16. Waiver and Severability. Failure to enforce any provision of this agreement will not waive that provision nor will any such failure prejudice Seller's right to enforce that provision in the future. Invalidation of any provision of this agreement by legislation or other rule of law shall not invalidate any other provision herein. The remaining provisions of this agreement will remain in full force and effect.
17. Termination. This agreement may be terminated by Seller for any reason and at any time by giving Buyer thirty (30) days written notice of termination. In addition, Seller may by written notice immediately terminate this agreement for the following: (a) Buyer commits a breach of any provision of this agreement (b) the appointment of a trustee, receiver or custodian for all or any part of Buyer's property (c) the filing of a petition for relief in bankruptcy of the other Party on its own behalf, or by a third party (d) an assignment for the benefit of creditors, or (e) the dissolution or liquidation of the Buyer.
18. Governing Law. This agreement and the sale and delivery of all Products hereunder shall be 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 this agreement. Disputes between the parties shall not be settled by arbitration unless, after a dispute has arisen, both parties expressly agree in writing to arbitrate the dispute.
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June 2023

Added Variable Displacement Motor content to P/M11-14 Variable Displacement  
Pump catalog HY28-2677-03/GC/US



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The products described in this catalog can expose you to chemicals, including Lead, which is 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](http://www.p65warnings.ca.gov).





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