



BOSCH

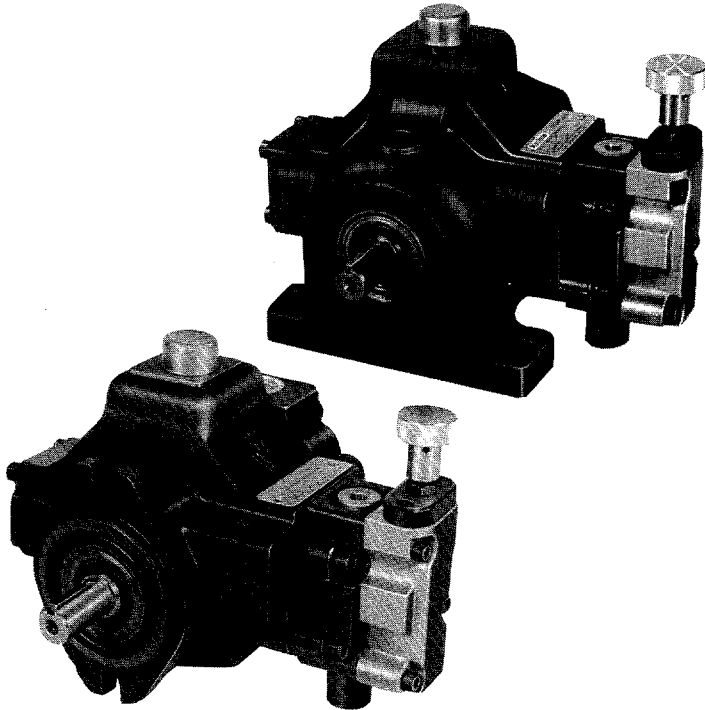
REPAIR PARTS

VARIABLE VOLUME SILENTVANE PUMPS

MODEL SV-10 2000 PSI
7.5 GPM

MODEL SV-15 1500 PSI
11 GPM

**MANIFOLD MOUNTED
FLANGE MOUNTED
COMBINATION CAPABILITY**



WHEN ORDERING PARTS, FURNISH:

1. COMPLETE CODE NUMBER
2. PARTS REQUIRED
3. SHIPPING INSTRUCTIONS

WRITE FACTORY FOR NEAREST AUTHORIZED
PARTS AND SERVICE CENTER.

PUMP CODING

PSV-PNSO-10HRM-52

- E - ELECTRO-HYDRAULIC PROPORTIONAL CONTROL
- H - SOLENOID TWO PRESSURE (NORMALLY HIGH ENERGIZED FOR LOW PRESSURE)
- J - HYDRAULIC TWO-PRESSURE CONTROL (NORMALLY LOW, ENERGIZED TO HIGH PRESSURE)
- K - SINGLE STAGE
- L - LOAD SENSING FLOW CONTROL
- M - MULTIPLE CONTROL (P, L, & T)
- P - PRESSURE COMPENSATOR (STD)
- S - SOLENOID TWO-PRESSURE CONTROL (NORMALLY LOW ENERGIZED TO HIGH PRESSURE)
- T - TORQUE LIMITING CONTROL
- V - SOLENOID VENT (NORMALLY VENTED, ENERGIZE TO HIGH PRESSURE)
- N - NO VOLUME CONTROL
- S - SCREW VOLUME CONTROL

- S - SUBPLATE
- A - FLANGE, SIDE PORTED (SAE STRAIGHT THREAD)
- B - FLANGE, REAR PORTED (SAE STRAIGHT THREAD)
- O - BUNA N SEALS
- F - VITON SEALS

