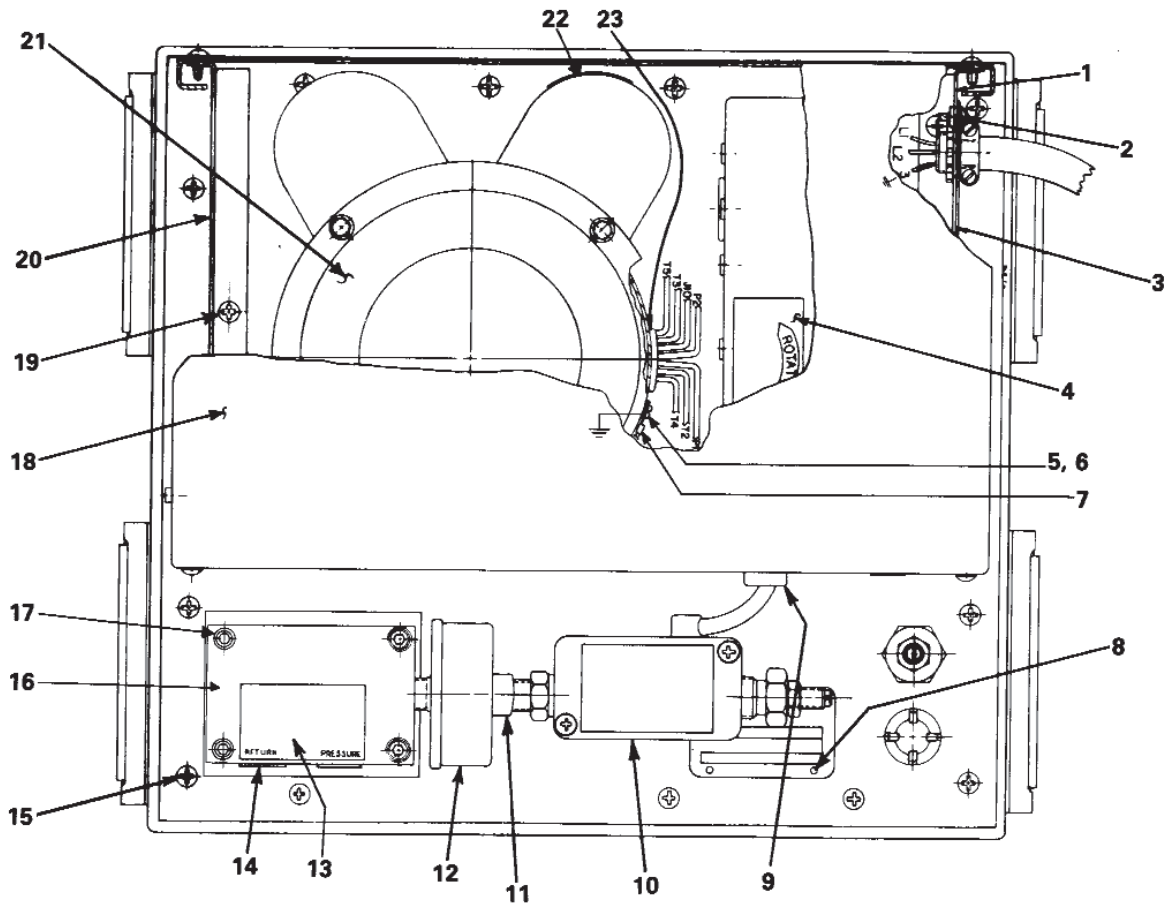
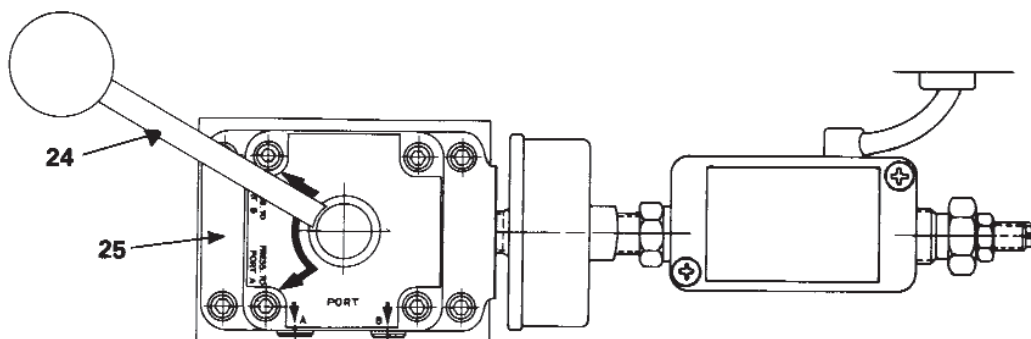


