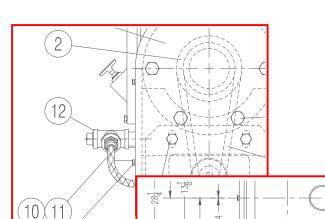


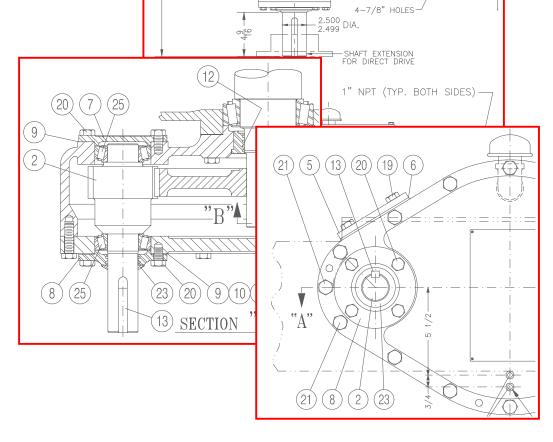
202T-6M Triplex Plunger Pump Parts List



15



Types: **202T-6M** 



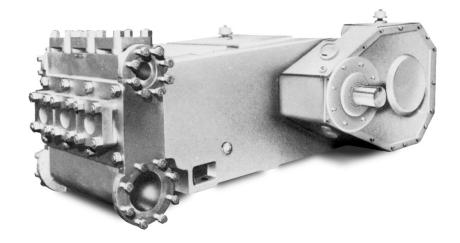
Sales / Technical Information

USA Tollfree: 1 (800) 800-4110 Phone: 1 (713) 462-4110 Fax: 1 (713) 462-3152 Internet: http://www.natoil.com

ISSUE: May 21, 2002



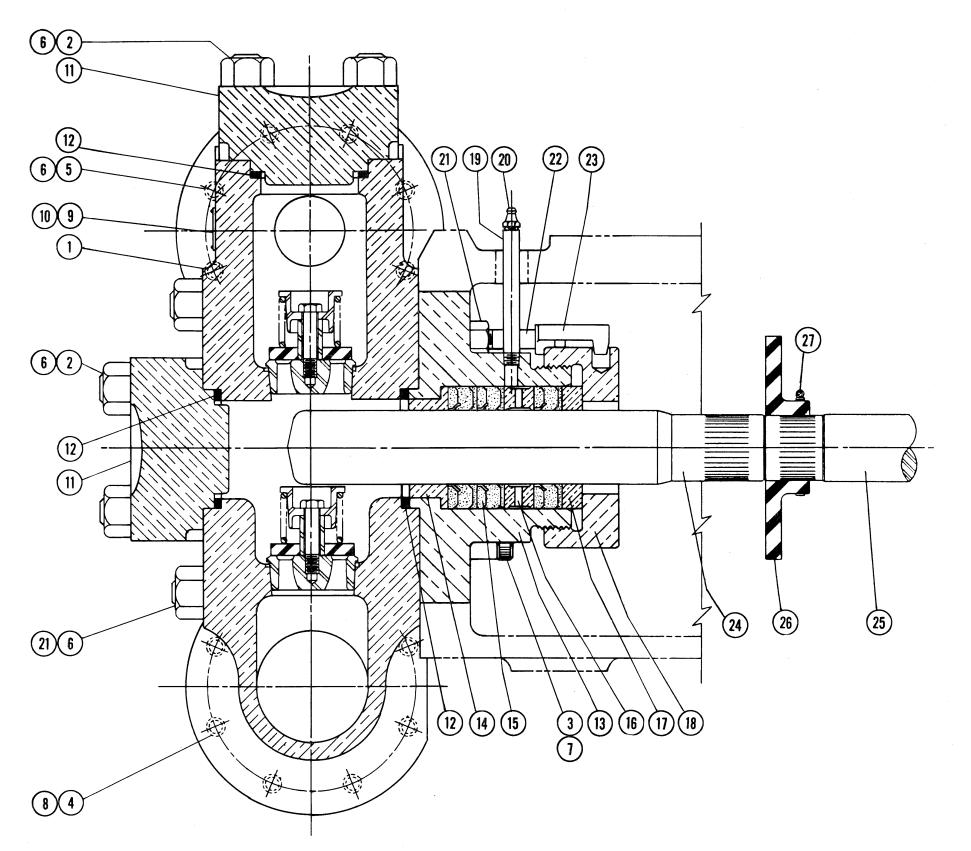
## Parts List Triplex Plunger Pump 202T-6.



Rated input horsepower "T" Triplex Stroke Length (in.) Fluid End Pressure Ranges "L" Low, "M" Medium, "H" High

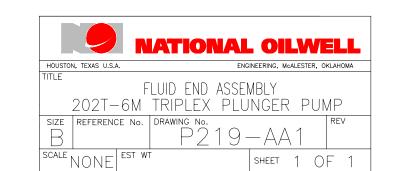
## **Index and Check List:**

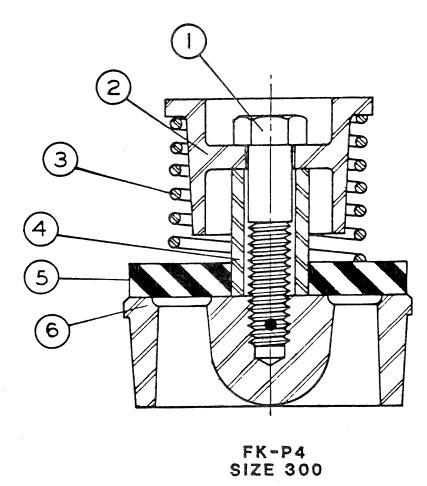
PAGE	DWG.	DESCRIPTION	SERIES OF	DATE OF
	NUMBER		ISSUE	ISSUE
1	P219-AA1	FLUID END ASSEMBLY	SECOND	8-1-87
2	GSK-5757P	VALVE SERVICE ASSEMBLY	SECOND	8-1-87
3	P213-AE1	POWER END ASSEMBLY	SECOND	10-1-88
4	P115-AM1	DIAPHRAGM ASSEMBLY	SECOND	10-1-88
5	P213-AH1	GEAR REDUCTION UNIT ASSEMBLY	FIRST	10-1-88
6	P150-AD1	LUBRICATOR ASSEMBLY	SECOND	10-1-88
7	P219-2	OUTLINE DRAWING LESS GEAR	SECOND	8-1-87
8	P219-A2	OUTLINE DRAWING WITH GEAR	SECOND	8-1-87
9	P213-AA1	FLUID END ASSY, W/ SPHERICAL VALVES	FIRST	5-21-02
10	P213-AY1	SPHERICAL VALVE ASSY., W/ WAVE RING	FIRST	5-21-02