FLOW RATE @
1800 RPM
10 - 7.5 GPM
15 - 11 GPM

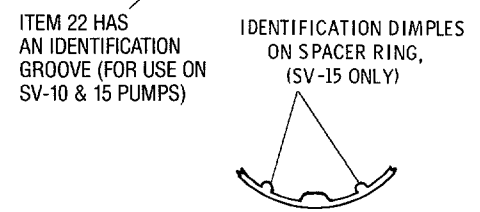
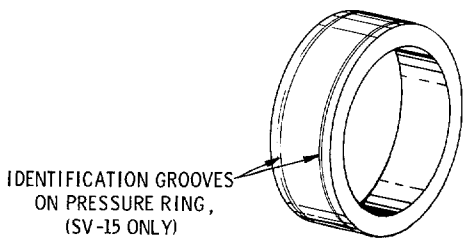
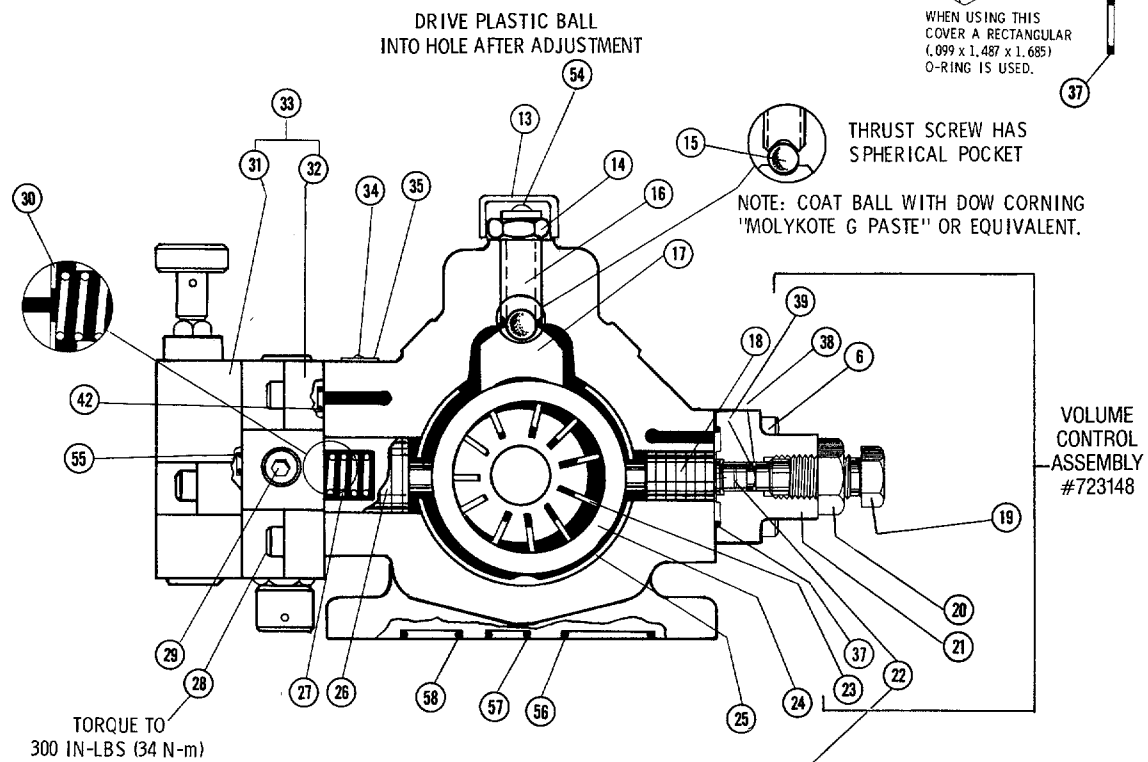
