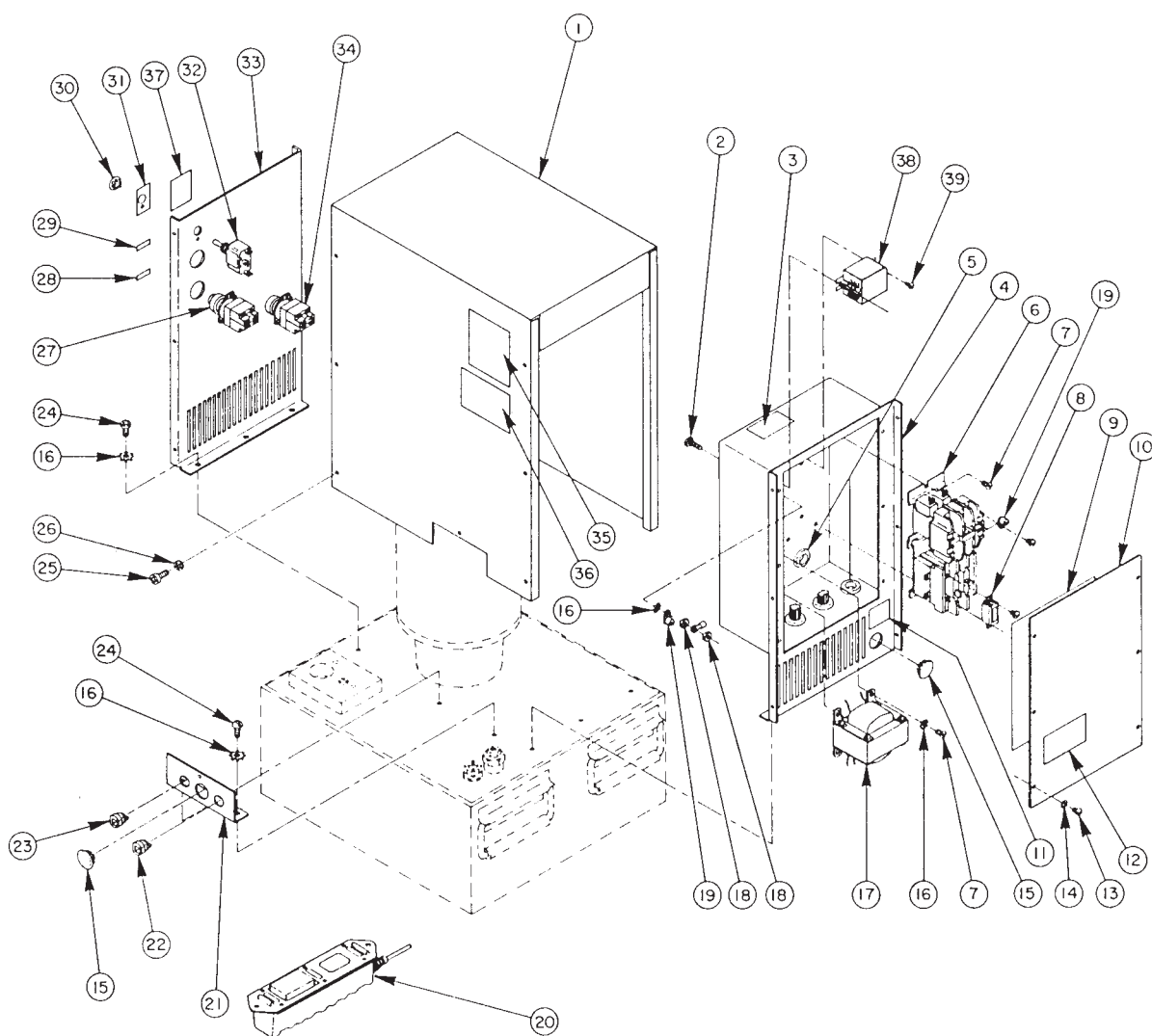


Parts List for:

