PARTS LIST

850-PT

Triplex Piston Pump

FLUID END

NATIONAL OILWELL
P.O. BOX 4638
HOUSTON, TEXAS 77210–4638

As used herein, any references to Oilwell shall be deemed to mean National Oilwell.

Printed in U.S.A.

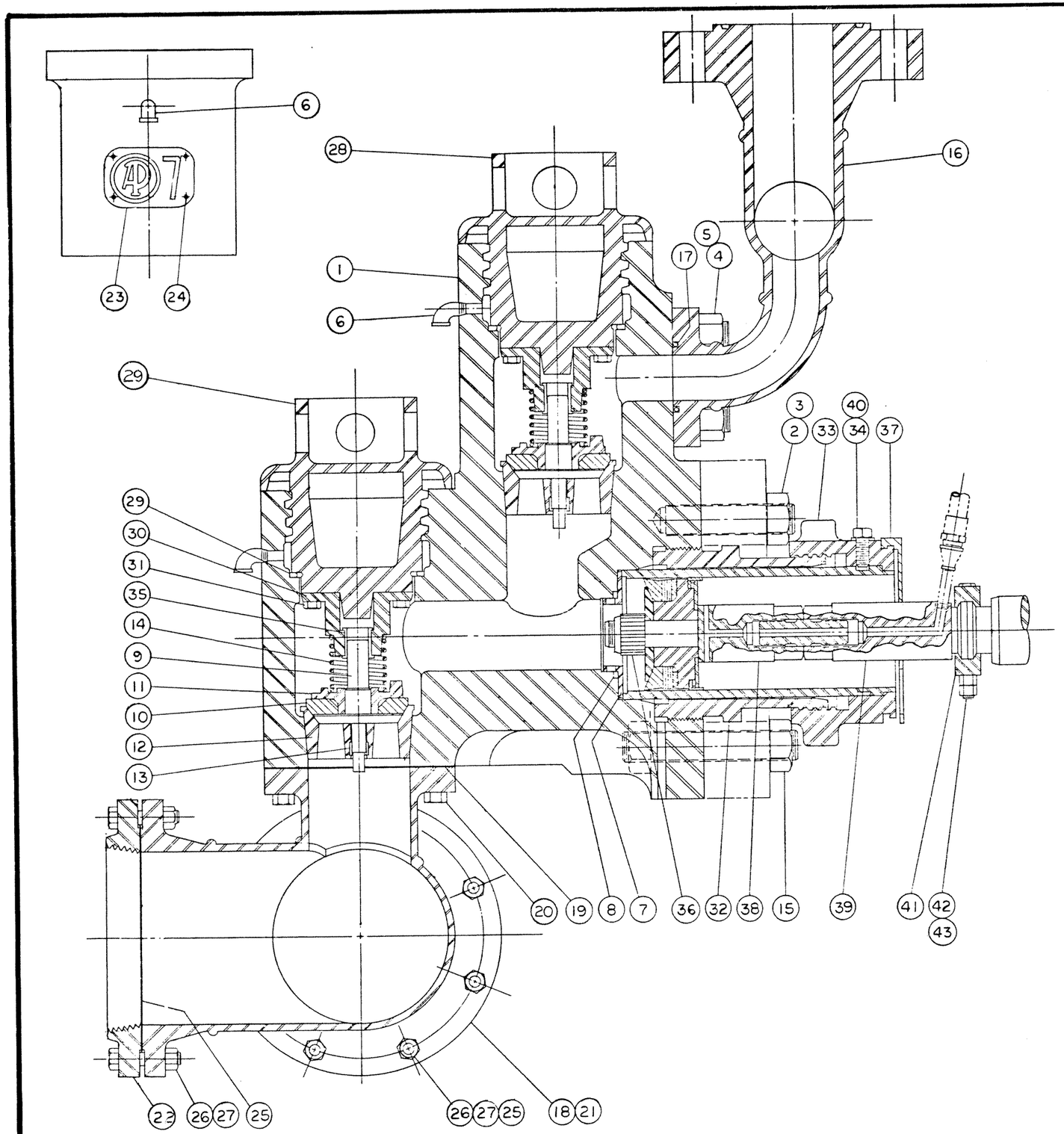
PARTS LIST
INDEX AND CHECK LIST

850-PT TRIPLEX PISTON PUMP

PAGE	DRAWING NUMBER	DESCRIPTION	SERIES OF ISSUE	DATE OF ISSUE	REASON FOR LATEST CHANGE*
		FLUID END			
1	P196-AY1	Fluid End	Second	2-15-75	
2	P196-AB1	Liner & Piston Assembly	Third	9-15-75	Corrected the Commodity Numbers for Liners
		POWER END			
3	P196-AV1	Power End Assembly	Second	2-15-75	
4	P196-AC1	Shaft Assemblies	Second	2-15-75	
5	P196-AD1	Jackshaft Assembly	Second	2-15-75	
6	P196-AX1	Liner Flushing System	Second	2-15-75	
7	P196-AN1	Internal Lubrication System	Second	2-15-75	
8	P196-AJ1	External Lubrication System	Second	2-15-75	
9	P184-AT1	Electric Lubrication System	First	2-15-75	
10	P185-AK1	Oil Level Assembly	Second	2-15-75	
11	P196-AG1	Heat Exchanger Assembly	Second	2-15-75	
		OUTLINE DIMENSIONS			
12	P196-B2	Outline Dimensions	Second	2-15-75	

*Only the page(s) listed in this column are affected with this issue (the other pages were not changed at this time).

REMARKS:

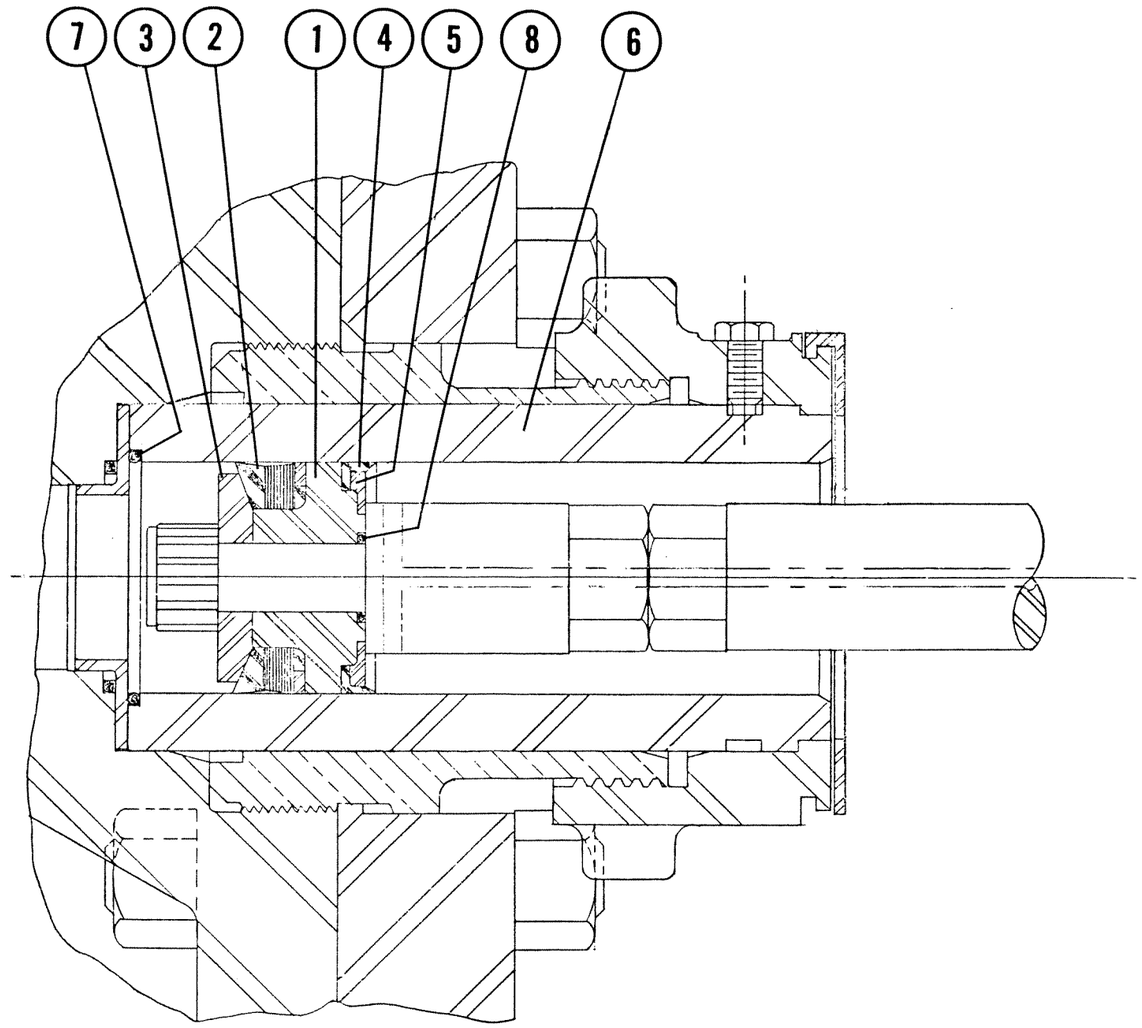


BILL OF MATERIAL

ITEM	REQ'D.	COMM. NO.	DESCRIPTION
1	3	10-300-175	FLUID END - STUDDED (INCLUDES ITEMS 2 THRU 8)
2	6	49-002-837	1-3/4 - 8 X 7-1/2 STUD
3	6	75-510-126	1-3/4 - 8 HVY. HEX NUT
4	12	49-001-292	1-3/8 - 8 X 4-1/2 STUD
5	12	75-511-754	1-3/8 - 8 HVY. NEX NUT
6	6	86-342-103	3/8" STD. B.M. STREET ELL
7	3	10-300-170	LINER WEAR PLATE
8	3	20-100-014	LINER WEAR PLATE GASKET
–	6	20-160-163	VALVE COMPLETE (INCLUDES ITEMS 9, 10 & 11)
9	6	20-160-162	VALVE BODY ONLY
10	6	20-180-019	VALVE DISC (POLYURETHANE)
11	6	20-860-015	VALVE NUT
–	6	20-220-105	VALVE SEAT W/ BUSHING
12	6	20-220-104	VALVE SEAT ONLY
13	6	20-101-767	VALVE SEAT BUSHING
14	6	20-160-081	VALVE SPRING
15	6	75-659-258	1-3/4 - 10 X 10-1/2 B-7 STUD W/2 NUTS
16	1	10-303-072	DISCHARGE MANIFOLD
17	3	99-609-343	"O" RING (4 X 3-5/8 X 3/16)
18	1	10-303-081	SUCTION MANIFOLD
19	3	10-300-201	SUCTION MANIFOLD GASKET
20	24	75-634-382	3/4 - 10 X 2 CAPSCREW
21	2	98-031-036	8" 150# R.F. BLIND FLANGE
22	1	98-029-036	8" 8-V 150# R.F. THREADED FLANGE
23	3	10-300-202	API-7 SPECIFICATION PLATE
24	12	75-632-012	No. 2 X 1/4 DRIVE SCREW
25	3	45-148-408	11 X 8 X 1/16 FLANGE GASKET
26	24	75-634-390	3/4 - 10 X 3-1/4 CAPSCREW
27	24	75-510-312	3/4 - 10 HVY. HEX NUT
28	6	10-300-005	VALVE COVER
29	6	10-300-011	VALVE COVER GASKET
30	6	10-300-004	UPPER VALVE GUIDE
31	24	75-632-234	5/8 - 11 X 1-1/4 CAPSCREW
32	3	10-300-130	LINER ADAPTER
33	3	10-300-002	LINER RETAINING NUT
34	9	75-632-758	3/4 - 10 X 1-3/4 DOG POINT SQ. HD. SET SCREW
35	6	20-200-004	VALVE GUIDE BUSHING
36	3	20-150-003	PISTON RETAINING NUT
37	3	20-460-667	LINER FLUSHING SHIELD
38	3	20-150-123	PISTON ROD
39	3	20-150-125	PISTON ROD EXTENSION
40	9	75-770-476	3/4 LOCK WASHER
41	3	16-484-114	CLAMP COMPLETE (INCLUDES ITEMS 42 & 43)
42	6	75-074-694	5/8 - 11 X 6 CAD. PLT. BOLT
43	12	75-510-438	5/8 - 11 S.S. HEX NUT

FLUID END
850-PT TRIPLEX PISTON PUMP

TECH.		P196 - AY1	C

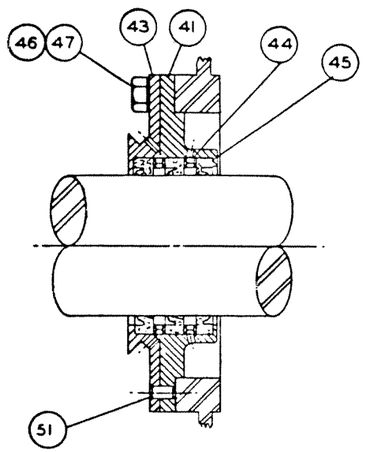


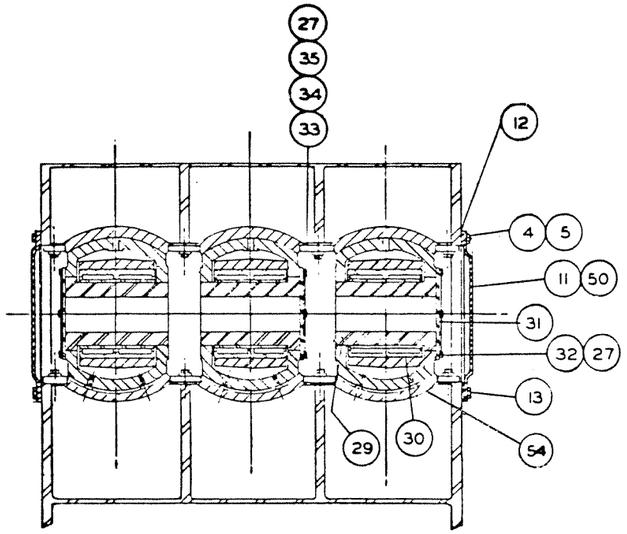
BILL OF MATERIAL

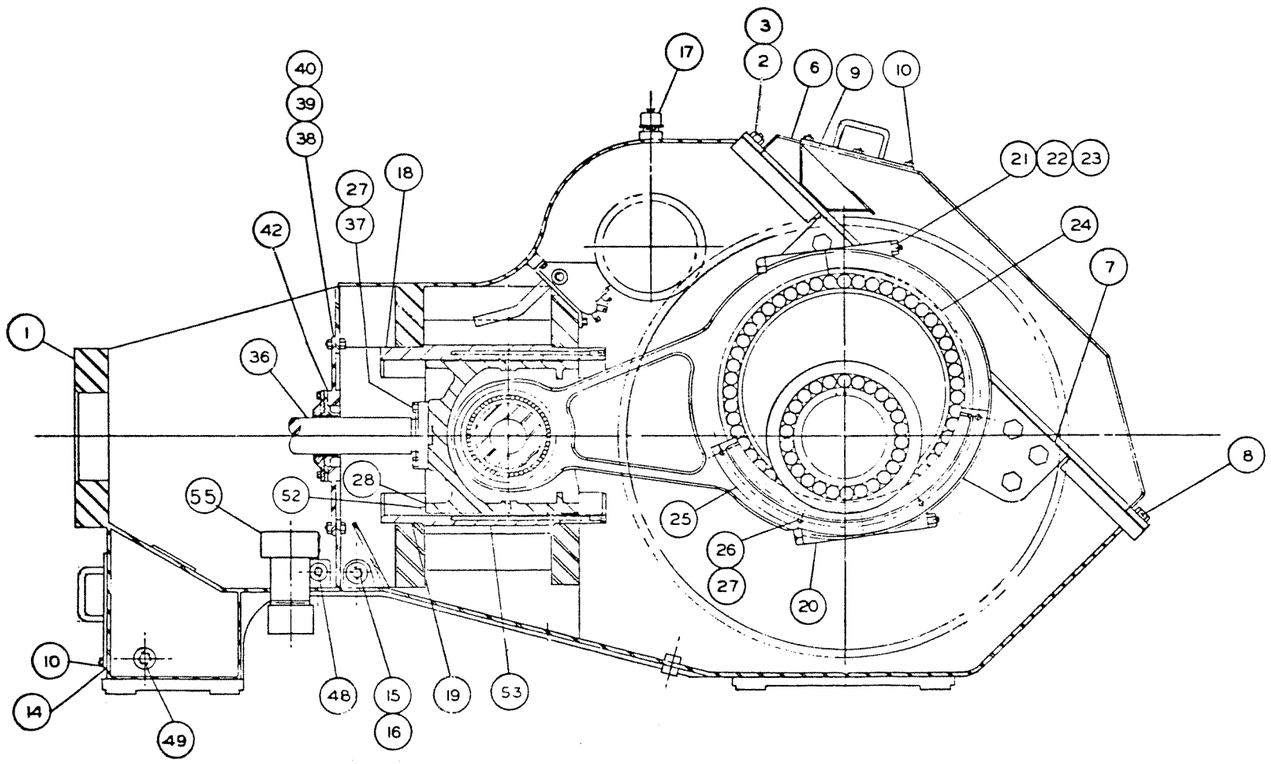
ITEM	REQ'D.	COMM. NO.	DESCRIPTION
1	3	20-120-091	4 PISTON BODY (SERIES 25)
	3	20-120-092	4-1/2 PISTON BODY (SERIES 30)
	3	20-120-093	5 PISTON BODY (SERIES 30)
	3	20-120-095	5-1/2 PISTON BODY (SERIES 37)
	3	20-120-097	5-3/4 PISTON BODY (SERIES 37)
	3	20-120-096	6 PISTON BODY (SERIES 37)
	3	20-120-094	6-1/2 PISTON BODY (SERIES 37)
2	3	20-140-365	4 O.R. PISTON RUBBER W/ BACK SEAL & O-RING
	3	20-140-363	4-1/2 O.R. PISTON RUBBER W/ BACK SEAL & O-RING
	3	20-140-361	5 O.R. PISTON RUBBER W/ BACK SEAL & O-RING
	3	20-140-373	5-1/2 O.R. PISTON RUBBER W/ BACK SEAL & O-RING
	3	20-140-371	5-3/4 O.R. PISTON RUBBER W/ BACK SEAL & O-RING
	3	20-140-369	6 O.R. PISTON RUBBER W/ BACK SEAL & O-RING
	3	20-140-367	6-1/2 O.R. PISTON RUBBER W/ BACK SEAL & O-RING
	3	20-140-267	4 PISTON RUBBER ONLY - OIL RESISTANT
	3	20-140-265	4-1/2 PISTON RUBBER ONLY - OIL RESISTANT
	3	20-140-263	5 PISTON RUBBER ONLY - OIL RESISTANT
	3	20-140-261	5-1/2 PISTON RUBBER ONLY - OIL RESISTANT
	3	20-140-259	5-3/4 PISTON RUBBER ONLY - OIL RESISTANT
	3	20-140-257	6 PISTON RUBBER ONLY - OIL RESISTANT
	3	20-140-295	6-1/2 PISTON RUBBER ONLY - OIL RESISTANT
3	3	20-120-107	4 RETAINING PLATE
	3	20-120-106	4-1/2 RETAINING PLATE
	3	20-120-106	5 RETAINING PLATE
	3	20-120-104	5-1/2 RETAINING PLATE
	3	20-120-104	5-3/4 RETAINING PLATE
	3	20-120-108	6 RETAINING PLATE
	3	20-120-108	6-1/2 RETAINING PLATE
4	3	20-140-237	4 BACK SEAL
	3	20-140-238	4-1/2 BACK SEAL
	3	20-140-239	5 BACK SEAL
	3	20-140-240	5-1/2 BACK SEAL
	3	20-140-241	5-3/4 BACK SEAL
	3	20-140-242	6 BACK SEAL
	3	20-140-243	6-1/2 BACK SEAL
5	3	20-120-101	4 BACK SEAL RETAINER
	3	20-120-318	4-1/2 BACK SEAL RETAINER
	3	20-120-319	5 BACK SEAL RETAINER
	3	20-120-320	5-1/2 BACK SEAL RETAINER
	3	20-120-321	5-3/4 BACK SEAL RETAINER
	3	20-120-322	6 BACK SEAL RETAINER
	3	20-120-323	6-1/2 BACK SEAL RETAINER
6	3	07-330-400	4 SUPER DI-HARD LINER
	3	07-330-450	4-1/2 SUPER DI-HARD LINER
	3	07-330-500	5 SUPER DI-HARD LINER
	3	07-330-550	5-1/2 SUPER DI-HARD LINER
	3	07-330-575	5-3/4 SUPER DI-HARD LINER
	3	07-330-600	6 SUPER DI-HARD LINER
	3	07-330-650	6-1/2 SUPER DI-HARD LINER
7	3	20-100-013	4 LINER GASKET
	3	20-100-014	4-1/2 LINER GASKET
	3	20-100-008	5 LINER GASKET
	3	20-100-009	5-1/2 LINER GASKET
	3	20-100-010	5-3/4 LINER GASKET
	3	20-100-011	6 LINER GASKET
	3	20-100-012	6-1/2 LINER GASKET
8	3	99-607-325	"O" RING (1-1/2 X 1-7/8 X 3/16)

