

NATIONAL OILWELL

PARTS LIST

F-1000 TRIPLEX MUD PUMP

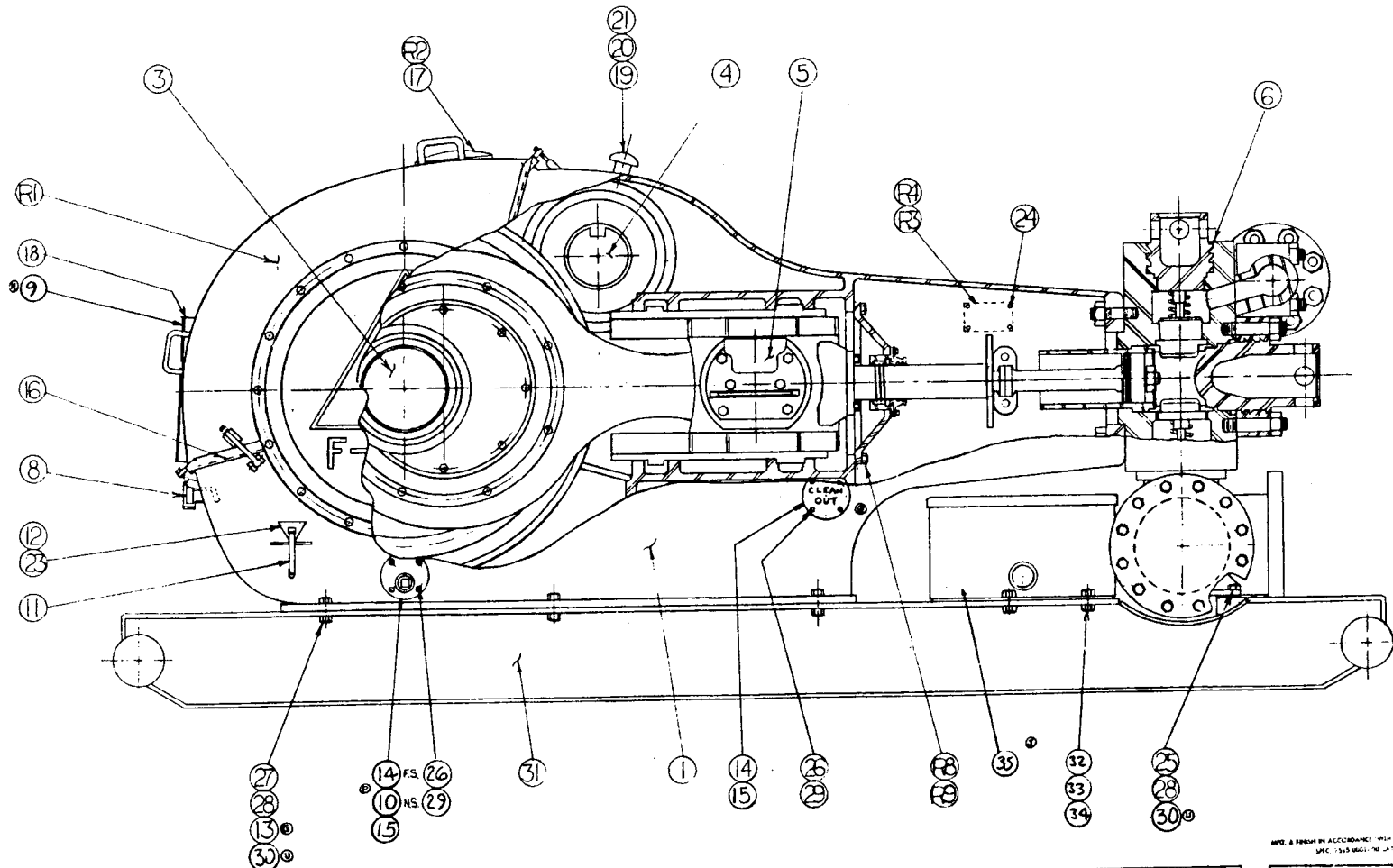
**NATIONAL-OILWELL
P.O. BOX 4638
HOUSTON, TEXAS 77210-4638**

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

Printed in U.S.A.

INSPECTION PER:
 7511-0110-02 PUMP TEST REPORT
 7511-0110-11 HYDROSTATIC TEST
 7511-0110-16 CROSSHEAD CLEARANCE
 7511-0110-20 ALIGNMENT

QTY	REV	PART NO.	DESCRIPTION
R1	1	6319-0074-00	GEAR CASE COVER
R2	2	7510-0201-00	C-E INSPECTION DR
R3	2	7506-0419-35	NAME PL C E
R4	2	" "	" " MID CONT
R5			
R6			
R7			
R8	24	7601-033052	1/2-13x1 1/2 HEX HD CAP SCREW
R9	24	7601-132016	1/2" LOCKWASHER
R10			
		6319-0154-01	FRAME ASSY
		6319-0032-00	CRANKSHAFT ASSY
		6319-0028-00	PINION SHAFT ASSY
		6319-0139-00	CROSSHEAD ASSY
		6999-0088-00	FLUID END ASSY
		6319-0141-00	LUBRICATION ASSY
		6319-0106-00	COVER PLATE
		6316-0349-00	CLEAN OUT COVER 7 1/2" CPLG.
		6397-0668-00	OIL LEVEL INDICATOR ASSY
		7506-0032-00	OIL LEVEL NAME PLATE
		6316-0259-00	SHIM SET (AS REQ'D)
		6397-0264-00	CLEAN OUT COVER
		7502-0581-00	CLEAN OUT CVR GASKET
		7602-059010	GEAR CASE CVR GASKET
		7502-0030-00	INSPECT. DR. GASKET
		6319-0105-00	GASKET
		6397-0186-00	BREATHER CAP
		7507-020000	BREATHER CAP STUD
		7602-107013	COPPER W/OIL (2 OZ)
		7602-5940-07	GEAR CASE COVER GASKET
		7601-106006	#6 X 3/4" PK DRIVE SCREW
		7601-106009	#8 X 5/8" PK DR SCR
		7601-033140	1" - 8 X 5 1/2" HEX CAPSCREW
		7601-033050	1/2" X 1 1/4" HEX HD CAP SCREW
		7601-033133	1/2" X 3" HEX HD CAP SCREW
		7601-063020	1" - 8 NC HVY NUT
		7601-133004	1/2" PLAIN WASHER SM. OD
		7601-132033	1" LOCKWASHER
		6319-018400	SKID
		7601-033077	3/8" - 11 X 1 3/4" HEX CAPSCREW
		7601-061012	3/8" - 11 HEX NUT
		7601-132030	3/8" LOCKWASHER
		6317-0164-00	90 GAL TANK



6319-0093-03 DIMENSIONAL DWG (UP TO S.N. 102)
 6319-0093-10 DIMENSIONAL DWG (S.N. 103 & UP)

REV	DATE	BY	CHKD	DESCRIPTION
1	63190			ITEM 25 QTY WAS 4
2	61890			REV. R W/M INCOMPLETE
3	61817			SKID(3) WAS 6319-0084-00
4				RELOCATE CLEAN OUT
5	62256			ADDED 2" TO SHIM SET
6	60092			ADDED 2" 6319-0105-00
7	68359			6 WAS 6319-0084-00
8	67267			ADDED INSPECTION NUT
9	67077			VERIFIED 6319-0084-00
10	66607			ADD TANK (SEE 6319-0084-00)