100221
100221-230

MODEL D ELECTRIC HYDRAULIC PUMP

CONTROL BOX & COVER ASSEMBLY



Part List, Form No. 101492, Back sheet 1 of 4

Item No.	Part No.	No. Req'd	Description
1	50946WH2	1	Shroud Cover
2	104484	1	Hex Hd. Mach. Screw (10-24 UNC X 3/4 Lg.)
3	202504	1	Rotation Decal
4	60235PU2	1	End Panel & Electrical Box
5	15497	6	Rubber Grommet
6	17861-4	1	Magnetic Starter
7	10164	6	Rd. Hd. Mach. Screw (10-24 UNC X 3/8 Lg.)
8	16641-39	3	Starter Heater (460 Volt)
	16641-50	3	Starter Heater (230 Volt)
9	307017	1	Electrical Schematic Decal
10	42457PU2	1	Cover Plate
11	205305	1	Specifications Decal
12	200188	1	Warning Decal
13	10975	6	Pan Hd. Mach. Screw (8-32 UNC X 5/16 Lg.)
14	11107	6	Serrated Washer (#8 Internal Tooth)
15	15327	2	Snap Plug
16	11108	AR	Serrated Washer (#10 External Tooth)
17	39693	1	Transformer
18	10197	2	Hex Nut (10-24 UNC)
19	205420	4	Lug Connector
20	25017	1	Remote Hand Control Assembly (See Parts List no. 101644)
21	36746WH2	1	Angle Plate
22	215857	1	Strain Relief Bushing
23	12176	1	Strain Relief Bushing
24	16613	8	Pan Hd. Mach. Screw (10-24 X 5/16 Lg.)

Item No.	Part No.	No. Req'd	Description
25	14394	14	Self-Tapping Screw (10-16 X 3/8 Lg.)
26	12356	AR	Serrated Washer (#10 Internal Tooth)
27	39283	1	Pushbutton Switch (Red)
28	203769	1	Stop Decal
29	203808	1	Start Decal
31	352081	1	Decal
32	12301	1	On/Off Switch
33	51124PU2	1	End Panel
34	39282	1	Pushbutton Switch (Green)
35	309233	2	Trade Name Decal
37	204015	1	Instruction Decal
38	39092	1	Relay
39	17563	2	Rd. Hd. Mach. Screw (6-32 UNC X 1/4 Lg.)

PARTS INCLUDED BUT NOT SHOWN

100236	1	Pressure Gauge
205189	1	Ground Decal
10672	1	Nipple (1/4 NPTF)
9610	1	Automatic Valve (See Form #101200)
12740	1	Straight Fitting
10618	1	Tee Fitting
10676	1	Straight Fitting
9625	1	Pressure Switch Assembly (See Form #100589)
100909	1	Quick Disconnect Coupler
352061	1	Metal Switch Guard