MODEL C
SUPER ELECTRIC TWO-STAGE HYDRAULIC PUMP
WITH MANIFOLD OR 3-WAY/4-WAY VALVE

TOP VIEW



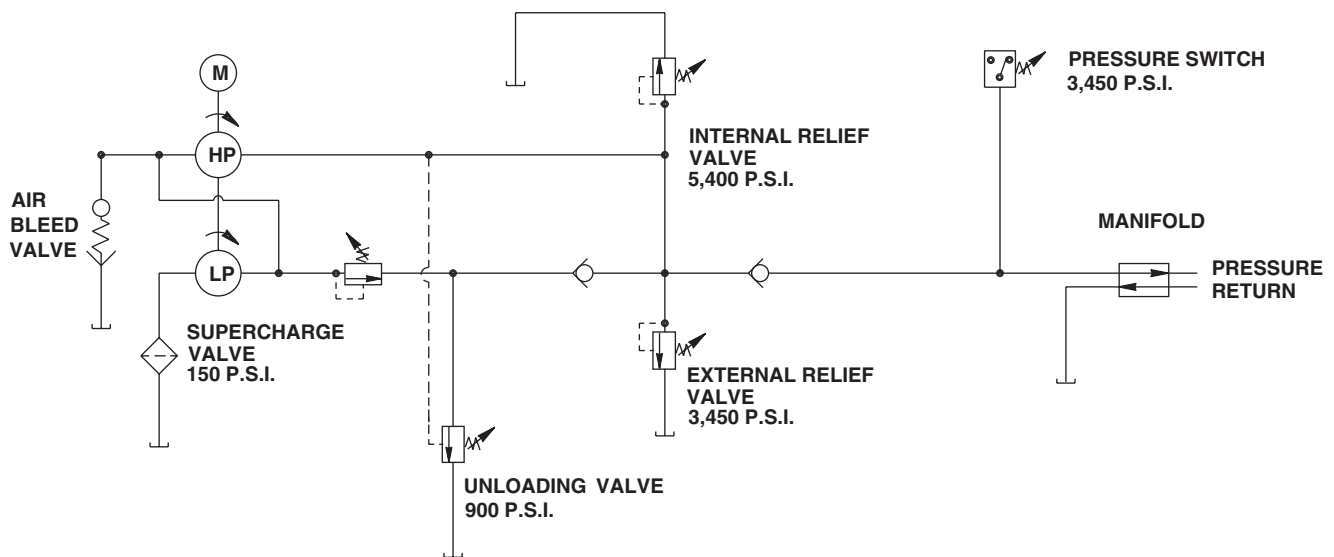
100211 & 100211-230



100216

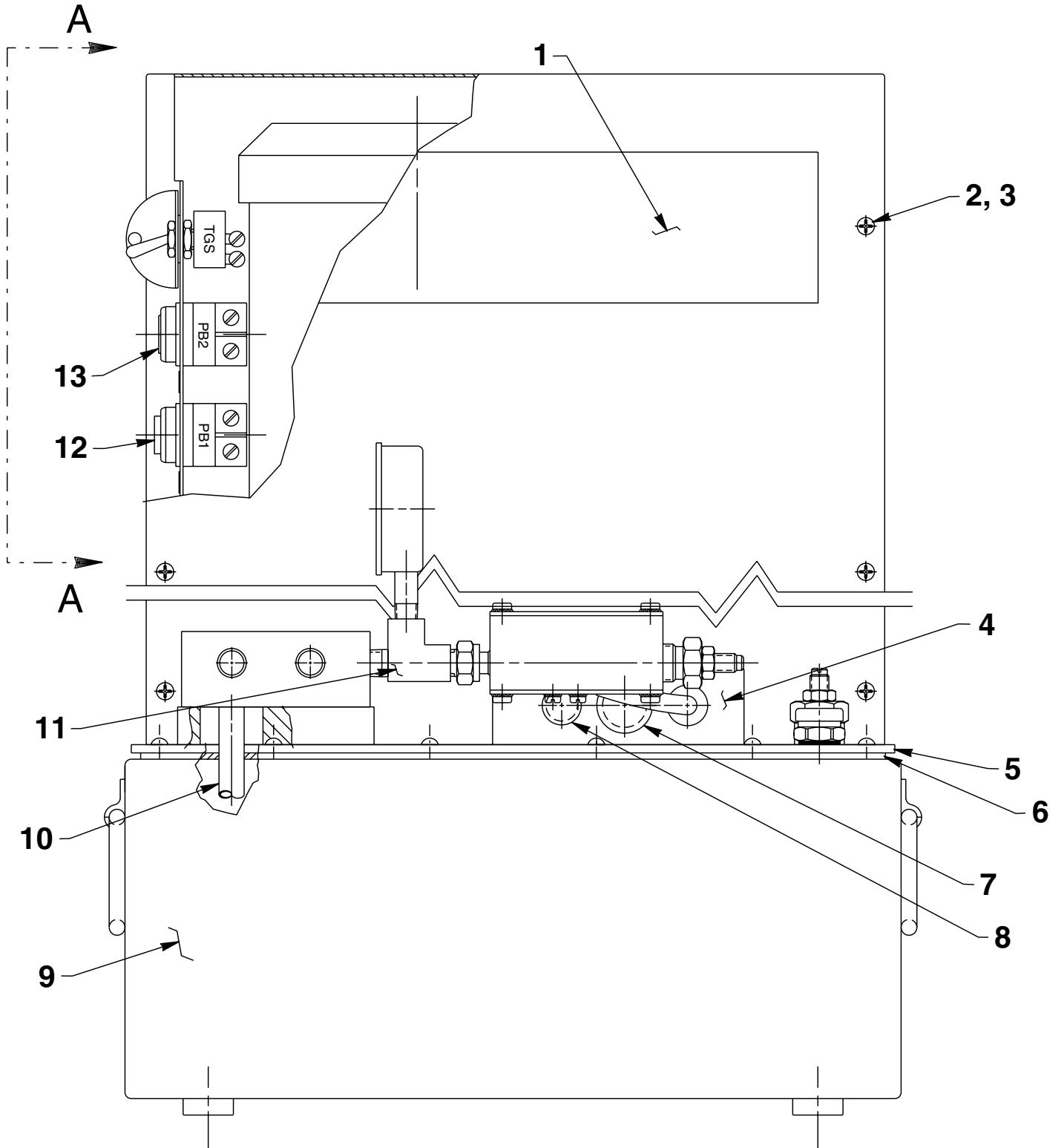
Item No.	Part No.	No. Req'd	Description
1	60235PU2	1	End Panel & Electric Box Assembly
2	10975	10	Machine Screw (#8-32 X 5/16 Lg.)
3	11107	10	Internal Tooth Washer
4	42457PU2	1	Rotation Decal
5	200188	1	Warning Decal
6	14394	1	Self-Tapping Screw (#10 X 3/8 Lg.)
7	11108	10	Washer (10 Shakeproof)
8	203972	1	CSA Logo Decal
9	10575	4	Drive Screw (#2-32 X 5/16 Lg.)
10	52203	1	Pressure Switch Assembly (See sheet 7 of 7)
11	17946	1	Gauge
12	210995	1	Decal (Valve)
13	45837	1	Manifold Assembly (Includes Items 12, 15, and 17)
14	10020	4	Soc. Hd. Cap Screw (1/4-20 X 1-1/4 Lg.)
15	16876	18	Machine Screw (#10-24 X 1/2 Lg.)
16	12356	17	Internal Tooth Washer
17	50946PU2	1	Cover Shroud
18	16613	9	Machine Screw (#10-24 X 5/16 Lg.)
19	51124PU2	1	Front Panel
20	15435	1	Motor (2 H.P. 60 Hz)
22	15497	1	Rubber Grommet
23	202504	1	Rotation Decal
24	25768	1	Special Valve Handle
25	100235	1	Directional Valve (See Form No. 100374 for parts list on valve)

