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HYDRAULICS INC

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Gold Cup Kits & Assemblies

P11 & P14

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Seal Kits for P11,14 Gold Cup Pumps

CIPR	MOD.	SERIES	SHAFT TYPE	ROT.	COMPLETE SEAL KIT	SHUTTLE	SHAFT SEAL KIT
11,14	A & C	P/V/R	1,2,3,6	R & L	S23-17032-⊕K	N/A	S23-05992-⊕K
	B & C		7,8	R	S23-17033-⊕K		S23-15244-⊕K
	B & C		7,8	L	S23-17034-⊕K		S23-15247-⊕K
	A & C	S/L	1,2,3,6	R & L	S23-17035-⊕K	S23-15089-⊕K	S23-05992-⊕K
	B & C		7,8	R	S23-17036-⊕K		S23-15244-⊕K
	B & C		7,8	L	S23-17037-⊕K		S23-15247-⊕K

Seal Kits for P11,14 Gold Cup Pumps with TB Auxiliary Pumps

CIPR	MOD.	SERIES	SHAFT TYPE	ROT.	COMPLETE SEAL KIT	SHUTTLE	SHAFT SEAL KIT
11,14	B & C	S/L	7,8	R	S23-15702-⊕K	S23-15089-⊕K	S23-15244-⊕K
				L	S23-15703-⊕K		S23-15247-⊕K

Note: Add -0 for Buna/Nitrile, -4 for EPR or -5 for Viton in place of ⊕

GOLD CUP MOTOR SEAL KITS

M & P	11,14	F/G "A" MOD	1,2,3,6	N/A	S23-00143-⊕K (5)		S23-05992-⊕K (6)
M	11,14	H/V "A" MOD	1,2,3,6	S23-17746-⊕K (3,4)	S23-00141-⊕K (5)	S23-17000-⊕K	S23-05992-⊕K (6)

Key: M = Motor, P = Pump

Rotation: R, L & N

NOTE: Add -4 for EPR Rubber or -5 for Viton in place of ⊕

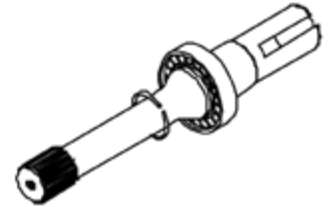
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Shaft and Bearing Assemblies - Drive Shafts (Keyed and Splined)

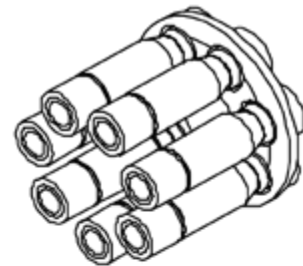
1. Drive Shaft
2. Bearing
3. Retaining Rings for Bearing
4. Key Where Applicable



P11,14		P11,14	
P11/14/P/S/V SAE-E SPLINED	S13-43968-0K	P11/14/P/S/V SAE-E SPLD	S23-15212-0K
P11/14/P/S/V SAE-E KEYED	S13-43969-0K	P11/14/P/S/V SAE-E KEYED	S23-15213-0K
P11/14/R/L SAE-E SPLINED	S23-16257-0K	P11/14/R/L SAE-E SPLD	S23-16092-0K
P11/14/R/L SAE-E KEYED	S23-16255-0K	P11/14/R/L SAE-E KEYED	S23-16093-0K

Piston & Shoes

1. Pistons, Shoes & Retainer



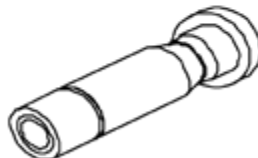
M11, M14, P11 & P14					
P11F/P/R/S	S13-45544-0K	P11V	S13-45544-0K	M11F/G/H/V	S13-45544-0K
P14F/P/R/S	S13-43970-0K	P14V	S13-43970-0K	M14F/G/H/V	S13-43970-0K