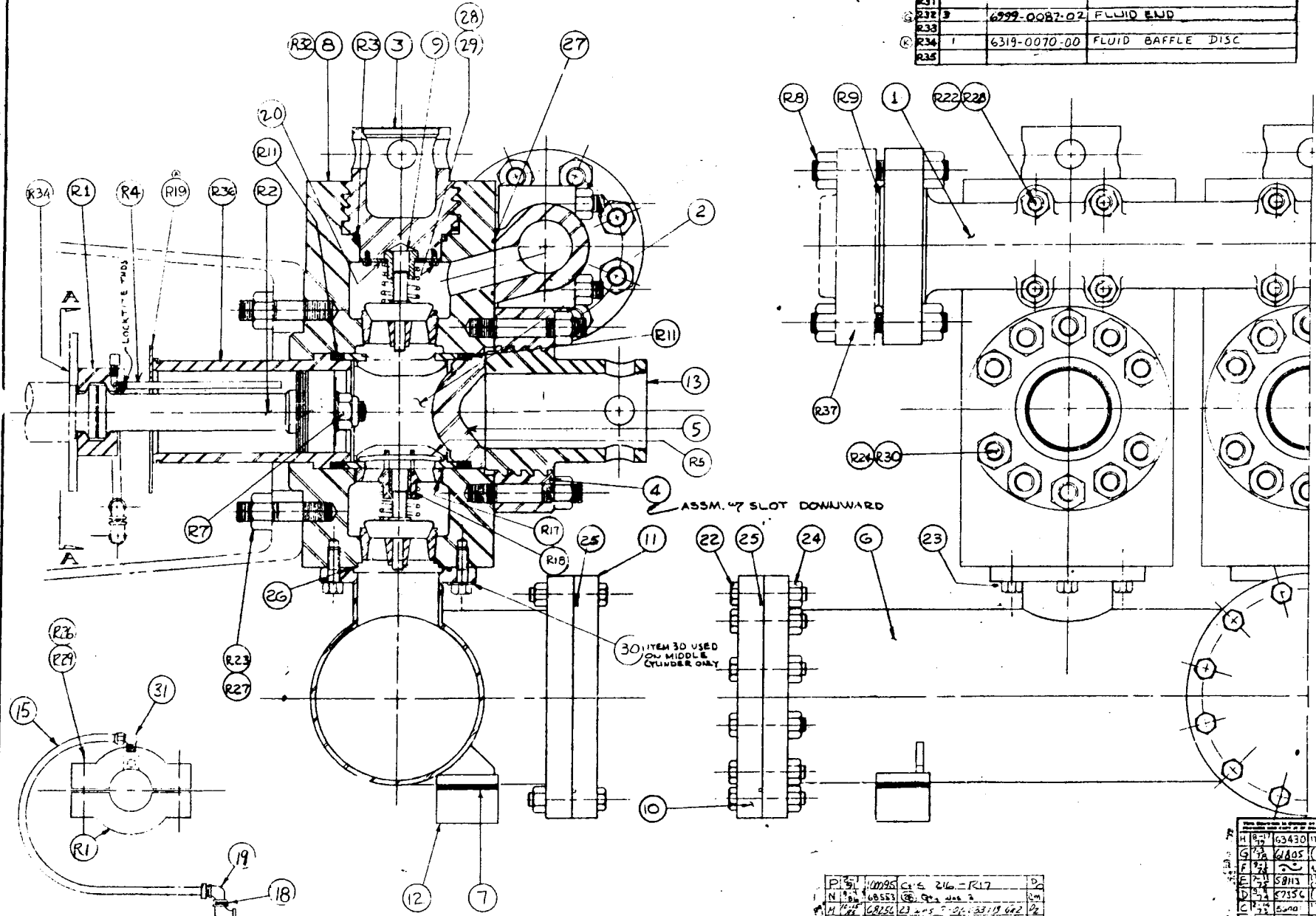
FILE # 6319-0084-00 G/TN 00920 P 65509 M 65509 B 65509 F 65509 A 65509 S 65509 E 65509 O 65509 D 65509 N 65509 U 65509 I 65509 L 65509 T 65509 R 65509 W 65509 Y 65509	CONTINENTAL ENSCO COMPANY 4001 W. 11TH STREET, SUITE 100 DALLAS, TEXAS	F1000 POWER PUMP GENERAL ASSEMBLY 6319-0084-00
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THD.	TORQUE BOLTS TO:	LB FEET
1/4"-8	DISCH MANIF TO CYL BLOCK	950-1000
1/2"-8	THD RING TO CYL BLOCK	130-1360
1/2"-8	CYL BLOCK TO FRAME	1575-1425
3/8"-9	SUCTION MANIF TO CYL BLOCK	220-250

ITEM NO.	QTY REQ'D.	PART NO.	DESCRIPTION
REF. OPTICAL PARTS			
R34	3	602-136120	LINER
R37	2	7601-206187	COMPANION FLANGE
R38			
R39			
R40			

ITEM NO.	QTY REQ'D.	PART NO.	DESCRIPTION
MISC. REF. PARTS			
R21			
R22	12	7521-2108-00	STUD (1/2")
R27	18	7501-2305-00	STUD (1/2")
R28	30	7501-2150-00	STUD (1/2")
R29	6	7601-0333-60	1/4" - SMC-2A x 4 1/4" LG. HEX. HD. CAP. SCREW
R30	18	7601-0675-17	1/2" - S HVY. HEX. NUT
R31	12	7601-0331-24	1/2" - S HVY. HEX. NUT
R32	6	7601-0331-24	1/2" - S HVY. HEX. NUT
R33	30	7601-0675-17	1/2" - S HVY. HEX. NUT
R34	3	6999-0087-02	FLUID END
R35	1	6319-0070-00	FLUID BAFFLE DISC

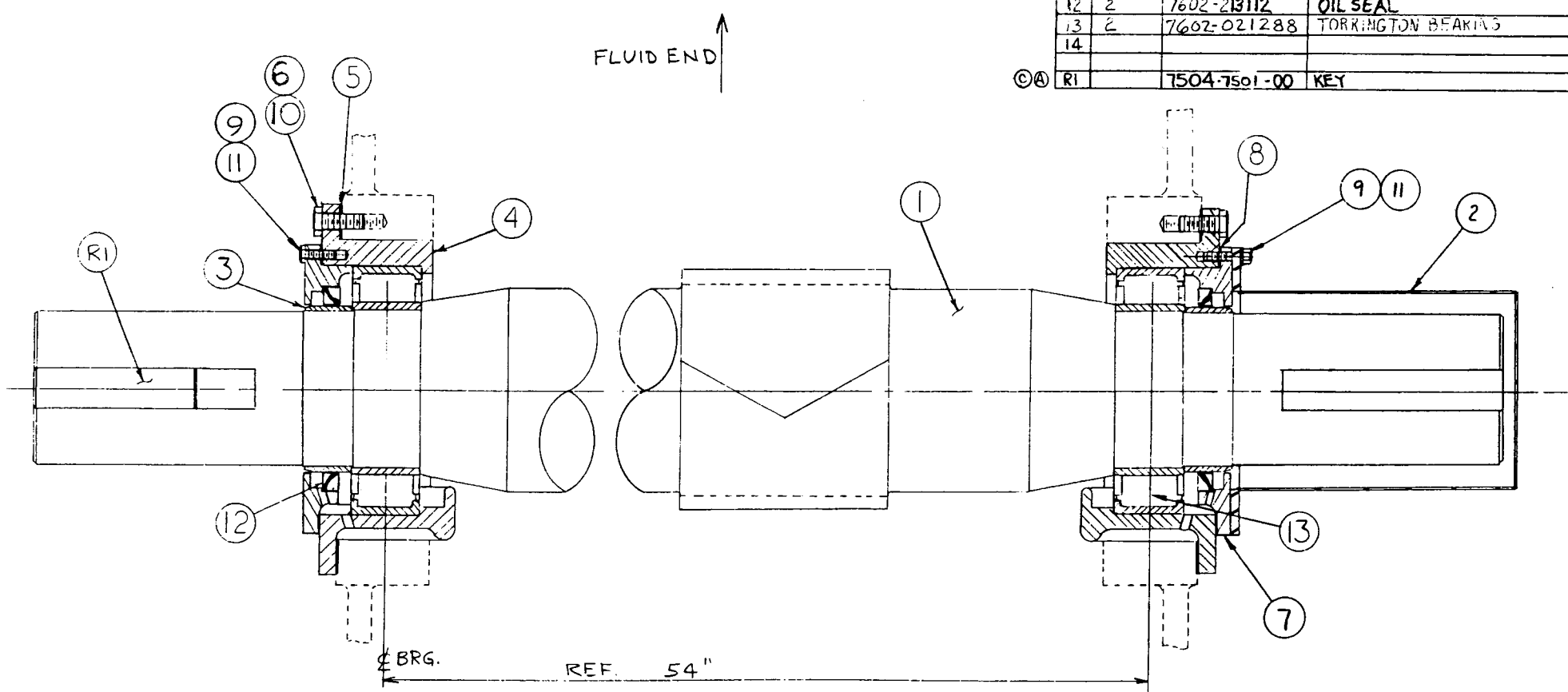
ITEM NO.	QTY REQ'D.	PART NO.	DESCRIPTION
1	1	6319-0025-00	DISCHARGE MANIFOLD
2	3	-0026-00	LINER CAGE
3	3	1-0027-00	VALVE POT COVER
4	3	6999-0089-00	THREAD RING
5	3	6319-0031-00	CYLINDER HEAD PLUG
6	1	6319-0067-00	SUCTION MANIFOLD
7	2	6319-0079-00	SHIM SET
8	3	6999-0086-02	FLUID END (STUDED)
9	3	6319-0575-00	VALVE GUIDE - UPPER
10	1	6319-0105-00	SUCTION FLANGE
11	1	6319-0074-00	BLIND SUCTION FLANGE
12	2	6319-0132-00	SPACER
13	3	6319-0070-00	CYLINDER HEAD
14			
15	3	7503-0210-19	HOSE ASSY.
16			
17			
18	3	7601-2530-42	1" T x 1/4" PIPE BUSHING - GALV.
19	3	1-2570-27	1/4" 90° STREET ELB. - GALV.
20	3	6357-0603-00	RETAINER - UPPER VALV. GUIDE
21			
22	36	7601-0331-39	1/4" - SMC x 5 1/4" LG. HEX. HD. CAP. SCREW
23	18	7601-0336-00	1/4" - SMC x 2" LG. HEX. HD. CAP. SCREW
24	36	7601-0675-02	1/2" - S HVY. HEX. NUT
25	3	7602-1600-52	SUCTION FLG. GSKT.
26	3	7602-1600-61	MANIF. TO S. RING
27	3	7602-1610-46	O-RING TYPE AU G230-19
28	12	7501-0051-00	RETAINER SCREW - VALV. GUIDE
29	1	7602-528-072	1/2" DIA. SOFT IRON WIRE - G-6"
30	1	7601-133-015	1/8" PLAIN WASHER
31	3	7601-209-036	90° ELB. ADAPTER
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ITEM NO.	QTY REQ'D.	PART NO.	DESCRIPTION
R20			
R21	3	6319-0121-00	LINER END COVER
R22	3	6316-0049-00	WASHER - LINER VALV. GUIDES
R23	3	6319-0087-00	VALVE GUIDE - LOWER
R24	1	7602-3016-49	PROTO HVY DUTY SOCKET N. 5770
R25	1	7602-3010-22	PROTO HVY DUTY SOCKET N. 5770
R26	1	7602-3010-22	PROTO HVY DUTY SOCKET N. 5770
R27	1	7602-3010-22	PROTO HVY DUTY SOCKET N. 5770
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R99	1	7602-3010-22	PROTO HVY DUTY SOCKET N. 5770
R100	1	7602-3010-22	PROTO HVY DUTY SOCKET N. 5770