LINER & PISTON ASSEMBLY
850-PT TRIPLEX PISTON PUMP

TECH.	TS-133	P196 - AB1	C



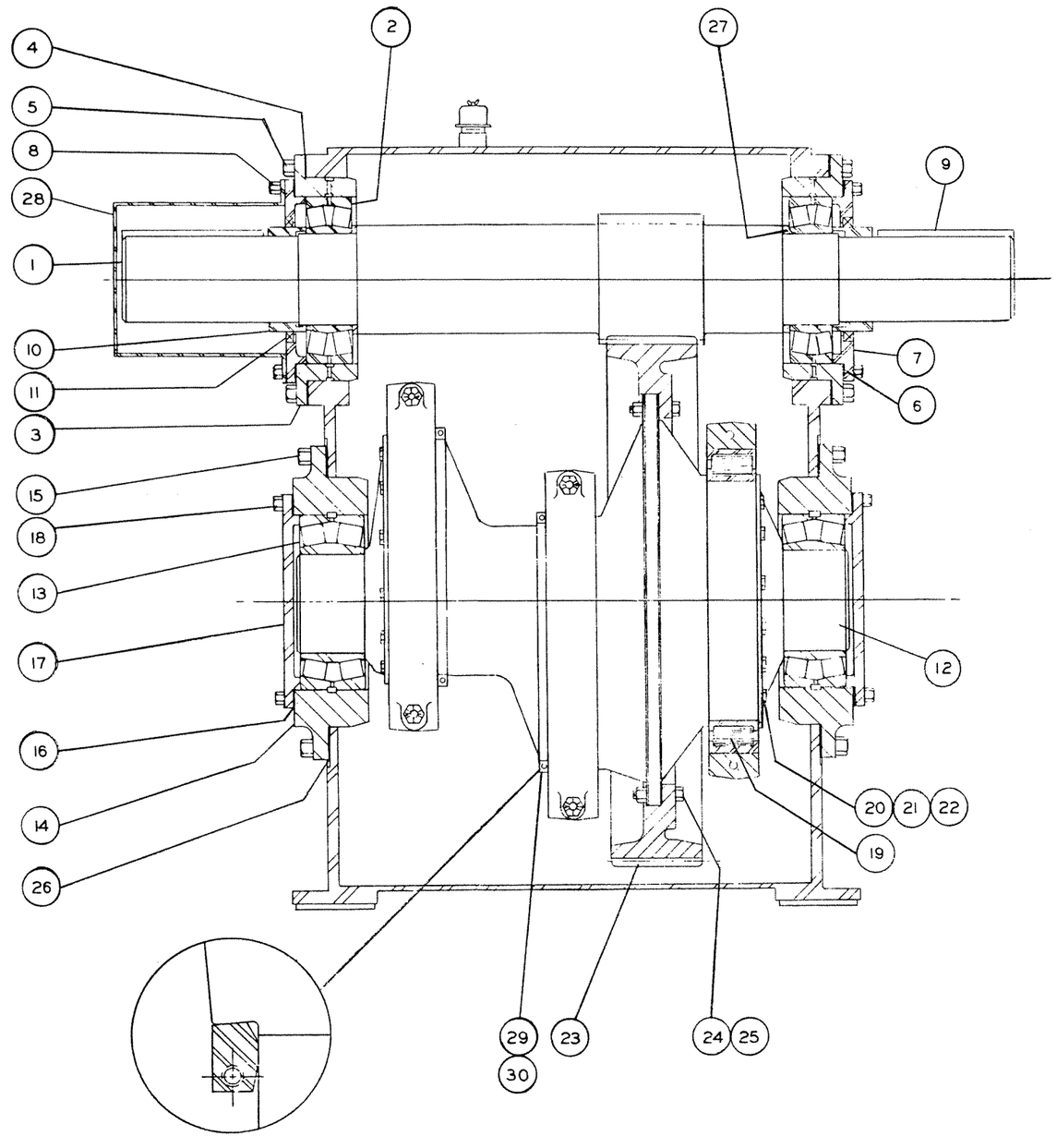




BILL OF MATERIAL			
ITEM	REQ'D.	COMM. NO.	DESCRIPTION
1	1	10-303-024	POWER END - STUDDED (INCL. ITEMS 2 & 4)
2	2	29-000-700	3/4 - 10 X 2-1/2 STUD
3	2	75-510-410	3/4 - 10 HEX NUT
4	4	29-000-777	1/2 - 13 X 1-3/4 STUD
5	4	75-510-406	1/2 - 13 HEX NUT
6	1	10-303-025	CRANKCASE COVER
7	1	10-303-046	CRANKCASE COVER GASKET
8	18	75-634-373	3/4 - 10 X 1-1/2 CAPSCREW
9	1	10-300-063	INSPECTION COVER GASKET
10	42	75-510-404	3/8 - 16 HEX NUT
11	2	10-303-027	CROSSHEAD INSPECTION DOOR
12	2	10-303-042	INSPECTION DOOR GASKET
13	24	75-632-135	1/2 - 13 X 1 SELF LOCKING CAPSCREW
14	1	10-300-058	SUMP COVER GASKET
15	2	86-429-001	2" X CLOSE STD. B.P. NIPPLE
16	2	83-802-512	2" BRASS DRAIN COCK
17	1	64-229-100	AIR BREATHER
18	3	10-303-009	CROSSHEAD GUIDE (UPPER)
19	12	10-303-041	CROSSHEAD GUIDE SHIM SET
20	3	10-303-047	CONNECTING ROD W/ CAP (INCL. 2 EA. ITEMS 20 & 21)
21	6	10-303-043	CONNECTING ROD BOLT
22	6	75-513-112	7/8 - 9 HVY. HEX SLOTTED NUT
23	6	75-102-008	1/8 X 2 COTTER PIN
24	3	10-303-033	CONNECTING ROD ECCENTRIC BEARING RETAINER
25	3	10-303-028	CONNECTING ROD OIL TROUGH
26	12	45-143-001	1/2 - 13 X 3/4 DRLD. HEAD CAPSCREW
27	27 FT.	59-800-016	No. 16 GAUGE LOCKING WIRE
28	3	10-303-073	CROSSHEAD
29	3	10-303-014	CROSSHEAD PIN
30	3	65-725-960	CROSSHEAD PIN BEARING
31	3	10-303-032	CROSSHEAD PIN RETAINING PLATE
32	18	45-142-701	3/4 - 10 X 1-1/2 DRLD. HEAD CAPSCREW
33	16	10-303-022	CROSSHEAD GUIDE RETAINING CLAMP
34	16	75-770-100	SPHERICAL WASHER
35	16	34-012-005	5/8 - 11 X 1-3/4 DRLD. HEAD CAPSCREW
36	3	10-300-142	CROSSHEAD EXTENSION ROD
37	12	45-142-703	3/4 - 10 X 1-3/4 DRLD. HEAD CAPSCREW
38	1	10-303-050	DIAPHRAGM SUPPORT GASKET (RIGHT HAND)
39	1	10-303-051	DIAPHRAGM SUPPORT GASKET (LEFT HAND)
40	1	10-303-049	DIAPHRAGM SUPPORT GASKET (CENTER)
41	3	10-300-020	DIAPHRAGM HOUSING
42	3	10-300-062	DIAPHRAGM HOUSING GASKET
43	3	10-300-021	DIAPHRAGM GLAND
44	6	10-300-022	DIAPHRAGM LANTERN RING
45	9	20-100-015	ROD WIPER
46	18	75-634-352	1/2 - 13 X 1-1/2 CAPSCREW
47	18	75-770-474	1/2 LOCK WASHER
48	2	86-485-116	2" STD. C.I. PIPE PLUG
49	2	86-486-112	1-1/2" STD. C.I. PIPE PLUG
50	–	–	–
51	6	45-127-305	3/8 X 3/4 DOWEL PIN
52	3	10-303-096	CROSSHEAD SHOE (LOWER)
53	3	10-303-097	CROSSHEAD GUIDE (LOWER)
54	12	75-633-119	1/2 - 13 X 1-1/4 F.H. MACHINE SCREW
55	1	10-300-158	OVERFLOW COVER

