

WHITE STAR PUMP CO.

QUADRAPLEX PUMP
PART BOOK



QUADRAPLEX PUMP

WS-800/1000

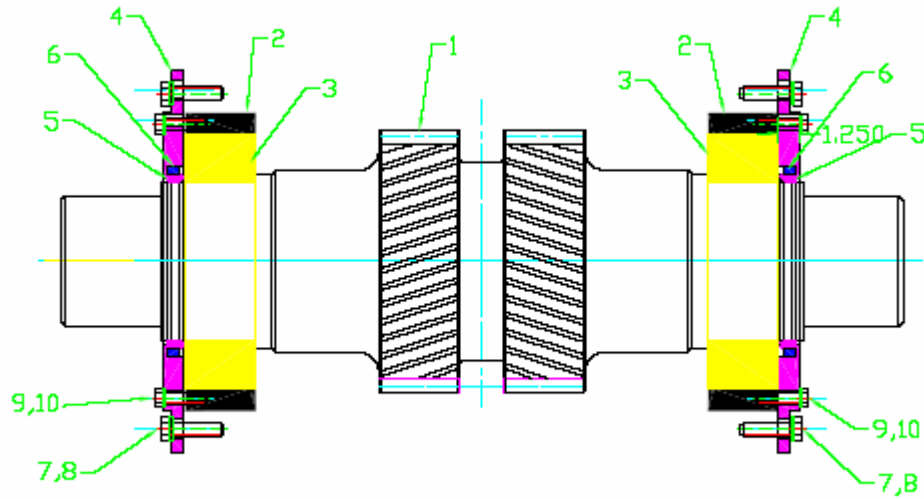
PART BOOK

White Star Pump Co.
22718 Commercial Lane, Tomball, Texas 77375
February 2007

CONTENT

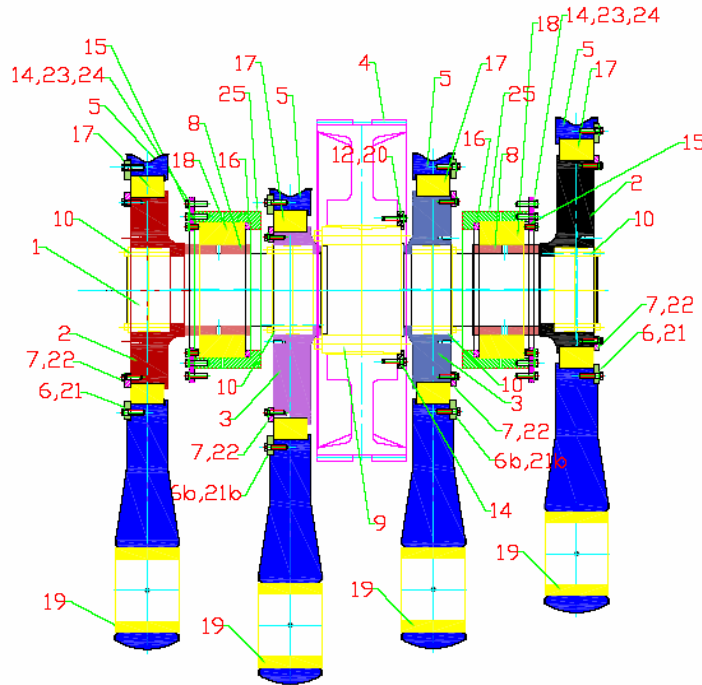
SECTION	ASSEMBLY	PAGE
1	PINION ASSEMBLY	3
2	CRANKSHAFT ASSEMBLY	4
3	CROSSHEAD ASSEMBLY	5
4	FLUID MODULE	6
5	SUCTION MANIFOLD ASSEMBLY	7
6	DISCHARGE MANIFOLD ASSEMBLY	8
7	LUBRICATION SYSTEM	9
8	PULSATION DAMPENER	10