HYDRAULIC SCHEMATIC

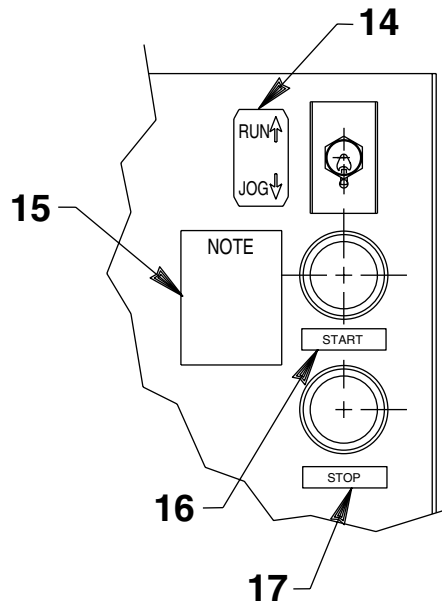


Note: Removed motor leads decal (Item #21) at last revision(s) made to this form.

SIDE VIEW



VIEW A-A



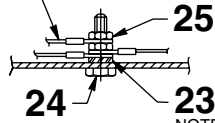
Item No.	Part No.	No. Req'd	Description
1	309386	2	Decal
2	14394	14	Self-Tapping Screw (#10 X 3/8 Lg.)
3	12356	14	Internal Tooth Washer
4	36746WH2	1	Angle Plate
5	64620	1	Basic Pump Assembly (6 Piston - See sheet 5 of 7)
6	50712	1	Reservoir Gasket
7	15327	1	Snap Plug
8	16412	2	Snap Plug (5/8 hole)
9	60234PU2	1	Reservoir
10	200609	1	Drain Tube
11	10618	1	Service Tee
12	39283	1	Pushbutton Switch (Red Button)
13	39282	1	Pushbutton Switch (Green Button)
14	352081	1	Run-Jog Decal
15	204015	1	Note Decal
16	203808	1	Decal (Start)
17	203769	1	Decal (Stop)

PARTS INCLUDED BUT NOT SHOWN

10494	4	Swivel Caster (2" dia.)
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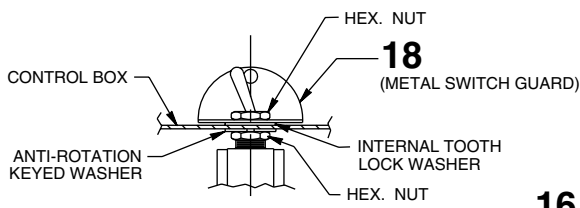
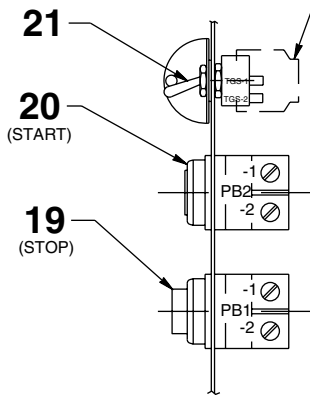
ELECTRICAL ASSEMBLY

POWER CORD GROUND
(MUST BE ISOLATED BETWEEN
NUTS AND CAN BE AT
TOP OR BOTTOM OF STACK.)

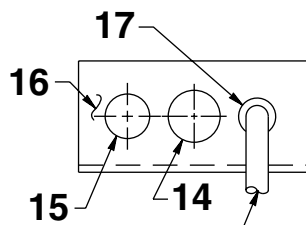


NOTE: SERRATED LOCK WASHER
MUST BE ADJACENT TO
METAL BOX. MORE WASHERS
CAN BE USED IF DESIRED.