Piston & Shoe Sets (no retainer)

- 7 Piston & shoes

P11, P14, M11 & M14

P11, M11	S23-17467-0K
P14, M14	S23-17468-0K



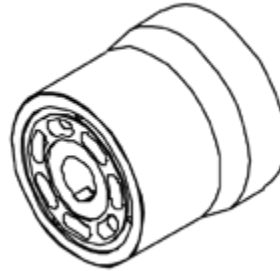
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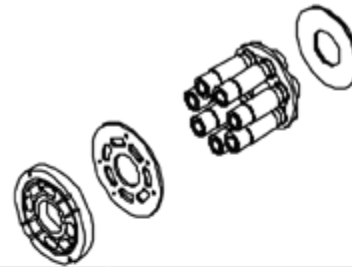
Barrel and Sleeve Assembly

M11, M14, P11 AND P14	
P11V/F/P/R/S, M11F/G/H/V	S13-45381-0K
P14V/F/P/R/S, M14F/G/H/V	S13-43965-0K



Rotating Group (Minor)

1. Face Plate
2. Pistons, Shoes & Retainer
3. Creep Plate
4. Port Plate



P11,14					
P11P/R/S	CW	S23-17419-0K	P11F	CW	S23-17419-0K
P11P/R/S	CCW	S23-17420-0K	P11F	CCW	S23-17420-0K
P14P/R/S	CW	S23-17421-0K	P14F	CW	S23-17421-0K
P14P/R/S	CCW	S23-17422-0K	P14F	CCW	S23-17422-0K
P11V	CW	S23-17423-0K			
P11V	CCW	S23-17424-0K			
P14V	CW	S23-17425-0K			
P14V	CCW	S23-17426-0K			
M11F/G/H/V		S23-17427-0K			
M14F/G/H/V		S23-17428-0K			

Note: CW = Clockwise or Right Hand (RH), CCW = Counter Clockwise or Left Hand (LH)

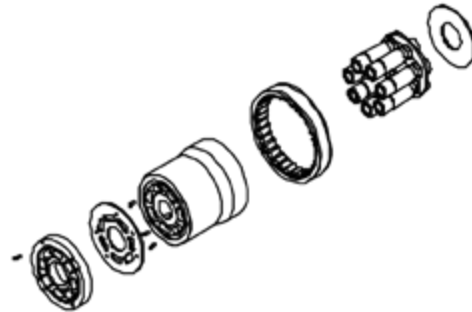
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Rotating Group (Major)

1. Barrel Bearing
2. Barrel & Sleeves
3. Face Plate
4. Face Plate & Port Plate Locating Pins
5. Pistons, Shoes & Retainer
6. Creep Plate
7. Port Plate

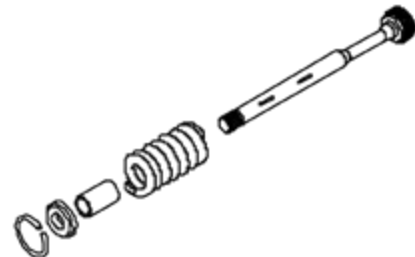


P11,14					
P11P/R/S	CW	S23-17101-0K	P11F	CW	S23-17101-0K
P11P/R/S	CCW	S23-17102-0K	P11F	CCW	S23-17102-0K
P14P/R/S	CW	S23-17103-0K	P14F	CW	S23-17103-0K
P14P/R/S	CCW	S23-17104-0K	P14F	CCW	S23-17104-0K
P11V	CW	S23-17105-0K			
P11V	CCW	S23-17106-0K			
P14V	CW	S23-17107-0K			
P14V	CCW	S23-17108-0K			
M11F/G/H/V		S23-17109-0K			
M14F/G/H/V		S23-17110-0K			

Note: CW = Clockwise or Right Hand (RH), CCW = Counter Clockwise or Left Hand (LH)