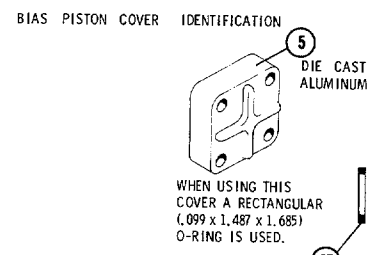
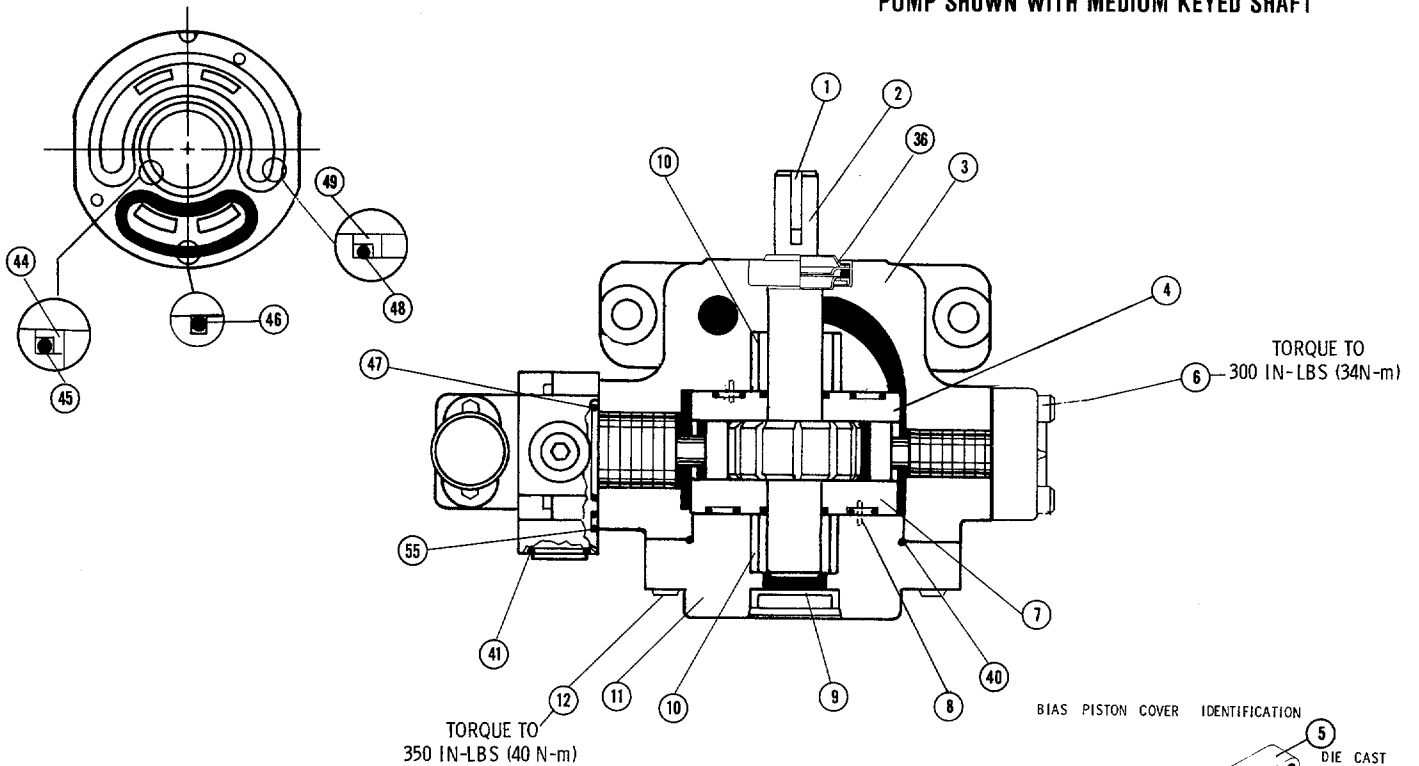
PRESSURE RATING MAX.
H - 2000 PSI
E - 1000 PSI (SV-15 ONLY)*
D - 750 PSI