AR: As Required

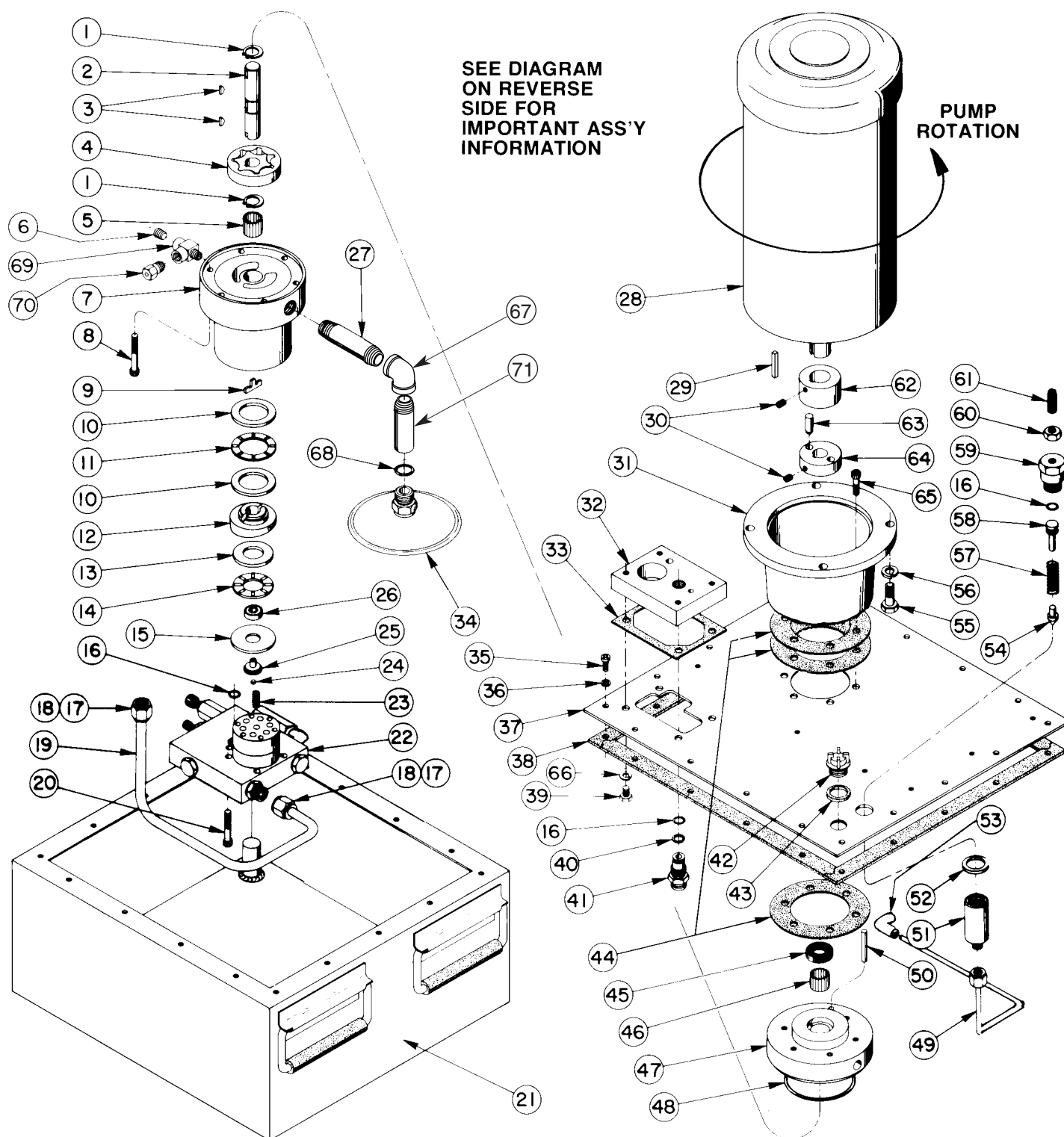
Note: Shaded areas reflect last revision(s) made to this form.

Refer to any operating instructions included with this product for detailed information about operation, testing, disassembly, reassembly, and preventive maintenance.

Items found in this parts list have been carefully tested and selected. **Therefore: Use only genuine Hytec replacement parts!**

Additional questions can be directed to our Technical Services Department.