Barrel Holddown

1. Auxiliary Shaft
2. Barrel Stop (6-14 ONLY)
3. Holddown Spring
4. Spring Retainer (6-14 ONLY)
5. Retaining Ring (6-14 ONLY)



P11,14					
Without Rear Drive					
P11/14P/V	S23-17250-0K	M11/14H/V/F/G	S23-17252-0K	P11/14F	S23-17252-0K
With Rear Drive					
P11/14P/S	S23-17251-0K				

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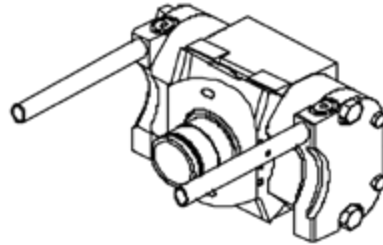
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Cam and Cradle Stroking Assemblies

1. Cam and Cradle Stroking Assembly
2. Override Tubes

Note: Viton seals as standard



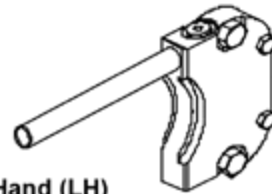
P11,14P/R/S/V		P24,P30P/R/S	
CW	S23-17240-5K	CW	S23-17242-5K
CCW	S23-17241-5K	CCW	S23-17243-5K
M11,14H/V		M24,M30H/V	
BI-DIR	S23-17240-5K	BI-DIR	S23-17242-5K

Cam & Stroking Rotation Conversions (CW to CCW)

1. Vane Chamber Covers (2)
2. Override Tubes (2)

P11 & P14	CW to CCW	S23-17232-0K
	CCW TO CW	S23-17314-0K

Note: CW = Clockwise or Right Hand (RH), CCW = Counter Clockwise or Left Hand (LH)



Gerotor P11,14

Note: Viton seals as standard

1. Eccentric & Gerotor
2. Gerotor Side Plate (CW or CCW)
3. Ring Seal
4. Side Plate
5. Thrust Bearing & Washers
6. Gerotor Key
7. Holddown Locking Pin
8. Center Port Plate
9. Gaskets



P11,14P/S CW	S23-17043-5K	P11,14V CW	S23-17047-5K
P11,14P/S CCW	S23-17044-5K	P11,14V CCW	S23-17048-5K

Note: CW = Clockwise or Right Hand (RH), CCW = Counter Clockwise or Left Hand (LH)

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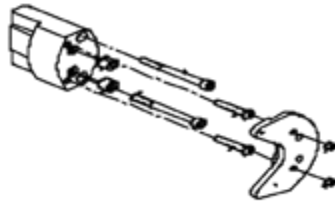
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Control Side

Input

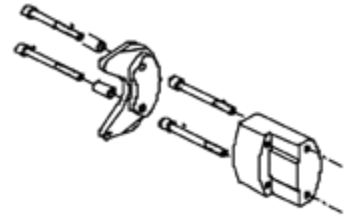
1. Screw (HEX HD)
2. Servo Stem
3. Orifice
4. Plate Servo
5. Screw (SOC HD)



Indicator/Torque Limiter Side

Output

1. Screw
2. Servo Stem
3. Balance Plate
4. Spacer



Input (Standard Orifice 0.062")		Output (Indicator)
P11/14P/S	S23-12276-0K	S23-03782-0K
M11/14H/V	S23-12276-0K	S23-03782-0K

Input

1. Screw (HEX HD)
2. Servo Stem
3. Orifice
4. Plate Servo
5. Screw (SOC HD)

Output

1. Screw
2. Servo Stem
3. Balance Plate
4. Spring Feedback
5. Spacer

HI IQ 7F/G Control Input (Orifice 0.043")		Output
P11/14 (7F/G)	S23-03781-0K	S23-03948-0K
HI IQ 7D/E Control Input		Output
P11/14 (7D/E)	S23-03782-0K	S23-03948-0K
Orifice 0.043"	033-53824-0K	
Orifice 0.062"	033-70819-0K	