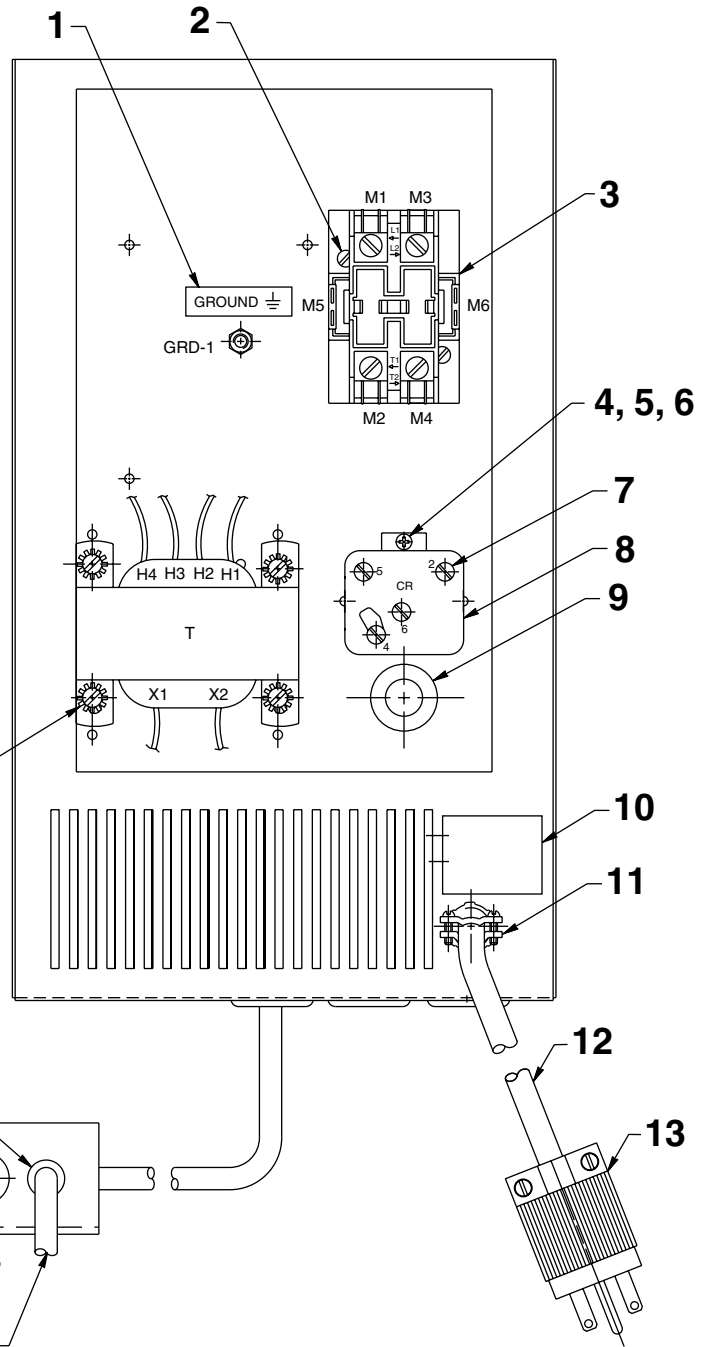
TERMINAL CONNECTIONS ON
SWITCH TO BE COVERED
WITH HEAT SHRINK TUBE
(17110) AS SHOWN BY
HIDDEN LINES.
(3 PLACES)



SWITCH DETAIL



TO PRESSURE SWITCH
(NOT SHOWN)



Item No.	Part No.	No. Req'd	Description
1	205189	1	Ground Decal
2	11539	2	Machine Screw (10-24 x 1/4)
3	11379-4	1	Relay Contactor (24 volt)
	**420718-4	1	Relay Contactor (24 volt)
4	10195	1	Nut (#6-32)
5	15906	1	Washer (#6 Shakeproof)
6	17898	1	Screw
7	10975	4	Machine Screw (#8-32 X 5/16 Lg.)
8	14667	1	Relay Starter (24 volt)
9	15497	4	Rubber Grommet
10	204607	1	Decal (Specifications)
11	11203	1	Strain Relief
12	307439	8'	Electrical Cable (12/3 SJTO)
13	11209	1	Electrical Connector (For 100211-230)
	16896	1	Electrical Connector (For 100211)
14	15327	1	Snap Plug
15	16412	2	Snap Plug (5/8 hole)
16	36746WH2	1	Angle Plate
17	215857	1	Strain Relief Bushing
18	352061	1	Switch Guard
19	39283	1	Pushbutton Switch (Red Button)
	39282	1	Pushbutton Switch (Green Button)
21	12301	1	Toggle Switch
22	10164	4	Rd. Hd. Std. Machine Screw (#10-24 X 3/8 Lg.)
23	11108	1	Washer (#10 Shakeproof)
24	104484	1	Machine Screw (10-24 UNC X 3/4 Lg.)
25	10197	2	Hex Nut (#10-24 UNC)
26	39692	1	Transformer (115/230/24)

PARTS INCLUDED BUT NOT SHOWN

38422	1	Decal (Electrical Schematic - See sheet 4 of 7)
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**For units built after March 1983.