1. PINION ASSEMBLY



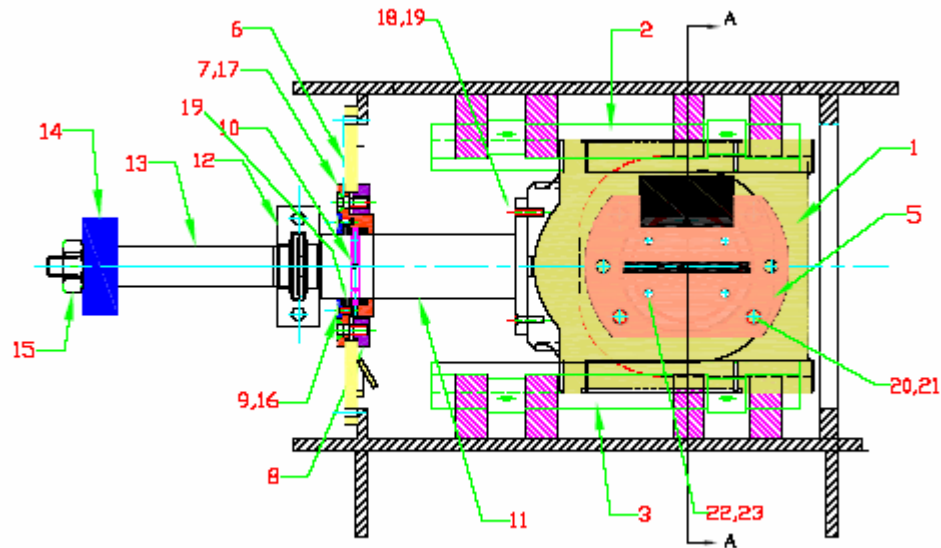
ITEM	PART NUMBER	PART NAME	QTY
1	9772-1	PINION	1
2	9772-1-3	PINION BEARING HOUSING	2
3	202-2193	PINION BEARING	2
4	9772-1-1	PINION BEARING RETAINING RING	2
5	9772-1-2	PINION SEAL RACE	2
6	SL-9772-1-3	PINION OIL SEAL	2
7	HB-9772-1-3	HEX BOLT 5/8"-11UNC-2A, 3.25" LG	16
8	LW-9772-1-1	LOCK WASHER 5/8"	16
9	HB-9772-1-1	HEX BOLT 1"-BUNC-2A, 2.75" LG	16
10	LC-9772-1-1	LOCK WASHER 1"	16

2. CRANSHAFT ASSEMBLY



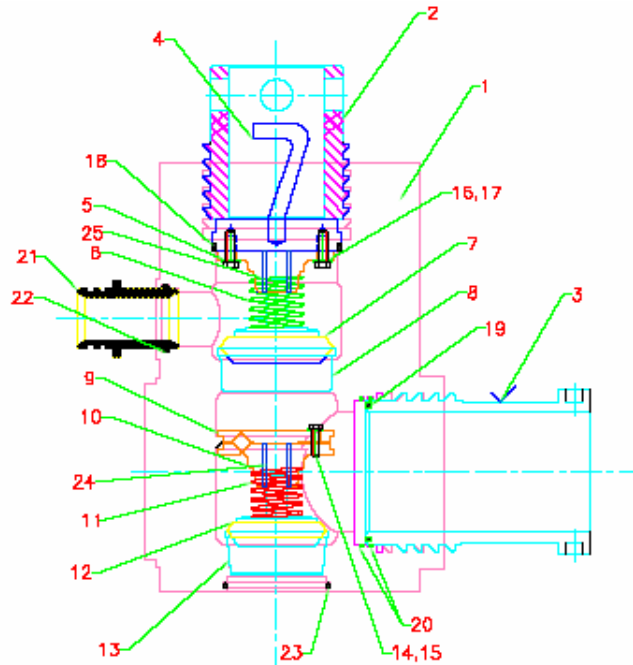
ITEM	PART NUMBER	PART NAME	QTY
1	9772-3-1	SHAFT	1
2	9772-3-2	CAM 1 & 2	2
3	9772-3-3	CAM 3 & 4	2
4	9772-2	BULL GEAR	1
5	9772-4	CONNECTING ROD	4
6	9772-4-2	EXTERNAL RETAINING RING (outside)	2
6b	9772-4-2b	EXTERNAL RETAINING RING (inside)	2
7	9772-3-6	INNER RETAINING RING	4
8	9772-3-8	SHAFT SLEEVE	2
9	9772-2-1	GEAR LOCK	1
10	9772-3-9	CAM LOCK	2
11	9772-3-11	CAM LOCK	2
12	9772-3-10	GEAR RETAINING RING	1
13	9772-3-21	MAIN BEARING RETAINING RING	2
14	9772-3-23	MAIN BEARING CARRIAGE	2
15	9772-3-25	THREADED SPACER	2
16	9772-3-26	SPACER RING	2
17	202-2183	ECCENTRIC BEARING	4
18	202-2202	MAIN BEARING	2
19	202-2195	CROSSHEAD BEARING	4
20	HB-9772-2	HEX BOLT 5/8" – 11UNC – 2A, 1.5" LG	8
21	HB-9772-4-2	HEX BOLT 5/8" – 11UNC – 2A, 1.25" LG	32
21b	HB-9772-4-2b	MACHINE 5/8" – 11UNC – 2A, 2" LG	32
22	HB-9772-3-6	HEX BOLT 3/4" – 10UNC – 2A, 1.5" LG	32
23	HB-9772-3-23	HEX BOLT 5/8" – 11UNC – 2A, 1.25" LG	18
24	HB-9772-3-25	HEX BOLT 5/8" – 11UNC – 2A, 2" LG	6