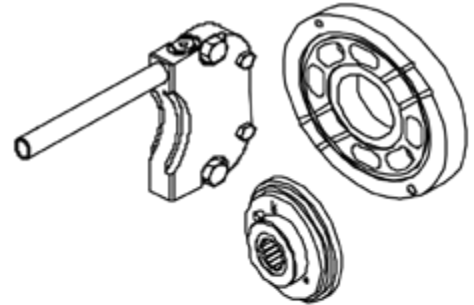
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Rotation Conversions

1. Port Plate
2. Vane Chamber Covers (2)
3. Override Tubes (2)
4. Gerotor Side Plate
5. Tag for Orifice Location (P6,7,8,11,14V ONLY)



P11P/S		P11V		P11F	
CW TO CCW	S23-16863-0K	CW TO CCW	S23-16865-0K	CW TO CCW	033-71914-0
CCW TO CW	S23-16864-0K	CCW TO CW	S23-16866-0K	CCW TO CW	033-71915-0
P14P/S		P14V		P14F	
CW TO CCW	S23-16867-0K	CW TO CCW	S23-16869-0K	CW TO CCW	033-71600-0K
CCW TO CW	S23-16868-0K	CCW TO CW	S23-16870-0K	CCW TO CW	033-71617-0K
P11R/L		P14R/L			
CW TO CCW	S23-16871-0K	CW TO CCW	S23-16873-0K		
CCW TO CW	S23-16872-0K	CCW TO CW	S23-16874-0K		

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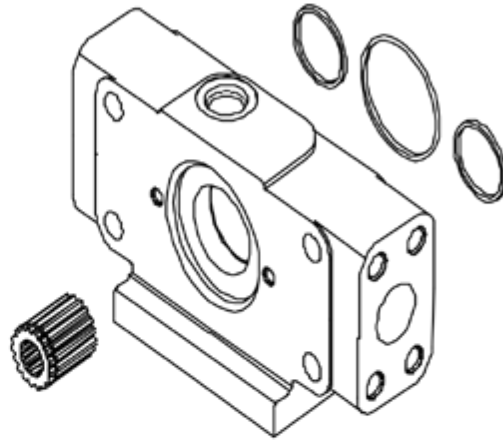
Rear Drive Adapter Kits

Required for Units That Already Have a Rear Mounting

1. Adapter
2. Auxiliary Pump to Adapter Gasket
3. Coupling
4. Adapter to Port Block Gasket
5. Valve Block Spacer (P11,14R/L WITH SAE-E ONLY)

Note: Viton seals as standard

P11,14P/D	
SAE-A	S23-16879-5K
SAE-B	S23-16880-5K
P11,14S	
SAE-A	S23-16881-5K
SAE-B	S23-16882-5K
P11,14R/L	
NONE	S23-16249-5K
SAE-A	S23-16250-5K
SAE-B	S23-16251-5K
SAE-C	S23-16252-5K
SAE-D	S23-16253-5K
SAE-E	S23-16886-5K