		<del></del>	BILL OF MATERIAL
ITEM	BEO(D	COMMANO	
ITEM	REQ'D	COMM NO	DESCRIPTION
1.*	1 24	08-400-124 45-810-002	FLUID END-STUDDED*
3	12	45-810-002	STUD, 1"-8 X 4-3/4 STUD, 1"-8 X 3-1/2
4	16	45-810-022	STUD, 5/8–11 X 2-3/4
5	16	45-810-005	STUD, 1" -8 X 4-1/4
6	48	75-510-316	1"-8 HEAVY HEX NUT
7	12	75-513-523	1"-8 CAD. PLTD. ALLENUT
8	19 1	75-510-310 08-200-003	5/8-11 HEAVY HEX NUT PLATE, SERIAL NUMBER
10	2	75-632-022	No. 10 X 3/8 CAD. PLTD. DRIVE SCREW
11	6	08-406-007	COVER, CYLINDER HEAD & VALVE
12	9	08-406-003	GASKET
13	3	08-423-006	STUFFING BOX (2" THRU 2-3/8 PLUNGERS)
14	3	08-423-003 08-053-328	STUFFING BOX (2-1/2 THRU 3" PLUNGERS) 2" STUFFING BOX BUSHING
17	3	08-224-065	2-1/8 STUFFING BOX BUSHING
	3	08-053-327	2-1/4 STUFFING BOX BUSHING
	3	08-224-069	2-3/8 STUFFING BOX BUSHING
	3	08-053-326	2-1/2 STUFFING BOX BUSHING
	3	08-053-325	2-3/4 STUFFING BOX BUSHING
15	3	08-053-324	3" STUFFING BOX BUSHING
15	3	08-215-038 08-415-000	2" PACKING SET (STYLE 838) 2-1/8 PACKING SET (STYLE 838)
	3	08-215-040	2-1/4 PACKING SET (STYLE 838)
	3	08-415-001	2-3/8 PACKING SET (STYLE 838)
	3	08-215-042	2-1/2 PACKING SET (STYLE 838)
	3	08-215-043	2-3/4 PACKING SET (STYLE 838)
	3	08-215-044	3" PACKING SET (STYLE 838)
16	3	08-053-312	2" LANTERN RING
	3 3	08-211-113 08-053-311	2-1/8 LANTERN RING 2-1/4 LANTERN RING
	3	08-211-115	2-3/8 LANTERN RING
	3	08-053-310	2-1/2 LANTERN RING
	3	08-053-309	2-3/4 LANTERN RING
	3	08-053-308	3" LANTERN RING
17	3	08-053-296	2" PACKING FOLLOWER
	3	08-226-235 08-053-295	2-1/8 PACKING FOLLOWER 2-1/4 PACKING FOLLOWER
	3	08-226-242	1
	3	08-053-294	2-3/8 PACKING FOLLOWER 2-1/2 PACKING FOLLOWER
	3	08-053-293	2-3/4 PACKING FOLLOWER
	3	08-053-292	3" PACKING FOLLOWER
18	3	08-425-003	STUFFING BOX GLAND (2" THRU 2-3/8 PLGRS.)
19	3	08-425-002 08-400-420	STUFFING BOX GLAND (2-1/2 THRU 3" PLGRS.)  1/4 MPT X 1/8 FPT X 7" SCH 40 GREASE NIPPLE
20**		64-016-115	1/8 HYD GREASE FITTING**
21	8	45-810-016	STUD, 1" –8 X 10-1/2
22	3	75-634-368	5/8-11 X 4" HEX HD HT CAPSCREW
23	3	08-425-008	GLAND PAWL
24	3	08-412-044	2" CO-HARD PLUNGER
	3	08-412-053 08-412-024	2-1/8 CO—HARD PLUNGER
	3	08-412-024	2-1/4 CO—HARD PLUNGER 2-3/8 CO—HARD PLUNGER
	3	08-412-025	2-1/2 CO—HARD PLUNGER
	3	08-412-026	2-3/4 CO—HARD PLUNGER
	3	08-412-027	3" CO-HARD PLUNGER
	3	08-412-107	2" CERAMIC PLUNGER
	-3	08-412-090	2-1/8 CERAMIC PLUNGER
	3	08-412-091 08-412-092	2-1/4 CERAMIC PLUNGER
	3	08-412-092	2-3/8 CERAMIC PLUNGER 2-1/2 CERAMIC PLUNGER
	3	08-412-095	2-1/2 CERAMIC PLONGER 2-3/4 CERAMIC PLUNGER
	3 3 3 3 3	08-412-097	3" CERAMIC PLUNGER
25	3	08-441-026	ROD, PLUNGER EXTENSION
26		08-441-027 99-094-087	BAFFLE, FLUID HOSE CLAMP
27	3		

- \* INCLUDES ITEMS 2,3,4,5,7,8 AND FORTY OF ITEM 6.
  \*\* NOT REQUIRED IF LUBRICATOR IS FURNISHED.