REF. LOOSE PARTS			
R20	3	6319-0121-00	LINER END COVER
R21	3	6316-0049-00	WASHER - LINER VALV. GUIDES
R22	3	6319-0087-00	VALVE GUIDE - LOWER
R23	1	7602-3016-49	PROTO HVY DUTY SOCKET N. 5770
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R85			

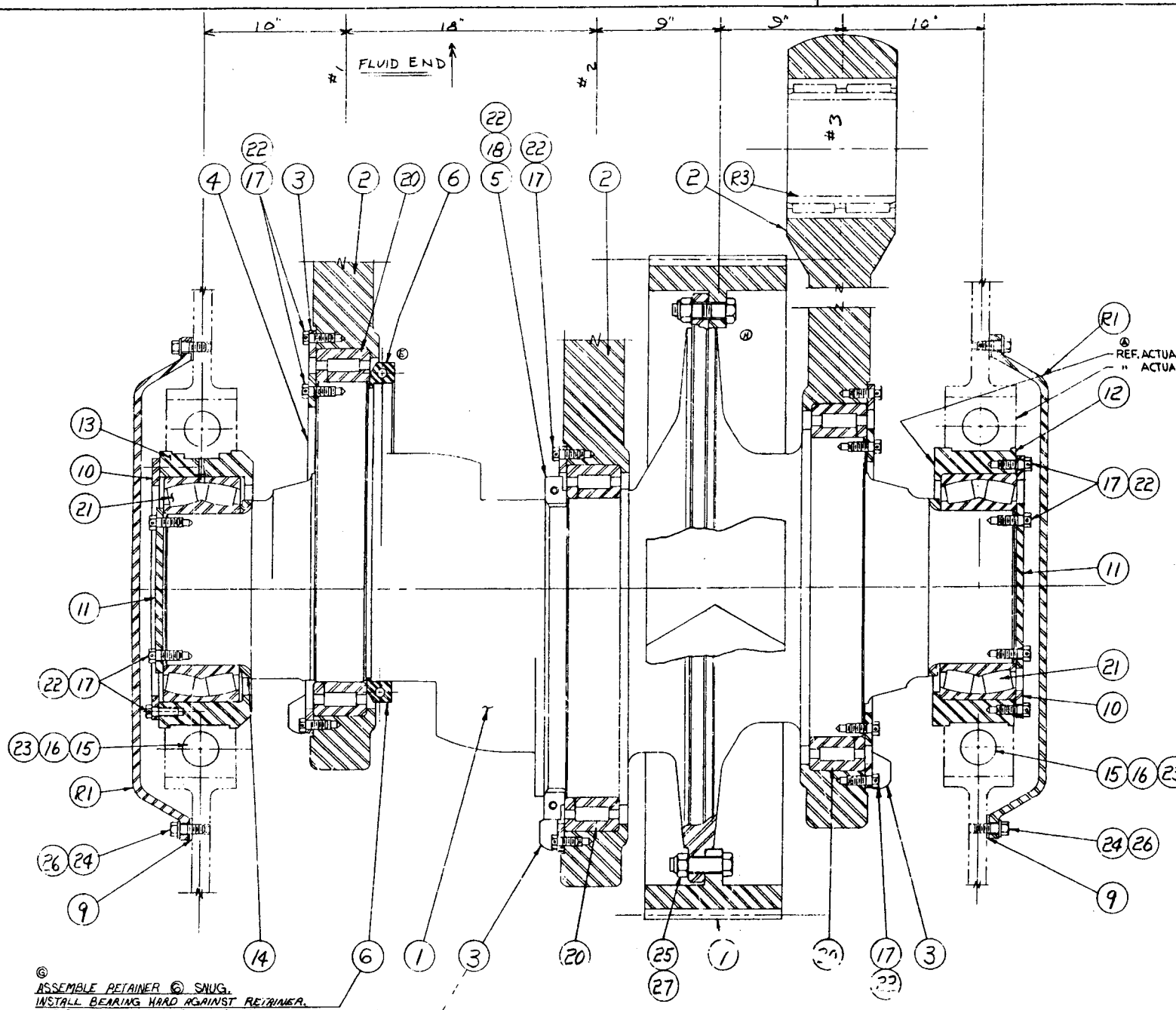
1	1'	6319-0012-00	PINION SHAFT
2	1	6319-0143-00	COVER
3	2	6319-0022-00	OIL SEAL WEAR RING
4	2	6319-0024-00	PINION BEARING CARRIER
5	2	7502-0884-00	PINION BEARING CARRIER GASKET
6	16	7601-033600	7/8"-9UNCx2" HEX. HD CAP. SC-GR5
7	2	6319-0023-00	OIL SEAL CARRIER
8	2	7502-0883-00	OIL SEAL CARRIER GASKET
9	12	7601-033220	1/2"-13UNCx1/2" HEX. HD CAP. SC-GR5
10	16	7601-132019	7/8" LOCKWASHER
11	12	7601-132016	1/2" LOCKWASHER
12	2	7602-213112	OIL SEAL
13	2	7602-021288	TORRINGTON BEARING
14			
ⓐ	R1	7504-7501-00	KEY



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MATERIAL:		CONTINENTAL-EMSCO COMPANY A DIVISION OF THE TORRINGTON SHAFT AND TUBE COMPANY DALLAS, TEXAS	
UNLESS SPECIFIED OTHERWISE:		F1000	
STRUCTURAL DIMENSIONS		= 1/16"	
CONCENTRICITY		.010" TIR	
ANGLES		= 1/2 DEG	
DATE	BY	DATE	BY
11/18	54358 REM. ITEM #2, ADD ITEM #1	10-13-69	B
DATE	REVISION	DATE	REVISION

6319-0028-00



ITEM NO.	NO. REV'S	PART NO.	DESCRIPTION
1	1	6319-0033-01	CRANK SHAFT
2	3	6319-0035-00	ECCENTRIC STRAP
3	3	6319-0036-00	OUTER FACE RETAINER
4	2	6319-0037-00	INNER FACE RETAINER
5	1	6319-0038-00	INNER FACE RET. (CENTER)
6	1	6319-0175-00	CRANKSH. BRG. INNER RET.
7	1	6319-0011-00	ECCENTRIC RING GEAR
8			
9	2	6319-0040-00	MAIN BRG. COVER GASKET
10	2	6319-0041-00	OUTER RACE RET. MAIN BRG.
11	2	6319-0046-00	INNER RACE RET. MAIN BRG.
12	1	6319-0043-00	BEARING CARRIER LEFT
13	1	6319-0176-00	BEARING CARRIER RIGHT
14	2	6319-0045-00	MAIN BEARING SPACER
15	4	6319-0034-00	MAIN BEARING HSR. BOLT
16	4	6319-0032-00	MAIN BEARING HSR. SHIM SET
17	70	7501-0004-00	3/8" DIA. DRILL HD. CAPSCREW
18	2	7501-1251-00	5/8" DIA. DRILL HD. CAPSCREW
19			
20	3	6319-0078-00	ECCENTRIC BRG.
21	2	7602-020147	MAIN BRG.
22	1	7602-528960	16 GA. SOFT IRON WIRE X 80-0"
23	1	7602-520060	11 GA. SOFT IRON WIRE X 5-0"
24	24	7601-033077	28" X 1 1/4" H. H. CAPSCREW
25	12	7601-033235	1/4" X 5" H. H. CAPS. GR. 5
26	24	7601-133005	3/8" BRN. WASHER - SMALL OD.
27	12	7601-072019	1 1/4" X 7 HEAVY HEX LOCKW. NUT
28			
R1	2	6319-0042-00	MAIN BRG. COVER, C-E OD
R2	3	6397-0267-00	CROSSHEAD BEARING
R4	1	7602-301051	MAIN BRG. BOLT WRENCH