BASIC PUMP ASSEMBLY

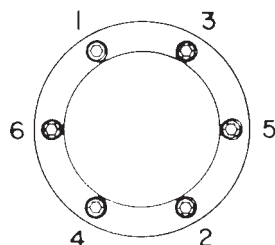


Parts List, Form No. 101492, Back sheet 2 of 4

Item No.	Part No.	No. Req'd	Description
1	12178	3	Retaining Ring (5/8 shaft)
2	303009	1	Pump Shaft
3	12179	2	Woodruff Key
4	15428	1	Gerotor Set
5	15461	1	Needle Bearing
6	10427	1	Pipe Plug (1/8" NPTF)
7	50705	1	Pump Housing
8	10854	6	Soc. Hd. Cap Screw (1/4-20 UNC X 1-3/4 Lg.; See NOTE below)
9	200397	1	Key
10	11227	2	Needle Thrust Race
11	11228	1	Needle Thrust Bearing
12	35271	1	Angle Plate
13	15432	1	Needle Thrust Race
14	15431	1	Needle Thrust Bearing
15	25348	1	Top Plate
16	10268	3	O-ring (1/2 X 3/8 X 1/16, -012)
17	10430	2	Tube Sleeve
18	10431	2	Tube Nut
19	35281	1	Oil Line
20	10022	5	Soc. Hd Cap Screw (1/4-20 UNC X 1-1/2 Lg.; Torque to 110/120 in. lbs.)
21	60234PU2	1	Reservoir
22	420882	1	High Pressure Pump Assembly (See Sheet 3 of 4; Adjustment required)
23	10361	1	Compression Spring (1/4 O.D. X 1" Lg.)
24	10375	1	Steel Ball (1/4 Dia.)
25	23457	1	Top Bearing Plate
26	11814	1	Ball Bearing
27	260022	1	Straight Fitting
28	15436	1	Motor (2 H.P., 230/460V, 60 Hz.)
29	27778	1	Square Key
30	10133	3	Soc. Hd. Set Screw
31	41838	1	Motor Mount
32	43110	1	Valve Mounting Block
33	200395	1	Gasket
34	21345	1	Filter Assembly
35	16876	18	Machine Screw (10-24 UNC X 1/2 Lg.)

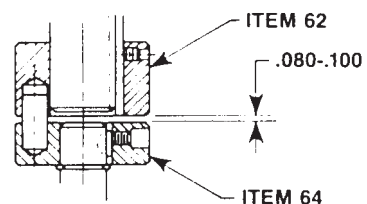
Item No.	Part No.	No. Req'd	Description
36	12356	18	Serrated Washer (#10 Internal Tooth)
37	60922	1	Cover Plate
38	50712	1	Cover Gasket
39	10005	4	Hex Hd. Cap Screw (1/4-20 UNC X 3/8 Lg.)
40	11863	1	Backup Washer
41	20787	1	Connector
42	20937	1	Filler Plug
43	200415	1	Washer (13/16 X 5/8 X 3/32)
44	35266	3	Gasket
45	12194	1	Seal
46	15430	1	Needle Bearing
47	50706	1	Gerotor Pump Housing
48	12504	1	O-ring (3" X 2-13/16 X 3/32)
49	350524	1	Oil Line Ass'y (with Fittings)
50	13152	1	Dowel Pin
51	22361	1	Body
52	14857	1	Flat Washer
53	16177	1	Connector Fitting
54	21046	1	Valve Stem
55	10049	4	Hex Hd. Cap Screw (3/8-16 UNC X 1" Lg.)
56	10247	4	Lockwasher (3/8" Bolt)
57	10495	1	Compression Spring (1/2 O.D. X 1-5/8 Lg.)
58	21306	1	Spring Guide
59	21305	1	Valve Cap
60	10386	1	Hex Nut (3/8-24 UNF)
61	22362	1	Valve Adjusting Screw
62	207440	1	Coupling
63	27003	2	Nylon Pin
64	27001	1	Coupling
65	10012	6	Soc. Hd. Cap Screw (1/4-20 X 7/8 Lg.; Torque to 110/120 in. lbs.)
66	10244	4	Lockwasher
67	260023	1	90° Elbow Fitting
68	10527	1	O-ring (13/16 X 41/64 X 3/32)
69	18969	1	Tee Fitting
70	306957	1	Air Bleed Valve
71	260021	1	Tube Extension