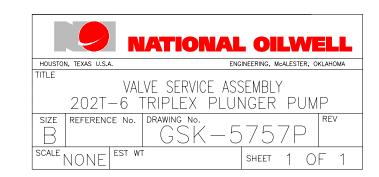


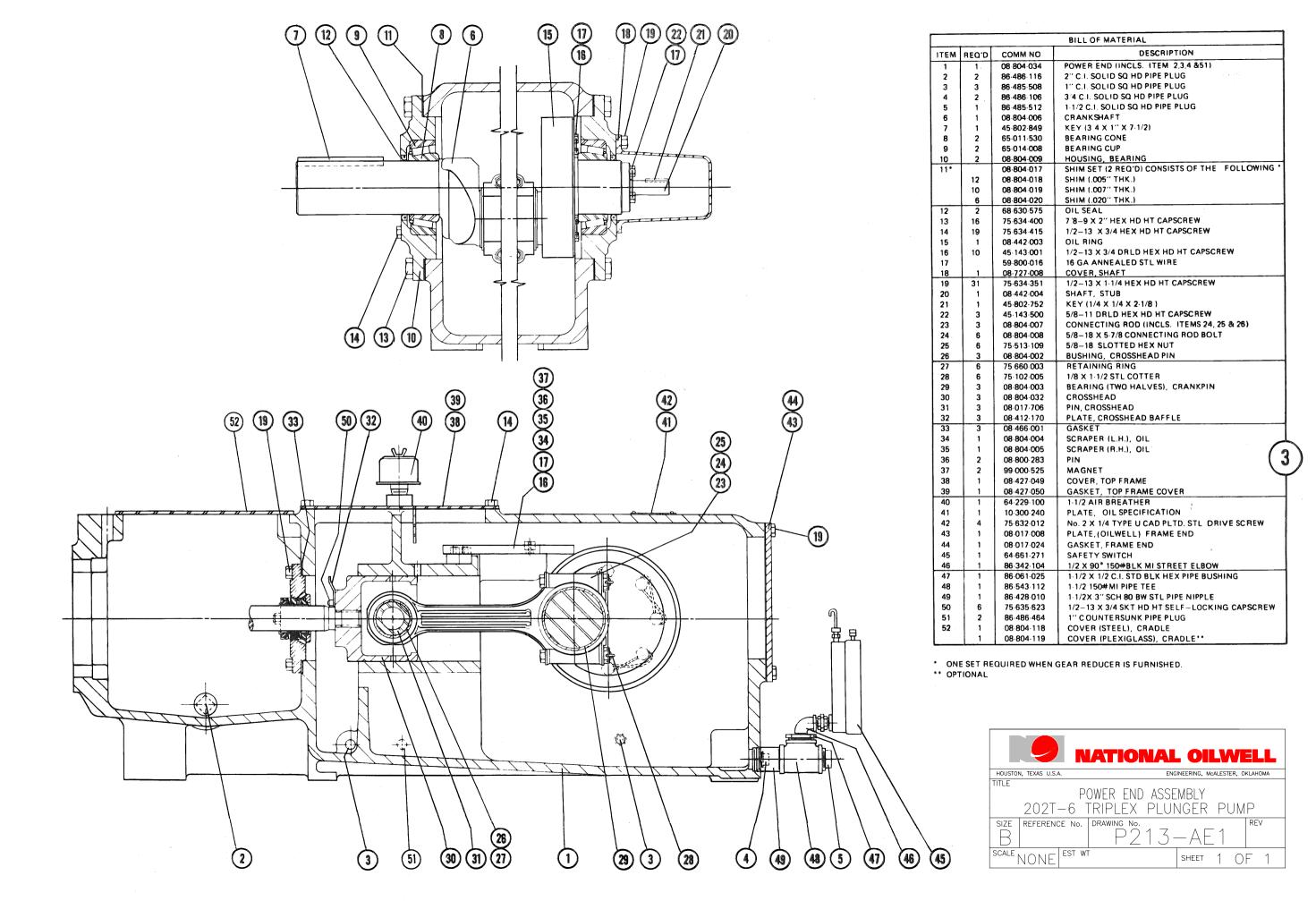


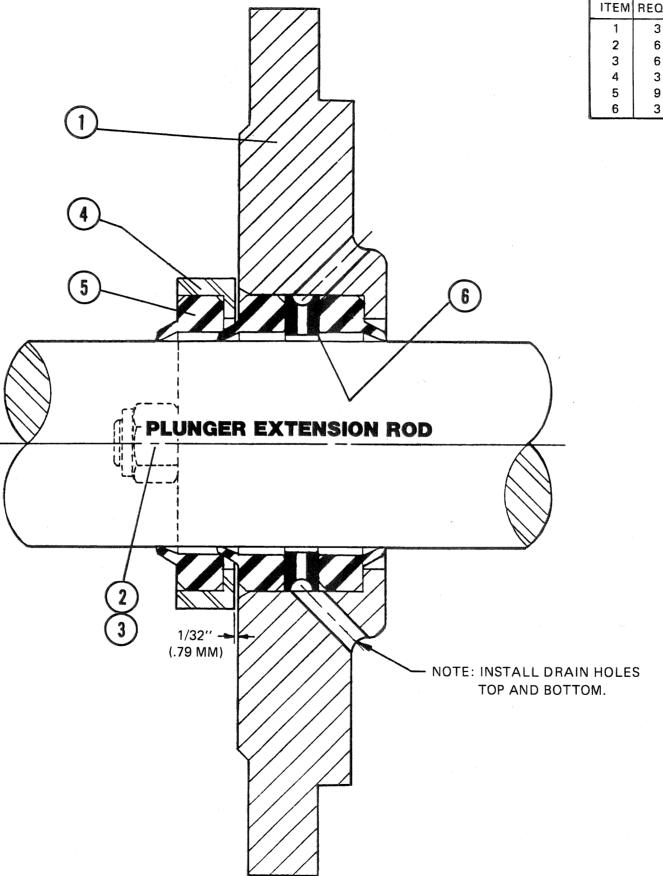
F/2" TO 3" PLUNGER RANGÈ

BILL OF MATERIAL					
TEM	REQ'D	COMM. NO.	DESCRIPTION		
	6	08-496-267	VALVE ASSEMBLY COMPLETE		
1	6	08-422-025	1/2-13 X 2-1/4 NYLOK CAPSCREW		
2	6	08-416-092	VALVE GUARD (S.S.)		
3	6	08-416-093	VALVE SPRING (INCONEL)		
4	6	08-416-054	VALVE SLEEVE (S.S.)		
5	6	08-116-082	VALVE DISC (DELRIN)		
6	6	08-422-049	VALVE SEAT (S.S.)		