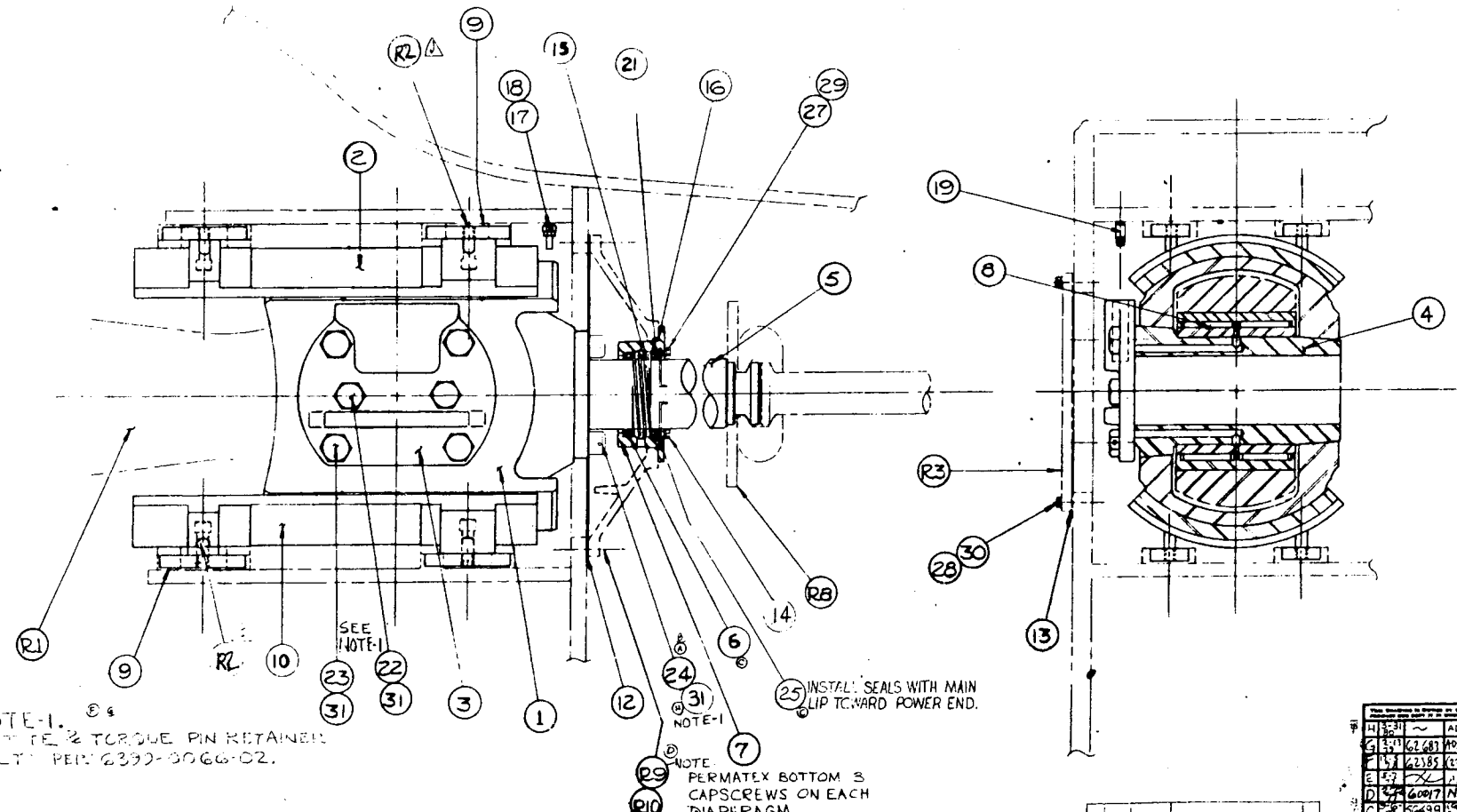
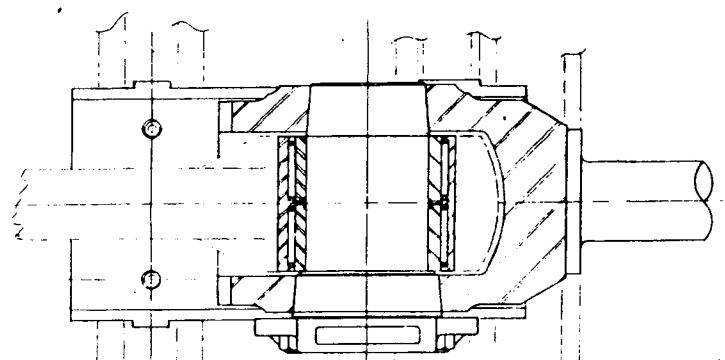
NOTE:
 01.

- 02. SHIM TO OBTAIN NET FIT OF .004" TIGHT BETWEEN CARRIERS AND FRAME. REFER TO 6399-0066-00 FOR DETAILS.
- 03. TORQUE MAIN BEARING BOLTS TO 8,800 FT. LBS. CHECK ROLLERS TO BE SURE NO MORE THAN 4 ARE TIGHT. (EXCEPT AT BOTTOM DUE TO WEIGHT), ZERO TIGHT ROLLERS IS OK.
- 04.

ASSEMBLE RETAINER 6 SNUG.
 INSTALL BEARING HARD AGAINST RETAINER.
 LET BEARING COOL TO ROOM TEMP.
 TIGHTEN & SAFETY WIRE RETAINER BOLTS.

INSTALL WITH OIL SCOOP AT BOTTOM
 TYPICAL - 3 RACES

11/22/55 12/15/55 1/10/56 2/15/56 3/15/56 4/15/56 5/15/56 6/15/56 7/15/56 8/15/56 9/15/56 10/15/56 11/15/56 12/15/56 1/15/57 2/15/57 3/15/57 4/15/57 5/15/57 6/15/57 7/15/57 8/15/57 9/15/57 10/15/57 11/15/57 12/15/57 1/15/58 2/15/58 3/15/58 4/15/58 5/15/58 6/15/58 7/15/58 8/15/58 9/15/58 10/15/58 11/15/58 12/15/58 1/15/59 2/15/59 3/15/59 4/15/59 5/15/59 6/15/59 7/15/59 8/15/59 9/15/59 10/15/59 11/15/59 12/15/59 1/15/60 2/15/60 3/15/60 4/15/60 5/15/60 6/15/60 7/15/60 8/15/60 9/15/60 10/15/60 11/15/60 12/15/60 1/15/61 2/15/61 3/15/61 4/15/61 5/15/61 6/15/61 7/15/61 8/15/61 9/15/61 10/15/61 11/15/61 12/15/61 1/15/62 2/15/62 3/15/62 4/15/62 5/15/62 6/15/62 7/15/62 8/15/62 9/15/62 10/15/62 11/15/62 12/15/62 1/15/63 2/15/63 3/15/63 4/15/63 5/15/63 6/15/63 7/15/63 8/15/63 9/15/63 10/15/63 11/15/63 12/15/63 1/15/64 2/15/64 3/15/64 4/15/64 5/15/64 6/15/64 7/15/64 8/15/64 9/15/64 10/15/64 11/15/64 12/15/64 1/15/65 2/15/65 3/15/65 4/15/65 5/15/65 6/15/65 7/15/65 8/15/65 9/15/65 10/15/65 11/15/65 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NOTE-1. LOCK TIGHT TORQUE PIN RETAINER BOLT PER 2399-0066-02.

NOTE-2. INSTALL SEALS WITH MAIN LIP TOWARD POWER END.