BOLT TIGHTENING SEQUENCE



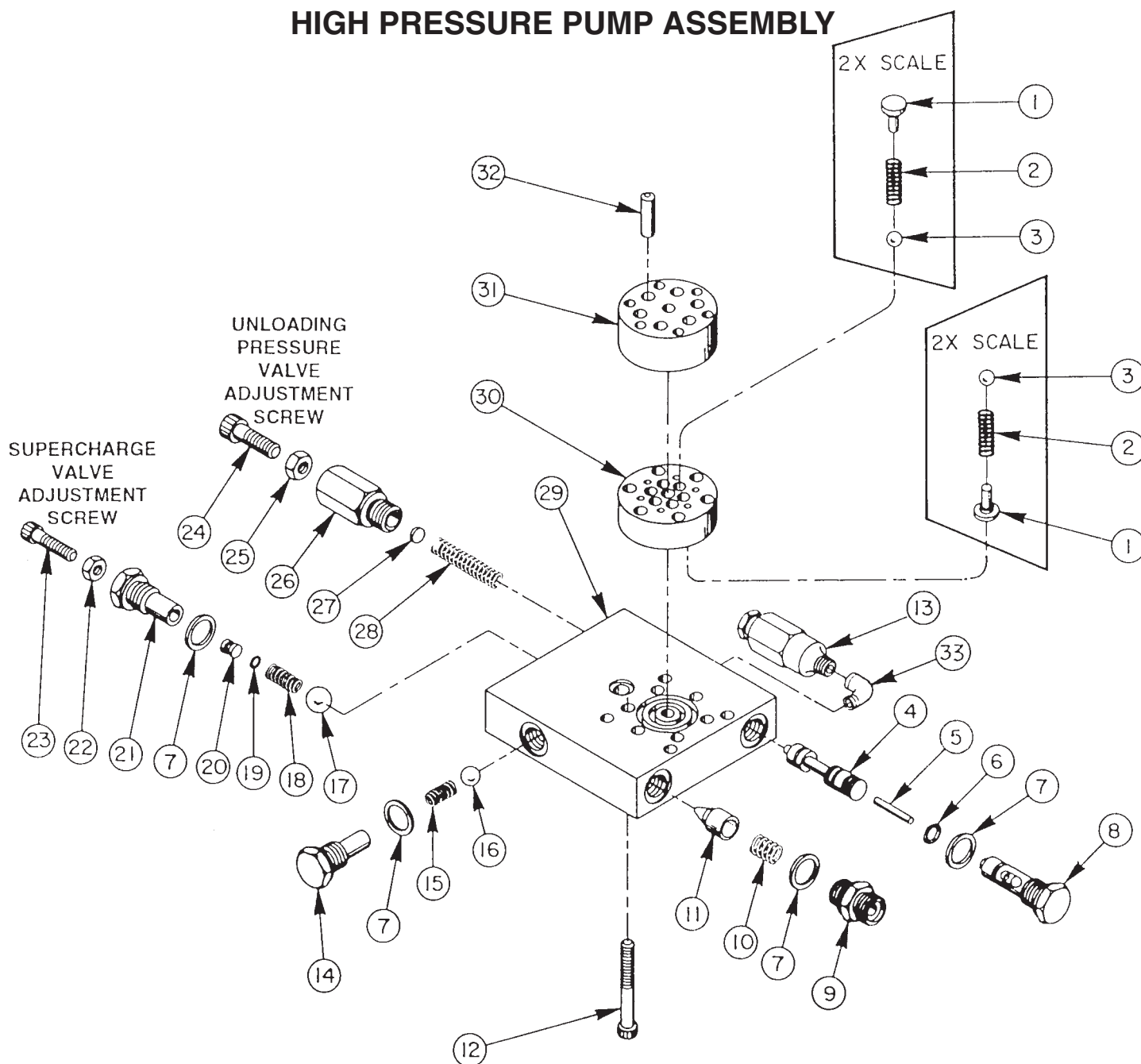
1. All bolts must be initially hand tightened in sequence shown (do not exceed 10 in. lbs.)
2. All bolts must be torqued in sequence shown. Torque to 110/120 in. lbs. in increments of 50/60 in. lbs.

COUPLING CLEARANCE



Note: Shaded areas reflect last revision(s) made to this form.

HIGH PRESSURE PUMP ASSEMBLY



SEE DIAGRAM ON REVERSE
SIDE FOR IMPORTANT
ASSEMBLY INFORMATION

Note: Supercharge Valve and Unloading Pressure Valve of the high pressure pump assembly are NOT factory set! They require adjustment at final pump assembly. Refer to the pump's hydraulic schematic for specifications.