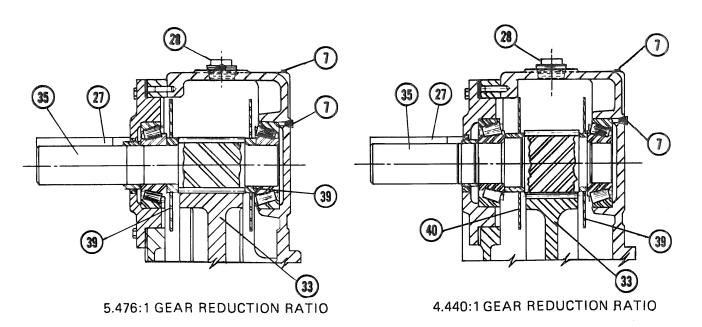






BILL OF MATERIAL					
ITEM	REQ'D	COMM NO	DESCRIPTION		
1	3	08-466-010	DIAPHRAGM HOUSING (INCLS . ITEMS 2 & 3)		
2	6	75-509-994	1/2-13 HEX STL LOCKNUT		
3	6	49-002-925	1/2-13 X 2" STUD		
4	3	08-467-006	GLAND, DIAPHRAGM		
5	9	08-466-012	WIPER, ROD		
6	3	08-411-016	RING, LANTERN		

NAT	<b>FIONAL OILWELL</b>
HOUSTON, TEXAS U.S.A.	ENGINEERING, McALESTER, OKLAHOMA
	IRAGM ASSEMBLY PLEX PLUNGER PUMP
SIZE REFERENCE No. DRAW	/ING No. P115—AM1
SCALE NONE EST WT	SHEET 1 OF 1



Γ				BILL OF MATERIAL	
T	ITEM	REQ'D	COMM NO	DESCRIPTION	
t	1	1	08-804-092	GEAR CASE (INCLS. ITEMS 2, 3, 4 & 7)	
	2	1	86-486-124	3" C.I. SOLID SQ HD PIPE PLUG	
	3	13	75-635-043	1/2-13 X 2-1/4 HEX HD HT CAPSCREW	
- 1	4	2	45-804-110	1/2 X 1-7/8 DOWEL PIN	
-	5	4	75-634-326	1/2-13 X 3-1/4 HEX HD HT CAPSCREW	
- 1	6	4	75-634-352	1/2-13 X 1-1/2 HEX HD HT CAPSCREW	
- 1	7	10	86-486-456	1/4 COUNTERSUNK PIPE PLUG	
	8	2	86-486-108	1" C.I. SOLID SQ HD PIPE PLUG	٢
Γ	9	1	08-804-105	SPACER, GEAR	ŀ
- 1	10	4	86-485-506	3/4 C.I. SOLID SQ HD PIPE PLUG	l
	11	4	86-485-512	1-1/2 C.I. SOLID SQ HD PIPE PLUG	
ı	12	1	16-527-136	MAGNET ASSEMBLY	1
- 1	13	1	86-061-050	3" X 1-1/2 CI STD BLK HEX PIPE BUSHING	l
- 1	14	1	64-229-100	1-1/2 AIR BREATHER	ı
-	15	1	08-804-011	HOUSING, PINION BEARING	١
ı	16		08-804-013	SHIM SET (1 REQ'D) CONSISTS OF THE FOLLOWING	١
- 1		6	08-804-014	SHIM (.005" THK)	L
- 1		5	08-804-015	SHIM (.007" THK)	T
- 1		3	08-804-016	SHIM (.020" THK)	ŀ
ı	17	1	68-630-507	OIL SEAL	ı
- 1	18	1	08-804-021	RING, OIL SEAL WEAR	١
	19	2	65-013-228	CUP, BEARING	1
١	20	2	65-010-521	CONE, BEARING	١
- 1	21	1	08-802-026	PLATE, REATAINER	ı
	22	1	75-635-178	1-1/4 - 8 X 2" HEX HD HT CAPSCREW	١
	23	1	75-770-480	1-1/4 EXT SHAKEPROOF LOCKWASHER	1
	24	1	45-804-236	GASKET	L
Γ	25	2	68-630-665	OIL SEAL	ſ
1	26	1	45-804-194	KEY (1" X 3/4 X 6-1/4)	ŀ
- [	27	1	45-122-603	KEY (7/8 X 7/8 X 6-1/2)	١
	28	1	86-486-120	2-1/2 C.I. SOLID SQ HEAD PIPE PLUG	١
١	29	- 8	45-142-603	7/8-9 X 2" DRLD HEX HD HT CAPSCREW	1
	30		59-800-016	16 GA ANNEALED STL WIRE	١
	31	1	86-424-001	1/2 X CLOSE SCH 40 BW STL PIPE NIPPLE	١
	32	1	86-061-010	3/4 X 1/2 C.I. STD BLK HEX PIPE BUSHING	

	1.588:1 GEAR REDUCTION RATIO				
33	1	08-275-000	GEAR (81 TEETH)		
34	1	06-109-009	GAUGE, OIL		
35	1	08-804-023	SHAFT, PINION		
36	1	45-802-738	KEY (1/2 X 3/4 X 4-1/2)		
37	1	08-804-026	PINION (51 TEETH)		
38	1	08-804-106	SPACER		
39	1	08-804-094	SPACER		
40	1	08-804-095	SPACER		
	•				

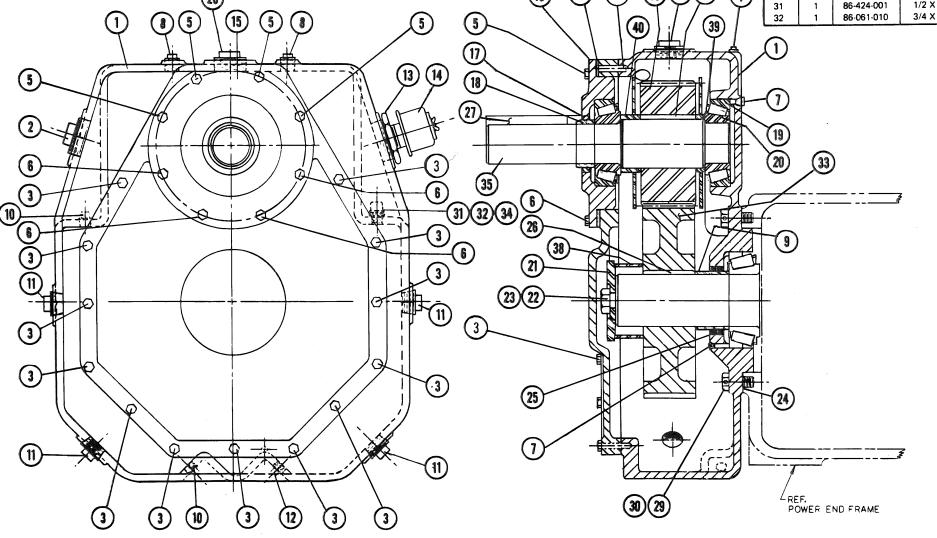
	1.775:1 GEAR REDUCTION RATIO					
33	1	08-018-052	GEAR (87 TEETH)			
34	1	06-109-009	GAUGE, OIL	90000		
35	1	08-804-023	SHAFT, PINION			
36	1	45 802 738	KEY (1/2 X 3/4 X 4-1/2)			
37	1	45-804-028	PINION (49 TEETH)			
38	1	08-804-106	SPACER	-		
39	1	08-804-094	SPACER			
40	1	08-804-095	SPACER			