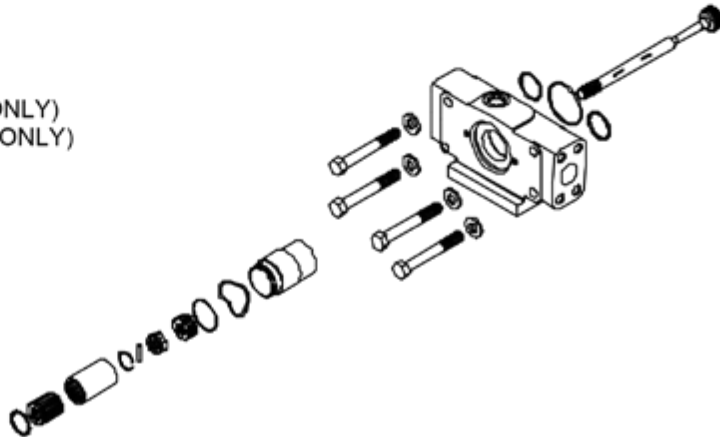


Required For Units That Do Not Have A Rear Mounting

1. Adapter
2. Auxiliary Pump to Adapter Gaskets
3. Coupling
4. Adapter to Coupling Gaskets
5. Auxiliary Shaft
6. Barrel Holddown Thrust Bearing (P6,7,8 ONLY)
7. Barrel Holddown Thrust Washers (P6,7,8 ONLY)
8. Barrel Holddown Nut
9. Replenish Isolation Sleeve

Note: Viton seals as standard

P11,14P	
SAE-A	S23-12182-5K
SAE-B	S23-12181-5K
P11,14S	
SAE-A	S23-12439-5K
SAE-B	S23-12668-5K



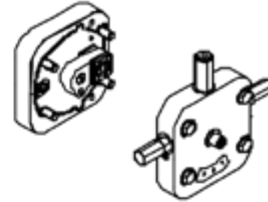
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Controls (Input)

Example: P24-2R1E-#A2-B00-X00



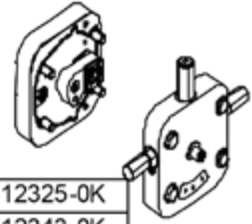
10*	SCREW ADJUSTMENT CCW-A/CW-B	S23-12327-0K
10*	SCREW ADJUSTMENT CCW-B/CW-A	S23-12328-0K
2A*	CYLINDER CONTROL CCW-A/CW-B	S23-12338-0K
2A*	CYLINDER CONTROL CCW-B/CW-A	S23-12340-0K
2A*	CYLINDER CONTROL OFFSET FULL "A" MTG.	S23-12329-0K
2A*	CYLINDER CONTROL OFFSET FULL "B" MTG.	S23-12326-0K
2A*	CYLINDER CONTROL <u>OFFSET MIN</u> "A" MTG.	S23-15207-0K
2A*	CYLINDER CONTROL <u>OFFSET MIN</u> "B" MTG.	S23-12280-0K
2H*	CYLINDER CONTROL 3POSITION SPRING CENTER	S23-12358-0K
2M*-*00	ELEC. CYL CONTROL SPRING CENTER CCW-A/CW-B	S23-16883-0K
2M*-*00	ELEC. CYL CONTROL SPRING CENTER CCW-B/CW-A	S23-15870-0K
2M*-*01	ELEC. CYL CONTROL SPRING CENTER CCW-B/CW-A	S23-16556-0K
2M*-*02	ELEC. CYL CONTROL SPRING CENTER CCW-A/CW-B	S23-15736-0K
2M*-*02	ELEC. CYL CONTROL SPRING CENTER CCW-B/CW-A	S23-15737-0K
2M*-*03	ELEC. CYL CONTROL SPRING CENTER CCW-A/CW-B	S23-15677-0K
2M*-*03	ELEC. CYL CONTROL SPRING CENTER CCW-B/CW-A	S23-15678-0K
2M*-*05	ELEC. CYL CONTROL SPRING CENTER CCW-A/CW-B	S23-15860-0K
2M*-*05	ELEC. CYL CONTROL SPRING CENTER CCW-B/CW-A	S23-15861-0K
2M*-*00	ELEC. CYL CONTROL SPRING OFFSET TO FULL "A" MTG	S23-16627-0K
2M*-*00	ELEC. CYL CONTROL SPRING OFFSET TO FULL "B" MTG	S23-16628-0K
2M*-*01	ELEC. CYL CONTROL SPRING OFFSET TO FULL "A" MTG	S23-16230-0K
2M*-*01	ELEC. CYL CONTROL SPRING OFFSET TO FULL "B" MTG	S23-16229-0K
2M*-*05	ELEC. CYL CONTROL SPRING OFFSET TO FULL "A" MTG	S23-16134-0K
2M*-*05	ELEC. CYL CONTROL SPRING OFFSET TO FULL "B" MTG	S23-16133-0K
2N*-*00	ELEC. CYL CONTROL SPRING CENTER	S23-15817-0K
2N*-*01	ELEC. CYL CONTROL SPRING CENTER	S23-16377-0K
2N*-*02	ELEC. CYL CONTROL SPRING CENTER	S23-15738-0K
2N*-*03	ELEC. CYL CONTROL SPRING CENTER	S23-15679-0K
2N*-*05	ELEC. CYL CONTROL SPRING CENTER	S23-15821-0K
2N*-*06	ELEC. CYL CONTROL SPRING CENTER	S23-16159-0K
2N*-*07	ELEC. CYL CONTROL SPRING CENTER	S23-16546-0K
40*	ROTARY SERVO SPRING CENTERED LESS VOL STOPS	S23-12344-0K

