

PARTS LIST

Equipment Model:

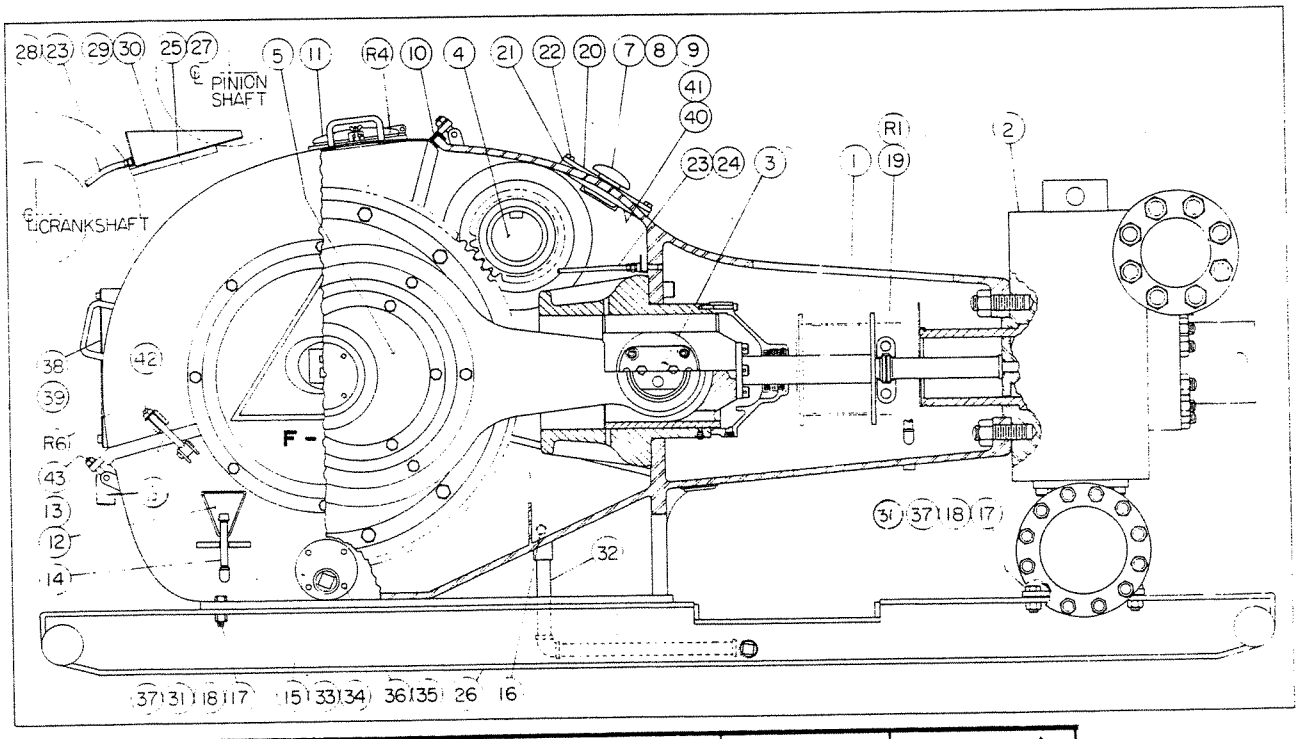
F-350 Triplex Mud Pump

As used herein, any references to CONTINENTAL-EMSCO shall be deemed to mean NATIONAL-OILWELL.

NATIONAL OILWELL

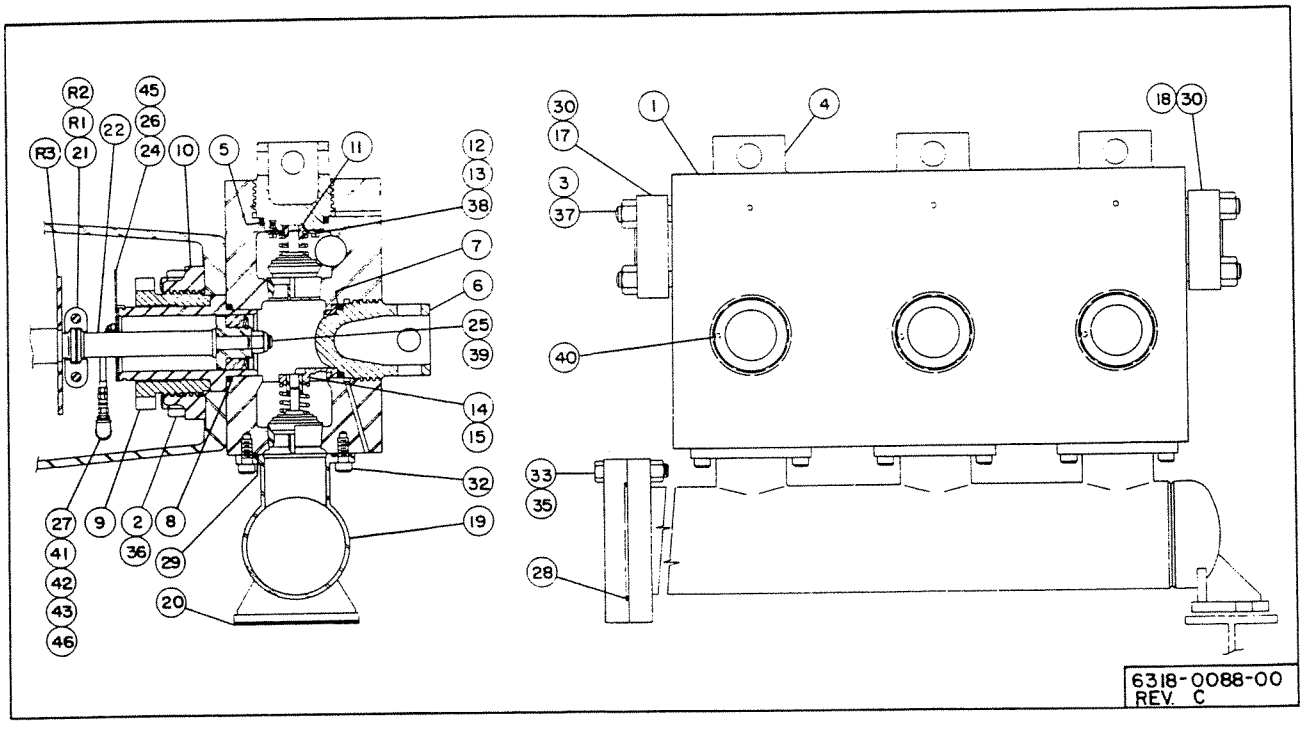
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F-350, F-500, F-650 & F-750 GENERAL ASSEMBLY



ITEM NO.	NO. REQ'D	DESCRIPTION	F-350 (Rev.P) 6318-0140-00	F-500(Rev.K) 6322-0003-00	F-650(Rev.N) 6321-0003-00	F-750(Rev.P) 6310-0100-00	
1	1	Frame Assembly	6318-0160-01	6322-0029-00	6321-0032-00	6310-0050-00	
2	1	Fluid End Assembly	6318-0156-00	6322-0034-00	6321-0014-00	PF-3-4	
3	1	Crosshead Assembly (PF-6-1)	6318-0090-00	6322-0072-00	6321-0018-00	PF-6-1	
4	1	Pinion Shaft Assembly (PF-7-1)	6318-0060-00	6322-0039-00	6321-0016-00	PF-7-1	
5	1	Crankshaft Assembly (PF-8-1)	6318-0080-00	6322-0047-00	6321-0017-00	PF-8-1	
6	1	Lubrication Assembly	----	6322-0056-00	6321-0030-00	6310-0138-00	
7	1	Breather Cap	6397-0186-00	6397-0186-00	6397-0186-00	6397-0186-00	
8	1	Breather Cap Stud	7507-0200-00	7507-0200-00	7507-0200-00	7507-0200-00	
9	1	Copper Wool (2 oz.)	7602-107013	7602-107013	7602-107013	7602-107013	
10	1	Gear Case Cover Gasket	7602-059016	7602-059013	7602-059016	7602-059016	
11	1	Inspection Door Gasket	7502-0103-00	7502-0103-00	7502-0103-00	7502-0103-00	
12	2	Oil Level Name Plate	7506-0032-00	7506-0032-00	7506-0032-00	7506-0032-00	
13	6	#6 x 3/8" P.K. Drive Screw	7601-106006	7601-106006	7601-106006	7601-106006	
14	2	Oil Level Indicator	6318-0266-00	6397-0668-00	6397-0182-00	6397-0182-00	
15	1	Clean Out Cover (W/1-1/2" Cplg.)	6316-0349-00	6316-0349-00	6316-0349-00	7601-259016 **	**3" Pipe Plug
16	2	1" Pipe Plug (Galv.)	7601-259011	7601-259011	7601-259011	7601-259011	
17	12	Hx. Hd. Capscrew	7601-033099*	7601-033115**	7601-033115**	7601-033115**	* 3/4"x2-3/4" ** 7/8"x2-3/4'
18	12	Hvy. Hx. Nut	7601-063016*	7601-063023**	7601-063023**	7601-063024**	* 3/4" ** 7/8"
19	8	#8 x 5/8" P.K. Drive Screw	7601-106009	7601-106009	7601-106009	7601-106009	
20	1	Top Access Door	6318-0078-00	6318-0078-00	6310-0025-00	6310-0025-00	
21	1	Top Access Door Gasket	7502-1057-00	7502-1057-00	7502-1037-00	7502-1037-00	
22	6	1/2" x 1-1/4" Hx. Hd. Capscrew	7601-033050	7601-033050	7601-033050(12)	7601-033219(24)	
23	4	Male Connector	7601-273022	----	----	----	
24	2	1/2" Lubricator Tubing Assembly	7508-0110-40	----	----	----	
25		1/2"-13 x 1-1/2" Hx. Capscrew	7601-033051(4)	----	7601-033051(8)	----	
26	1	Skid	6318-121-00	6322-0011-00	6321-0027-00	6310-0154-00	
27	4	1/2" - 13 Locknut	7601-072048	----	----	----	
28	2	1/2" Lubricator Tube Assembly	7508-0070-40	----	----	----	
29	1	Lube Oil Trough R.H. Side	6318-0104-00	----	----	----	
30	1	Lube Oil Trough L.H. Side	6318-0105-00	----	----	----	
31	6	Shim Set (As Required)	6321-0059-00	6321-0059-00	6321-0059-00	6310-0072-00(2)	
32	1	Oil Sump Drain Piping	6318-0281-00	6322-0160-00	6321-0074-00	7601-259011*	* 1" Pipe Plug
33	1	Clean Out Cover	6397-0264-00	6397-0264-00	6397-0264-00	7601-259016*	* 3" Pipe Plug
34	2	Clean Out Cover Gasket	7502-0581-00	7502-0581-00	7502-0581-00	----	
35	8	1/2" Plain Washer	7601-133004	7601-133004	7601-133004	----	
36	8	Hx. Hd. Capscrew	7601-033049 1/2" x 1"	7601-033049 1/2" x 1"	7601-033051 1/2" x 1-1/2"	----	
37	12	Lockwasher	7601-132018*	7601-132019**	7601-132019**	7601-132019**	* 3/4" ** 7/8"
38	1	Cover Plate	----	6322-0032-00	6320-0100-00	6320-0100-00	
39	1	Gasket	----	6322-0033-00	6320-0099-00	6320-0099-00	
40	1	Top Access Door Baffle	----	----	6310-0093-00	6310-0093-00	
41	4	1/2" x 3/4" Dr. Hx. Hd. Capscrew	----	----	7501-0123-00	7501-0123-00	
42	4	Hold Down Bolt - Long	7601-2610-00	7601-2610-00	7601-2610-00	7601-2610-00	
43		Hold Down Bolt - Short	7501-2223-00(5)	7501-2223-00(7)	7501-2223-00(7)	7501-2223-00(7)	
R1	2	Name Plate (CECO)	7506-0419-36	7506-0419-39	7506-0419-38	7506-0419-22	
R4	1	Inspection Door (CECO)	7510-0201-00	7510-0201-00	7510-0201-00	7510-0201-00	
R6	1	Gear Case Cover	6318-0064-00	6322-0027-00	6310-0059-00	6310-0059-00	