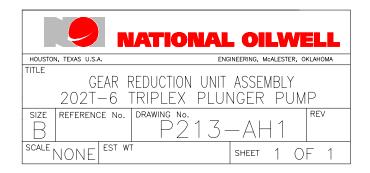
	2.487:1 GEAR REDUCTION RATIO					
33	1	08-275-004	GEAR (97 TEETH)			
34	1	06-009-373	GAUGE, OIL			
35	1	08-804-023	SHAFT, PINION			
36	1	45-802-738	KEY (1/2 X 3/4 X 4-1/2)			
37	1	45-804-027	PINION (39 TEETH)			
38	1	08-804-106	SPACER			
39	1	08-804-094	SPACER			
40	1	08-804-095	SPACER			

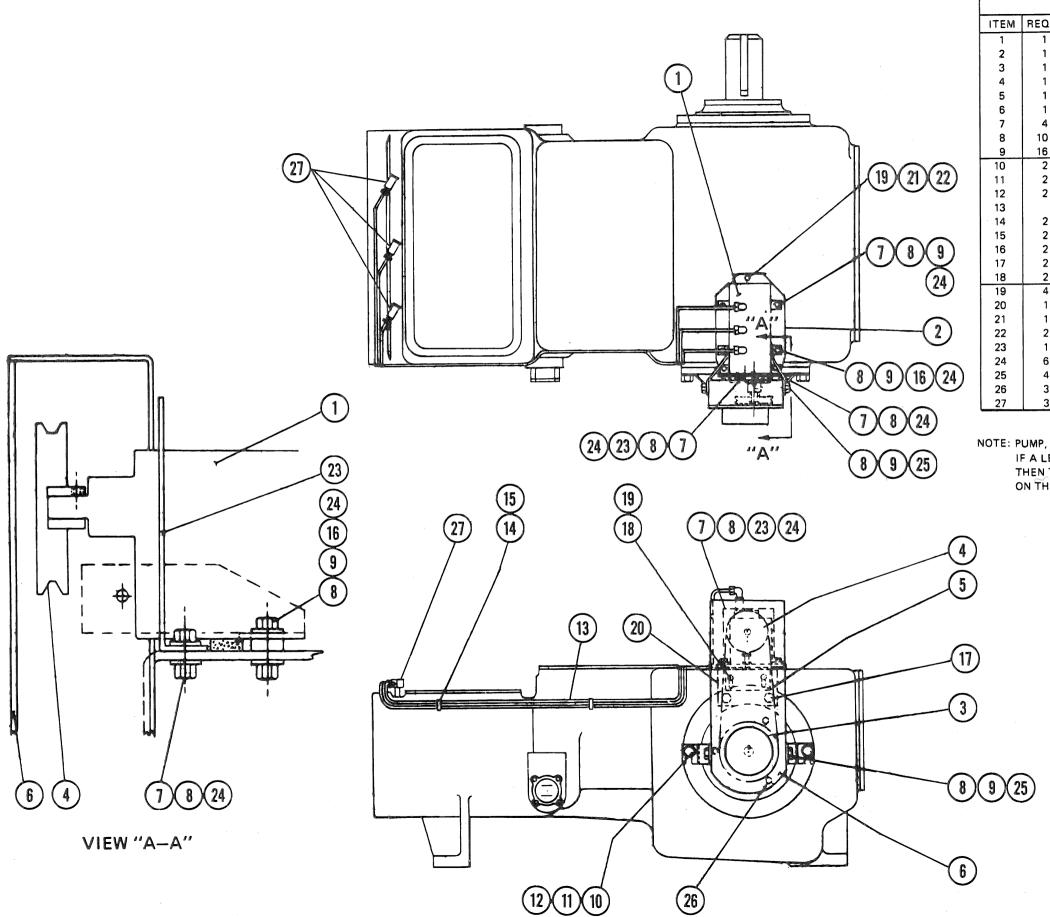
		3.121:1 GEAF	REDUCTION RATIO	
33	1	08-017-420	GEAR (103 TEETH)	
34	1	06-009-365	GAUGE, OIL	
35	1	08-804-023	SHAFT, PINION	
36	1	45-802-738	KEY (1/2 X 3/4 X 4-1/2)	
37	1	08-804-029	PINION (33 TEETH)	
38	1	08-804-106	SPACER	
39	1	08-804-094	SPACER	
40	1	08-804-095	SPACER	

		4.440:1 GEAR	REDUCTION RATIO
33	1	08-275-091	GEAR (111 TEETH)
34	1	45-804-280	GAUGE, OIL
35	1	08-804-096	PINION SHAFT W/INTEGRAL PINION (25 TEETH)
38	1	08-804-106	SPACER
39	1	08-804-094	SPACER
40	1	08-804-095	SPACER

1		5.476:1 GEAR	REDUCTION RATIO
33	1	08-018-341	GEAR ( 115 TEETH)
34	1 1	45-804-280	GAUGE, OIL
35	1	08-804-097	PINION SHAFT W/INTEGRAL PINION (21 TEETH)
38	1	08-804-107	SPACER
39	2	08-804-093	SPACER