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Example: P24-2R1E-#A2-B00-X00



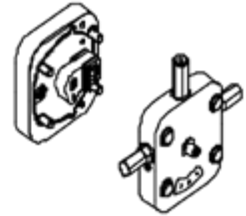
4A*	ROTARY SERVO SPRING CENTERED WITH VOLUME STOPS	S23-12325-0K
4B*	ROTARY SERVO W/BRAKE, NEUTRAL BY-PASS LESS VOLUME STOPS	S23-12343-0K
4C*	ROTARY SERVO W/BRAKE, NEUTRAL BY-PASS WITH VOLUME STOPS	S23-12324-0K
5A*-01	ELEC/HYD STROKER "0" DEADBAND SPRING OFFSET FULL "B" MTG	S23-12418-0K
5A*-01	ELEC/HYD STROKER "0" DEADBANDSPRING OFFSET FULL "A" MTG	S23-12419-0K
5A*-00	ELEC/HYD STROKER W/DEADBAND SPRING CENTER	S23-12413-0K
5A*-01	ELEC/HYD STROKER "0" DEADBAND SPRING CENTER	S23-12415-0K
5C*-00	ELEC/HYD STROKER W/DEADBAND & BRAKE & NEUTRAL BY-PASS	S23-12414-0K
5C*-01	ELEC/HYD STROKER "0" DEADBAND & BRAKE & NEUTRAL BY-PASS	S23-12420-0K
7D*	High IQ with 10 gpm servovalve	Consult factory
7F*	High IQ with 10 gpm servovalve & 4A (rotary servo) control	Consult factory
7J*	High IQ with 4DC01 valve & volume indicator	Consult factory
7K*	High IQ with 4DC01 valve & 4A (rotary servo) control	Consult factory
8A*-00	HYDRAULIC STROKER SPRING CENTER	S23-12268-0K
8A*-01	HYDRAULIC STROKER SPRING CENTER	S23-12760-0K
8A*-02	HYDRAULIC STROKER SPRING CENTER	S23-12630-0K
8A*-03	HYDRAULIC STROKER SPRING CENTER	S23-12529-0K
8A*-04	HYDRAULIC STROKER SPRING CENTER	S23-15065-0K
8A*-00	HYDRAULIC STROKER SPRING CENTER P6,7,8R	S23-12946-0K
8A*-01	HYDRAULIC STROKER SPRING CENTER P6,7,8R	S23-12760-0K
8A*-02	HYDRAULIC STROKER SPRING CENTER P6,7,8R	S23-12630-0K
8A*-03	HYDRAULIC STROKER SPRING CENTER P6,7,8R	S23-15341-0K
8A*-04	HYDRAULIC STROKER SPRING CENTER P6,7,8R	S23-15951-0K
8A*-00	HYDRAULIC STROKER SPRING OFFSET TO FULL "A" MTG.	S23-12271-0K
8A*-00	HYDRAULIC STROKER SPRING OFFSET TO FULL "B" MTG.	S23-12378-0K
8A*-01	HYDRAULIC STROKER SPRING OFFSET TO FULL "A" MTG.	S23-12527-0K
8A*-01	HYDRAULIC STROKER SPRING OFFSET TO FULL "B" MTG.	S23-12526-0K
8A*-00	HYDRAULIC STROKER SPRING OFFSET TO MIN "B" MTG.	S23-15235-0K
8C*-00	HYD STROKER BRAKE NEUTRAL BY-PASS WITH VOLUME STOPS	S23-12820-0K
8C*-02	HYD STROKER BRAKE NEUTRAL BY-PASS WITH VOLUME STOPS	S23-16239-0K
8C*-03	HYD STROKER BRAKE NEUTRAL BY-PASS WITH VOLUME STOPS	S23-16378-0K
*00	ELEC/HYD STROKER W/DEADBAND SPRING CENTER	S23-12667-0K
9A*-01	ELEC/HYD STROKER W/DEADBAND SPRING CENTER	S23-12957-0K
9A*-00	ELEC/HYD STROKER W/DEADBAND SPRING CENTER CCW-A/CW-B	S23-12733-0K
9A*-00	ELEC/HYD STROKER W/DEADBAND SPRING CENTER CCW-B/CW-A	S23-12734-0K
9A*-00	ELEC/HYD STROKER W/DEADBAND SPRING CENTER P6,7,8R	S23-12940-0K
9A*-01	ELEC/HYD STROKER W/DEADBAND SPRING CENTER P6,7,8R	S23-16073-0K
9A*-00	ELEC/HYD STROKER SPRING OFFSET TO FULL "A" MTG.	S23-15050-0K
9A*-00	ELEC/HYD STROKER SPRING OFFSET TO FULL "B" MTG.	S23-15051-0K
9C*-00	ELEC/HYD STROKER W/BRAKE NEUTRAL BY-PASS W/VOL STOPS	S23-12925-0K