F-350 TRIPLEX PUMP FLUID END ASSEMBLY
API VALVE POT #4

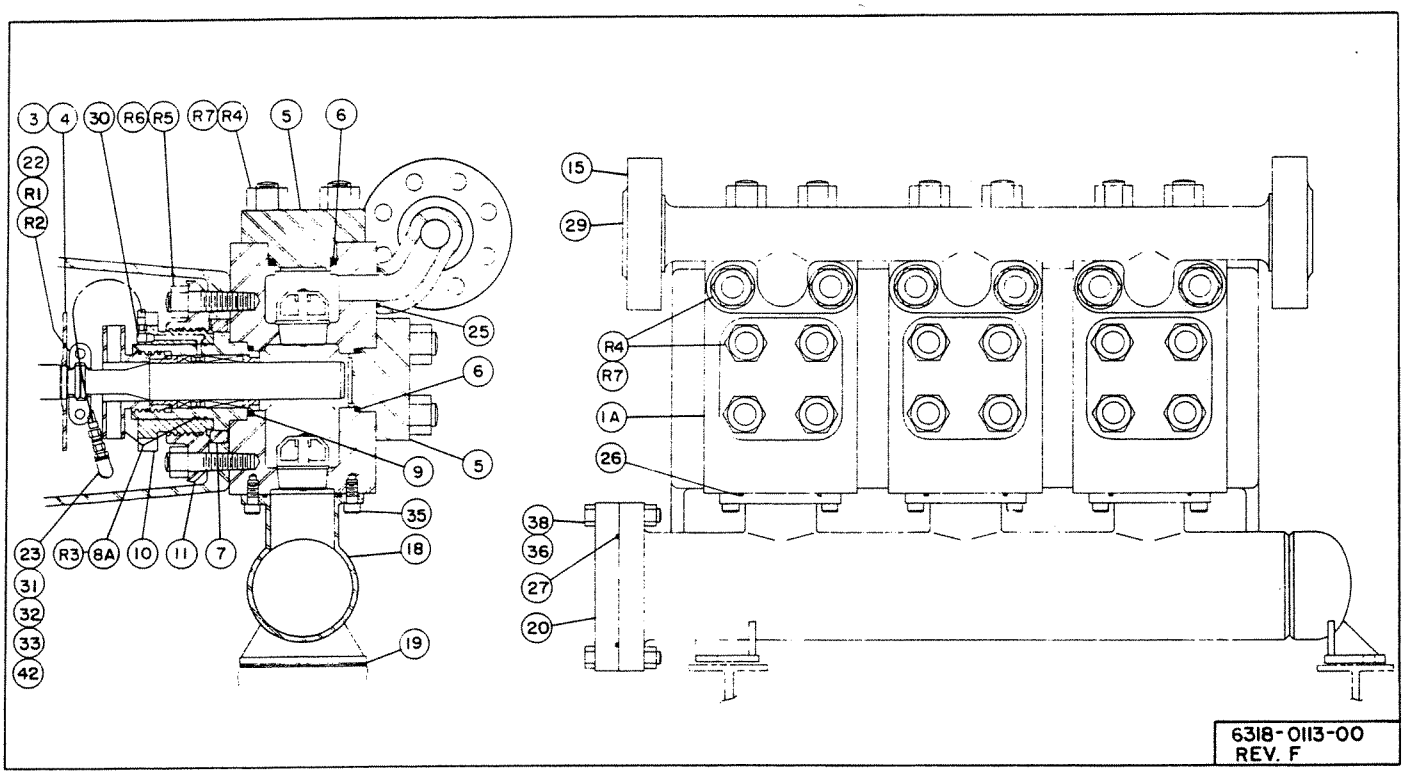


ITEM NO.	PART NO.	DESCRIPTION	NO. REQD	ITEM NO.	PART NO.	DESCRIPTION	NO. REQD
	6318-0088-00	Fluid End Assy. (Rev C)	1	25	As Specified	Piston	3
1	6318-0087-00	Fluid End - Studded	1	26	7602-159003	1/8" Spray Nozzle	3
2	7507-2201-00	Stud	12	27	7503-0024-06	Hose Assembly	3
3	7507-2102-00	Stud	8	28	7602-160057	Suction Flange Gasket	1
4	6318-0024-00	Valve Pot Cover	3	29	7602-160038	O-Ring	3
5	6318-0031-00	Cover Seal	3	30	7602-160025	O-Ring	2
6	6318-0025-00	Cylinder Head	3	32	7601-034042	3/4" x 1-3/4" Ferry Hd Cpscr	18
7	7602-220004	Cylinder Head Seal	3	33	7601-033139	1" x 5" HxHd Capscrew	12
8	6310-0084-00	Liner Seal	3	35	7601-063020	1" Heavy Hex Nut	12
9	6318-0023-00	Liner Lock	3	36	7601-063017	1-1/2" Heavy Hex Nut	12
10	6318-0027-00	Liner Lock Housing	3	37	7601-063024	1-1/4" Heavy Hex Nut	8
11	6318-0035-00	Valve Guide - Upper	3	38	7602-528072	1/16" Soft Iron Wire x 6'	1
12	6318-0034-00	Retainer-Upper Valve Guide	3	39	7601-072017	Heavy Lock Nut	3
13	7501-0051-00	Retainer Screw	12	40	7601-084062	Roll Pin	3
14	6318-0099-00	Valve Guide - Lower	3	41	7601-227036	Snap-Tite Coupler	3
15	6318-0101-00	Bushing-Lower Valve Guide	3	42	7601-227037	Snap-Tite Nipple	3
17	6318-0041-00	Discharge Flange	1	43	7601-209011	Stratoflex Adapter	3
18	6318-0081-00	Discharge - Blind Flange	1	45	7601-257039	1/8" 90-Elbow (Galv)	3
19	6318-0085-00	Suction Manifold	1	46	7601-253035	1/2" x 1/8" Bushing	3
20	6318-0092-00	Suction Manifold Shim Set	2				
21	6310-0022-10	Piston Rod Clamp	3	R1	7601-033100	3/4" x 3" HxHd Capscrew	6
22	6318-0084-00	Piston Rod	3	R2	7601-132018	3/4" Lock Washer	6
24	6318-0079-00	Liner End Cover	3	R3	6318-0032-00	Fluid Baffle Disc	3

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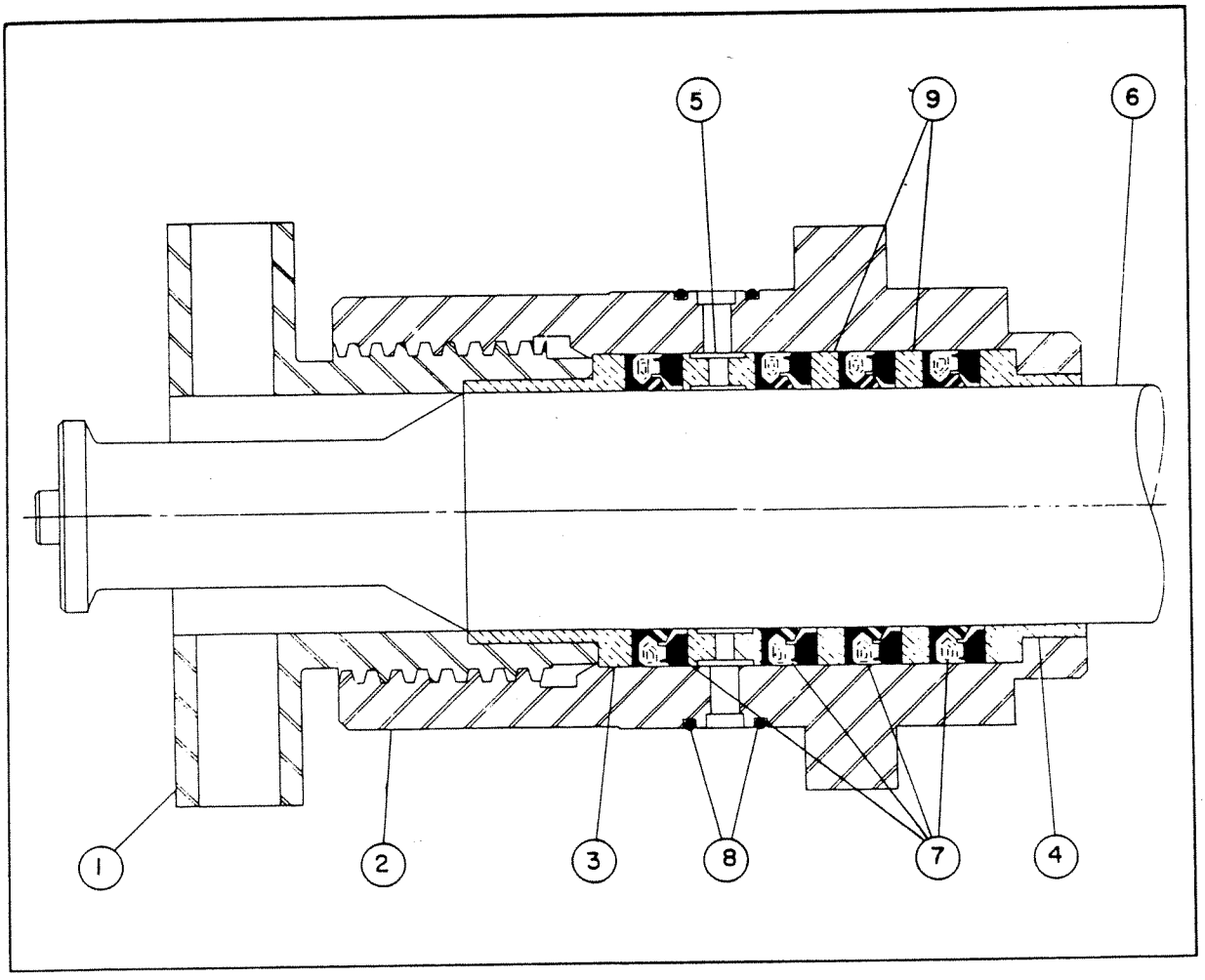
F-350 API-3 H.P. FLUID END