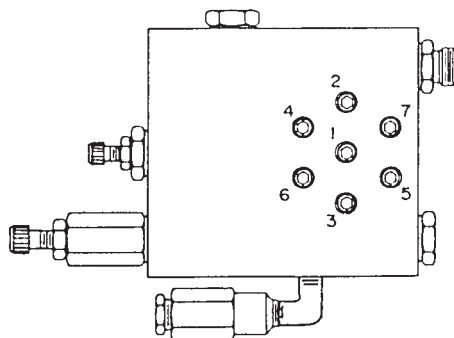
Parts List, Form No. 101492, Back sheet 3 of 4

Item No.	Part No.	No. Req'd	Description
1	*24549	12	Valve Guide
2	*10445	12	Compression Spring (5/32 O.D. X 3/4 Lg.)
3	*12223	12	Steel Ball (3/16" Dia.)
4	200273	1	Spool
5	16471	1	Dowel Pin
6	14763	1	O-ring (7/16 X 5/16 X 1/16)
7	10261	4	Copper Washer (3/4 X 19/32 X 1/32)
8	202561	1	Adapter, Actuating Pin (Torque to 30/35 ft. lbs.)
9	20770	1	Connector (Torque to 40/45 ft. lbs.)
10	10425	1	Compression Spring (3/8 O.D. X 3/4 Lg.)
11	20771	1	Poppet
12	*15318	7	Soc. Hd. Cap Screw (See diagram below)
13	21278-50	1	Relief Valve Assembly (Set at 5,100/5,700 PSI)
14	200269	1	Adapter Plug (Torque to 30/35 ft. lbs.)
15	11451	1	Compression Spring (1/4 O. D. X 5/8 Lg.)
16	10378	1	Steel Ball (3/8 Dia.)

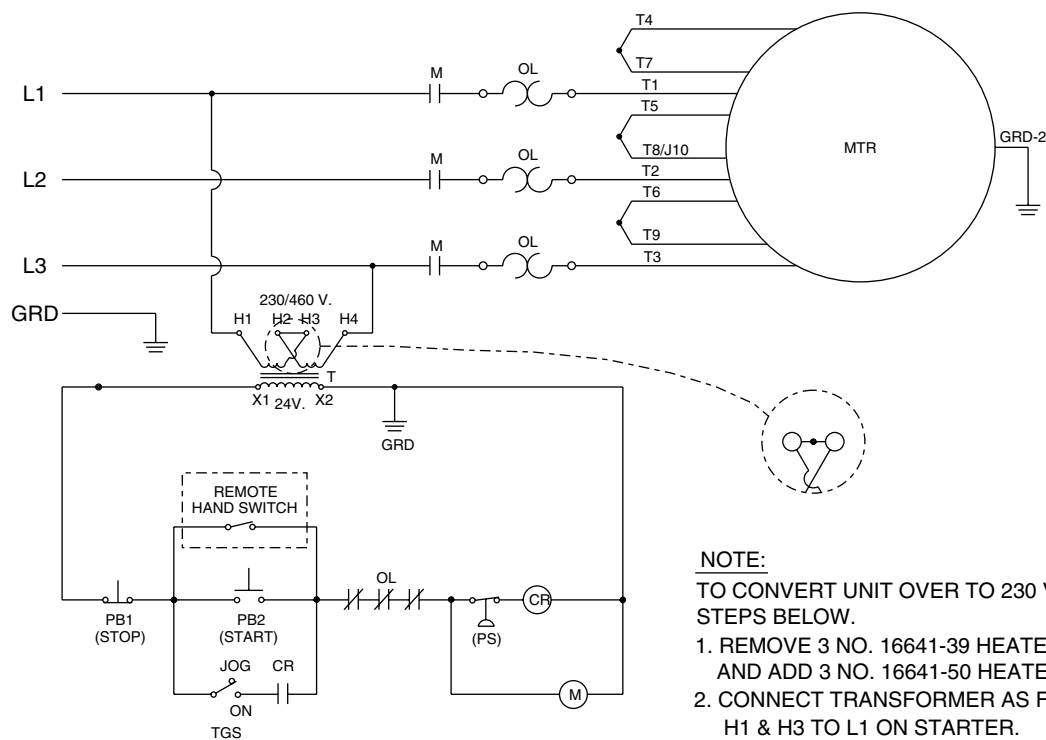
Item No.	Part No.	No. Req'd	Description
17	10379	1	Steel Ball (1/2 Dia.)
18	15319	1	Compression Spring (.240 O.D. X 3/4 Lg.)
19	12099	1	O-ring (9/32 X 5/32 X 1/16)
20	200271	1	Adapter
21	200270	1	Fitting, Super Charge (Torque to 30/35 ft. lbs.)
22	10383	1	Finished Jam Nut
23	10016	1	Soc. Hd. Cap Screw (1/4-20 UNC X 1"Lg.)
24	10809	1	Soc. Hd. Cap Screw (5/16-18 UNC x 1-1/4 Lg.)
25	10385	1	Finished Jam Nut
26	36545	1	Unloading Fitting (Torque to 30/35 ft. lbs.)
27	16528	1	Disc
28	203031	1	Compression Spring (.300 O.D. X 1-3/4 Lg.)
29	*50691	1	Valve Body
30	*41048	1	Valve Head
31	*41063	1	Pump Barrel
32	*21628	6	Piston
33	13229	1	90° Elbow Fitting