Note: 5A/C & 9A/C Controls have viton seals as standard

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Note: A Pipe Kit may be required to add one of these controls

Example: P24-2R1E-9A#B00-X00

*D2	POTENTIOMETER OUTPUT CONTROL	S23-02345-0K
*F2	POTENTIOMETER OUTPUT CONTROL	S23-02345-0K
*E2	RVDT OUTPUT CONTROL	S23-03278-0K
*G2	RVDT OUTPUT CONTROL	S23-03278-0K
**2	VOLUME INDICATOR	S13-42064-0K
**4	DAMPENED TORQUE LIMITER	S23-12299-0K
**4	DAMPENED TORQUE LIMITER CCW-A/CW-B	S23-12298-0K
**4	DAMPENED TORQUE LIMITER CCW-B/CW-A	S23-12300-0K
**6	POTENTIOMETER OUTPUT CONTROL	S23-02345-0K
**8	RVDT OUTPUT CONTROL	S23-03278-0K
Gold Cup Controls (Input Override)		
**5	REVERSE COMPENSATOR M6,7,11,14	S23-00532-0K

Pipe Kits

"A" or "B" Refer to control side mounting		
		P11,14
Automatic Brake Control (5C)		
CW/CCW -"A"		S23-03070-0K
CW/CCW -"B"		S23-03069-0K
8C & 9C		
CW/CCW -"A"		S23-15661-0K
CW/CCW -"B"		S23-15660-0K
Torque Limiter **4		
CW - "A"		S23-05641-0K
CW "B"		S23-05645-0K
CCW "A"		S23-05643-0K
CCW "B"		S23-05647-0K
Brake Control +Torque Limiter (ABC + **4)		
CW - "B"		
CCW - "B"		
CW "A"		S23-15689-0K
CW "B"		S23-15690-0K