PLUNGER TYPE



ITEM NO.	PARTS NO.	DESCRIPTION	NO. REQD	ITEM NO.	PARTS NO.	DESCRIPTION	NO. REQD
	6318-0113-00	Fluid End Assembly (Rev. F)	1	26	7602-160038	O-Ring	3
1	6318-0111-00	Fluid End - Studded	3	27	7602-160057	O-Ring (Suction Flange Gskt)	1
3	6318-0102-00	Fluid Baffle Back-Up Plate	3	30	7601-209032	Stratoflex Elbow	3
4	6318-0032-00	Fluid Baffle Disc	3	31	7601-209011	Stratoflex Adapter	3
5	6318-0107-00	Fluid End Cover	6	32	7601-227036	Snap-Tite Coupler	3
6	7602-220009	Cover Seal	6	33	7601-227037	Snap-Tite Nipple	3
7	6318-0161-00	Frame Adapter Ring (Not Reqd.w/ Frame 6318-0071-00)	3	35	7601-034054	3/4" x 1-3/4" SktHd Cpscrew	18
				36	7601-033139	1" x 5" HxHd Cpscrew	12
8	As Specified	Stuffing Box Assy (See PF-3-2A)	3	38	7601-063020	1" Heavy Hex Nut	12
9	6318-0031-00	Stuffing Box Seal	3	42	7601-253035	1/2" x 1/8" Bushing	3
10	6318-0023-01	Stuffing Box Lock	3				
11	6318-0027-10	Housing, Stuffing Box Lock	3	R1	7601-033100	3/4" x 3" HxHd Cpscrew	6
15	6318-0109-00	Discharge Manifold	1	R2	7601-132018	3/4" Lock Washer	6
18	6318-0085-00	Suction Manifold	1	R3	7602-161018	O-Ring	6
19	6318-0092-00	Suction Manifold Shims	2	R4	7507-3453-00	Stud	30
20	6397-0233-00	Suction Flange 8" Pipe Thread	1	R5	7507-2201-00	Stud	18
22	6310-0022-10	Piston Rod Clamp	3	R6	7601-063017	1-1/2" Heavy Hex Nut	18
23	7503-0140-06	Hose Assembly	3	R7	7601-063006	1-3/4" Heavy Hex Nut	30
25	7602-160068	O-Ring (Manifold Gasket)	3				

F-350 STUFFING BOX



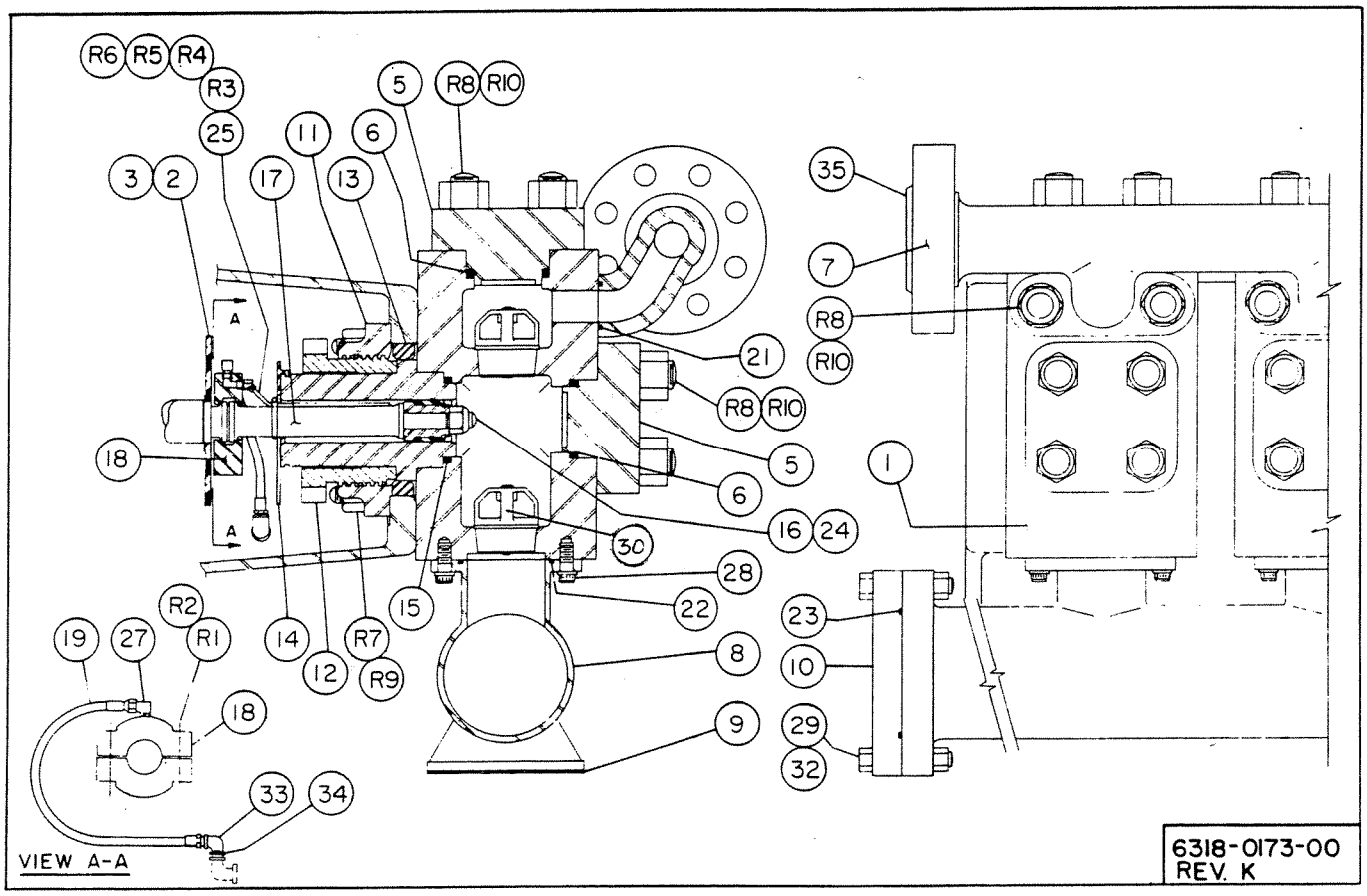
ITEM NO.	DESCRIPTION	NO. REQ'D	3-1/4" PLUNGER (Rev. A) PART NO.	3" PLUNGER (Rev. -) PART NO.	2-3/4" PLUNGER (Rev. -) PART NO.	2-1/2" PLUNGER (Rev. -) PART NO.
	Stuffing Box Assy		6318-0120-00	6318-0163-00	6318-0164-00	6318-0165-00
1	Stuffing Box Gland	3	6318-0114-00	6318-0114-00	6318-0114-01	6318-0114-01
2	Stuffing Box	3	6318-0115-00	6318-0115-00	6318-0115-01	6318-0115-01
3	Gland Bushing	3	6318-0116-00	6318-0131-00	6318-0137-00	6318-0143-00
4	Bottom Bushing	3	6318-0117-00	6318-0132-00	6318-0138-00	6318-0144-00
5	Lantern Ring	3	6318-0118-00	6318-0133-00	6318-0139-00	6318-0145-00
6	Plunger	3	6318-0119-00	6318-0134-00	6318-0141-00	6318-0146-00
7	Packing Set	3	7602-168111	7602-168112	7602-168113	7602-168114
8	O-Ring	6	7602-161018	7602-161018	7602-161018	7602-161018
9	Spacer	6	6318-0123-00	6318-0135-00	6318-0142-00	6318-0147-00