POWER END
850-PT TRIPLEX PISTON PUMP

TECH.		P196 - AV1	D

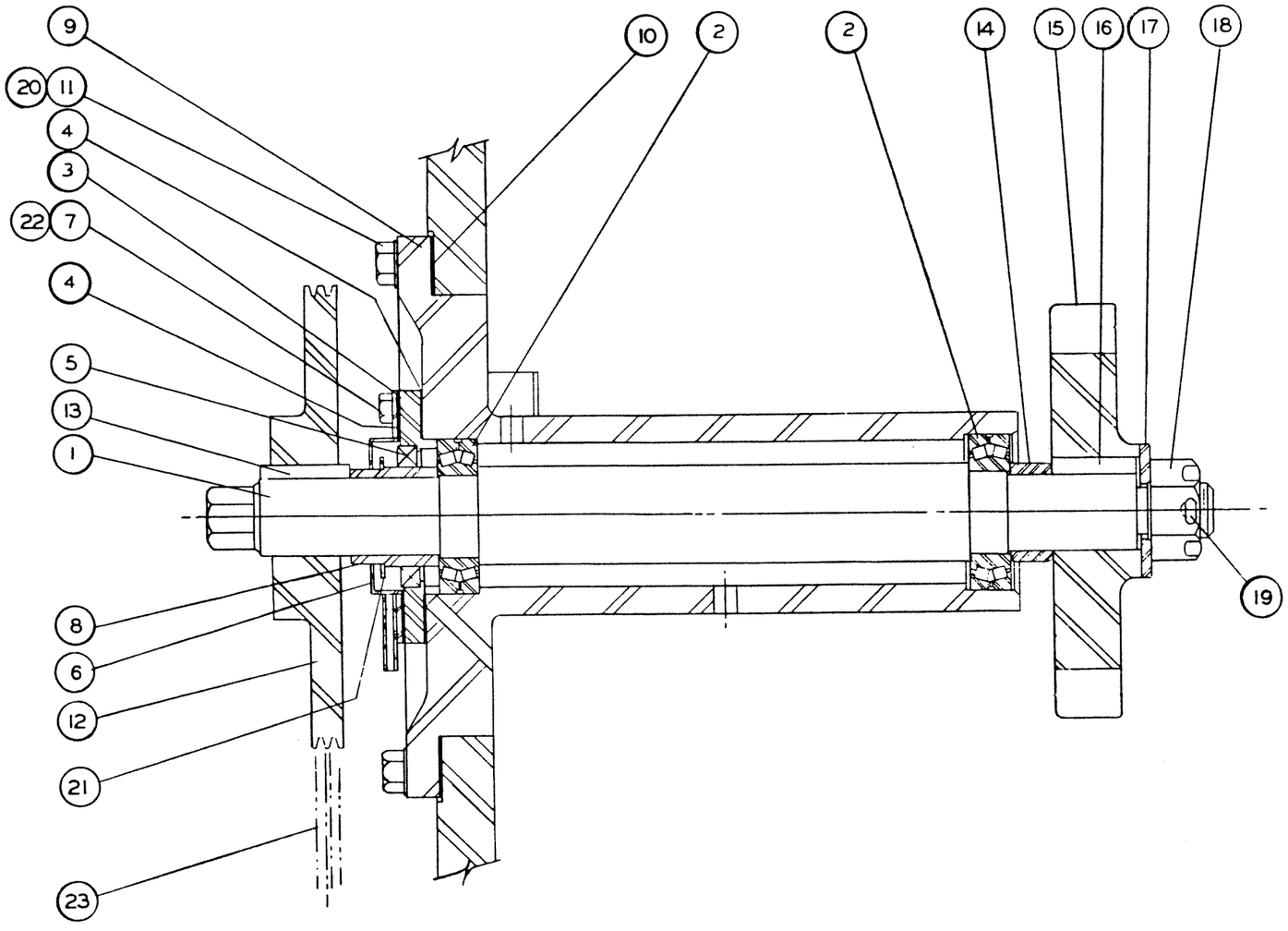


BILL OF MATERIAL

ITEM	REQ'D.	COMM. NO.	DESCRIPTION
1	1	10-303-012	PINION W/ INTEGRAL SHAFT (21 TEETH)
2	2	65-725-010	PINION SHAFT BEARING
3	2	10-303-011	PINION SHAFT BEARING HOUSING
4	2	10-303-048	PINION SHAFT BEARING HOUSING GASKET
5	16	75-635-091	1 - 8 X 2 CAPSCREW
6	2	45-803-900	PINION BEARING RETAINER SHIM SET
7	2	10-303-015	PINION BEARING RETAINER
8	16	75-634-383	3/4 - 10 X 2-1/4 CAPSCREW
9	2	45-803-923	PINION SHAFT KEY
10	2	10-303-020	WEAR SLEEVE
11	2	68-631-012	OIL SEAL
12	1	10-303-059	CRANKSHAFT
13	2	65-725-020	MAIN BEARING
14	2	10-303-008	MAIN BEARING HOUSING
15	16	75-632-220	1 - 8 X 2-3/4 SELF LOCKING CAPSCREW
16	2	45-803-895	MAIN BEARING RETAINER SHIM SET
17	2	10-303-016	MAIN BEARING RETAINER
18	16	75-634-382	3/4 - 10 X 2 CAPSCREW
19	3	65-725-959	ECCENTRIC BEARING
20	2	10-303-062	ECCENTRIC BEARING RETAINER
21	24	45-143-000	1/2 - 13 X 1 DRLD. HD. CAPSCREW
22	18 FT.	59-800-016	No. 16 GAUGE LOCKING WIRE
23	1	10-303-034	CRANKSHAFT GEAR (94 TEETH)
24	8	75-634-409	1 - 8 X 4 CAPSCREW
25	8	75-514-120	1 - 8 UNI-TORQUE LOCK NUT
26	2	10-303-044	MAIN BEARING HOUSING GASKET
27	2	10-303-021	PINION BEARING SPACER
28	1	10-303-055	PINION SHAFT EXTENSION COVER
29	2	10-303-061	RETAINING RING (INCLUDES 2 OF ITEM 30)
30	4	75-632-445	1/2 - 13 X 2-1/4 SELF LOCKING CAPSCREW

SHAFT ASSEMBLIES
850-PT TRIPLEX PISTON PUMP

ENGR. REF.		P196 - AC1	C
COMMERCIAL			



BILL OF MATERIAL

ITEM	REQ'D.	COMM. NO.	DESCRIPTION
1	1	10-300-030	JACKSHAFT
2	2	65-725-031	JACKSHAFT BEARING
3	1	10-300-032	JACKSHAFT BEARING RETAINER
4	2	45-803-797	JACKSHAFT RETAINER GASKET
5	1	68-630-235	OIL SEAL
6	1	10-300-098	OIL CATCHER
7	4	75-634-352	1/2 - 13 X 1-1/2 CAPSCREW
8	1	10-300-034	JACKSHAFT BEARING SPACER
9	1	10-300-031	JACKSHAFT BRACKET
10	1	45-803-729	JACKSHAFT BRACKET GASKET
11	6	75-634-359	5/8 - 11 X 1-1/2 CAPSCREW
12	1	68-097-451	ACCESSORY DRIVE SHEAVE (10.6 O.D. 3-V 2-GR.)
13	1	45-802-800	1/2 X 1/2 X 2 KEY
14	1	10-300-033	JACKSHAFT BEARING SPACER
15	1	10-303-017	JACKSHAFT PINION
16	1	45-803-362	1/2 X 1/2 X 1-3/4 KEY
17	1	10-300-035	JACKSHAFT WASHER
18	1	75-513-018	1-1/4 - 7 SLOTTED HEX NUT
19	1	75-104-013	3/16 X 2-1/2 COTTER PIN
20	6	75-770-475	5/8 LOCKWASHER
21	1	10-300-099	OIL SLINGER
22	4	75-770-474	1/2 LOCKWASHER
23	2	68-028-560	3-V-560 WEDGE BELTS

JACKSHAFT ASSEMBLY
850-PT TRIPLEX PISTON PUMP

TECHNICAL		P196 - AD1	C
COMMERCIAL			

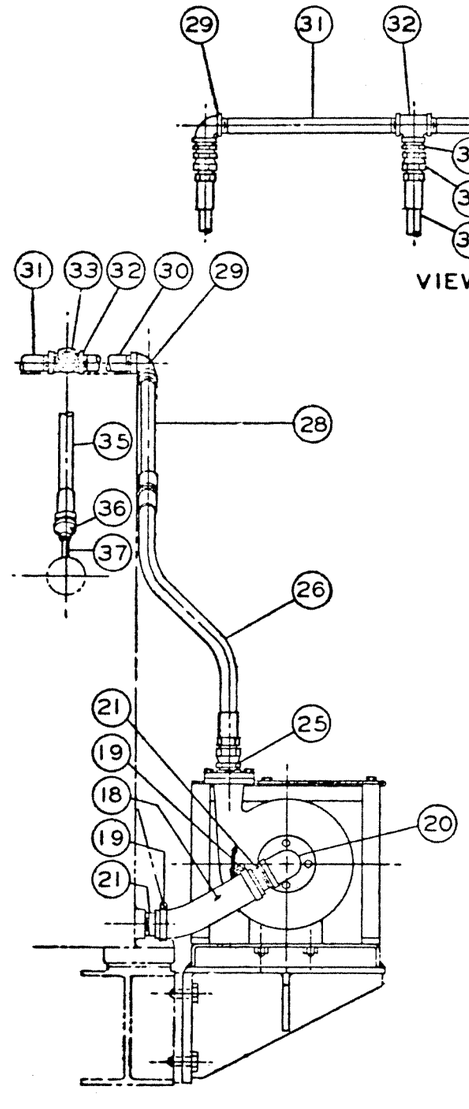
BILL OF MATERIAL			
ITEM	REQ'D.	COMM. NO.	DESCRIPTION
1	1	95-999-050	1 X 1-1/2 X 8-1/2 C CENTRIFUGAL PUMP
2	1	68-103-964	FLEXIBLE COUPLING
3*	1	60-980-826	ELECTRIC MOTOR*
4	1	10-300-243	PUMP & MOTOR BASE
5	4	75-634-365	5/8 - 11 X 1-3/4 CAPSCREW
6	4	75-510-408	5/8 - 11 HEX
7	4	75-770-205	5/8 PLATE WASHER
8	4	75-770-475	5/8 LOCK WASHER
9	4	75-634-314	3/8 - 16 X 1 CAPSCREW
10	4	75-770-472	3/8 LOCK WASHER