- M - MEDIUM KEYED SHAFT
- D - THRU KEYED SHAFT
- W - KEYED SHAFT (METRIC)

- 50 - ORIGINAL DESIGN
- 51 - 2ND STAGE UPDATE
- 52 - 1ST & 2ND STAGE CHANGES
- 53 - SOL. 2-PRESS. CONTROL ONLY
- 60 - COMBINATION PUMP
- 61 - 2ND STAGE UPDATE
- 62 - 1ST & 2ND STAGE CHANGES
- 63 - SOL. 2-PRESS. CONTROL ONLY
- R - RIGHT HAND ROTATION
- Q - LEFT HAND ROTATION OPPOSITE DRIVE SHAFT - MANIFOLD MTD.
- L - LEFT HAND ROTATION - FLANGE MOUNTED

*1500 psi maximum intermittent pressure (non-shock)

**MANIFOLD MOUNTING RIGHT HAND ROTATION
PUMP SHOWN WITH MEDIUM KEYED SHAFT**



Ref. No.	Part No.	Description	Qty.
1	408128	Key	1 or 2
2	308333	Rotor Shaft, Standard	1
2	308334	Rotor Shaft, Thru (-52 design)	1
2	308985	Rotor Shaft, Combination (-62 design)	1
3	222832	Body, Subplate Mounted (-52 design)	1
3	222868	Body, Flange Mounted (-62 design) RH -	1
3	222869	Body, Flange Mounted (-62 design) LH -	1
4	223235	Port Plate, Body	1
5	492010	Bias Cover, Die Cast Aluminum	1
6	400789	Screw, 5/16-18 x 1-1/4	4
7	223237	Port Plate, Cover	1
8	401712	Roll Pin	4
9	490778	Expansion Plug (-50 design)	1
10	778355	Sleeve & Bearing Assembly	2
11	222834	Cover, Subplate Mounted (-52 design)	1
11	222931	Cover, Rear Ported SAE (-62 design)	1
11	222989	Cover, Side Ported SAE (-62 design)	1
12	400809	Screw, 3/16-16 x 1-1/2	4
13	490775	Cap, Thrust Screw	1
14	401015	Lock Nut, 5/8-18	1
15	401069	Steel Ball	1
16	308701	Thrust Screw	1
17	490768	Thrust Block	1
18	308329	Bias Piston	1
19	308127	Adjusting Screw	1

Ref. No.	Part No.	Description	Qty.
20	401016	Lock Nut	1
21	222524	Body, Volume Control	1
22	308322	Piston	1
23	778277	Vane (309203) 11 - Vane Kit	1
24	308330	Pressure Ring	1
24	308666	Pressure Ring (SV-15 only)	1
25	308331	Spacer Ring	1
25	308700	Spacer Ring (SV-15 only)	1
26	308129	Control Piston	1
27	408717	Spring	1
**28	400789	Screw, 5/16-18 x 1-1/4	4
28	491838	Screw, Ferry Hd., 5/16-18 x 1-1/4	1
29	491832	Plug, #8 SAE	1
30	492742	Shim (SV-15 only)	1
31	—	Second stage of two-stage compensator	1
32	—	First stage of two-stage compensator	1
33	—	Assembly, two-stage compensator	1
34	491865	Rivet, Nameplate	2
35	491854	Nameplate	1
—	400925	Plug, 1/16 N.P.T.F. (Not Shown)	4
50	492568	Gasket (Viton)	1
51	222975	End Cover	1
52	407799	Washer	2
53	400721	Screw, 3/8-16 x 7/8	2
54	492143	Plastic Ball	1
***59	406618	Plug, #4 SAE (Gage Port)	1

* Included in Seal Kits used for both SV-10 & SV-15.

** On Standard Compensated and Load Sensing Compensating pumps, this screw is used to mount the 1st stage to the pump body. All other optional compensators or controls use 491838 Ferry Head Cap Screws.

*** Not Shown

CAUTION: Do not over torque.

SEAL KIT (VITON)

SV10/15 SINGLE END SHAFT PUMPS: KIT #778358

SV10/15 THROUGH SHAFT PUMPS: KIT #778364

Ref. No.	Part No.	Description	Qty.
36	794467	Shaft Seal Assembly (457614)	1 or 2
37	492122	O-Ring, Rectangular (Alum. Cap)	1
37	406513	O-Ring, 3/32 x 1-9/16 x 1-3/4 (-129) (Ductile Cap)	1
38	408846	Back Up Ring	1
39	406269	O-Ring, 1/16 x 3/8 x 1/2 (-012)	1
40	491015	O-Ring, 3/32 x 3-3/4 x 3-15/16 (-154)	1
41	407139	O-Ring, #8 SAE (-908)	2
42	406797	O-Ring, 1/16 x 5/16 x 7/16 (-011) (Used with powered metal body)	1
42	406565	O-Ring, 1/16 x 7/16 x 9/16 (-013) (Used with the iron body)	1
44	490746	Back Up Ring	2
45	409156	O-Ring, 1-1/4 x 1-3/8 x 1/16 (-026)	2
46	406711	O-Ring, 1-7/16 x 1-5/8 x 3/32 (-127)	2

NOTE: Kit #778364 consists of 1 pc.: 778358 and 1 pc.: 794467.