			BILL OF MATERIAL				
BILL OF MATERIAL							
ITEM	REQ'D	COMM NO	DESCRIPTION				
1	1	08-285-029	3-FEED LUBRICATOR (INCLS. ITEM 27)				
2	1	08-485-028	PLATE, LUBRICATOR MOUNTING				
3	1	68-640-250	6.7 P.D. 1-A SECTION DRIVE SHEAVE				
4	1 1	68-650-431	5" P.D. 1-A SECTION LUBRICATOR SHEAVE				
5	1	68-020-048	A-48 V-BELT				
6	1	08-485-041	GUARD, LUBRICATOR BELT				
7	4	75-633-740	3/8-16 X 1-1/4 HEX HD HT CAPSCREW				
8	10	75-770-472	3/8 EXT. SHAKEPROOF LOCKWASHER				
9	16	75-770-203	3/8 PLATE WASHER				
10	2	75-635-063	7/8-9 X 7/8 HEX HD HT CAPSCREW				
11	2	75-770-477	7/8 EXT. SHAKEPROOF LOCKWASHER				
12	2	75-770-207	7/8 PLATE WASHER				
13		64-699-208	1/4 O.D. COPPER TUBING (.049" THK. WALL)				
14	2	64-228-265	TUBING CLIP				
15	2	75-634-875	1/4-20 X 1/2 RD. HD MACHINE SCREW				
16	2	75-634-342	3/8-16 X 1-1/2 HEX HD HT CAPSCREW				
17	2	75-634-403	7/8-9 X 2-1/4 HEX HD HT CAPSCREW				
18	2	75-634-351	1/2-13 X 1-1/4 HEX HD HT CAPSCREW				
19	4	75-770-204	1/2 PLATE WASHER				
20	1	08-485-034	SUPPORT, LUBRICATOR				
21	1	75-634533	1/2-13 X 3" SQ HD CUP POINT SETSCREW				
22	2	75-510-506	1/2-13 HEX HD JAM NUT				
23	1	08-627-039	COVER, LUBRICATOR				
24	6	75-510-404	3/8-16 HEX NUT				
25	4	75-634-313	3/8-16 X 3/4 HEX HD HT CAPSCREW				
26	3	75-634-415	1/2-13 X 3/4 HEX HD HT CAPSCREW				
27	3	64-438-895	1/8 MPT X 1/4 T ANGLE CHECK VALVE				

NOTE: PUMP, AS SHOWN, IS FOR RIGHT HAND DRIVE.

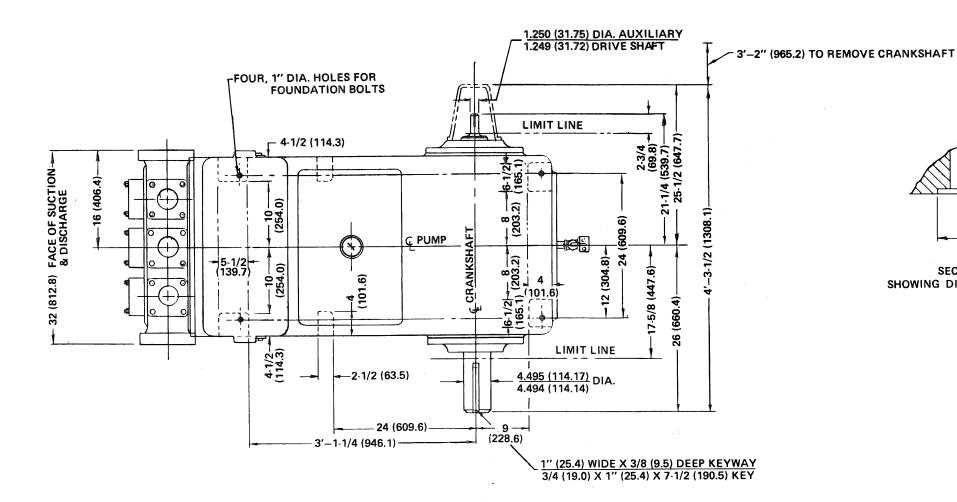
IF A LEFT HAND DRIVE PUMP IS ORDERED

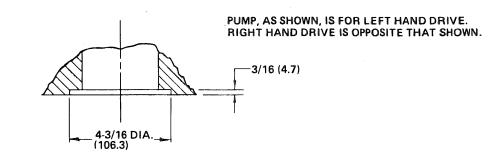
THEN THE LUBRICATOR WOULD BE MOUNTED

ON THE OPPOSITE SIDE.

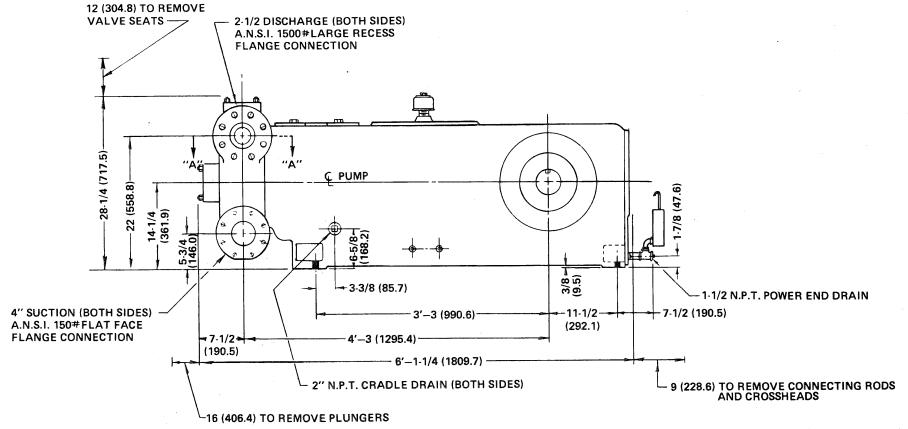


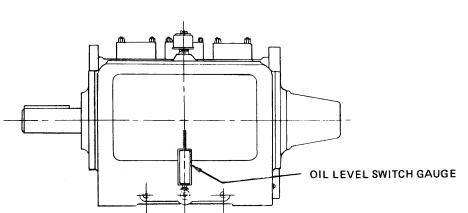
(b)