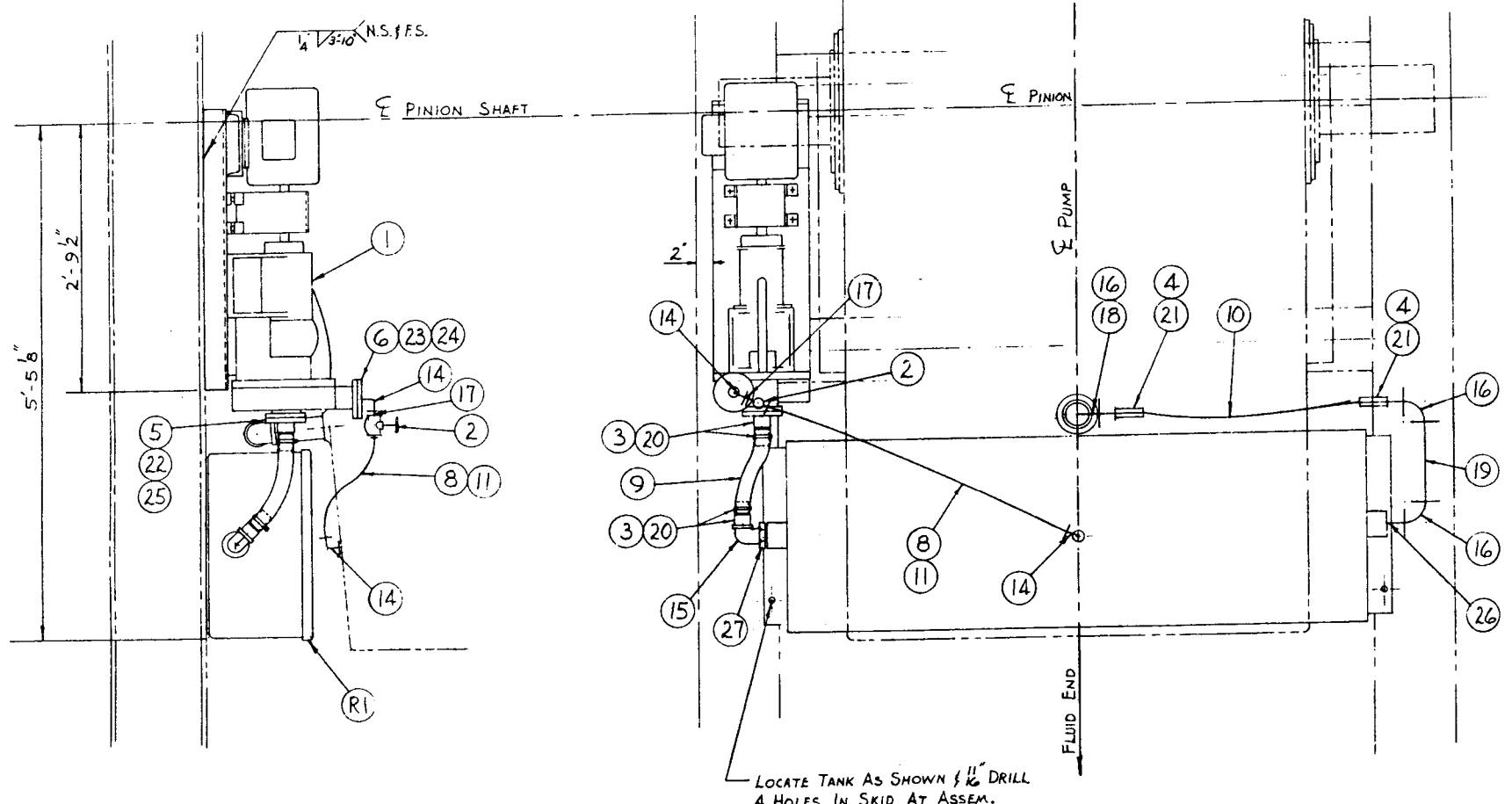
NOTE-3. PERMATEX BOTTOM 3 CAPSCREWS ON EACH DIAPHRAGM.

ITEM NO.	QTY	PART NO.	DESCRIPTION
1	3	6319-0014-00	CROSSHEAD
2	3	60238-00	GUIDE (PER 4357)
3	3	60016-00	PIN RETAINER
4	3	60017-00	PIN
5	3	60020-00	EXTENSION
6	3	7602-213205	SINGLE LIP OIL SEAL
7	3	6397-0543-00	DIAPHRAM STUFFING BOX
8	3	6397-0827-00	TORQUE TOLL BRG. (PER 7776-B)
9	24	6319-0131-00	LOCKING PLATE
10	3	6319-0229-00	CROSSHEAD GUIDE-LOWER 4357
11	3	6319-0019-00	GASKET - DIAPHRAM
12	3	6319-0069-00	" - CROSSHEAD COVER
13	3	6397-0542-00	DIAP. STUFF. BOX LOCKSPRING
14	3	6397-0539-00	DIAP. STUFF. B. W. SPRING
15	3	7602-161021	O-RING TYPE (PER 6230-40)
16	3	7601-273007	1/2" DIA. COPPER TUBING ASS'Y
17	3	7508-0014-31	3/8" COPPER TUBING ASS'Y
18	4	7601-258008	3/8" x 2" LG. PIPE WIPPLE
19	4	7601-258008	3/8" x 2" LG. PIPE WIPPLE
20			
21	3	7602-160037	O-RING 6227-60
22	2	7501-0141-00	1 1/2" DIA. x 2 1/2" DR. HD. CAPSCR. (GR. 5)
23	12	7501-0139-00	1" x 2 1/2" " "
24	12	7501-1269-00	1" x 2 1/2" SKT. HD. CAPSCR.
25	3	7602-213275	DOUBLE LIP OIL SEAL
26			
27	12	7601-033029	3/4" LG. WASH. WEX. HO. CAPSCR.
28	24	7601-033076	1/2" LG. WASH. WEX. HO. CAPSCR.
29	12	7601-132014	1/2" LK. WASH. WEX. HO. CAPSCR.
30	24	7601-133005	5/8" SMALL OD. PLAIN WASH. WEX. HO. CAPSCR.
31	1	7602-331240	1/4" x 2" STAINLESS STL. WIRE
32			
33			
34			
35			

R15			
R14			
R13			
R12			
R11			
R10	24	7601-132016	1/2" LK. WASH. WEX. HO. CAPSCR.
R9	24	7601-033052	1/2" LG. WASH. WEX. HO. CAPSCR.
R8	3	6319-0070-00	FLUID BAFFLE DISC
R7			
R6			
R5			
R4			
R3	2	6319-0048-00	CROSSHEAD DOOR
R2	24	7601-033235	SKT. HD. CAPSCR. (WASH. LOCK 4-10 x 2-1/2)
R1	3	6319-0035-00	ECCENTRIC STRAP

41	31	ADD QTY TO 24	
42	31	ADD QTY TO 24	
43	31	ADD QTY TO 24	
44	31	ADD QTY TO 24	
45	31	ADD QTY TO 24	
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CONTINENTAL RUBBER COMPANY
A DIVISION OF THE GOODYEAR TIRE & RUBBER COMPANY
MILWAUKEE, WISCONSIN
F-1000 PUMP
CROSSHEAD ASSEMBLY
D 6319-0139-00



ITEM NO.	NO. REQD.	PART NO.	DESCRIPTION
1	1	6316-0266-00	1" x 1 1/2" MISSION PUMP ASSY. (LESS MOTOR)
2	1	7602-291019	1" GLOBE VALVE
3	2	-072004	2" HOSE CLAMP (IDEAL #5296)
4	2	-072041	3" HOSE CLAMP
5	1	-066145	1 1/2"-150" FLANGE GASKET
6	1	-066144	1"-150" FLANGE GASKET
7			
8	1	7503-0480-66	1" HOSE ASSY.
9	1	7601-324014	1 1/2" I.D. HOSE (GATES 35W x 1'-2")
10	1	-431036	2 1/2" I.D. HOSE (GATES 35W x 3'-0")
11	1	-209028	MALE PIPE ADAPTER (#1013-16-16B)
12			
13			
14	2	7601-257091	1" x 90° STREET ELL (GALV.)
15	1	-257093	1 1/2" x 90° STREET ELL
16	3	-257047	2 1/2" x 90° ELBOW
17	1	-258160	1" x CLOSE NIPPLE
18	1	-258238	2 1/2" x 8" NIPPLE
19	1	-258824	2 1/2" x 12" NIPPLE
20	2	-258394	1 1/2" KING COMB. NIPPLE
21	2	-258352	2 1/2" KING COMB. NIPPLE
22	1	-206013	1 1/2"-150" THD. FLANGE
23	1	-206317	1"-150" THD. FLANGE
24	4	-126119	1/2"-13 x 2 1/2" STUD BOLTS w/ NUTS
25	4	-126120	1/2"-13 x 2 3/4" STUD BOLTS w/ NUTS
26	1	-258234	2 1/2" x 4" NIPPLE (GALV.)
27	1	-253098	2 1/2" x 1 1/2" BUSHING
28			
29			
RIT	1	6317-0164-00	90 GALLON TANK