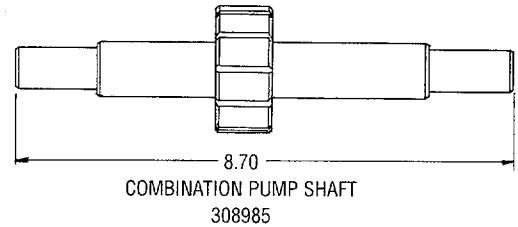
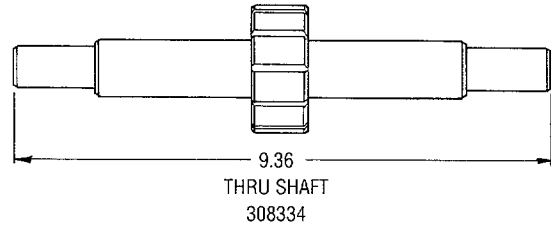
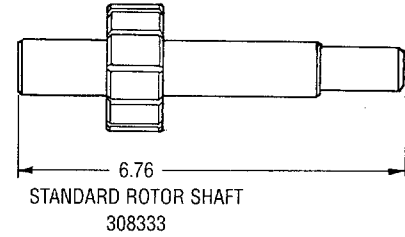
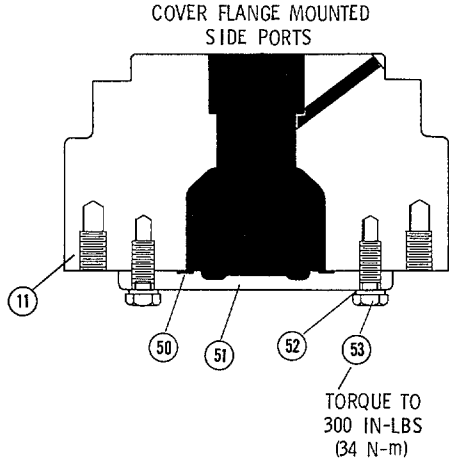
Ref. No.	Part No.	Description	Qty.
47	407105	O-Ring, 1/16* 1-1/2 x 1-5/8 (-029)	1
48	491016	O-Ring, 3/32 x 3 x 3-3/16 (-151)	2
49	491812	Back Up Ring	2
55	406797	O-Ring, 1/16 x 5/16 x 7/16 (-011)	4
56	407148	O-Ring, 3/32 x 1-3/8 x 1-3/16 (-123)	1
57	406518	O-Ring, 3/32 x 3/4 x 9/16 (-113)	1
58	406555	O-Ring, 3/32 x 1 x 13/16 (-117)	1
***	406579	O-Ring, 3/32 x 7/16 x 5/8 (-111)	1
***	407141	O-Ring, (-904)	2
***	407138	O-Ring, #10 SAE (-910)	1
***	490418	Back Up Ring	1

***: Shown on pages 5, 6, and 7.

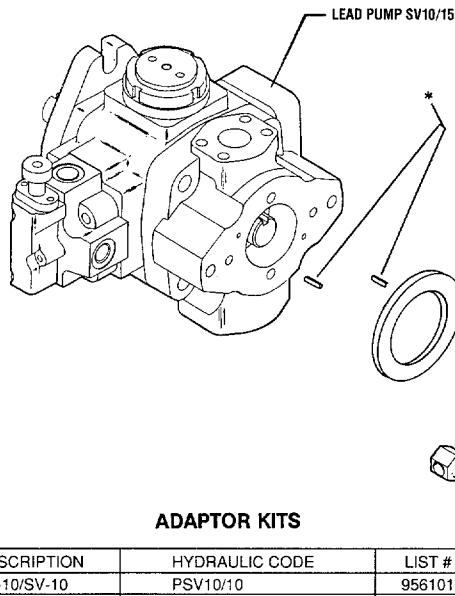
REPAIR KITS

Description	Design Digit	Assembly No. SV-10	Assembly No. SV-15
Std. Medium Keyed Shaft - Viton	-50 thru -62	794107	794110
Double-ended Shaft - Viton	-50 thru -52	794109	794111
Combination Shaft - Viton	-60 thru -62	794395	794397

NOTE: Each Kit Contains The Following Parts: One Rotor Shaft, One Key, One Set of Vanes, Four Roll Pins, Two Port Plates, Two Bearings, One Pressure Ring and One Seal Kit.