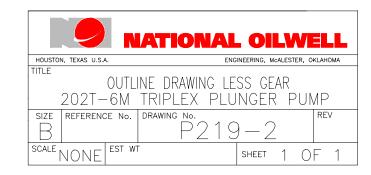


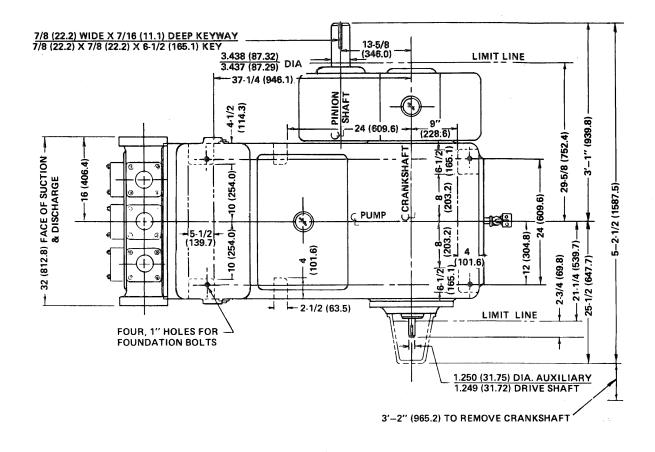


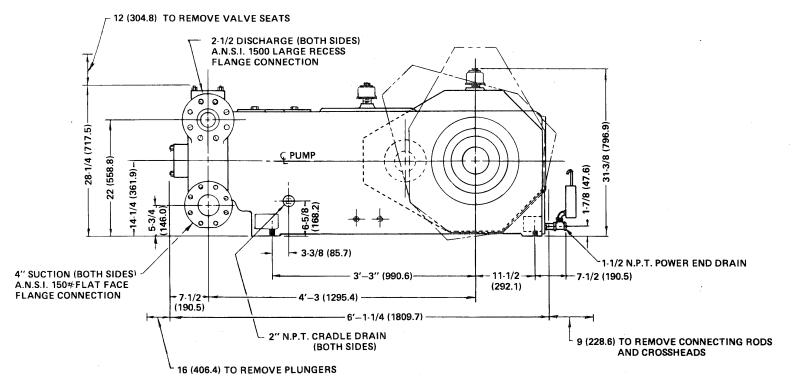
SECTION "A"—"A"
SHOWING DISCHARGE CONNECTION

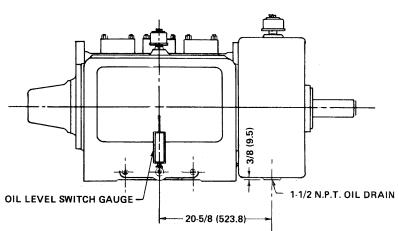


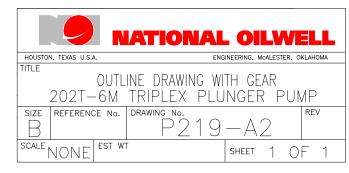


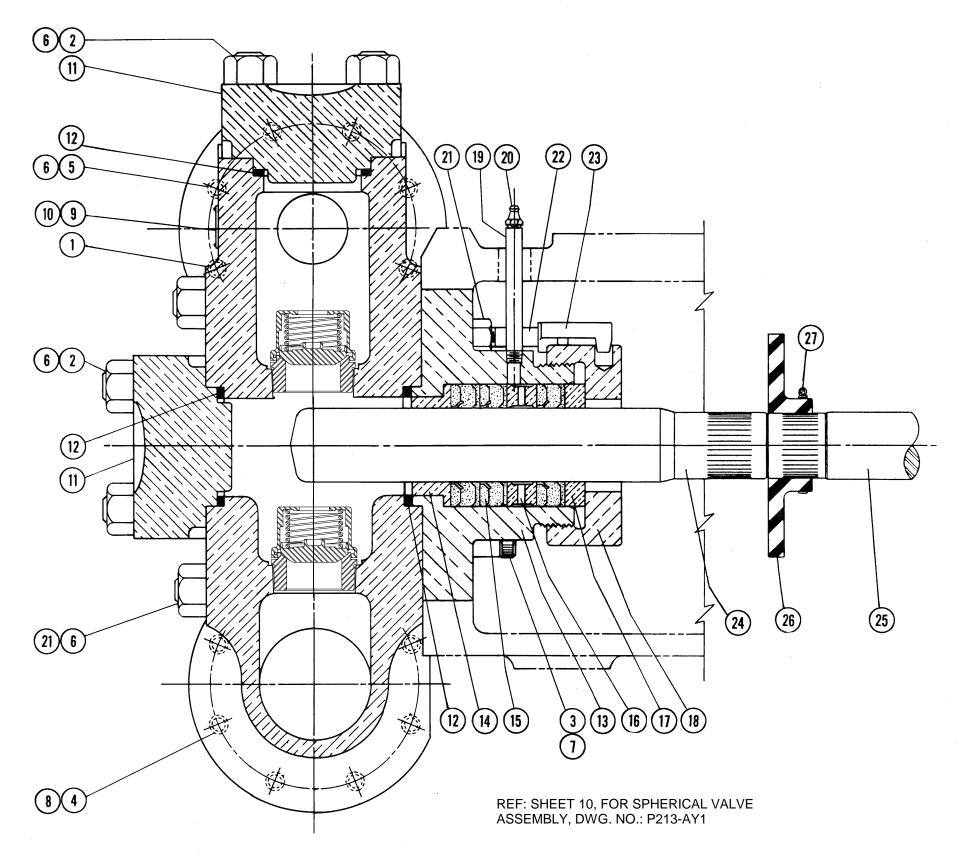






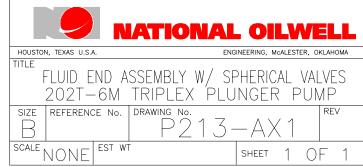




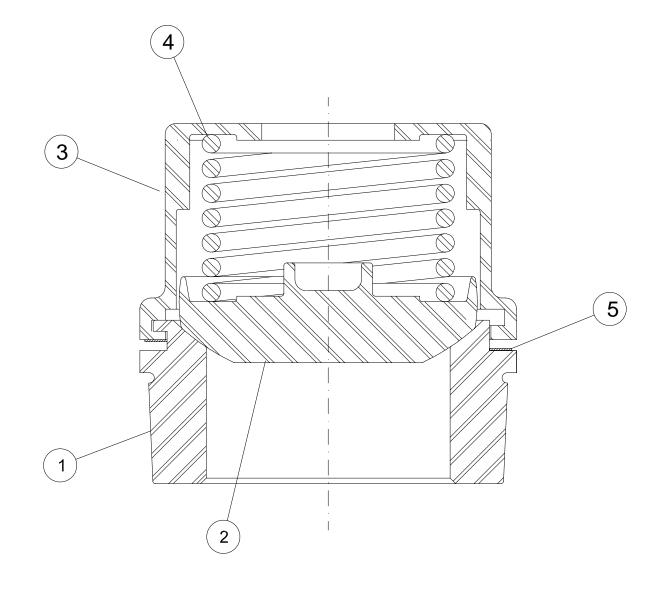


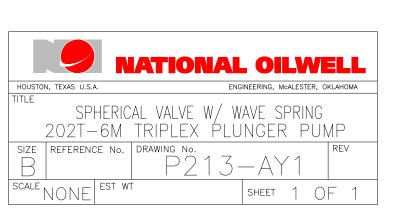
			BILL OF MATERIAL
ITEM	REQ'D	COMM NO	DESCRIPTION
1.*	1	08-400-124	FLUID END-STUDDED*
2	24	45-810-002	STUD, 1"-8 X 4-3/4
3	12	45-810-000	STUD, 1"-8 X 3-1/2
4	16	45-810-022	STUD, 5/8-11 X 2-3/4
5 6	16 48	45-810-005 75-510-316	STUD, 1" –8 X 4-1/4 1"–8 HEAVY HEX NUT
7	12	75-513-523	1"-8 CAD. PLTD. ALLENUT
8	19	75-510-310	5/8-11 HEAVY HEX NUT
9	1	08-200-003	PLATE, SERIAL NUMBER
10 11	2 6	75-632-022 08-406-007	No. 10 X 3/8 CAD. PLTD. DRIVE SCREW COVER, CYLINDER HEAD & VALVE
12	9	08-406-003	GASKET
13	3	08-423-006	STUFFING BOX ( 2" THRU 2-3/8 PLUNGERS)
- 14	3	08-423-003	STUFFING BOX (2-1/2 THRU 3" PLUNGERS)
14	3	08-053-328 08-224-065	2" STUFFING BOX BUSHING 2-1/8 STUFFING BOX BUSHING
	3	08-053-327	2-1/4 STUFFING BOX BUSHING
	3	08-224-069	2-3/8 STUFFING BOX BUSHING
	3	08-053-326	2-1/2 STUFFING BOX BUSHING
	3	08-053-325	2-3/4 STUFFING BOX BUSHING 3" STUFFING BOX BUSHING
15	3	08-053-324 08-215-038	2" PACKING SET (STYLE 838)
.5	3	08-415-000	2-1/8 PACKING SET (STYLE 838)
	3	08-215-040	2-1/4 PACKING SET (STYLE 838)
	3	08-415-001	2-3/8 PACKING SET (STYLE 838)
	3	08-215-042	2-1/2 PACKING SET (STYLE 838) 2-3/4 PACKING SET (STYLE 838)
	3	08-215-043 08-215-044	3" PACKING SET (STYLE 838)
16	3	08-053-312	2" LANTERN RING
	3	08-211-113	2-1/8 LANTERN RING
	3	08-053-311	2-1/4 LANTERN RING