3. CROSSHEAD ASSEMBLY



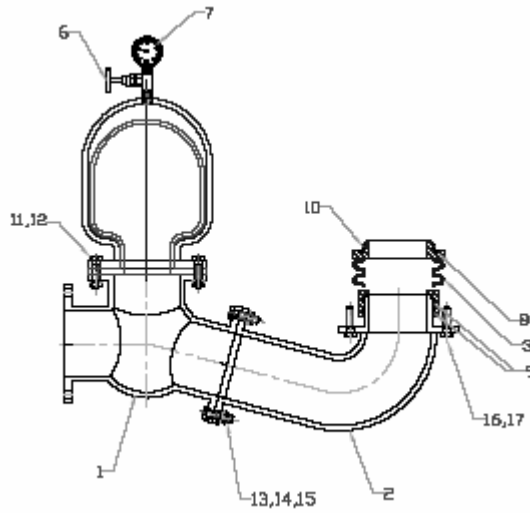
ITEM	PART NUMBER	PART NAME	QTY
1	726-6	CROSSHEAD	4
2	9772-6-1-1	TOP GUIDE	4
3	9772-6-1-2	BOTTOM GUIDE	4
4	726-4-1	WRIST PIN	4
5	726-6-9	WRIST PIN RETAINING PLATE	4
6	9772-6-2	STRIPPER BOX SUPPORT PLATE	4
7	9772-6-4	STRIPPER BOX	4
8	726-6-3	STRIPPER BOX RETAINING RING	4
9	726-6-5	PACKING RETAINING RING	4
10	9772-6-6	LANTERN RING	4
11	9772-6-7	EXTENSION ROD	4
12	9772-6-11	ROD CLAMP	4
13	9772-6-8	PISTON ROD	4
14	9772-6-9-1	PISTON ASSEMBLY	4
15	HN-9772-6-8	PISTON LOCK NUT	4
16	SB-9772-6-3	FLATHEAD SOCKET BOLT 82°, 5/8"-11UNC-2A, 1" LG	24
17	SB-9772-6-4	FLATHEAD SOCKET BOLT 82°, 7/8" -9UNC-2B, 2.5" LG	24
18	SB-9772-6	FLATHEAD SOCKET BOLT 82°, 1"-8UNC-2A, 2.5" LG	16
19	SL-9772-6-4	SEAL LUC 5000-5000 750BPO + O RING	12
20	HB-9772-6-9	HEX BOLT, 1-1/4" - 7UNC - 2A, 3.0" LC	16
21	LW-9772-6-9	LOCKING WASHER, 1-1/4"	16
22	HB-9772-4-1	HEX BOLT, 3/4" - 10UNC - 2A, 2.0" LG	16
23	LW-9772-4-1	LOCKING WASHER 3/4"	16