ADAPTOR/COUPLING SYSTEM



THE DISTANCE FROM THE PUMP MOUNTING FLANGE TO THE CENTER OF THE PORT, INCREASED BY 3/8" (SV-10/SV-15).
PORT CHANGES
DASH-50 VERSUS DASH-60 DESIGNS

PUMP MODEL (Port Type)	DASH-50 DESIGN		DASH-60 DESIGN	
	INLET	OUTLET	INLET	OUTLET
SV-10/SV-15 (Straight Thread)	SAE 16 1-5/16 x 12	SAE 12 1-1/16 x 12	SAE 20 1-5/8 x 12	SAE 12 1-1/16 x 12

ADAPTOR KITS

DESCRIPTION	HYDRAULIC CODE	LIST #
SV-10/SV-10	PSV10/10	956101
SV-10/PSQ	PSV10/10	956101
SV10/E055	SV10/E055	956177
SV10/20 H, L	SV10/20 H, L	956178
SV10/80 H, M, L	SV10/80 H, M, L	956179
SV10/BOSCH F	SV10/BOSCH F GEAR	956320

ASSEMBLE WITH DRIVE TANG
AS SHOWN

ALUMINUM
COVER

TRAILING PUMP
SEE CHART

NOTE: Coupling system is a "Wet Design". The lead pump does not have a rear shaft seal. This allows the adaptor to fill with fluid to lubricate and cool the coupling.

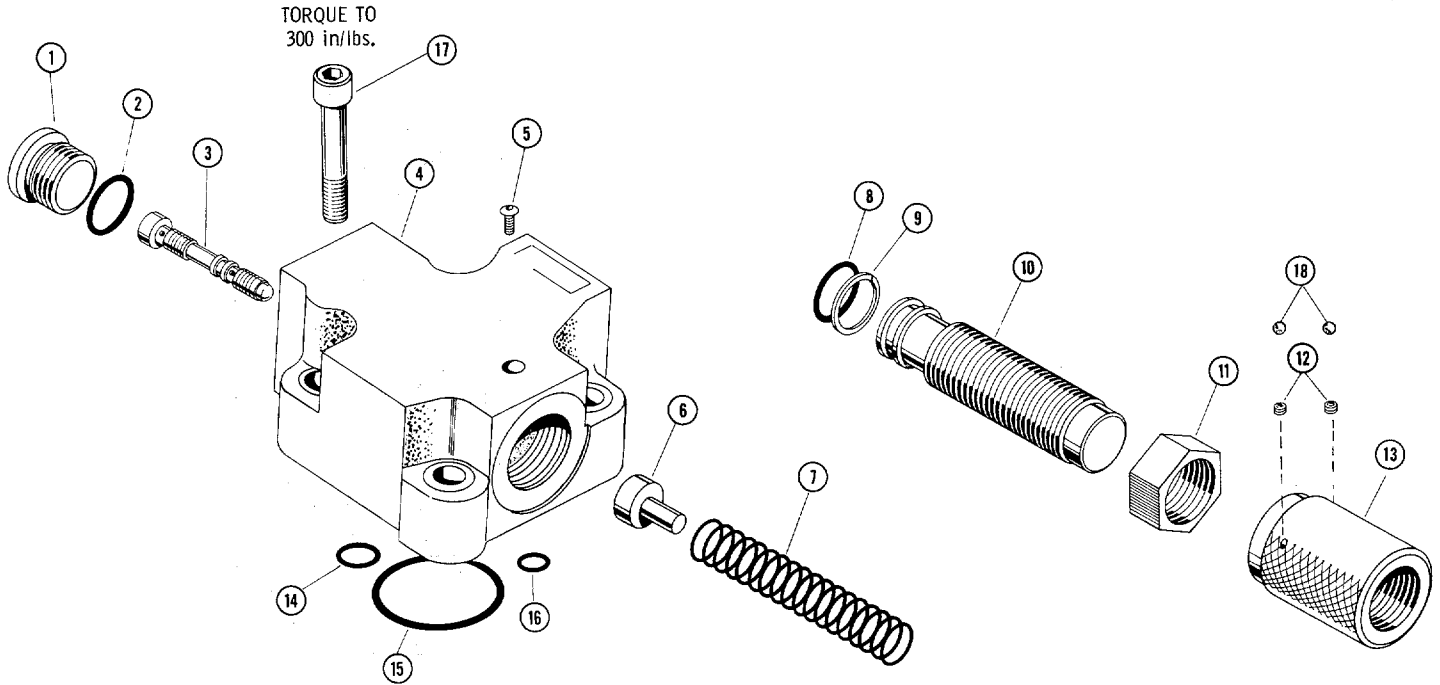
****NOTE:** When the weight of the trailing pump(s) exceeds 65 lbs., this part must be used.