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F-350 API-3 H.P. FLUID END

PISTON & LINER TYPE

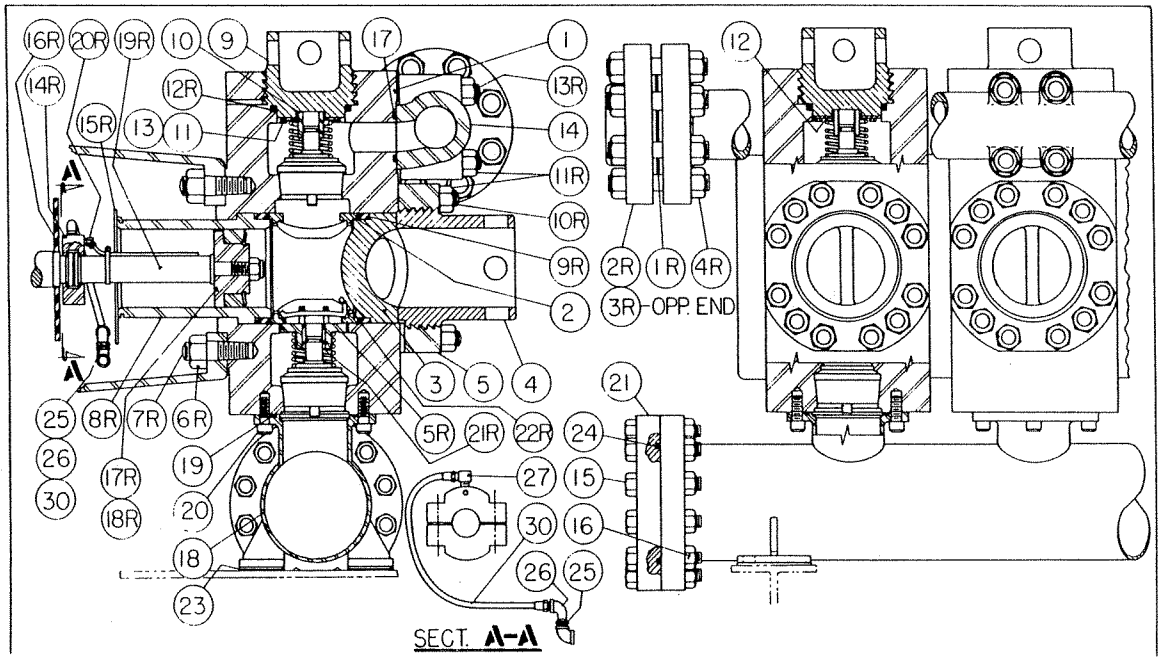


ITEM NO.	PART NO.	DESCRIPTION	NO. REQD	ITEM NO.	PART NO.	DESCRIPTION	NO. REQD
	6318-0173-00	Fluid End Assembly (Rev K)	1	24	7601-072017	Heavy Lock Nut	3
1	6318-0111-00	Fluid End - Studded	3	25	6318-0226-00	Liner Wash Tubing Assembly	3
2	6318-0032-00	Baffle Disc	3	27	7601-209036	Stratoflex Elbow	3
3	6318-0102-00	Baffle Back-up Plate	3	28	7601-034054	3/4" x 1-3/4" Skt Hd Cpscrew	18
5	6318-0107-00	Fluid End Cover	6	29	7601-033139	1" x 5" Hex Hd Cpscrew	12
6	7602-220009	Cover Seal	6	30	7602-292082	Reed-American Valve Assy.	6
7	6318-0109-00	Discharge Manifold	1	31		N/A	
8	6318-0085-00	Suction Manifold	1	32	7601-063020	1" Heavy Hex Nut	12
9	6318-0092-00	Suction Manifold Shims	2	33	7601-257087	1/4" x 90-Str Ell (Galv)	3
10	6397-0233-00	Suction Flange - 8" Pipe Thd	1	34	7601-253034	1/2" x 1/4" Bushing (Galv)	3
11	6318-0027-10	Liner Lock Housing	3	35	7601-066128	Ring Joint Gasket	2
12	6318-0023-00	Liner Lock	3				
13	6318-0161-00	Adapter Ring (Not Req'd w/ Frame 6318-0071-00)	3	R1	7601-033100	3/4" x 3" Hex Hd Cpscrew	6
				R2	7601-132018	3/4" Lock Washer	6
14	6318-0225-00	Liner End Cover	3	R3	7601-275023	45-Male Ell	3
15	6318-0031-00	Liner Seal	3	R4	7602-072004	Clamp	3
16	As Specified	Piston	3	R5	7601-336009	1/4" Copper Tubing	3
17	6318-0084-00	Piston Rod	3	R6	7601-277002	Wthd Nut	3
18	6310-0022-10	Piston Rod Clamp	3	R7	7507-2201-00	Stud	18
19	7503-0160-19	Hose Assembly	3	R8	7507-3453-00	Stud	30
21	7602-160068	O-Ring (Manifold Gasket)	3	R9	7601-063017	1-1/2"-8 Heavy Hex Nut	18
22	7602-160038	O-Ring	3	R10	7601-063006	1-3/4"-8 Heavy Hex Nut	30
23	7602-160057	O-RIng (Suction Flange Gasket)	1				

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FLUID END FOR F-350, F-500 & F-650



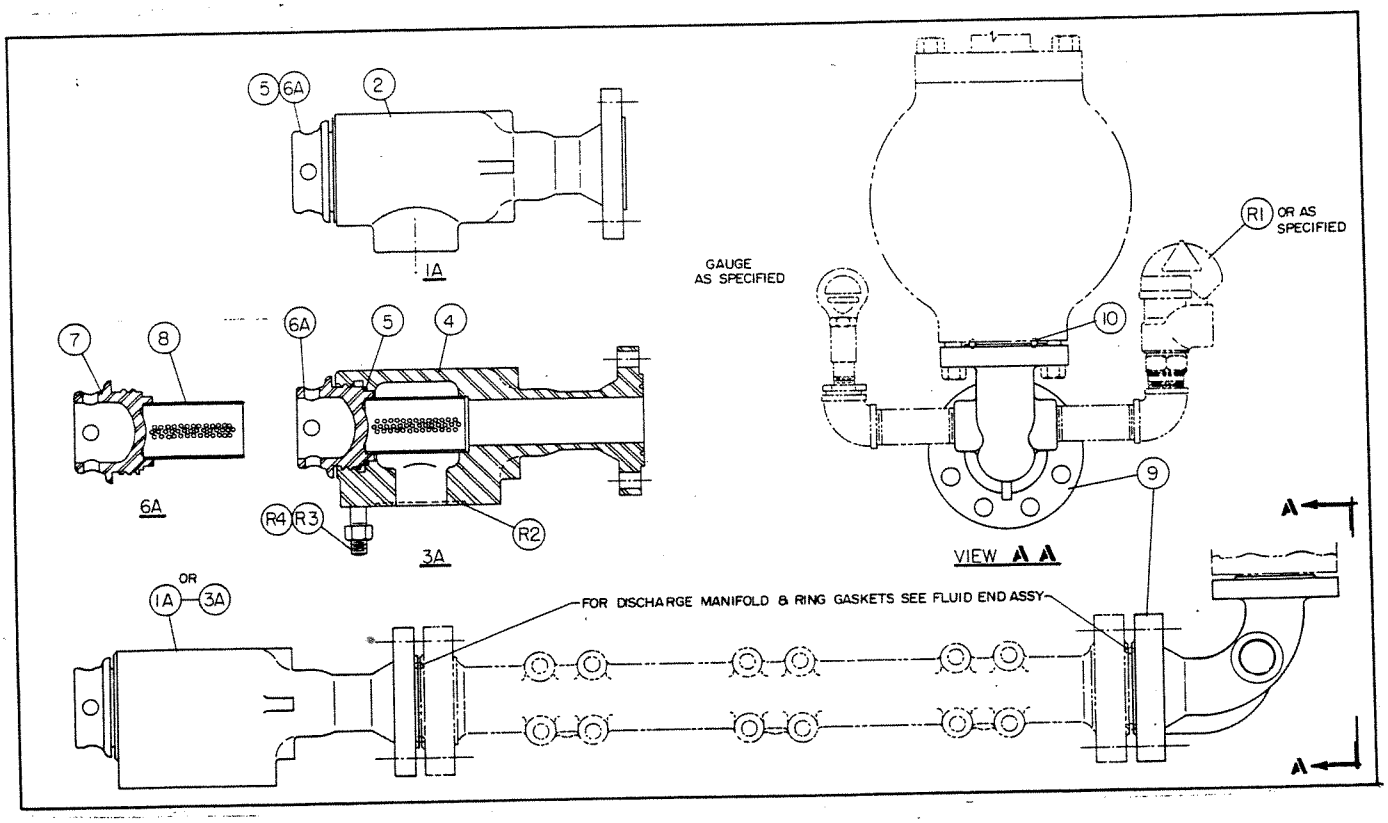
SECT. A-A

ITEM NO.	DESCRIPTION	NO. REQD	F-350(Rev R) 6318-0156-00	F-500(Rev L) 6322-0034-00	F-650(Rev N) 6321-0014-00
	Fluid End Assembly	1	6318-0156-00	6322-0034-00	6321-0014-00
1	Fluid End - Studded	3	6318-0151-00	6318-0151-00	6318-0151-00
2	Liner Cage	3	6318-0148-00	6318-0148-00	6318-0148-00
3	Cylinder Head Plug	3	6318-0158-00	6318-0158-00	6318-0158-00
4	Cylinder Head	3	6318-0157-00	6318-0157-00	6318-0157-00
5	Thread Ring	3	6318-0130-00	6318-0130-00	6318-0130-00
9	Valve Pot Cover	3	6310-0016-01	6310-0016-01	6310-0016-01
10	Valve Guide - Upper	3	6397-0602-00	6397-0602-00	6397-0602-00
11	Valve Guide Retainer Bolt	12	7501-0051-00	7501-0051-00	7501-0051-00
12	Valve Guide Retainer-Upper	3	6310-0133-00	6310-0133-00	6310-0133-00
13	#11 Soft Iron Wire x 3'0"	1	7602-520036	7602-520036	7602-520036
14	Discharge Manifold	1	6318-0128-00	6322-0036-00	6321-0012-00
15	1" 8 x 5" Hx Hd Capscrew	24	7601-033139	7601-033139	7601-033139
16	1"-8 Heavy Hex Nut	24	7601-063020	7601-063020	7601-063020
17	O-Ring	3	7602-160023	7602-160023	7602-160023
18	Suction Manifold	1	6318-0126-00	6322-0035-00	6321-0013-00
19	O-Ring	3	7602-160038	7602-160038	7602-160038
20	3/4" x 1-1/2" Skt Hd Cpsrw	18	7601-034053 3/4" x 1-1/2"	7601-034053 3/4" x 1-1/2"	7601-034055 3/4" x 2"
21	Suction Flange (8 Thrd)	1	6397-0233-00	6397-0233-00	6397-0233-00
23	Suction Manifold Shim Set	4	6318-0154-00	6318-0154-00	6318-0154-00
24	Suction Flange Gskt	2	7602-160057	7602-160057	7602-160057
25	1" x 1/4" Galv Pipe Bushing	3	7601-253042	7601-253042	7601-253042
26	1/4" 90 Ell (Galv. Street)	3	7601-257087	7601-257087	7601-257087
27	Stratoflex Elbow	3	7601-209036	7601-209036	7601-209036
30	Hose Assembly	3	7503-0160-19	7503-0160-19	7503-0160-19
R1	Ring Joint Gasket	2	7602-066003	7602-066003	7602-066003