4. FLUID MODULE



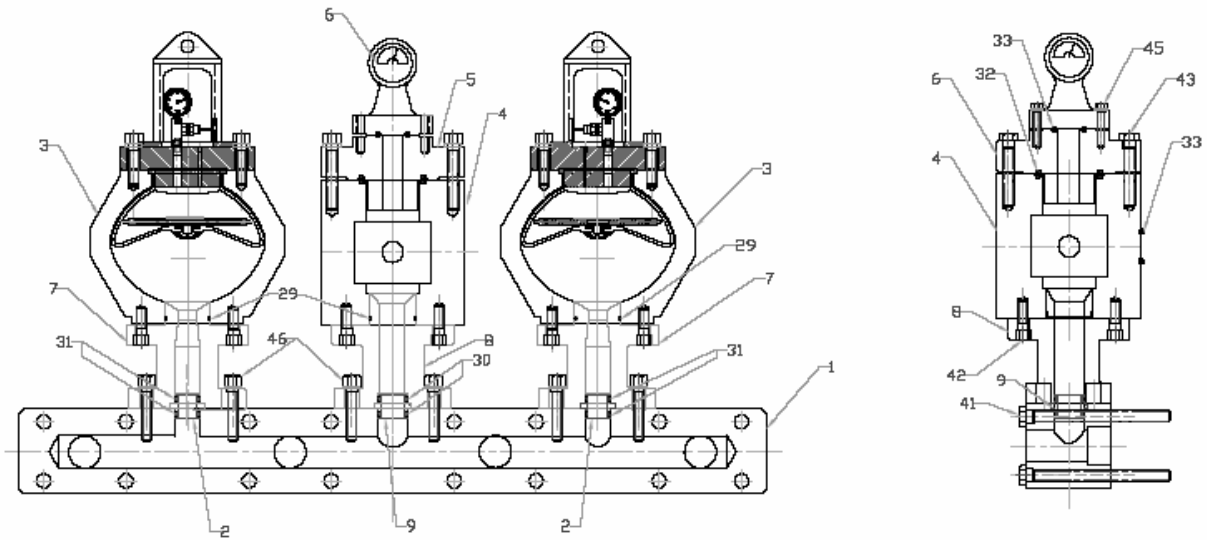
ITEM	PART NUMBER	PART NAME	QTY
1	9772-100-00	FLUID MODULE	4
2	9772-F-003	THREADED PLUG RETAINER	4
3	9772-F-002	THREADED LINER	4
4	9772-F-004	PLUG	4
5	9772-F-008	TOP VALVE GUIDE	4
6	9772-F-009	TOP VALVE SPRING	4
7	9772-F-010	TOP VALVE, API #8	4
	9772-F-010-1	TOP VALVE INSERT	4
8	9772-F-011	TOP VALVE SEAT, API #8	4
9	9772-F-006	LOWER VALVE GUIDE RETAINER	4
10	9772-F-007	LOWER VALVE GUIDE	4
11	9772-F-012	LOWER VALVE SPRING	4
12	9772-F-013	LOWER VALVE, API #7	4
	9772-F-013-1	LOWER VALVE INSERT	4
13	9772-F-014	LOWER VALVE SEAT, Q1 #7	4
14	SB-9772-F-007	SOCKET HEAD BOLT 1/2" - 13NC-2B, 1-5/8" LG	4
15	LW-9772-F-007	1/2" LOCK WASHER	4
16	HB-9772-F-004	HEX BOLT 5/8" - 11UNC-2B, 1-1/2" LG	8
17	LW-9772-F-004	5/8" LOCK WASHER	4
18	S-9772-F-004	PLUG SEAL	4
19	S-9772-F-002-1	LINER FACE SEAL	4
20	S-9772-F-002-2	LINER RADIAL SEAL	8
21	9772-100-01	DISCHARGE SLEEVE	4
22	S-9772-100-01	MODULE DISCHARGE SEAL	4
23	S-9772-A-1	MODULE SUCTION SEAL	4
24	9772-F-007-1	LOWER VALVE GUIDE BUSHING	4
25	9772-F008-1	TOP VALVE GUIDE BUSHING	4