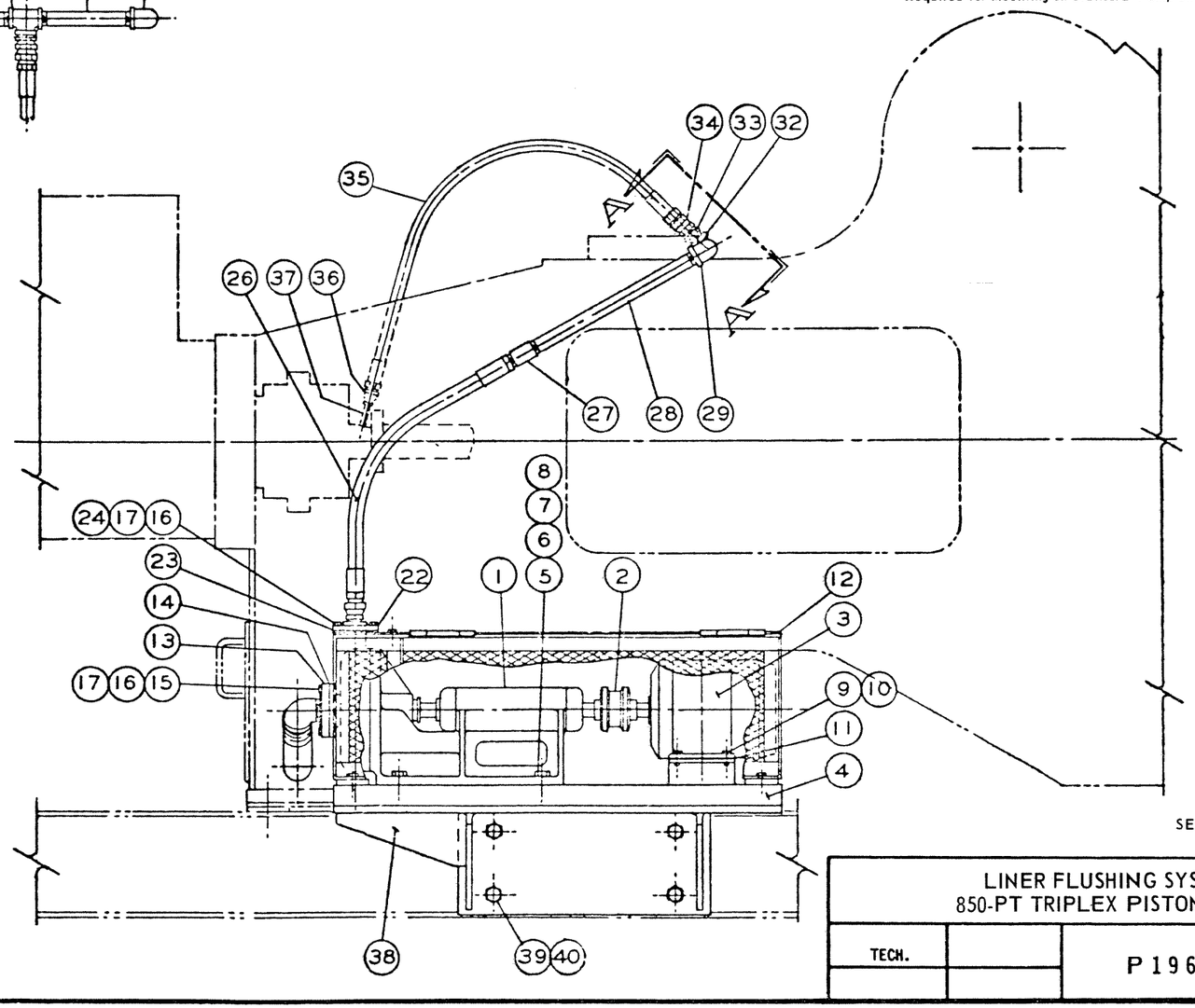
BILL OF MATERIAL			
ITEM	REQ'D.	COMM. NO.	DESCRIPTION
11	2	29-001-153	SHIM SET
12	1	10-300-245	GUARD
13	1	98-029-012	1-1/2" 150# R.F. THREADED FLANGE
14	1	78-208-036	FLANGE GASKET
15	4	75-634-353	1/2 - 13 X 2 CAPSCREW
16	8	75-510-406	1/2 - 13 HEX NUT
17	8	75-770-474	1/2 LOCK WASHER
18	1	99-287-816	2" I.D. X 10" RADIATOR HOSE
19	2	99-092-574	HOSE CLAMP
20	1	86-342-112	1-1/2" STD. B.M. STREET ELL
21	2	45-003-181	1-1/2" X 3" STD. B.P. NIPPLE (THD. ONE END)
22	1	98-029-006	1" 150# R.F. THREADED FLANGE
23	1	78-208-012	FLANGE GASKET
24	4	75-634-354	1/2 - 13 X 1-3/4 CAPSCREW
25	1	64-289-326	1" MALE ADAPTER UNION
26	1	45-171-824	1" X 38" HOSE ASSEMBLY

BILL OF MATERIAL			
ITEM	REQ'D.	COMM. NO.	DESCRIPTION
27	1	57-000-008	1" STD. B.P. COUPLING
28	1	86-426-029	1" X 10" STD. B.P. NIPPLE
29	2	86-336-108	1" STD. B.M. ELL
30	1	86-426-025	1" X 8" STD. B.P. NIPPLE
31	2	45-803-938	1" X 13" STD. B.P. NIPPLE
32	2	86-543-108	1" STD. B.M. TEE
33	3	86-061-014	1" X 1/2" STD. C.I. BUSHING
34	3	64-289-320	1/2" MALE ADAPTER UNION
35	3	45-171-810	1/2" X 46" HOSE ASSEMBLY
36	3	86-600-005	1/2" X 1/4" STD. B.M. REDUCER
37	3	86-422-007	1/4" X 2-1/2" STD. B.P. NIPPLE
38**	1	10-300-244	SUPPORT**
39**	4	75-634-373	3/4 - 10 X 1-1/2 CAPSCREW**
40**	4	75-770-476	3/4 LOCK WASHER**

*Electric Motor is: 3 hp, 1750 rpm, 230/460 vac, 3-Phase 60 Hertz, Explosion Proof Electric Motor W/ Frame 182-T

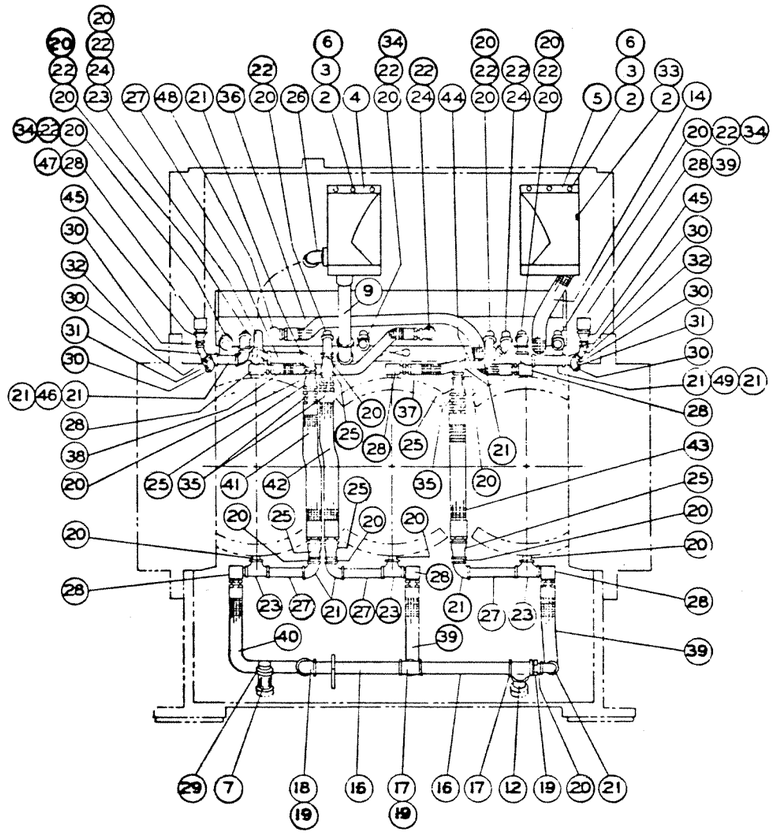
**Required for Mounting on Standard Pump Skid or Base