ITEM NO.	DESCRIPTION	NO. REQD	F-350(Rev R) 6318-0156-00	F-500(Rev L) 6322-0034-00	F-650(Rev N) 6321-0014-00
R2	4" Thd. Flange	1	7601-206106	7601-206106	7601-206106
R3	4" Blind Flange	1	7601-206135	7601-206135	7601-206135
R4	Stud w/Nuts (1-1/4" x 8")	16	7601-126024	7601-126024	7601-126024
R5	Lower Valve Guide	3	6318-0152-00	6318-0152-00	6318-0152-00
R6	1-1/2"-8 Heavy Hex Nut	18	7601-063017	7601-063017	7601-063017
R7	Frame To Fluid End Stud	18	7507-2207-00	7507-2207-00	7507-2207-00
R8	Liner (6")	3	7602-136131	7602-136131	7602-136131
R9	Liner Seal	6	7602-220034	7602-220034	7602-220034
R10	Thd. Ring to F.E. Stud	36	7507-3402-00	7507-3402-00	7507-3402-00
R11	1-1/8"-8 Heavy Hex Nut	48	7601-063026	7601-063026	7601-063026
R12	Valve Cover Seal	3	6310-0084-00	6310-0084-00	6310-0084-00
R13	Disch Manif to F.E. Stud	12	7507-3407-00	7507-3407-00	7507-3407-00
R14	Piston Rod Clamp	3	6310-0022-10	6310-0022-10	6310-0022-00
R15	Liner End Cover	3	6318-0224-00	6318-0224-00	6318-0224-00
R16	Baffle Disc	3	6318-0032-00	6318-0032-00	6310-0087-00
R17	Piston (6")	3	As Specified	As Specified	As Specified
R18	ESNA Heavy Lock Nut	3	7601-072017	7601-072017	7601-072017
R19	Piston Rod	3	6318-0084-00	6322-0054-00	6321-0011-00
R20	Liner Wash Tubing Assembly	3	6318-0226-00	6318-0226-00	6318-0048-00
	CONSISTING OF:				
	Wthd. Inv. Male Ell	3	7601-275023	7601-275023	7601-275023
	Wthd. Nut	3	7601-277002	7601-277002	7601-277002
	1/4" Copper Tubing	3	7601-336009	7601-336009	7601-336010
	Clamp (#5236 Ideal)	3	7602-072004	7602-072004	7602-072066
	3/4" x 3" Hx Hd Cpscrew	2	7601-033100	7601-033100	7601-033100
	3/4" Lock Washer	2	7601-132018	7601-132018	7601-132018
R21	Lower Vlv Guide Bushing	3	6318-0155-00	6318-0155-00	6318-0155-00
R22	Lower Vlv Guide Locking Clip	3	6318-0153-00	6318-0153-00	6318-0153-00

Superseding 10-77 Issued

F-350 THRU FB-1600
DISCHARGE STRAINER & ACCESSORY MANIFOLD

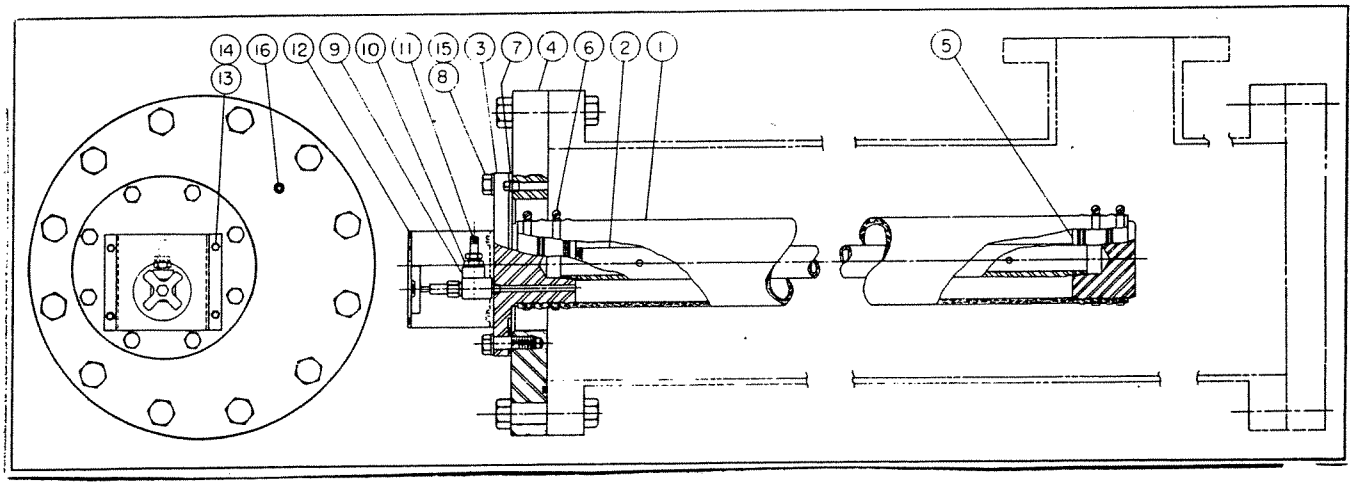


ITEM NO.	NO. REQ'D	DESCRIPTION	F-350	F-350 H.P.	F-500	F-650	F-750	F-800 Thru FB-1600
1A	1	Screwed Discharge Manifold Assembly	6310-0139-00	-----	6310-0139-00	6310-0139-00	6310-0139-00	-----
2	1	Strainer Housing 4" NPT Outlet	6310-0130-00	-----	6310-0130-00	6310-0130-00	6310-0130-00	-----
3A	1	Flanged Discharge Manifold Assy 5" Outlet	-----	6318-0170-00	-----	-----	6310-0189-00	6317-0039-00
or	1	Flanged Discharge Manifold Assy 6" Outlet	-----	-----	-----	-----	-----	6317-0099-00
4	1	Strainer Housing, 5" Outlet	-----	6318-0174-00	-----	-----	6310-0194-00	6317-0049-00
or	1	Strainer Housing, 6" Outlet	-----	-----	-----	-----	-----	6317-0097-00
5	1	Strainer Gasket ARP-439	-----	7602-160040	7602-160040	7602-160040	7602-160040	7602-160040
6A	1	Discharge Manifold Strainer Assembly	-----	6397-0290-00	6397-0290-00	6397-0290-00	6397-0290-00	6397-0290-00
7	1	Strainer Cap	-----	6397-0291-00	6397-0291-00	6396-0291-00	6397-0291-00	6397-0291-00
8	1	Strainer	-----	6397-0293-01	6397-0293-01	6397-0293-01	6397-0293-01	6397-0293-01
9	1	PD-2 Accessory Manifold w/2-3" Side Outlets	6310-0129-00	-----	6310-0129-00	6310-0129-00	6310-0129-00	6317-0114-00
or	1	PD-2HP Acc. Manifold w/2-3" Side Outlets	6310-0209-00	6318-0017-00	6310-0209-00	6310-0209-00	6310-0209-00	6317-0114-00
or	1	PD-43 & PD-53 Acc. Manifold w/2-3" Outlets	6322-0100-00	-----	6310-0100-00	6310-0100-00	6310-0100-00	6317-0098-00
or	1	PD-45 & PD-55 Acc. Manifold w/2-3" Outlets	6310-0193-00	-----	6310-0193-00	6310-0193-00	6310-0193-00	6317-0040-10
or	1	K-20-5000 Hydril Acc. Manifold w/2-3" Outlets	-----	-----	-----	-----	6310-0193-00	6317-0040-10
or	1	K-10-5000 Hydril Acc. Manifold w/2-3" Outlets	-----	6318-0168-00	-----	-----	-----	-----
or	1	Relief Valve & Gauge Acc. Manifold w/3-2" Out.	-----	6318-0127-00	-----	-----	-----	-----
10	1	R.J. Gasket, PD-2 & PD-2HP Dampener (R-27)	7602-066016	7602-066016	7602-066016	7602-066016	7602-066016	7602-066016
or	1	R.J. Gasket, Hydril K-10-5000 Dampener (R-38)	-----	7602-066135	-----	-----	-----	-----
or	1	R J Gasket PD-43,PD-53, K-20-3000 Damp.(R-37)	7602-066022	-----	7602-066002	7602-066002	7602-066002	7602-066002
or	1	R J Gasket PD-45,PD-55, K-20-5000 Damp.(R-39)	7602-066003	-----	7602-066003	7602-066003	7602-066003	7602-066003
R1	1	C-E 3" Type 'B' Shear Relief Valve	6923-0016-00	-----	6923-0016-00	6923-0016-00	6923-0016-00	6923-0016-00
R2	1	R.J. Gasket,(R-44) 5" Flg.-Not Included	-----	7602-066111	-----	-----	7602-066111	7602-066111
or	1	R.J. Gasket,(R-46) 6" Flg.-Not Included	-----	-----	-----	-----	-----	7602-066005
R3	8	Stud - 5" Flange	-----	7507-2201-00	-----	-----	7507-2201-00	7507-2201-00
or	12	Stud - 6" Flange	-----	-----	-----	-----	-----	7507-2743-00
R4	8	Heavy Hex Nut (1-1/2"), 5" Flange	-----	7601-063017	-----	-----	7601-063017	7601-063017
or	12	Heavy Hex Nut (1-3/8"), 6" Flange	-----	-----	-----	-----	-----	7601-063028

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SUCTION DESURGER



ITEM NO.	DESCRIPTION	NO. REQ'D	F-350 thru F-650 Rev. B SD-4 PART NO.	F-350 thru F-650 (NEW) SD-4A PART NO.	F-800 Rev. B SD-6 PART NO.	F-1000 thru FB-1600 Rev. G SD-8 PART NO.
	Assembly		6922-0077-00	6922-0099-00	6922-0070-00	6922-0062-00
1	Bladder	1	6922-0073-00	6922-0094-00	6922-0069-00	6922-0054-00
2	Support Rod	1	6922-0072-00	6922-0095-00	6922-0068-00	6922-0066-00
3	Charging Flange	1	6922-0074-00	6922-0100-00	6922-0063-00	6922-0063-00
4	Adapter Flange	1	6922-0071-00	6922-0098-00	6922-0064-00	6922-0048-01
5	End Plug	1	6922-0065-00	6922-0065-00	6922-0096-00	6922-0065-00
6	Hose Clamp	4	7602-072130	7602-072104	7602-072130	7602-072130
7	Gasket	1	6922-0076-00	6922-0097-00	6922-0053-00	6922-0053-00
8	5/8" x 1-3/4" Hex Head Capscrew	8	7601-033077	7601-033077	7601-033077	7601-033077
9	Marsh 1/4" Needle Valve 1900-MFA	1	7602-291077	7602-291077	7602-291077	7602-291077
10	1/4" x 1/8" Hex Pipe Bushing	1	7601-253001	7601-253001	7601-253001	7601-253001
11	1/8" Air Tank Valve	1	7602-291805	7602-291805	7602-291805	7602-291805
12	Valve Guard	1	6922-0075-00	6922-0101-00	6922-0067-00	6922-0067-00
13	1/4"-20 x 1/2" Hex Head Capscrew	4	7601-033001	7601-033001	7601-033001	7601-033001
14	1/4" Lockwasher	4	7601-132038	7601-132038	7601-132038	7601-132038
15	5/8" Lockwasher	8	7601-132030	7601-132030	7601-132030	7601-132030
16	1/4" Pipe Plug Grade 5	1	7601-259008	7601-259008	7601-259008	7601-259008