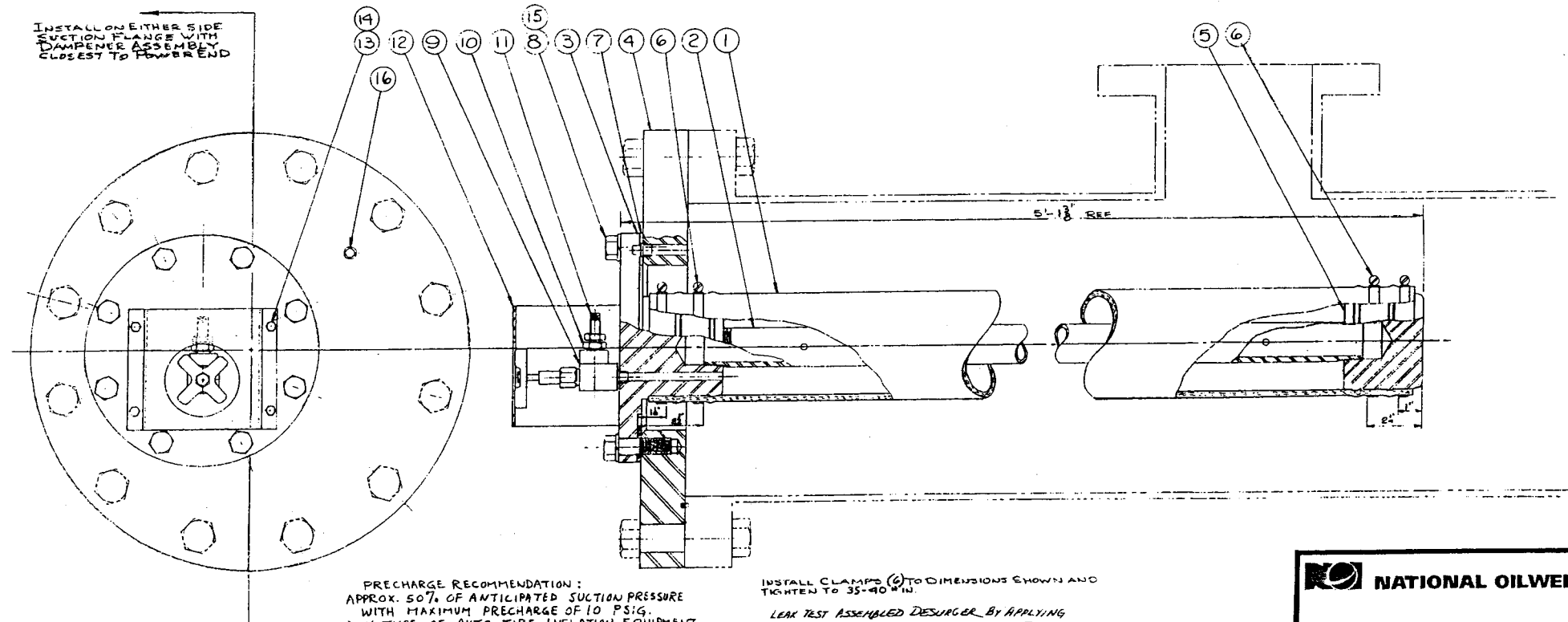
NOTE:
 1. LEFT HAND INSTALLATION SHOWN;
 RIGHT HAND SAME EXCEPT OPP. HAND.
 2. MISSION PUMP ROTATION SHOULD BE COUNTER-
 CLOCKWISE LOOKING INTO END OF PUMP SHAFT.

LOCATE TANK AS SHOWN & 1/16" DRILL
 4 HOLES IN SKID AT ASSEM.

SIM. 6319-0162-00

THIS DRAWING IS THE PROPERTY OF CONTINENTAL ENSCO COMPANY. IT IS CONFIDENTIAL. LOANED AND IS TO BE RETURNED UPON REQUEST. THE BORROWER IS RECEIVING IT FOR ALL WORK AND IS NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF CONTINENTAL ENSCO COMPANY.		CONTINENTAL ENSCO COMPANY A DIVISION OF FERTILISERS AND CHEMICALS DALLAS, TEXAS	
UNLESS SPECIFIED OTHERWISE: MACHINING DIMENSIONS ± .010" STRUCTURAL DIMENSIONS ± .125" CONCENTRICITY ± .010" DIA. ANGLES ± 1/4 DEG.		F-1000 POWER PUMP PISTON & LINER WASH ASSY. MISSION CENT. PUMP, LESS TANK	
DESIGNED BY: R.H. [Signature] CHECKED BY: [Signature] DATE: 10/1/60	DRAWN BY: [Signature] DATE: 10/1/60	PART NO.: 6319-0181-00 (L.H.) 6319-0181-01 (R.H.)	S.P. [Signature]

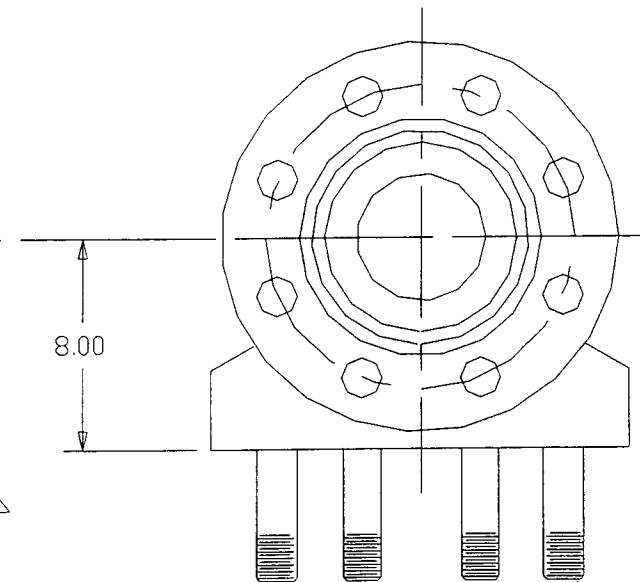
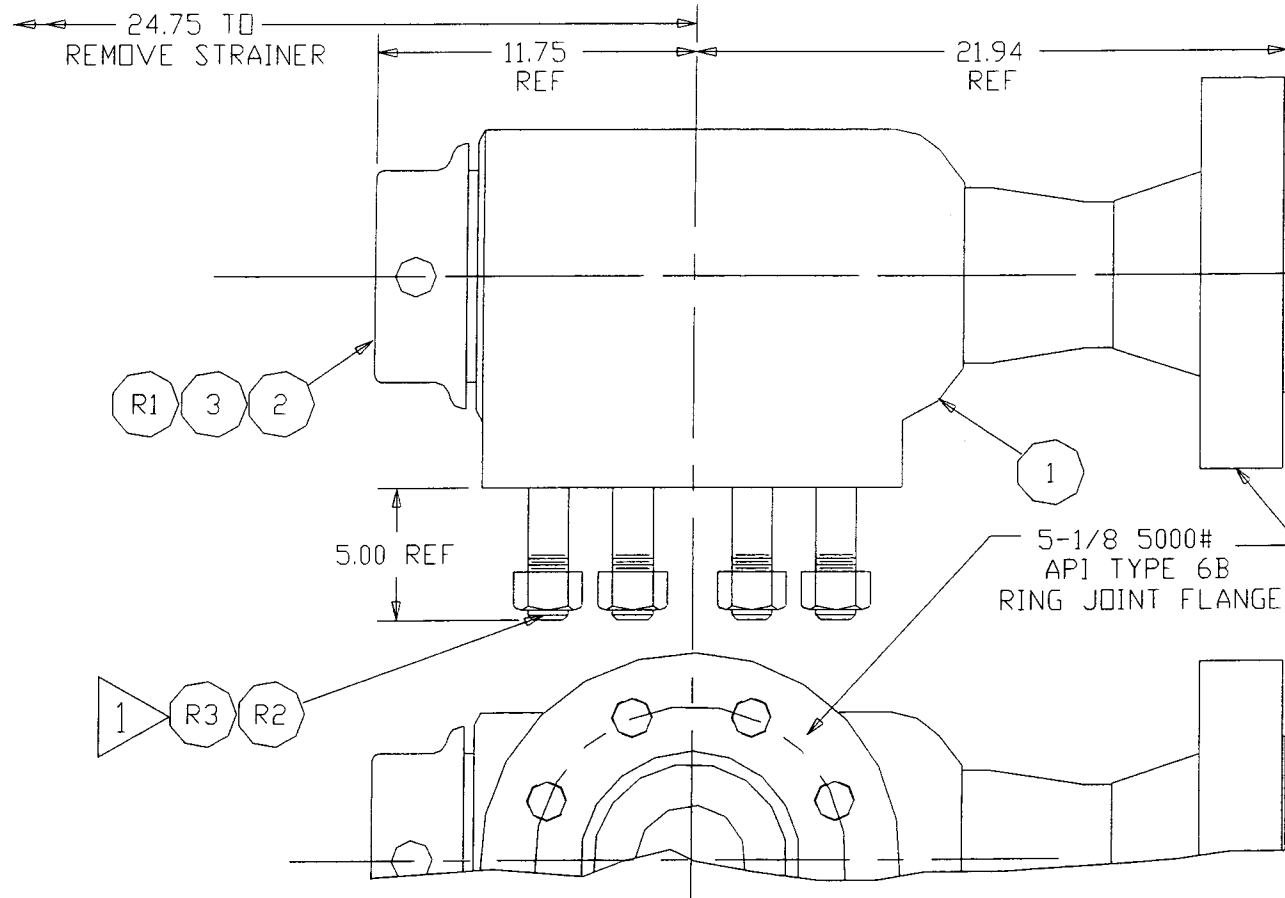
BILL OF MATERIAL			
ITEM	REQ'D	PART NO.	DESCRIPTION
---	---	6922-0062-00	SD-8 SUCTION DESURGER ASSEMBLY (CONSISTS OF THE FOLLOWING)
1	1	6922-0054-00	BLADDER
2	1	6922-0066-00	ROD, SUPPORT
3	1	6922-0063-00	FLANGE, CHARGING
4	1	6922-0048-01	FLANGE, ADAPTER
5	1	6922-0065-00	PLUG, END
6	4	7602-072130	CLAMP, HOSE
7	1	6022-0053-00	GASKET
8	8	7601-033077	CAPSCREW, 5/8" X 1-3/4" LG. HEX HEAD
9	1	7602-291077	VALVE, 1/4" NEEDLE
10	1	7601-253001	BUSHING, 1/4" X 1/8" HEX HEAD PIPE
11	1	7602-291805	VALVE WITH VALVE STEM, 1/8" TANK
12	1	6922-0067-00	GUARD, VALVE
13	4	7601-033001	CAPSCREW, 1/4" - 20 X 1/2" LG. HEX HEAD
14	4	7601-132038	WASHER, 1/4" LOCK
15	8	7601-132030	WASHER, 5/8" LOCK
16	1	7601-259008	PLUG, 1/4" PIPE