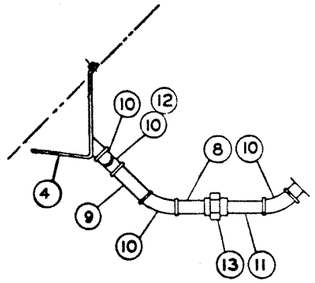




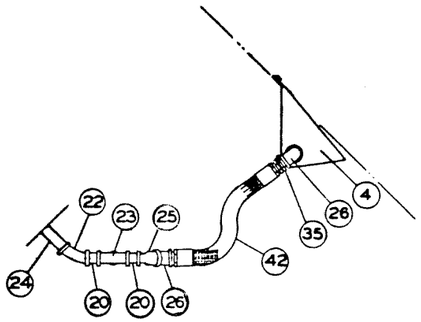
LINER FLUSHING SYSTEM
850-PT TRIPLEX PISTON PUMP

TECH.		P196 - AX1	C

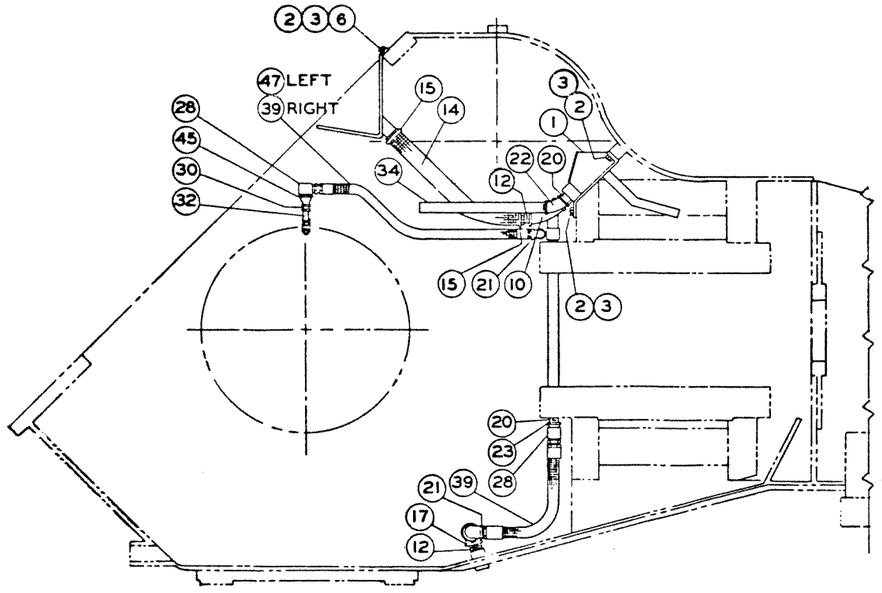




LEFT HAND OIL SCRAPER
BOTTOM PIPING



LEFT HAND OIL SCRAPER
SIDE HOSE CONNECTION

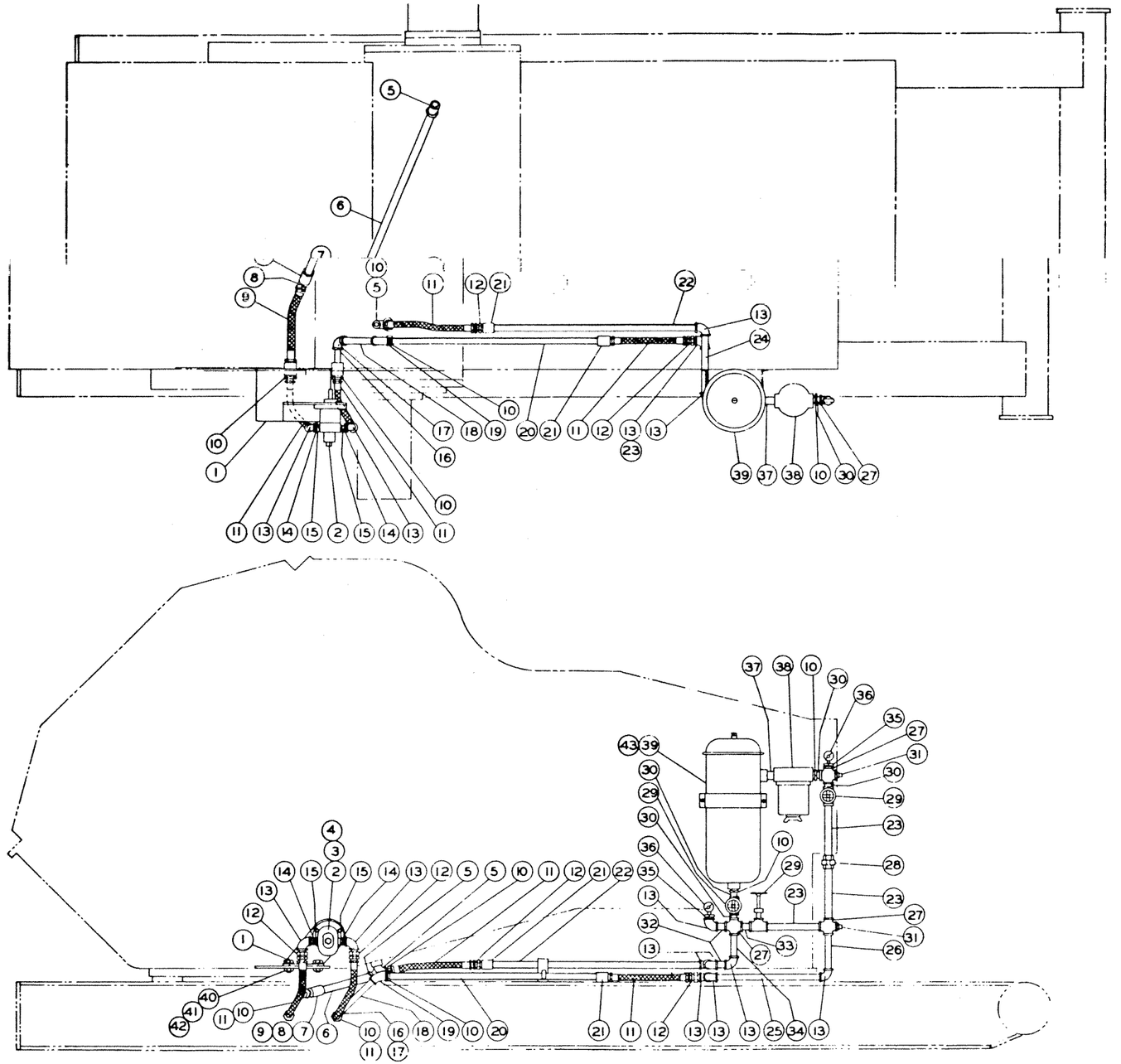


BILL OF MATERIAL

ITEM	REQ'D.	COMM. NO.	DESCRIPTION
1	1	10-303-065	OIL TROUGH
2	19	45-143-001	1/2 - 13 X 3/4 DRLD. HD. CAPSCREW
3	2 FT.	59-800-016	No. 16 GAUGE LOCKING WIRE
4	1	10-303-030	OIL SCRAPER (LEFT HAND)
5	1	10-303-031	OIL SCRAPER (RIGHT HAND)
6	6	75-770-204	1/2 PLATE WASHER
7	1	10-300-037	1" X 3" STRAINER NIPPLE
8	1	86-426-009	1" X 3" STD. B.P. NIPPLE
9	1	–	1" X 7-1/4" STD. B. P. NIPPLE
10	5	86-339-108	1" 45° STD. B.M. ELL
11	1	86-426-013	1" X 4" STD. B.P. NIPPLE
12	3	86-426-001	1" X CLOSE STD. B.P. NIPPLE
13	1	86-641-108	1" STD. B.M. UNION
14	3 FT.	99-287-110	1-1/4" I.D. HOSE
15	2	99-092-558	HOSE CLAMP
16	2	86-426-029	1" X 10" STD. B.P. NIPPLE
17	2	86-543-108	1" STD. B.M. TEE
18	1	86-336-108	1" STD. B.M. ELL
19	3	86-061-014	1" X 1/2" STD. C.I. BUSHING
20	22	86-424-001	1/2" X CLOSE STD. B.P. NIPPLE
21	10	86-336-104	1/2" STD. B.M. ELL
22	8	86-339-104	1/2" 45° STD. B.M. ELL
23	5	86-543-104	1/2" STD. B.M. TEE
24	3	86-424-009	1/2" X 3" STD. B.P. NIPPLE
25	7	86-600-010	3/4" X 1/2" STD. B.M. REDUCER
26	2	86-341-005	3/4" 45° STD. B.M. STREET ELL
27	4	86-424-021	1/2" X 6" STD. B.P. NIPPLE
28	7	64-271-214	1/2" MALE 90° HOSE ADAPTER
29	1	86-132-008	1" STD. B.M. PIPE CAP
30	6	86-422-001	1/4" X CLOSE STD. B.P. NIPPLE
31	2	86-336-102	1/4" STD. B.M. ELL
32	2	86-339-102	1/4" 45° STD. B.M. ELL
33	1	75-770-474	1/2 LOCK WASHER
34	3	–	1/2" X 14" STD. B.P. NIPPLE (THD. 1 END)
35	4	64-271-212	3/4" HOSE ADAPTER
36	1	45-804-067	1/2" X 28" HOSE ASSEMBLY
37	1	45-804-066	1/2" X 11-1/8" HOSE ASSEMBLY
38	1	45-804-065	1/2" X 19-7/8" HOSE ASSEMBLY
39	3	45-804-069	1/2" X 16-7/8" HOSE ASSEMBLY
40	1	45-804-068	1/2" X 22-7/8" HOSE ASSEMBLY
41	1	45-804-062	3/4" X 18-1/4" HOSE ASSEMBLY
42	2	45-804-063	3/4" X 20" HOSE ASSEMBLY
43	1	45-804-064	3/4" X 17-1/2" HOSE ASSEMBLY
44	1	86-424-013	1/2" X 4" STD. B.P. NIPPLE
45	2	86-600-005	1/2" X 1/4" STD. B.M. REDUCER
46	1	86-424-005	1/2" X 2" STD. B.P. NIPPLE
47	1	45-804-078	1/2" X 17-7/8" HOSE ASSEMBLY
48	1	86-342-104	1/2" STD. B.M. STREET ELL
49	1	86-424-011	1/2" X 3-1/2" STD. B.P. NIPPLE