PRECHARGE RECOMMENDATIONS

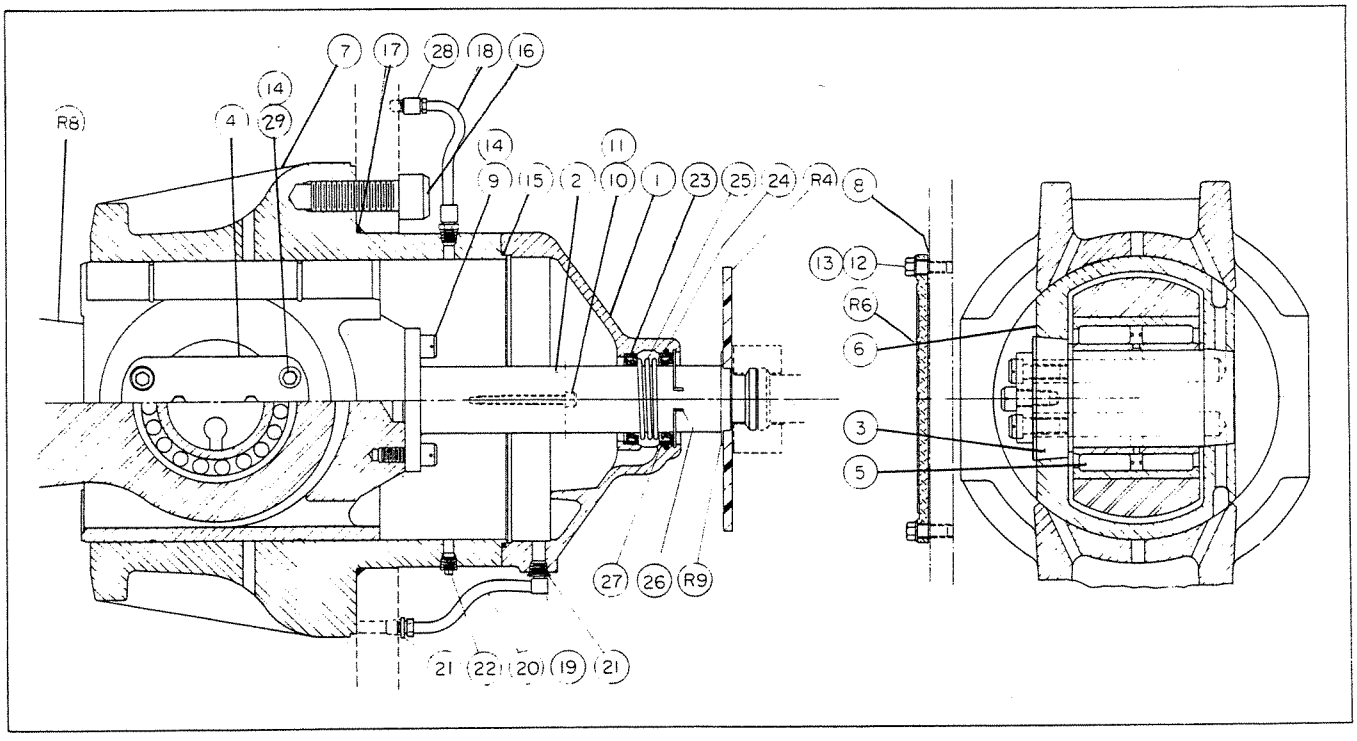
Approximately fifty percent (50%) of anticipated suction pressure with maximum precharge of 10 PSIG.

Any type of auto tire inflation equipment may be used to charge dampener.
Likewise, an auto tire pressure gauge may be used to check the pressure.

If desired pressure is exceeded, bleed off pressure by depressing pin in center of valve stem (Item #11)

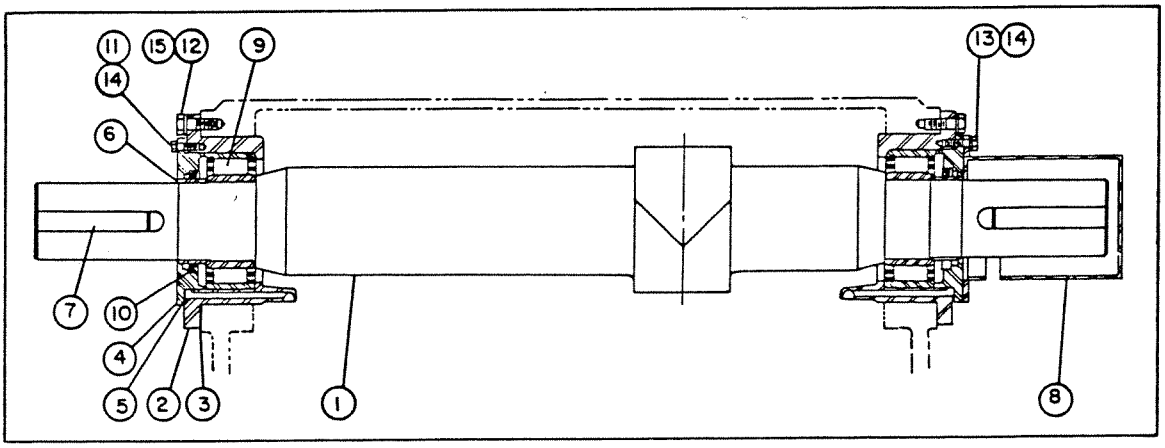
Install clamps (Item #6) to dimensions shown and tighten to 35-40 inch-pounds
Test at 20 PSI air pressure

F-350 THRU F-750 CROSSHEAD ASSEMBLY



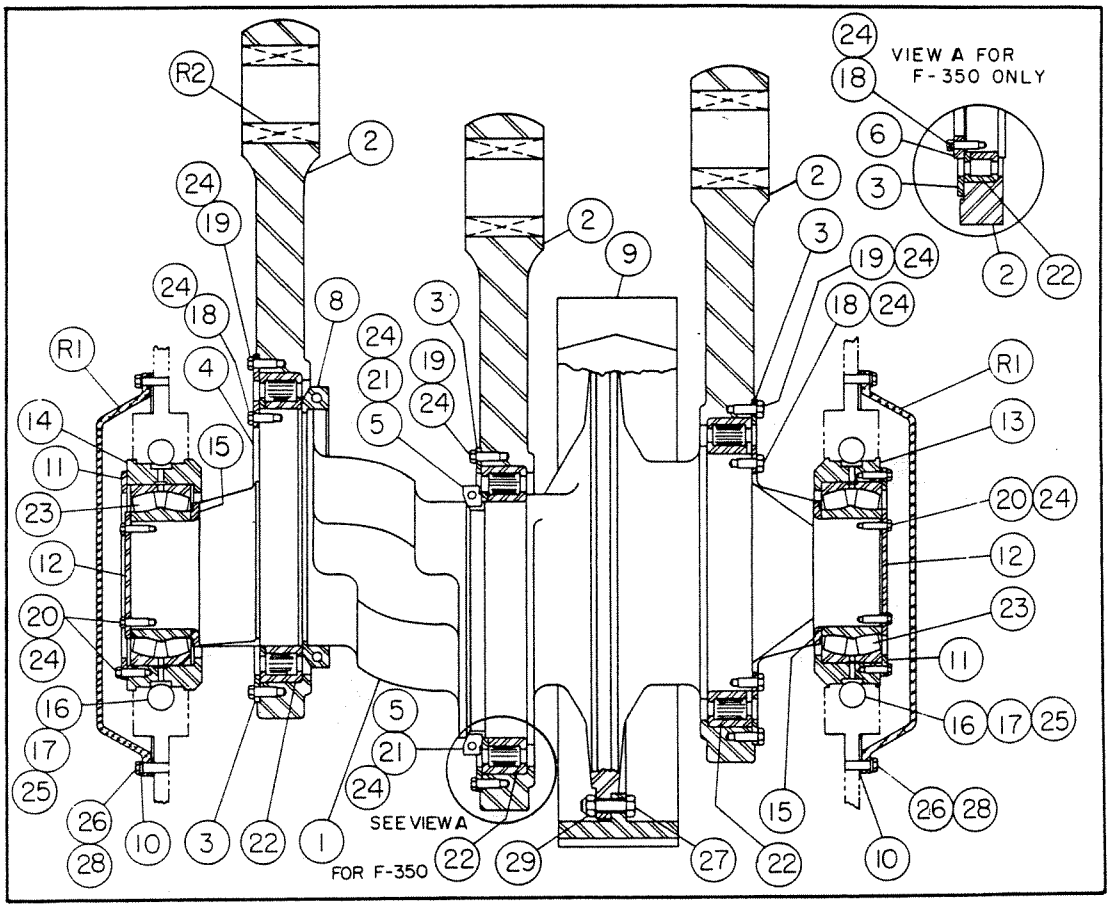
ITEM NO.	DESCRIPTION	NO. REQD.	F-350(Rev M) Part No.	F-500(Rev N) Part No.	F-650(Rev M) Part No.	F-750(Rev -) Part No.
	Crosshead Assembly	1	6318-0090-00	6322-0072-00	6321-0018-00	----
1	Diaphragm Stuffing Box	3	6318-0022-00	6322-0065-00	6310-0021-00	6310-0021-00
2	Crosshead Extension	3	6318-0179-00	6322-0068-00	6310-0070-00	6310-0070-00
3	Crosshead Pin	3	6318-0021-00	6322-0066-00	6310-0078-00	6310-0078-00
4	Crosshead Pin Retainer	3	6318-0026-00	6322-0067-00	6310-0134-00	6310-0134-00
5	Crosshead Bearing	3	7602-021277	7602-021291	6310-0011-00	6310-0011-00
6	Crosshead	3	6318-0028-00	6322-0064-00	6310-0013-10	6310-0013-10
7	Crosshead Guide	3	6318-0037-00	6322-0063-00	6310-0036-00	6310-0036-00
8	Crosshead Cover Gasket	2	6318-0075-00	6322-0052-00	6310-0055-00	6310-0055-00
9	5/8" x 1-1/2" Dr Hd Skt Cps	12	7501-1255-00	7501-1255-00	7501-1255-00	7501-1255-00
10	Skt. Hd. Cpscrew	18	7601-034118 3/8" x 3"	7601-034135 3/8" x 3-1/4"	7601-034118 3/8" x 3"	7601-034118 3/8" x 3"
11	3/8" Lockwasher	18	7601-132042	7601-132042	7601-132042	7601-132042
12	Hx. Hd. Cpscrew	20	7601-033076 5/8" x 1-1/2"	7601-033050 1/2" x 1-1/4"	7601-033076 5/8" x 1-1/2"	7601-033076(44) 5/8" x 1-1/2"
13	Plain Washer Small O.D.	10	7601-133005 5/8"	7601-133004 1/2"	7601-133005 5/8"	7601-133005(44) 5/8"
14	#16 Stainless Steel Wire	1	7602-531120	7602-531120	7602-531048	7602-531048
15	O-Ring	3	7602-163044	7602-163024	7602-160095	7602-160095
16	Socket Head Capscrew	24	7601-034069 1" x 3"	7601-034076 1-1/4"x 3-1/2"	7601-034075 1-1/4"x 3-1/4"	7601-034075 1-1/4" x 3-1/4"
17	O-Ring	3	7602-163054	7602-163025	7602-163025	7602-163025
18	1/4" Hose Assembly	3	7503-0090-18	7503-0090-18	7503-0090-18	7503-0090-18
19	Stflx 90-Ell	3	7601-209038	7601-209038	7601-209038	7601-209038
20	3/8" Hose Assembly	3	7503-0070-36	7503-0100-36	7503-0070-36	7503-0070-36
21	1/2" x 3/8" Pipe Bushing	6	7501-253033	7601-253033	7601-253033	7601-253033
22	1/4" Pipe Plug	3	7601-259008	7601-259076	7601-259076	7601-259076
23	Single Lip Oil Seal	3	7602-213035	7602-213035	7602-213182	7602-213182
24	O-Ring	3	7602-160025	7602-160025	7602-160030	7602-160030
25	Stuffing Box Spring	3	6397-0551-00	6397-0551-00	6310-0077-00	6310-0077-00
26	Stuffing Box Lock Spring	3	6397-0595-00	6397-0595-00	6310-0073-00	6310-0073-00
27	Double Lip Oil Seal	3	7602-213272	7602-213272	7602-213273	7602-213273
28	Straight Adapter	3	7601-209016	7601-209016	7601-209016	7601-209016
29	Drilling Head Cpscrew	18	7501-1262-00 5/8" x 1-1/4"	7601-1255-00 5/8" x 1-1/2"	7501-0136-00 5/8" x 1-1/2"	7501-0136-00 5/8" x 1-1/2"
R4	Fluid Baffle Disc	3	6318-0032-00	6318-0032-00	6310-0087-00	6310-0087-00
R6	Crosshead Door	2	6318-0043-00	6322-0050-00	6310-0038-00	6310-0038-00
R8	Eccentric Strap	3	6318-0066-00	6322-0053-00	6310-0018-00	6310-0018-00
R9	Fluid Baffle Back-Up Plate	3	6318-0102-00	6318-0102-00	6310-0174-00	6310-0174-00