***NOTE:** Roll pins should be pressed into pump prior to assembly.

COMPLETE ASSEMBLY

956302 - SV10 - 2000 PSI

956304 - SV15 - 1000 PSI

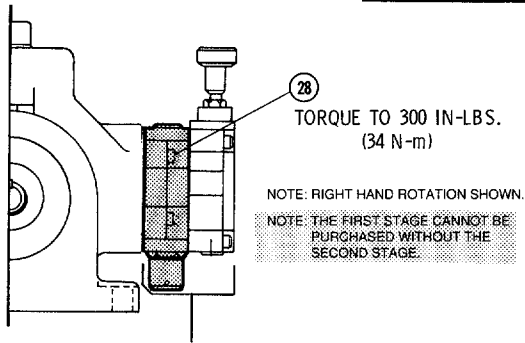


Ref. No.	Part No.	Description	Qty.
1	491832	Plug SAE #8	1
2	407139	O-Ring SAE #8 -908	1
3	309291	Spool	1
4	223109	Body	1
5	457564	Screw	1
6	309290	Spring Seat	1
7	457561	Spring	1
8	406554	O-Ring 5/8 x 3/4 x 1/6 -016	1
9	492369	Back-Up Ring	1
10	309289	Internal Adjustment Barrel	1
11	309019	Lock Nut	1
12	457688	Set Screw 1/4-20 x 1/8	2
13	309292	Pressure Adjustment Knob	1
14	406797	O-Ring 1-16 x 5/16 x 7/16 -011	1
15	407105	O-Ring 1-16 x 1-1/2 x 1-5/8 -029	1
16	406565	O-Ring 1-16 x 7/16 x 9/16 -013	1
*17	400789	Screw 5/16-18 x 1-1/4	4
18	457689	Plastic Ball 9/64 Dia.	2

*Item 17 is not included in the complete assembly.

STANDARD TWO-STAGE COMPENSATOR—FIRST STAGE

— 52 DESIGN
— 62 DESIGN



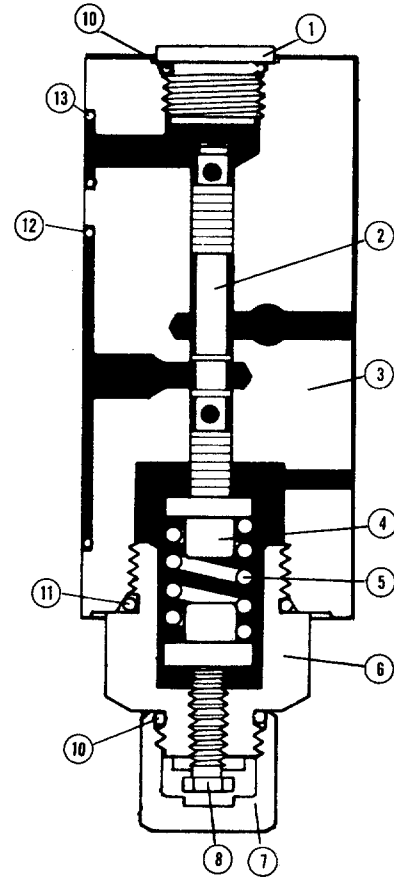
STANDARD TWO STAGE PRESSURE COMPENSATOR
SV-10 - 956131

Ref. No.	Part No.	Description	Qty.
1	491832	Plug, #8 SAE	1
2	308736	Spool (White)	1
3	223052	Body, 1st Stage (Iron)	1
4	308943	Spring Seat	2
5	491831	Spring	1
6	309052	Adaptor	1
7	308936	Safety Cap	1
8	778459	Adjustment Screw & Locknut	1
*10	407139	O-Ring, #8 SAE (-908)	2
*11	407138	O-Ring, #10 SAE (-910)	1
*12	407105	O-Ring, 1/16 x 1-1/2 x 1-5/8	1
*13	406797	O-Ring, 1/16 x 5/16 x 7/16 (Used with 223052)	1
**14	406565	O-Ring, 1/16 x 7/16 x 9/16	1
***28	400789	Screw, Socket Hd., 5/16-18 x 1-1/4	4