INTERNAL LUBRICATION SYSTEM
850-PT TRIPLEX PISTON PUMP

TECH.		P196 - AN1	D



BILL OF MATERIAL

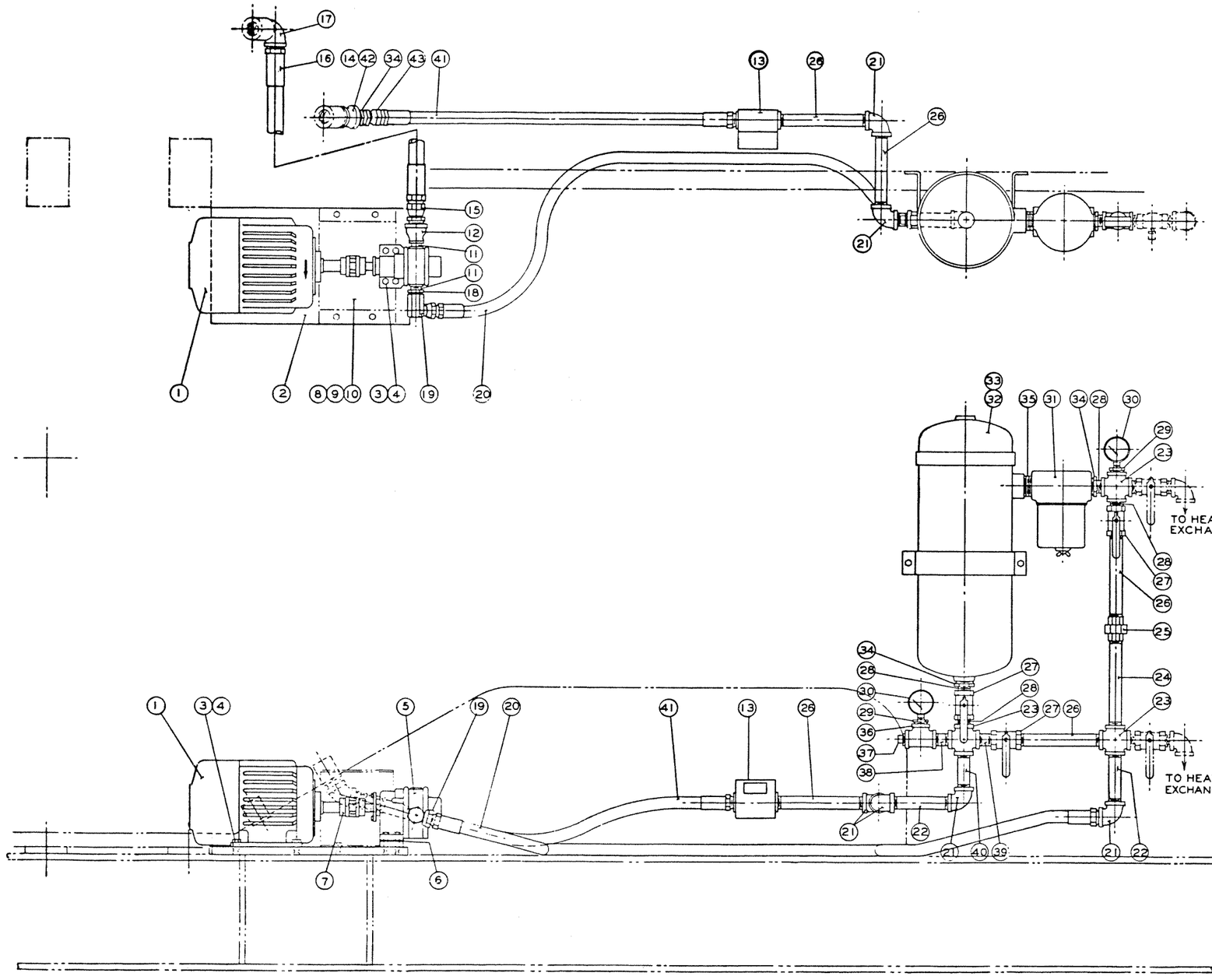
ITEM	REQ'D.	COMM. NO.	DESCRIPTION
1	1	10-303-018	OIL PUMP BRACKET
2	1	64-182-042	B & S MODEL 2-S OIL PUMP*
3	4	75-634-314	3/8 - 16 X 1 CAPSCREW
4	4	75-770-472	3/8 LOCKWASHER
5	2	86-342-108	1" STD. B.M. STREET ELL
6	1	45-001-832	1" X 24" STD. B.P. NIPPLE
7	1	86-149-008	1" STD. B.P. COUPLING
8	1	64-289-326	1" M&F ADAPTER UNION
9	1	45-171-818	1" X 16" FLEX HOSE
10	6	86-061-015	1" X 3/4" STD. C.I. BUSHING
11	4	45-171-917	3/4" X 12" FLEX HOSE
12	4	64-289-324	3/4" M&F ADAPTER UNION
13	8	86-336-106	3/4" STD. B.M. ELL
14	2	86-061-010	3/4" X 1/2" STD. C.I. BUSHING
15	2	86-424-001	1/2" X CLOSE STD. B.P. NIPPLE
16	1	86-426-013	1" X 4" STD. B.P. NIPPLE
17	1	86-336-108	1" STD. B.M. ELL
18	1	86-426-021	1" X 6" STD. B.P. NIPPLE
19	1	86-339-108	1" 45° STD. B.M. ELL
20	1	45-001-658	3/4" X 30" STD. B.P. NIPPLE
21	2	86-149-006	3/4" STD. B.P. COUPLING
22	1	45-001-654	3/4" X 28" STD. B.P. NIPPLE
23	4	86-425-025	3/4" X 8" STD. B.P. NIPPLE
24	1	86-425-029	3/4" X 10" STD. B.P. NIPPLE
25	1	45-001-622	3/4" X 16" STD. B.P. NIPPLE
26	1	86-425-019	3/4" X 5-1/2" STD. B.P. NIPPLE
27	3	86-240-106	3/4" STD. B.M. CROSS
28	1	86-641-106	3/4" STD. B.M. UNION
29	3	83-058-006	3/4" BRZ. GLOBE VALVE
30	3	86-425-001	3/4" X CLOSE STD. B.P. NIPPLE
31	2	86-485-106	3/4" STD. C.I. PIPE PLUG
32	2	86-425-005	3/4" X 2" STD. B.P. NIPPLE
33	1	86-425-007	3/4" X 2-1/2" STD. B.P. NIPPLE
34	1	86-425-013	3/4" X 4" STD. B.P. NIPPLE
35	2	86-061-008	3/4" X 1/4" STD. C.I. BUSHING
36	2	08-017-360	OIL PRESSURE GAUGE
37	1	86-426-009	1" X 3" STD. B.P. NIPPLE
38	1	64-212-003	MODEL PQ-3 FERROFILTER
39	1	64-212-832	OIL FILTER**
40	2	75-068-020	5/8 - 11 X 1-3/4 CAPSCREW
41	2	75-510-408	5/8 - 11 HEX NUT
42	2	75-770-475	5/8 LOCKWASHER
43	1	64-212-848	OIL FILTER ELEMENT

* No. 713-920-2 B&S No. 2 Pump w/Mounting Holes Reamed to 7/16" Dia.

** Winslow ECX-2075 or Equal.

EXTERNAL LUBRICATION SYSTEM
850-PT TRIPLEX PISTON PUMP

TECH.		P196 - AJ1	D



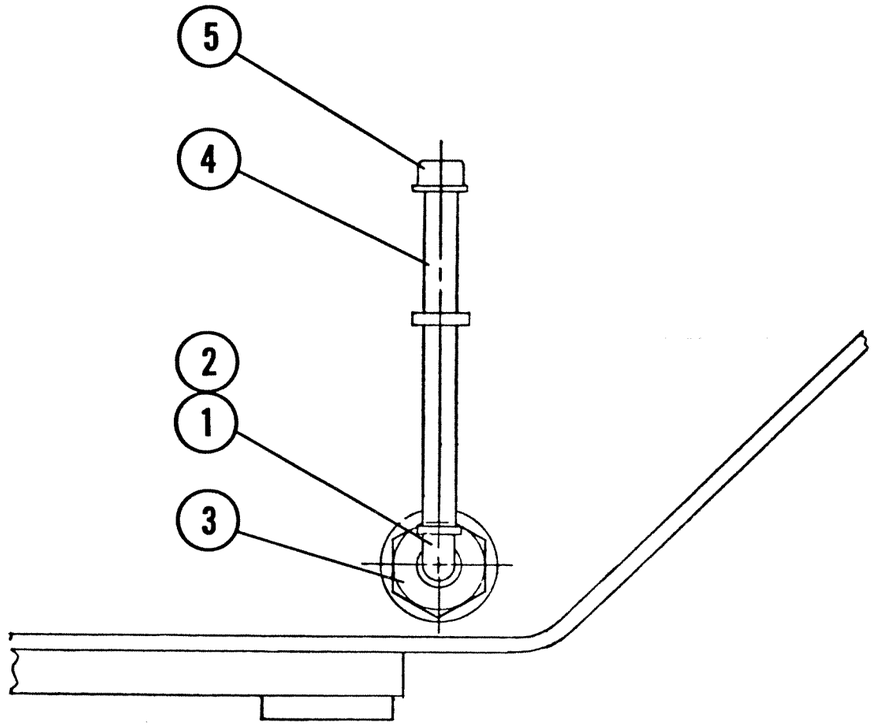
BILL OF MATERIAL			
ITEM	REQ'D.	COMM. NO.	DESCRIPTION
1*	1	60-980-813	1 HP ELECTRIC MOTOR*
2	1	10-300-171	PUMP & MOTOR BASE
3	8	75-634-340	3/8 - 16 X 1-1/4 CAPSCREW
4	8	75-770-472	3/8 LOCK WASHER
5	1	64-182-010	B & S No. 713-2-7 ROTARY GEAR PUMP
6	1	45-194-207	SHIM SET
7	1	68-103-991	FLEXIBLE COUPLING (#L095)
8	1	06-500-261	COUPLING GUARD
9	4	75-634-300	1/4 - 20 X 5/8 CAPSCREW
10	4	75-770-470	1/4 LOCK WASHER
11	2	86-424-001	1/2" X CLOSE STD. B.P. NIPPLE
12	1	86-600-014	1" X 1/2" STD. B.M. REDUCER
13	1	64-325-980	3/4" OIL FLOW INDICATOR
14	1	86-426-001	1" X CLOSE STD. B.P. NIPPLE
15	1	64-289-326	1" M & F UNION ADAPTER
16	1	45-804-210	1" X 48" HOSE ASSEMBLY
17	1	86-342-108	1" STD. B.M. STREET ELL
18	1	86-061-010	3/4" X 1/2" STD. C.I. BUSHING
19	1	64-289-470	3/4" 90° M & F UNION ADAPTER
20	1	45-171-907	3/4" X 68" HOSE ASSEMBLY
21	4	86-336-106	3/4" STD. B.M. ELL
22	2	86-425-019	3/4" X 5-1/2" STD. B.P. NIPPLE
23	3	86-240-106	3/4" STD. B.M. CROSS
24	1	45-804-245	3/4" X 8-1/4" STD. B.P. NIPPLE
25	1	86-641-106	3/4" STD. B.M. UNION
26	4	86-425-025	3/4" X 8" STD. B.P. NIPPLE
27	3	83-899-802	3/4" STD. BALL VALVE
28	4	86-425-001	3/4" X CLOSE STD. B.P. NIPPLE
29	2	86-061-008	3/4" X 1/4" STD. C.I. BUSHING
30	2	08-017-360	2-1/2" 0-100# OIL PRESSURE GAUGE
31	1	64-212-003	MAGNETIC OIL FILTER
32	1	64-212-832	OIL FILTER (WINSLOW ECX-2075 OR EQUAL)
33	1	64-212-848	OIL FILTER ELEMENT OR CARTRIDGE
34	3	86-061-015	1" X 3/4" STD. C.I. BUSHING
35	1	86-426-009	1" X 3" STD. B.P. NIPPLE
36	1	86-543-106	3/4" STD. B.M. TEE
37	1	86-486-106	3/4" STD. C.I. PIPE PLUG
38	1	86-425-005	3/4" X 2" STD. B.P. NIPPLE
39	1	86-425-007	3/4" X 2-1/2" STD. B.P. NIPPLE
40	1	86-425-013	3/4" X 4" STD. B.P. NIPPLE
41	1	45-171-854	3/4" X 44" HOSE ASSEMBLY
42	1	86-339-108	1" 45° STD. B.M. ELL
43	1	64-289-324	3/4" M & F UNION ADAPTER

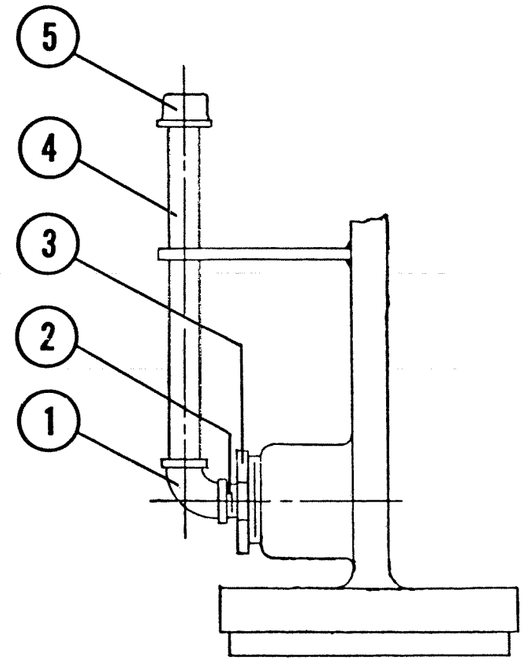
*Electric Motor is 1 hp, 900 rpm, 230/460 vac, 3-Phase, 60 Hertz Explosion Proof Electric Motor with Frame 182-T.