5. SUCTION MANIFOLD ASSEMBLY



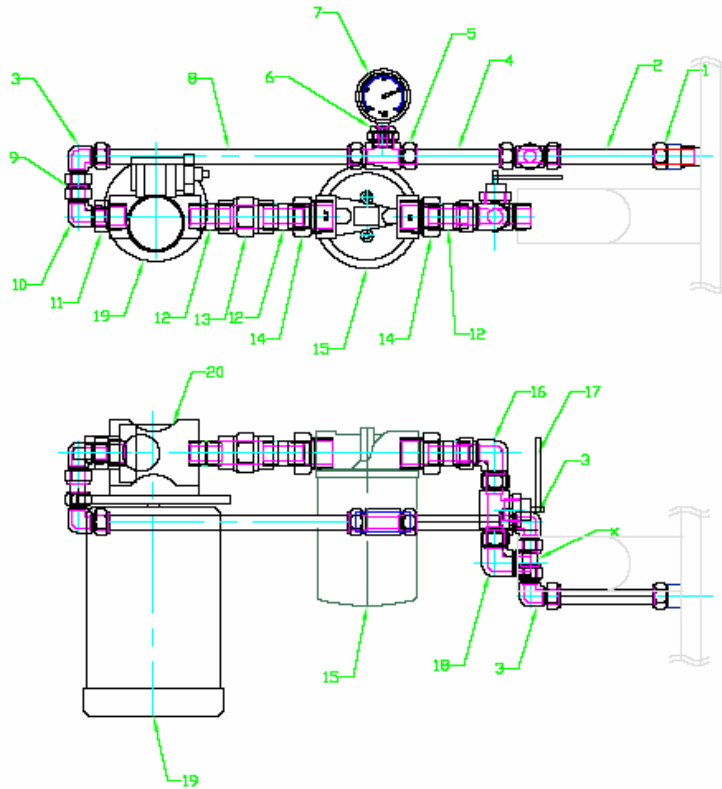
ITEM	PART NUMBER	PART NAME	QTY
1	9772-A-1	SUCTION MANIFOLD	1
2	9772-A-1-2	SUCTION ELBOW	4
3	9772-A-1-3	SUCTION FLEXIBLE ADAPTOR	4
4	9772-A-1-1	SUCTION DESURGER	2
5	9772-A-1-4	SUCTION DESURGER RUBBER BLADDER KIT	2
6	9772-A-1-5-1	3 WAY VALVE	2
7	9772-A-1-5-2	DESURGER PRESSURE GAUGE 200 PSI	2
8	SL-9772-A-1-3-1	O-RING 440, NITRIL 70 DURO	4
9	SL-9772-F-1-3-2	O-RING 438, NITRIL 70 DURO	8
10	SL-9772-F-1-3-3	NBR SEAT 6.75" x (6.25 & 6.125")x0.375"	4
11	HB-9772-A-1-1-1	HEX BOLT 5/8" - 11UNC - 2A, 2.5 LG	16
12	HN-9772-A-1-1-2	HEX BOLT 5/8" - 11UNC - 2B	16
13	HB-9772-A-1-2-1	HEX BOLT 5/8" - 11UNC - 2A, 2.5 LG	24
14	HN-9772-A-1-2-2	HEX BOLT 5/8" - 11UNC - 2B	24
15	LW-9772-A-1-2-3	LOCK WASHER 5/8"	24
16	HN-9772-A-1-2-4	HEX NUT 5/8" - 11UNC - 2B	24

6. DISCHARGE MANIFOLD ASSEMBLY



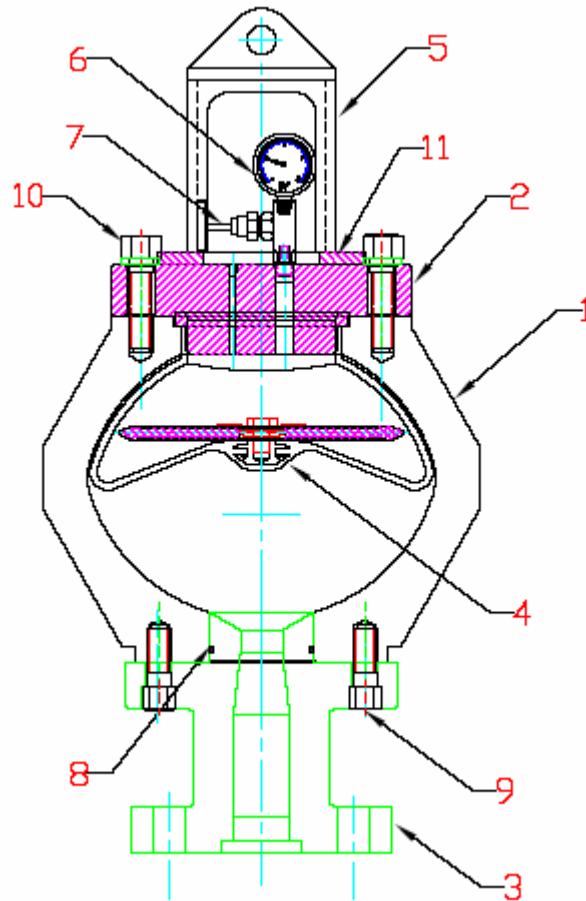
ITEM	PART NUMBER	PART NAME	QTY
1	9772-A-4	DISCHARGE MANIFOLD	1
2	9772-A-11-5	PD ADOTER SLEEVE	2
3	9772-A-11-1	PULSATION DAMPENER	2
4	726-A-2	STRAINER CROSS	1
5	9772-A-3	BULL PLUG FLANGE	1
6	9772-A-11-3	PRESSURE GUAGE, 5000 PSI	1
7	726-A-2-1	PD ADOPTER	2
8	726-A-2-1	DISCHARGE ADOPTER STRAINER CROSS	1
9	9772-A-2-2	STRAINER CROSS ADOPTER SLEEVE	1
29	SL-9772-A-2	LUC 1870 – 4125 – 375BPO	3
30	SL-9772-A-2-1-1	LUC 1870 – 2625 – 375BPO	2
31	SL-9772-A-11-1-1	LUC 1870 – 2125 – 375BPO	4
32	SL-9772-A-2-2	METAL SEAL BX169	1
33	SL-9772-A-2-1	METAL SEAL BX152	2
41	HB-9772-A-4	HEX BOLT 1-3/8" – 8UN, 13.5 LG	16
42	SB-9772-A-2	SOCKET HEAT BOLT 1" – 8UN, 2-1/2" LG	24
43	HB-9772-A-3	HEX BOLT 1" – 8UN, 5.5 LG	8
45	HB-9772-A-3-1	HEX BOLT 3/4" – 10UN-2B, 3" LG	8
46	SB-9772-A-4	STUD 1-1/4" – 7UN – 2B, 7-1/2" LG	12