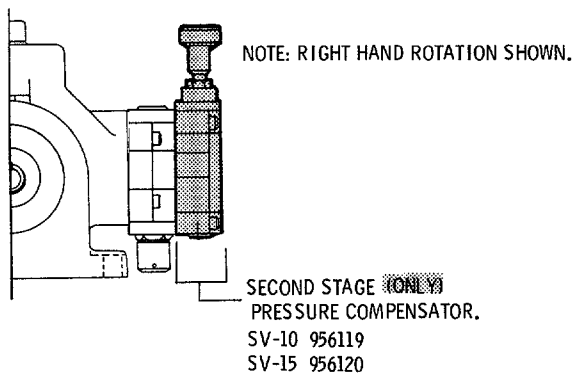
* Included in Seal Kit 778358

** Not Shown

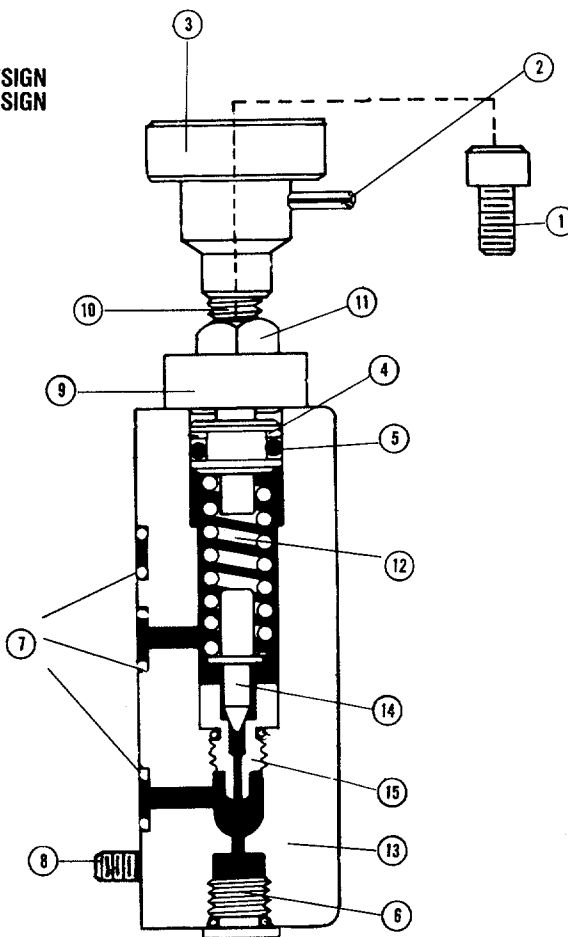
*** On Standard Compensated and Load Sensing Compensating pumps, this screw is used to mount the 1st Stage to the pump body. All other optional compensators or controls use 491838 Ferry Head Cap Screws. CAUTION: Do not over torque.



STANDARD TWO-STAGE COMPENSATOR — SECOND STAGE



- 52 DESIGN
- 62 DESIGN



Ref. No.	Part No.	Description	Qty.
1	402396	Screw, #10-24 x 1/2	2
2	401714	Roll Pin	1
3	308730	Knob	1
4	490418	Back-Up Ring	1
5	406579	O-Ring, (-111 Viton 75)	1
6	406618	Plug, #4 SAE with O-Ring (-904)	1
7	406797	O-Ring, 1/16 x 5/16 x 7/16	3
8	400779	Screw, 1/4-20 x 1-1/4	3
9	221777	Retaining Cap	1
10	309028	Adjusting Screw	1
11	401011	Lock Nut	1
12	407846	Spring (-51/52 & -61/62)	1
13	222962	Body (-51/52 & -61/62)	1
14	309057	Poppet (-52/62 Only)	1
15	778462	Seat (-52/62 Only) & O-Ring	1

9 535 233 264
HPUS RSB 003/43 US (7.95)

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