F-350 thru F-750 TRIPLEX PUMPS
Pinion Shaft Assemblies



ITEM NO.	DESCRIPTION	NO. REQD.	F-350 Rev B Part No.	F-500 Rev C Part No.	F-650 Rev C Part No.	F-750 Rev K Part No.
	Assembly		6318-0060-00	6322-0039-00	6321-0016-00	----
1	Pinion Shaft	1	6318-0029-00	6322-0022-00	6310-0029-01	6310-0029-01
2	Pinion Bearing Carrier	2	6397-0557-10	6322-0031-00	6310-0023-00	6310-0023-00
3	Pinion Bearing Carrier Gskt.	2	7502-0590-00	6322-0038-00	7502-0814-00	7502-0814-00
4	Oil Seal Carrier	2	6397-0558-00	6322-0030-00	6310-0037-00	6310-0037-00
5	Oil Seal Carrier Gasket	2	7502-0589-00	6322-0037-00	7502-0587-00	7502-0587-00
6	Oil Seal Wear Ring (Spacer)	2	6397-0535-00	6322-0023-00	6310-0058-00	6310-0058-00
7	Key	2	Furnished by Manufacturer (if C-E key required, see R1)			
8	Pinion Shaft Cover	1	6318-0059-00	6322-0070-00	6310-0074-00	6310-0074-00
9	Pinion Shaft Bearing	2	7602-021036 Hyatt A-5226-TS	7602-021037 Hyatt ~~A-5228-TS~~ A5228TS	7602-021039 Hyatt A-5232-TS	7602-021039 Hyatt A-5232-TS
10	Oil Seal	2	7602-213082 C/R 53701	7602-213087 C/R 58716	7602-213255 JM 6840-LPD	7602-213255 JM 6840-LPD
11	1/2"-13 X 1-1/4" Hx Hd Capscrew	12	7601-033219 (6)	7601-033219 (6)	7601-033219	7601-033219
12	3/4"-10 X 2" Hex Head Capscrew	16	7601-033307 (12)	7601-033307	7601-033307	7601-033307
13	Hex Head Capscrew	6	7601-033323 1/2" x 1-3/4"	7601-033323 1/2" x 1-3/4"	7601-033231 (5) 3/8" x 3/4"	7601-033231 (5) 3/8" x 3/4"
14	1/2" Lockwasher	12	7601-132016	7601-132016	7601-132016	----
15	3/4" Lockwasher	16	7601-132018 (12)	7601-132018	7602-132018	----
R1	Square Key	2	7504-3010-00	7504-3012-00	7504-3413-00	7504-3413-00