7. LUBRICATION SYSTEM



ITEM	PART NUMBER	PART NAME	QTY
1	B-1210-1-12	MALE CONNECTOR 3° NPT	1
2	SS-T12-G-049-20	STAINLESS STEEL TUBING, 6" LG	1
3	SS-1210-9	UNION ELBOW	3
4	SS-T12-G-049-20	STAINLESS STEEL TUBING, 6" LG	1
5	SS-1210-3TTF	FEMALE CONNECTOR, BRANCH 3° NPT	1
6	SS-12-RB-4	BUSING REDUCER, 3/4" NPTMAX 1/2" NPT	1
7	XXX	PRESSURE GAUGE 100 PSI, 2" DIAL	1
8	SS-T12-G-0490-20	STAINLESS STEEL TUBING, 14" LG	1
9	SS-T12-G-0490-20	STAINLESS STEEL TUBING, 1.25" LG	1
10	SS-1210-2-12	MALE CONNECTOR 3/4" NPTM EBLW	1
11	9772-L-010	STEEL ADAPTOR, 1" NPTMX 3/4" NPTF	1
12	9772-L-011	CLOSS NIPPLE, 1" NPTMX1" NPTM	3
13	9772-L-012	UNION COUPLER, 1" NPTFX1" NPTM	1
14	9772-L-013	BUSING RDCUCER, 1-1/4" NPTMX1" NPTF	2
15	9772-L-018	PARKER FILTRATION 25C, T PARKER P/N 926170, K-23019, FA57-25	1
16	SS-1610-2-16	MALE ELBOW, 1" NPTM	2
17	9772-L-014	BRASS BALL VALVE, 1" NPTMX1" NPTM	1
18	9772-L-015	STEEL ELBOW, 1" NPTMX1" NPTM	1
19	9772-L-016	BALDOR MOTOR, 2HP, 35H876-872	1
20	9772-L-017	CENTRIFUGAL PUMP, 2 HP	1

8. PULSATION DAMPENER



ITEM	PART NUMBER	PART NAME	QTY
1	9772-A-11-1	PULSATION DAMPENER BODY	1
2	9772-A-11-2	PD TOP COVER	1
3	9772-A-11-3	PD ADAPTER	1
4	9772-A-11-4	RUBBER BLADDER KIT	1
5	9772-A-11-2-1	PR GAUGE PROTECTOR	1
6	GG - 9772-A-11	PRESSURE GAUGE, 6000 PSI	1
7	V- 9772-A-11	4 WAY VALVE	1
8	SL - 9772-A-11-2	LUC - 1870 - 4125 - 375BPO	1
9	SB - 9772-A-11-3	SOCKET HEAD BOLT 1" - 8UN-2A, 2.5"	8
10	HB - 9772-A-11-2	HEX HEAD BOLT 1" - 8UN-2A, 4" LG	8
11	HB - 9772-A-11-2-1	HEX HEAD BOLT 3/4" - 10UNC - 2 A, 1.5" LG	4