Consult factory when replacing items marked with an asterisk (*).

HIGH PRESSURE PUMP BOLT TIGHTENING SEQUENCE

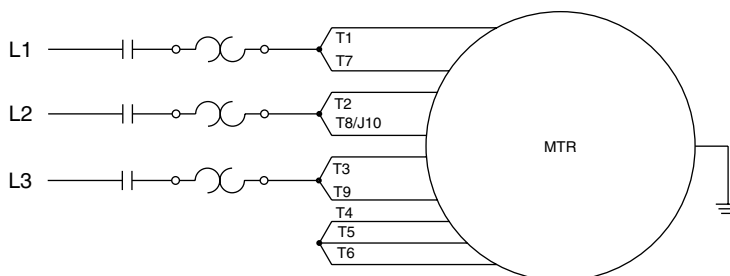


**NOTE: Assemble in sequence shown.
Lubricate uner head and on
threads. Torque to 180 in. lbbs.**

ELECTRICAL SCHEMATIC**460 VOLT, 60 CYCLE, 3 PHASE****WARNING:** To help avoid personal injury, all electrical work must be done by a qualified electrician.**NOTE:**

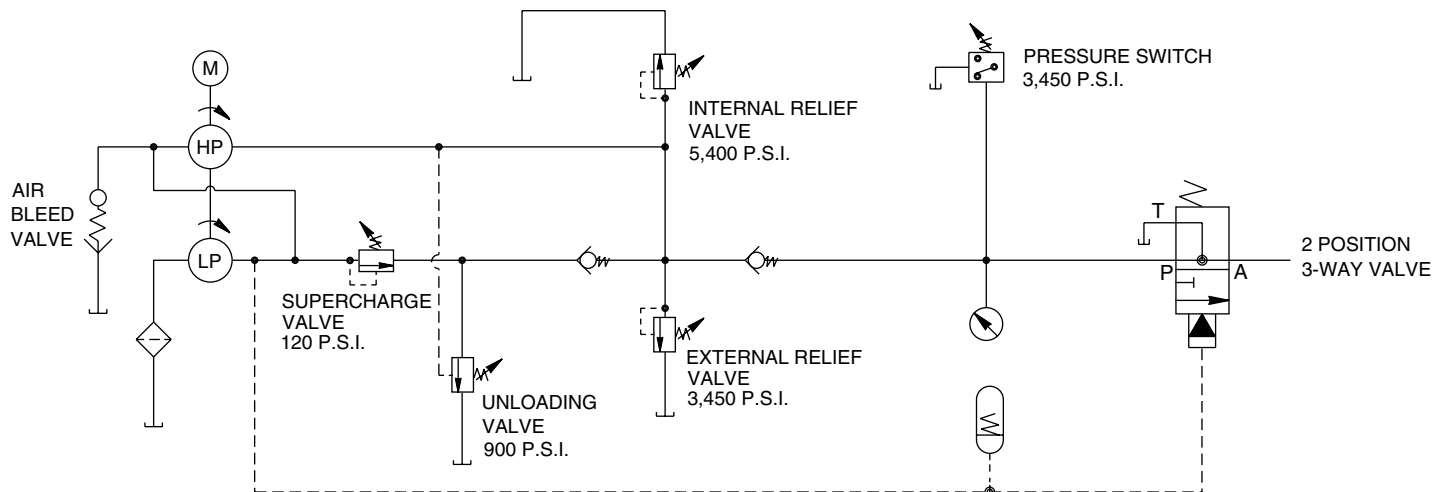
TO CONVERT UNIT OVER TO 230 V., 60 HZ. FOLLOW STEPS BELOW.