F-350 THRU F-750 CRANKSHAFT ASSEMBLY

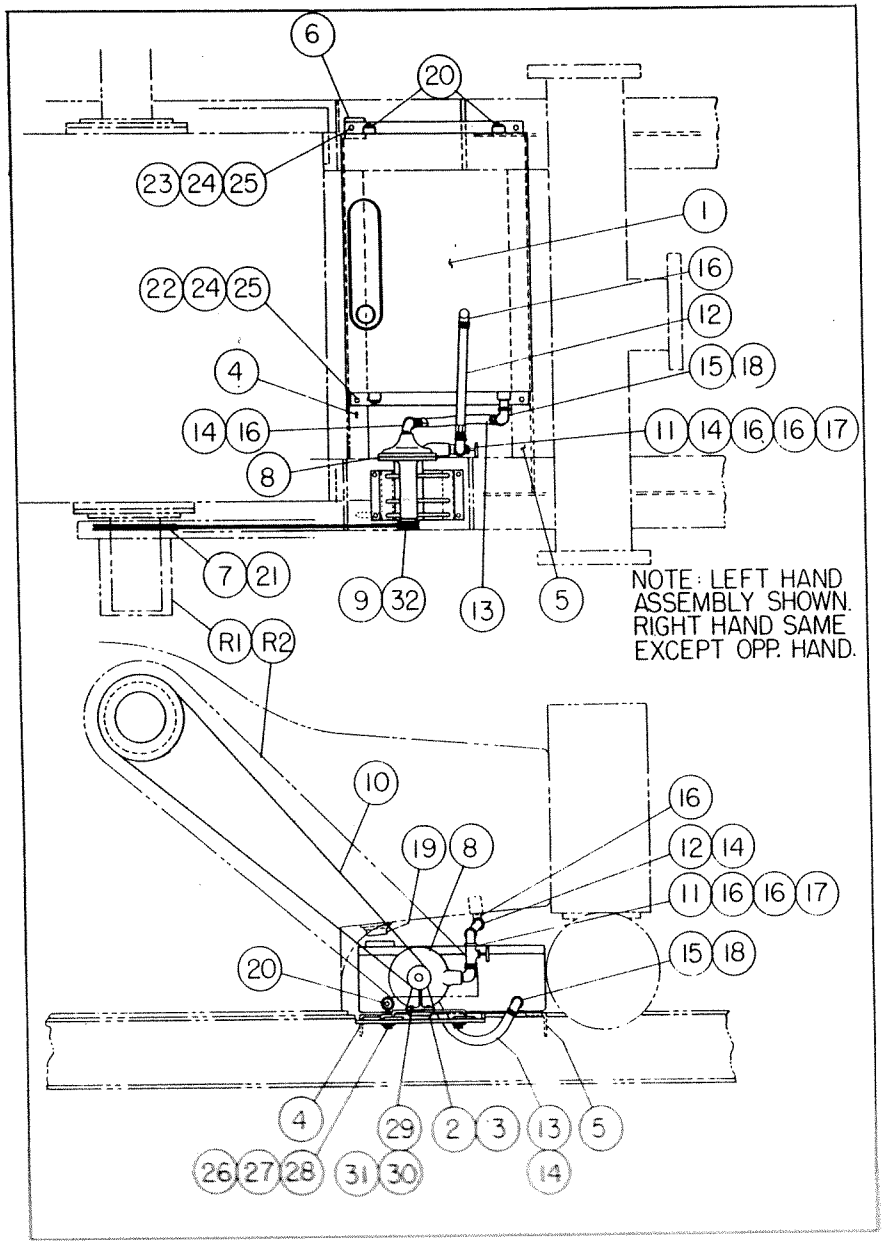


ITEM NO.	DESCRIPTION	NO. REQD.	F-350(Rev G) Part No.	F-500(Rev G) Part No.	F-650(Rev F) Part No.	F-750(Rev N) Part No.
	Assembly	1	6318-0080-00	6322-0047-00	6321-0017-00	----
1	Crankshaft	1	6318-0047-00	6322-0043-01	6310-0026-00	6310-0026-00
2	Eccentric Strap	3	6318-0066-00	6322-0053-00	6310-0018-00	6310-0018-00
3	Outer Race Retainer Ecc. Brg.	3	6318-0077-00	6310-0086-00	6310-0086-00	6310-0086-00
4	Inner Race Retner.Outboard Brg.	2	6318-0070-00	6322-0051-00	6310-0069-00(8)	6310-0069-00(8)
5	Inner Race Retainer,Center Brg.	1	----	6310-0085-00	6310-0085-00	6310-0085-00
6	Inner Race Retainer	1	6318-0265-00	----	----	----
8	Crnkshft Brg. Inner Retainer	1	6318-0249-00	6322-0118-00	6321-0070-00	6321-0070-00
9	Eccentric Ring Gear	1	6318-0030-00	6322-0012-00	6310-0028-01	6310-0028-01
10	Cover Gasket, Main Brg.	2	6318-0065-00	7502-089400	7502-081300	7502-081300
11	Outer Race Retainer, Main Brg.	2	6318-0074-00	6322-0048-00	6310-0075-00	6310-0075-00
12	Inner Race Retainer, Main Brg.	2	6318-0073-00	6322-0049-00	6310-0039-00	6310-0039-00
13	Main Bearing Carrier, Left	1	6318-0046-00	6322-0045-00	6310-0030-00	6310-0030-00
14	Main Bearing Carrier, Right	1	6318-0250-00	6322-0119-00	6321-0071-00	6310-0031-00
15	Spacer, Main Bearing	2	6318-0083-00	6322-0042-00	6310-0057-00	6310-0057-00
16	Housing Bolt, Main Bearing	4	7501-2738-00	7501-1281-00	7501-1279-00	7501-1279-00
17	Shim Set, Main Bearing	4	6318-0094-00	7502-0355-00	6310-0066-00	6310-0066-00
18	Drilled Hd. Capscrew	-	7501-0004-00(17)	7501-0061-00(10)	7501-0061-00(8)	7501-0061-00(8)
19	Drilled Hd. Capscrew	18	7501-0071-00	7501-0061-00	7501-0061-00	7501-0061-00
20	Drld Hd. Capscrw 1/2" x 1-1/4"	-	7501-0071-00(16)	7501-0071-00(24)	7501-0071-00(24)	7501-0071-00(24)
21	Drilled Socket Hd. Capscrew	2	----	7501-1252-00	7501-1252-00	7501-1280-00
22	Eccentric Bearing	3	7602-021278	6310-0012-00	6310-0012-00	6310-0012-00
23	Main Bearing	2	7602-020051	7602-020053	7602-020134	7602-020134
24	16 Ga. Safety Wire x 40'-0"	1	7602-528132	7602-528480	7602-528360	7602-528668
25	11 Ga. Safety Wire x 4'-0"	1	7602-520036	7602-520048	7602-520036	7602-520036
26	Hx. Hd. Capscrew 5/8" x 1-1/2"	24	7601-0330-76	7601-0330-76	7601-0330-76	7601-0330-86
27	Hx. Hd. Capscrew	12	7601-0333-31	7601-0336-92	7601-0336-60	7601-0336-60
28	5/8" Lock Washer	24	7601-1330-05(16)	7601-1330-05	7601-1330-05	7601-1330-05
29	ESNA Hvy. Hx. Lock Nut	12	7601-0720-15	7601-0720-16	7601-0720-17	7601-0720-17
R1	Main Bearing Cover	2	6318-0038-00	6322-0044-00	6310-0019-10	6310-0019-00
R2	Crosshead Bearing	3	7602-021277	7602-021291	6310-0011-00	6310-0011-00

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F-350 THRU F-800 PISTON & LINER WASH



ITEM NO.	DESCRIPTION	NO. REQD.	F-350(Rev B) S/N 64 & UP Part No.	F-500(Rev -) S/N 51 & UP Part No.	F-650(Rev -) S/N 11 & UP Part No.	F-800(Rev D) S/N 67 & UP Part No.
	Piston & Liner Assembly		6318-0293-00	6322-0168-00	6321-0081-00	6320-0174-00
1	35 Gallon Tank	1	6320-0178-00	6320-0178-00	6320-0178-00	6320-0178-00
2	Pump Support	1	6320-0177-00	6320-0177-00	6320-0177-00	6320-0177-00
3	Adjustment Plate	1	6320-0176-00	6320-0176-00	6320-0176-00	6320-0176-00
4	Tank Support Angle	1	6318-0288-00	6322-0163-00	6321-0076-00	6320-0181-00
5	Tank Support Angle	1	6318-0289-00 L.H.	6322-0164-00 L.H.	6321-0075-00	6320-0182-00
	Tank Support Angle	1	6318-0290-00 R.H.	6322-0167-00 R.H.	----	----
6	Tank Spacer Plate	1	----	----	6320-0179-00	6320-0179-00
7	Sheave - P.D.-1A	1	6318-0291-00 9-7/8"	6322-0165-00 10-1/2"	6321-0080-00 10-3/4"	6320-0180-00 11-3/4"
8	Gardner-Denver CA-122 Cent. Pump	1	7602-182038	7602-182038	7602-182038	7602-182038
9	3" P.D.-1A-Sheave w/QD-SH Hub	1	7602-236404	7602-236404	7602-236404	7602-236404
10	V-Belt	1	7602-033030 A-96	7602-033031 A-105	7602-033032 A-112	7602-033034 A-128
11	1" Globe Valve	1	7602-291019	7602-291019	7602-291019	7602-291019
12	1" Hose Assembly	1	7503-0290-66	7503-0300-66	7503-0300-66	7503-0180-66
13	1" Hose Assembly	1	7503-0480-66	7503-0480-66	7503-0480-66	7503-0120-66
14	Male Hose Adapter (1013-16-16B)	2	7601-209028	7601-209028	7601-209028	7601-209028
15	1" x 90 Elbow (Galv.)	1	7601-257043 (2)	7601-257043	7601-257043	7601-257043
16	1' x 90 Street Ell	4	7601-257091 (3)	7601-257091	7601-257091	7601-257091
17	1" x Close Nipple	1	7601-258160	7601-258160	7601-258160	7601-258160
18	1" x 2-1/2" Nipple	1	7601-258162	7601-258162	7601-258162	7601-258162
19	2-1/2" Nipple, Thd. One End	1	7601-258857 2-1/4"	7601-258857 2-1/4"	7601-258857 2-1/4"	7601-258870 1-3/4"
20	1" Pipe Plug	3	7601-259011	7601-259011	7601-259011	7601-259011
21	1/4"-20 x 1-3/4" Cup Point Set	2	7601-037017	7601-037017	7601-037017	7601-037017
22	5/8"-11 x 1-1/2" Hx. Hd. Capscr.	4	7601-033076	7601-033076	7601-033076 (3)	7601-033076 (3)
23	5/8"-11 x 2-1/2" Hx. Hd. Capscrew	1	----	----	7601-033080	7601-033080
24	5/8"-11 Hex. Nut	4	7601-061012	7601-061012	7601-061012	7601-061012
25	5/8" Lockwasher	4	7601-132030	7601-132030	7601-132030	7601-132030
26	3/4"-10-1-1/4" Hx Hd Capscrew	4	7601-033094	7601-033094	7601-033094	7601-033094
27	3/4" Lockwasher	4	7601-132018	7601-132018	7601-132018	7601-132018
28	3/4" Plain Waher Wide O.D.	2	7601-134008	7601-134008	7601-134008	7601-134008
29	3/8"-16 Hx. Hd. Capscrew	6	7601-033031 1-1/4"	7601-033031 1-1/4"	7601-033031 1-1/4"	7601-033032 1-1/2"
30	3/8" Lockwasher	6	7601-132014	7601-132014	7601-132014	7601-132014
31	3/8" Plain Washer Wide O.D.	6	7601-134022	7601-134022	7601-134022	7601-134022
32	1/4" x 1/4" x 1/8" Key	1	7504-0254-00	7504-0254-00	7504-0254-00	7504-0254-00
R1	Belt Guard (L.H.)	1	6318-0292-00	6322-0166-00	6321-0077-00	6320-0179-00
R2	Belt Guard (R.H.)	1	6318-0292-01	6322-0166-01	6321-0077-01	6320-0179-00

F-350 THRU FA-1600 TOOL LIST

ITEM NO.	DESCRIPTION	NO. REQ'D	F-350 PART NUMBER	F-500 PART NUMBER	F-650 PART NUMBER
	Tool List	1	6318-0013-00	6320-0008-00	6321-0006-00
1	Proto Socket (2-3/8")	1	7602-301009	7602-301009	7602-301009
2	Proto Socket (2")	1	7602-301022	7602-301022	----
3	Proto Socket (1-13/16")	1	7602-301034	7602-301034	7602-301034
4	Proto Sliding Bar	1	7602-301005	7602-301005	7602-301005
5	Proto Sliding Plug	1	7602-301048	7602-301048	7602-301048
6	Proto 8" Extension	1	7602-301007	7602-301007	7602-301007
7	Valve Cover Bar	1	6397-0700-00	6397-0700-00	6397-0700-00
8	Cylinder Head Wrench	1	6316-0277-00	6316-0277-00	6316-0277-00
10	1-1/4" Allen Hx Wrench	1	----	7602-301057	----
11	1-1/2" Lg Series Hx Key	1	----	----	7602-301038

ITEM NO.	DESCRIPTION	NO. REQ'D	F-800 PART NUMBER	F-1000 PART NUMBER	F-1300-FA-1600 PART NUMBER
	Tool List	1	6320-0004-00	6319-0006-00	----
1	Proto Socket (2-3/8")	1	7602-301009	7602-301009	7602-301009
2	Proto Socket (2")	1	7602-301022	7602-301022	7602-301022
4	Proto Sliding Bar	1	7602-301005	7602-301005	7602-301005
5	Proto Sliding Plug	1	7602-301048	7602-301048	7602-301048
6	Proto 8" Extension	1	7602-301007	7602-301007	7602-301007
7	Valve Cover Bar	1	6397-0691-00	6397-0691-00	6397-0691-00
8	Cylinder Head Wrench	1	6316-0280-00	6316-0280-00	**
9	Snap-On Socket	1	7602-301052	7602-301051	7602-301059
12	Proto Socket (2-3/16")	1	7602-301049	7602-301049	----
16	Spanner Wrench	1	----	----	6316-0249-00

1/2 Ton hoist with trolley - 7602-5160-09

NOTE:
**For F-1300 & F-1600 Use 6316-0281-00
For FA-1300 & FA-1600 Use 6316-0276-00