ELECTRIC LUBRICATION SYSTEM
850-PT TRIPLEX PISTON PUMP

TECH.		P184 - AT1	D

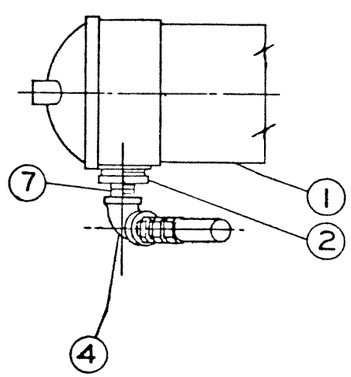
BILL OF MATERIAL			
ITEM	REQ'D.	COMM. NO.	DESCRIPTION
1	1	86-336-104	1/2" STD. B.M. ELL
2	1	86-424-001	1/2" X CLOSE STD. B.P. NIPPLE
3	1	86-061-032	2" X 1/2" STD. C.I. BUSHING
4	1	86-424-029	1/2" X 10" STD. B.P. NIPPLE
5	1	06-109-007	OIL LEVEL DIP STICK



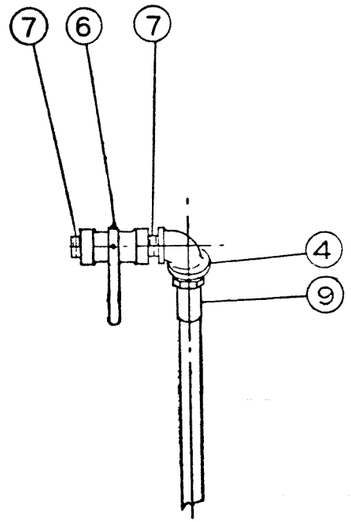


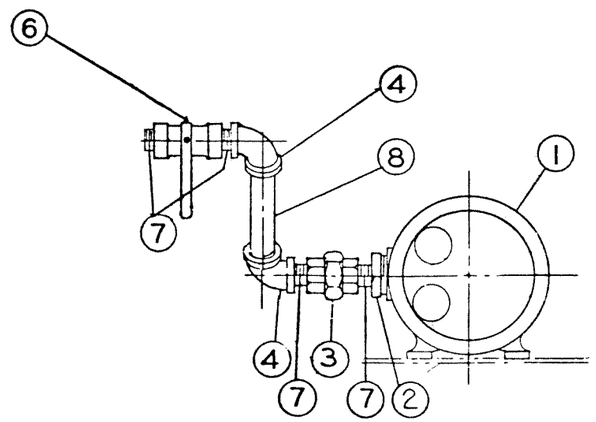
OIL LEVEL ASSEMBLY 850-PT TRIPLEX PISTON PUMP			
TECHNICAL		P 1 8 5 - A K 1	B
COMMERCIAL			

BILL OF MATERIAL			
ITEM	REQ'D.	COMM. NO.	DESCRIPTION
1	1	16-385-012	HEAT EXCHANGER
2	2	86-061-026	1-1/2" X 3/4" STD. C.I. BUSHING
3	1	86-641-106	3/4" STD. B.M. UNION
4	4	86-336-106	3/4" STD. B.M. ELL
5	4	75-634-335	3/8 - 16 X 5/8 CAPSCREW
6	2	83-899-802	3/4" BALL VALVE
7	7	86-425-001	3/4" X CLOSE STD. B.P. NIPPLE
8	1	86-425-022	3/4" X 6-1/2" STD. B.P. NIPPLE
9	1	45-804-281	3/4" X 41" HOSE W/ 3/4" MPT & JIC FEM. CONNECTIONS
10	1	64-271-212	3/4" HOSE ADAPTER
11	4	75-770-472	3/8 LOCK WASHER

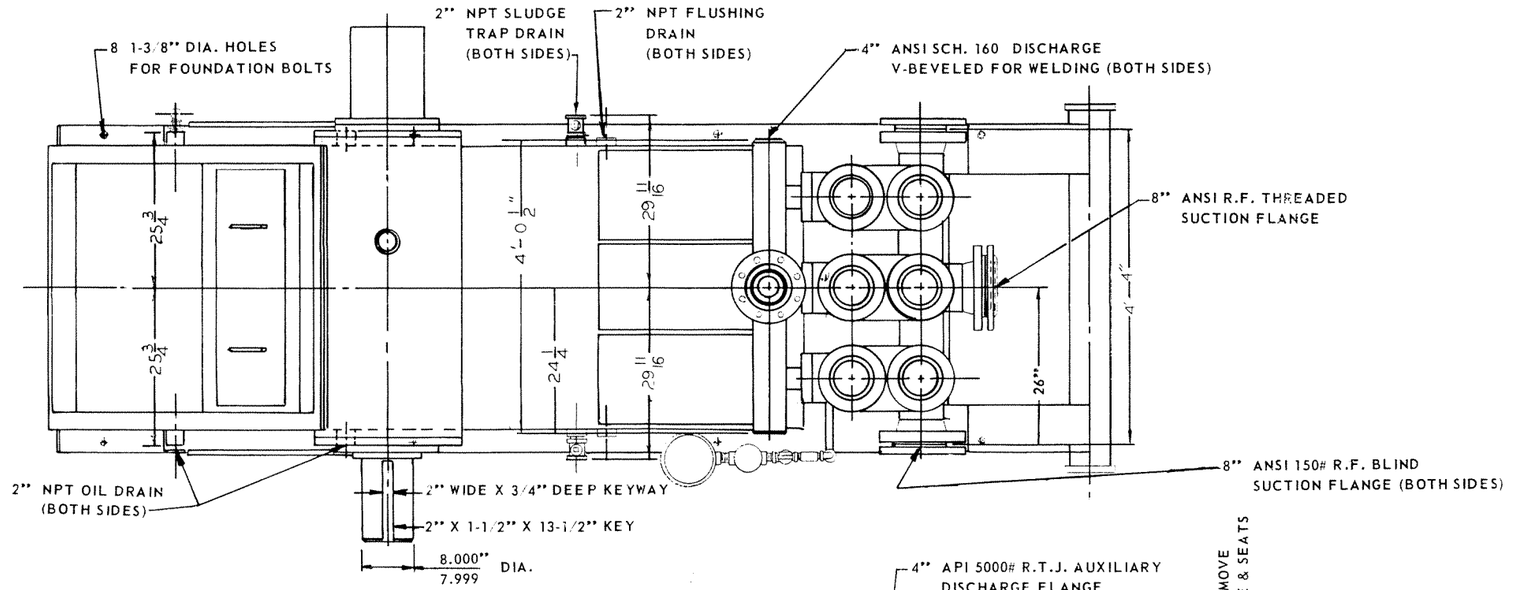




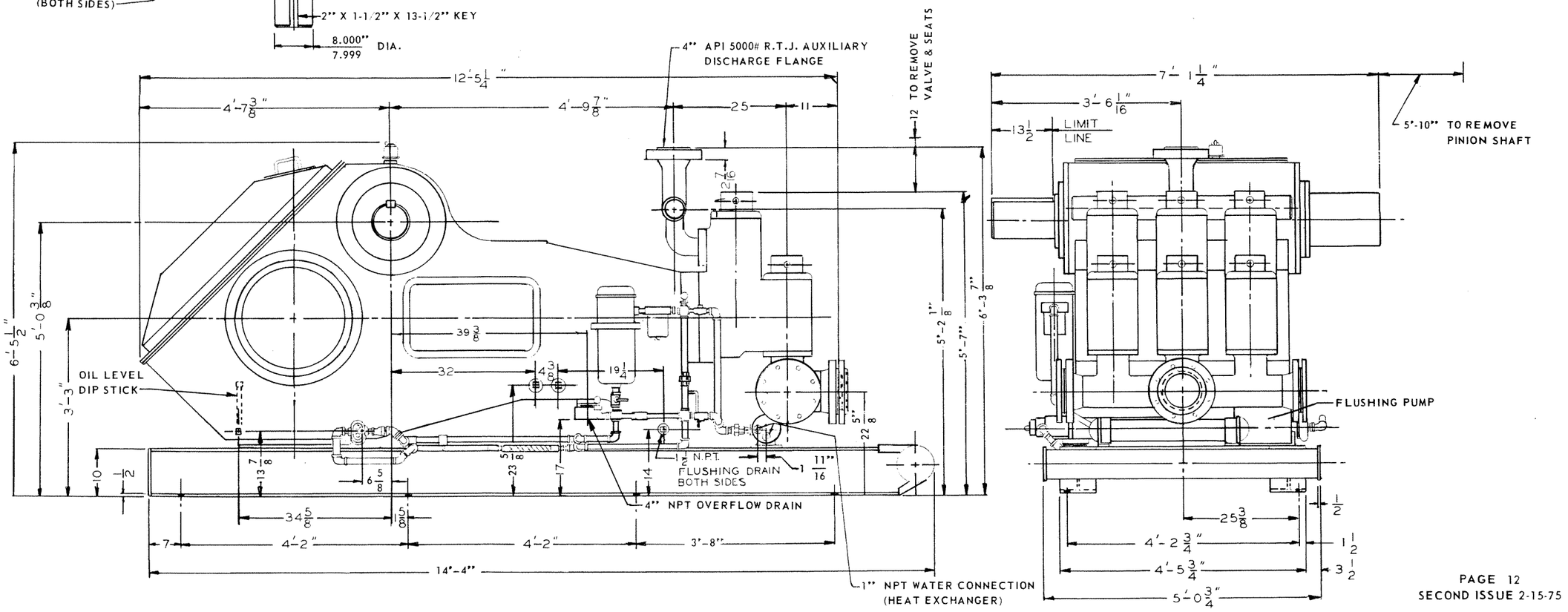




HEAT EXCHANGER ASSEMBLY 850-PT TRIPLEX PISTON PUMP			
TECHNICAL		P196 - AG1	C
COMMERCIAL			



PUMP, AS SHOWN, IS FOR RIGHT HAND DRIVE.
IT CAN BE DRIVEN FROM EITHER SIDE OR BOTH SIDES.



NOTE: THESE DIMENSIONS ARE ACCURATE BUT SHOULD NOT BE USED FOR INSTALLATION UNLESS CERTIFIED.

OUTLINE DIMENSIONS 850-PT TRIPLEX PISTON PUMP			
ENGR. REF.		P196 - B2	D
COMMERCIAL			