1. REMOVE 3 NO. 16641-39 HEATERS FROM 17861-4 STARTER AND ADD 3 NO. 16641-50 HEATERS
2. CONNECT TRANSFORMER AS FOLLOWS:
H1 & H3 TO L1 ON STARTER.
H2 & H4 TO L3 ON STARTER.
3. CONNECT MOTOR AS FOLLOWS:



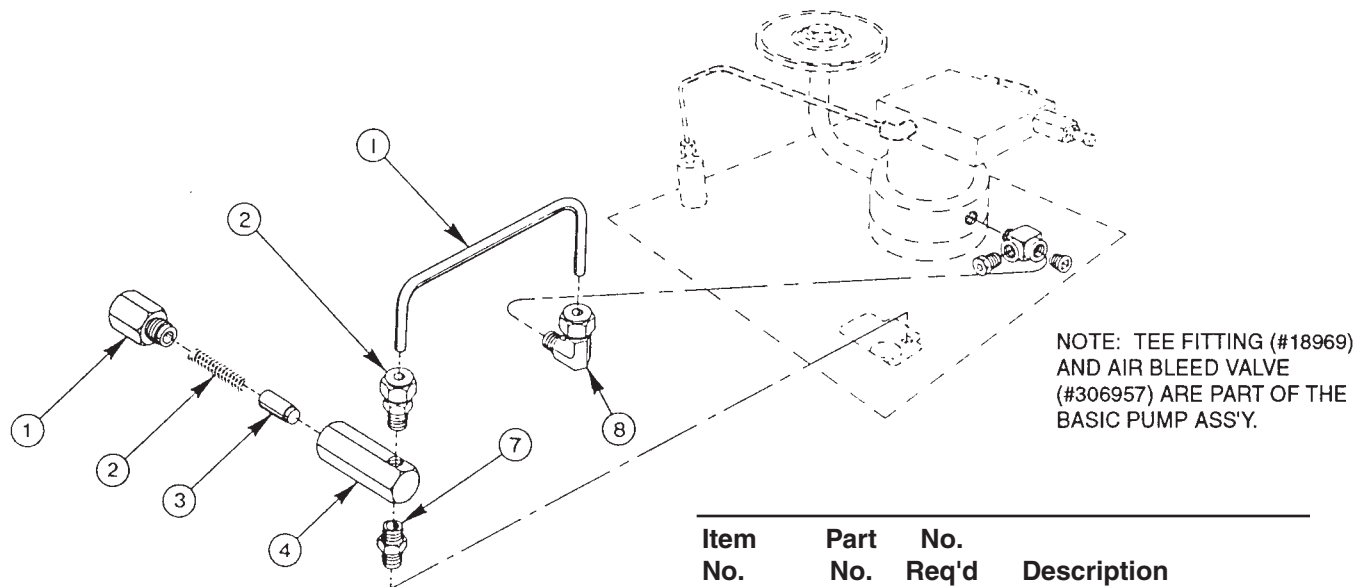
Note: Revised graphics at last revision(s) made to this form.

HYDRAULIC SCHEMATIC



Note: Revise schematic graphics at last revision(s) made to this form.

OPTIONAL PILOT OIL LINE/ACCUMULATOR ASSEMBLY



Item No.	Part No.	No. Req'd	Description
1	200405	1	Oil Line
2	11173	1	Connector
3	202121	1	Spring Retainer (Torque to 50/70 in. lbs.)
4	16499	1	Compression Spring
5	21945	1	Plunger
6	21944	1	Cylinder Body
7	11421	1	Pipe Nipple
8	11278	1	Connector
	21943	1	Accumulator (Consists of items 3, 4, 5 & 6)