NOTE: OPTIONAL EQUIPMENT, PLEASE SPECIFY WHEN ORDERING.

		NATIONAL OILWELL		Houston, Texas, U.S.A.	
SD-8 SUCTION DESURGER ASSY. FB-1600 TRIPLEX MUD PUMP					
SHEET 1 OF 1	SIZE:	DRAWING NO.:	REV.:		
	D	PL 6922-0062-00	H		

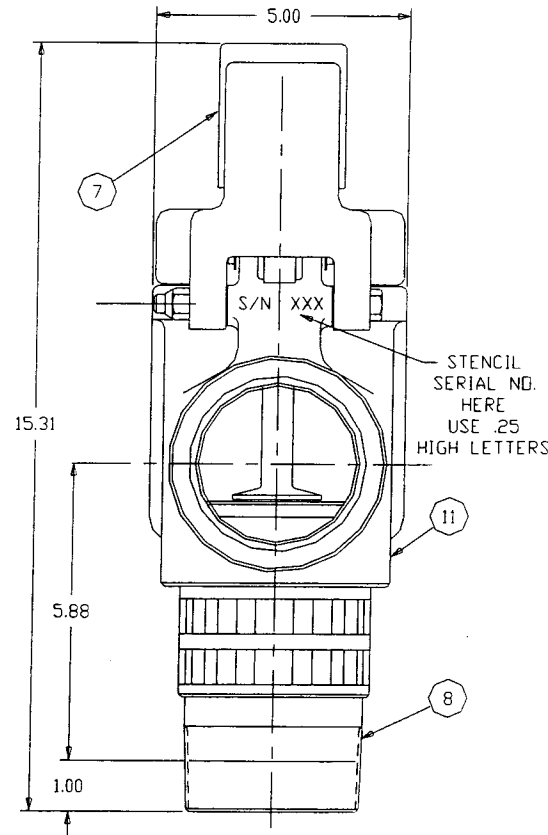
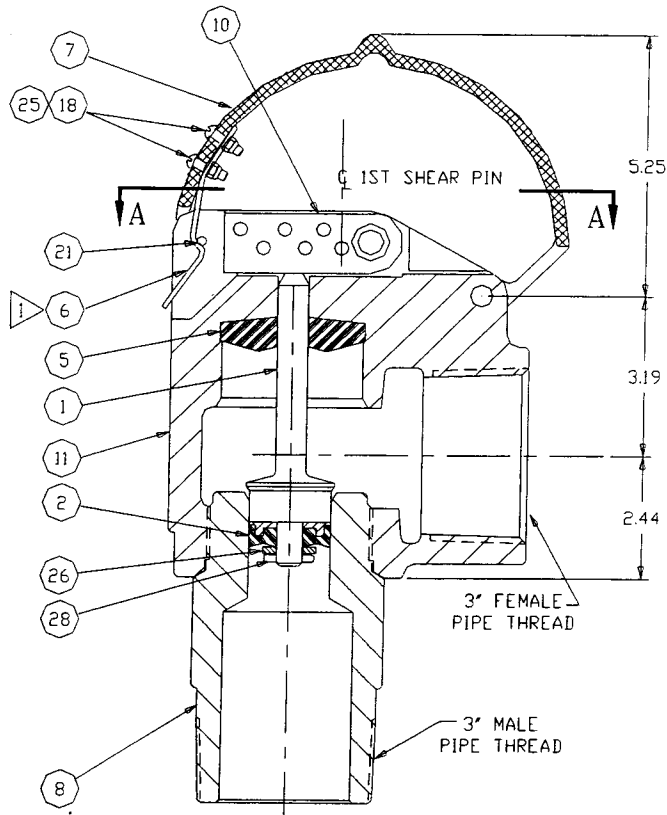
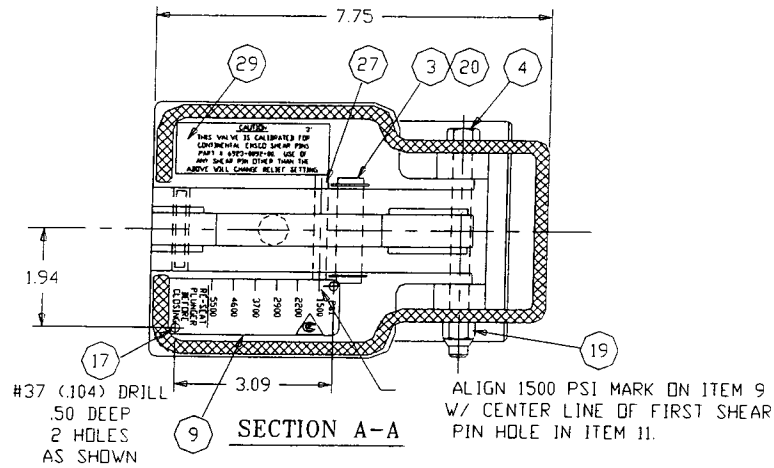
BILL OF MATERIAL			
ITEM	REQ'D	PART NO.	DESCRIPTION
---	---	6917-0039-00	DISCHARGE STRAINER ASSEMBLY (CONSISTS OF THE FOLLOWING)
1	1	6317-0049-00	HOUSING ASSEMBLY, STRAINER
2	1	6397-0290-00	STRAINER ASSEMBLY
3	1	7602-1600-40	GASKET, STRAINER
R1	1	6397-0293-01	STRAINER
R2	8	7507-2201-00	STUD, 1-1/2" - 8 X 6.88 LG.
R3	8	7601-0630-17	NUT, 1-1/2" - 8 HEAVY HEX



1 REF: STUD NUT TORQUE:
1575-1625 FT-LB

NOTE: OPTIONAL EQUIPMENT, PLEASE SPECIFY WHEN ORDERING.