	3	08-211-115 08-053-310	2-3/8 LANTERN RING 2-1/2 LANTERN RING
	3	08-053-310	2-3/4 LANTERN RING
	3	08-053-308	3" LANTERN RING
17	3	08-053-296	2" PACKING FOLLOWER
	3	08-226-235	2-1/8 PACKING FOLLOWER
	3	08-053-295 08-226-242	2-1/4 PACKING FOLLOWER 2-3/8 PACKING FOLLOWER
	3	08-053-294	2-1/2 PACKING FOLLOWER
	3	08-053-293	2-3/4 PACKING FOLLOWER
40	3	08-053-292	3" PACKING FOLLOWER
18	3	08-425-003 08-425-002	STUFFING BOX GLAND (2" THRU 2-3/8 PLGRS.) STUFFING BOX GLAND (2-1/2 THRU 3" PLGRS.)
19	3	08-400-420	1/4 MPT X 1/8 FPT X 7" SCH 40 GREASE NIPPLE
20**	3	64-016-115	1/8 HYD GREASE FITTING**
21	8	45-810-016	STUD, 1" -8 X 10-1/2
22 23	3	75-634-368 08-425-008	5/8–11 X 4" HEX HD HT CAPSCREW GLAND PAWL
24	3	08-412-044	2" CO-HARD PLUNGER
-	3	08-412-053	2-1/8 CO—HARD PLUNGER
	3	08-412-024	2-1/4 CO—HARD PLUNGER
	3	08-412-054	2-3/8 CO—HARD PLUNGER
	3	08-412-025 08-412-026	2-1/2 CO—HARD PLUNGER 2-3/4 CO—HARD PLUNGER
	3	08-412-027	3" CO-HARD PLUNGER
	3	08-412-107	2" CERAMIC PLUNGER
	3	08-412-090	2-1/8 CERAMIC PLUNGER
	3	08-412-091	2-1/4 CERAMIC PLUNGER
	3	08-412-092 08-412-093	2-3/8 CERAMIC PLUNGER 2-1/2 CERAMIC PLUNGER
	3	08-412-095	2-3/4 CERAMIC PLUNGER
	3 3	08-412-097	3" CERAMIC PLUNGER
25	3	08-441-026	ROD, PLUNGER EXTENSION
26 27	3	08-441-027	BAFFLE, FLUID HOSE CLAMP
41		99-094-087	HOSE CLAWF

<sup>\*</sup> INCLUDES ITEMS 2,3,4,5,7,8 AND FORTY OF ITEM 6.
\*\* NOT REQUIRED IF LUBRICATOR IS FURNISHED.



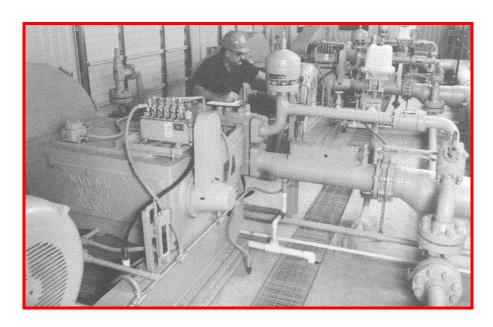
1	9707082	WAVE RING	5
1	1793025	SPRING, OUTER	4
1	1793024-6W	RETAINER, SPRING	3
1	1793027-25	VALVE	2
1	1793031-25	SEAT VALVE	1
QTY	PART NO.	DESCRIPTION	ITEM
LIST	OF MATERIAL:	VALVE ASSEMBLY 1793030-25W	





10)





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