		NATIONAL OILWELL		Houston, Texas, U.S.A.	
DISCHARGE STRAINER ASSEMBLY DRAWING					
SHEET 1 OF 1	SIZE:	DRAWING NO.:	REV.:		
	B	PL 6317-0039-00	H		



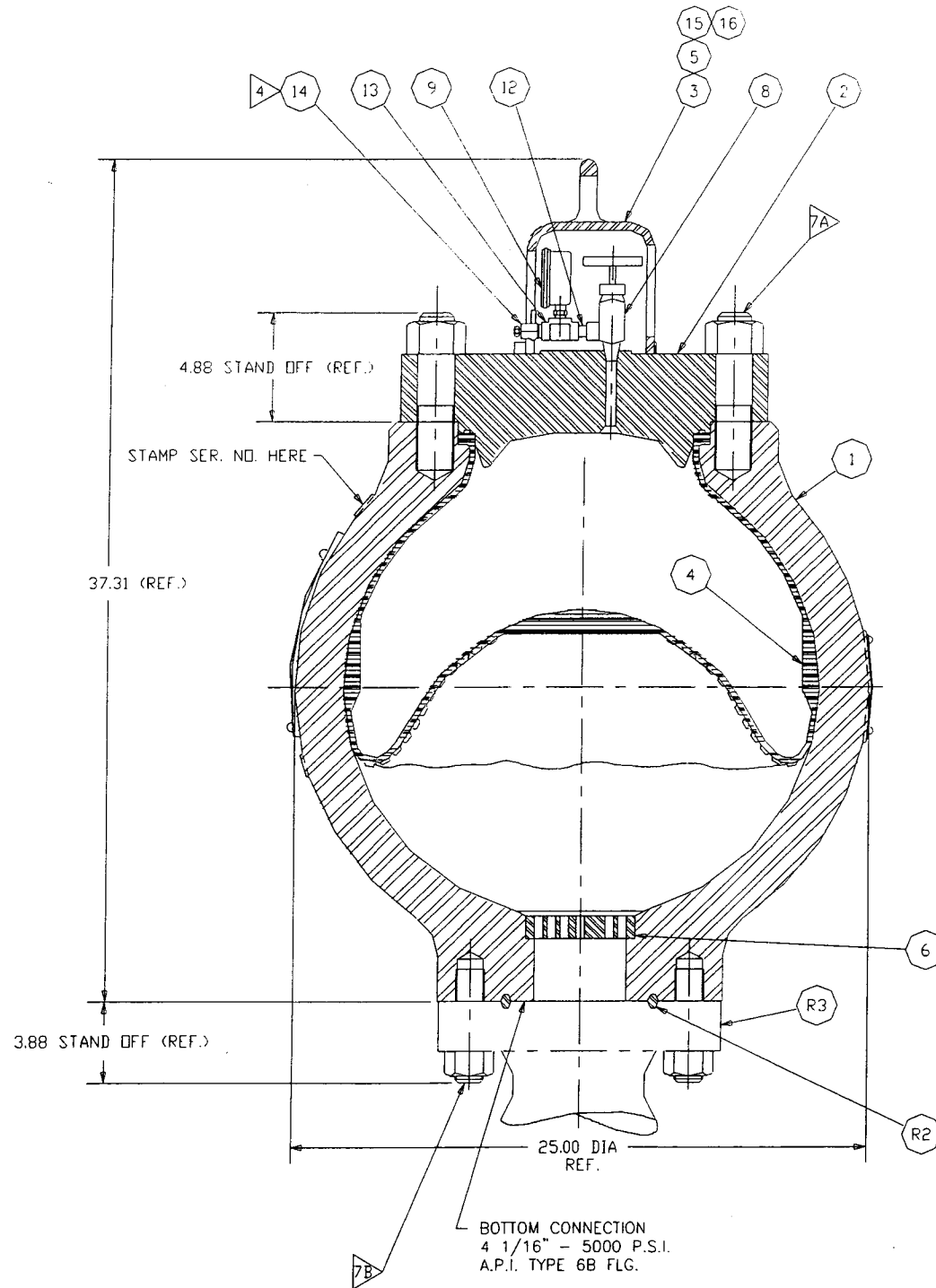
NOTE: OPTIONAL EQUIPMENT, PLEASE SPECIFY WHEN ORDERING.

BILL OF MATERIAL			
ITEM	REQ'D	PART NO.	DESCRIPTION
---	---	6923-0016-00	3" TYPE B SHEAR RELIEF VALVE ASSEMBLY (CONSISTS OF THE FOLLOWING)
1	1	6923-0006-00	STEM, PLUNGER
2	1	6923-0007-00	SEAL, PLUNGER
3	1	6923-0011-00	PIN, SHEAR BAR
4	1	7601-0335-43	CAPSCREW, 3/8" - 16 X 4-1/2" LG. CAD PLTD. HEX HEAD
5	1	6923-0012-00	BUMPER
6	1	6923-0013-00	SPRING, COVER
7	1	6923-0014-00	COVER
8	1	6923-0015-00	ADAPTER, THREADED
9	1	7506-0087-00	PLATE, NAME
10	1	6923-0096-00	BAR, SHEAR
11	1	6923-0018-00	BODY
17	2	7601-1060-03	SCREW, NO. 4 X .31 LG. DRIVE
18	2	7601-0720-25	NUT, NO. 8 - 32 LIGHT THIN LOCK
19	1	7601-0720-26	NUT, 3/8" - 16 LIGHT LOCK
20	2	7602-2040-78	RING, RETAINER
21	1	7601-0840-07	PIN, ROLL
25	2	7601-0010-35	SCREW, NO. 8 - 32 X .38 LG. CAD. PLTD. SKT. BUTTON HD.
26	1	7601-1330-10	WASHER, 1.06 O.D. X .53 I.D. X .13 THK. SPEC. FOR SKT. SCREW
27	12	6923-0092-00	PIN, SHEAR
28	1	7602-0810-62	PIN, .13 DIA. X 1" LG. CAD PLTD. COTTER
29	1	6923-0094-00	LABEL, WARNING

NOTES:

1. AFTER COMPLETE ASSEMBLY OF VALVE, ADJUST THE COVER SPRING, ITEM 6, IF REQUIRED TO HOLD COVER SECURELY IN PLACE. MAKE ADJUSTMENT BY BENDING BACK OR FORTH NEAR LOWER SCREW, ITEM 25.
2. AFTER ASSEMBLY, TEST VALVE BY SHEARING PIN AT 5500 PSI SHEAR HOLE. VALVE SHOULD BE WITHIN ±10 PERCENT PSI RATED.
3. LUBRICATE PLUNGER AND SEAL FRICTION SURFACES WITH SUNVIS 911 OR EQUAL.

NATIONAL OILWELL Houston, Texas, U.S.A.			
3" TYPE B SHEAR RELIEF VALVE ASSEMBLY			
SHEET 1 OF 1	SIZE: C	DRAWING NO.: PL 6923-0016-00	REV.: DD



BILL OF MATERIAL			
ITEM	REQ'D	PART NO.	DESCRIPTION
---	---	6922-0021-00	PD-55 PULSATION DAMPENR ASSY. (CONSISTS OF THE FOLLOWING)
1	1	6922-0022-00	STUDDER ASSEMBLY
2	1	6922-0017-00	HEAD
3	1	6922-0008-00	COVER, GAUGE
4	1	6922-0003-00	BLADDER
5	1	6922-0023-00	PLATE ASSEMBLY, NAME
6	1	6922-0019-00	PLUG, BOTTOM
8	1	7602-2910-00	VALVE, NEEDLE
9	1	7602-1153-03	GAUGE (0-6000 PSI), PRESSURE
12	1	7601-6582-79	NIPPLE, 1/4" X CLOSE S.S. PIPE
13	1	7601-2612-29	TEE, 1/4" STAINLESS STEEL PIPE
14	1	7602-2938-29	VALVE, 1/4" S.S. BLEED
15	4	7601-0340-29	CAPSCREW, SOCKET HEAD
16	4	7601-1320-16	WASHER, 1/2" LOCK
17	1	6399-0088-00	CHARGING INSTRUCTIONS
REFERENCE INFORMATION			
R2	1	7602-0660-03	GASKET, R-39 RING JOINT
R3	1	6397-0498-00	FLANGE, ADAPTER

NOTES:

1. TEST WITH 100 PSI AIR PRESSURE AFTER ASSEMBLY, THEN VENT.
2. VENT
3. 7511-0110-12 TEST REPORT.
4. BEFORE CHARGING OR DISASSEMBLY, BLEED OFF ANY EXISTING PRESSURE IN GAUGE AREA BY TURNING APPROX. 1/4 TO 1/2 TURN, THEN REMOVE PURGE VALVE.
5. BLADDERS MUST BE STORED IN AN AREA PROTECTED FROM THE WEATHER. THE CONTAINER MUST BE CLOSED TO PREVENT AIR AND LIGHT EXPOSURE TO BLADDER.
6. APPROX. MUD VOL. 20 GALLONS.
7. A REF STUD NUT TORQUE 1575 - 1625 FT. LBS (1 1/2 - 8 THREAD).
B REF. STUD NUT TORQUE 950 - 1000 FT. LBS. (1 1/4 - 8 THREAD)
8. PRIOR TO USE, PRECHARGE WITH DRY NITROGEN GAS. REFER TO NAMEPLATE OR OPERATION AND MAINTENANCE MANUAL FOR INSTRUCTIONS.

17 NOT SHOWN

REF. DIMENSIONAL DWG. 6399-0091-00

NOTE:

OPTIONAL EQUIPMENT, PLEASE SPECIFY WHEN ORDERING.

		NATIONAL OILWELL Houston, Texas, U.S.A.	
PD-55 PULSATION DAMPENR ASSY.			
SHEET 1 OF 1	SIZE:	DRAWING NO.:	REV.:
	C	PL 6922-0021-00	S