WARNING:

To help avoid personal injury, all electrical work should be done by a qualified electrician. Refer to Form No. 19261, sheet 1 of 2, for electrical hook-up and operating instructions.

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.

ELECTRICAL SCHEMATIC

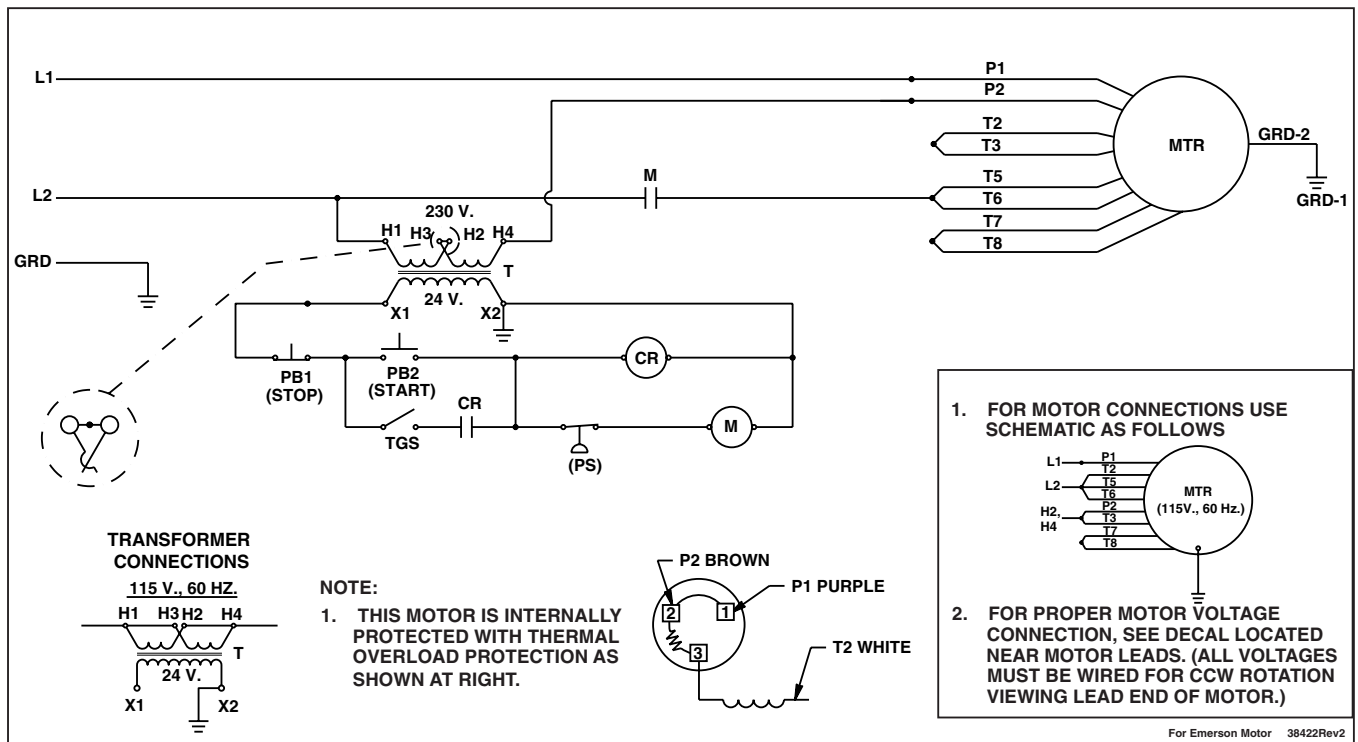
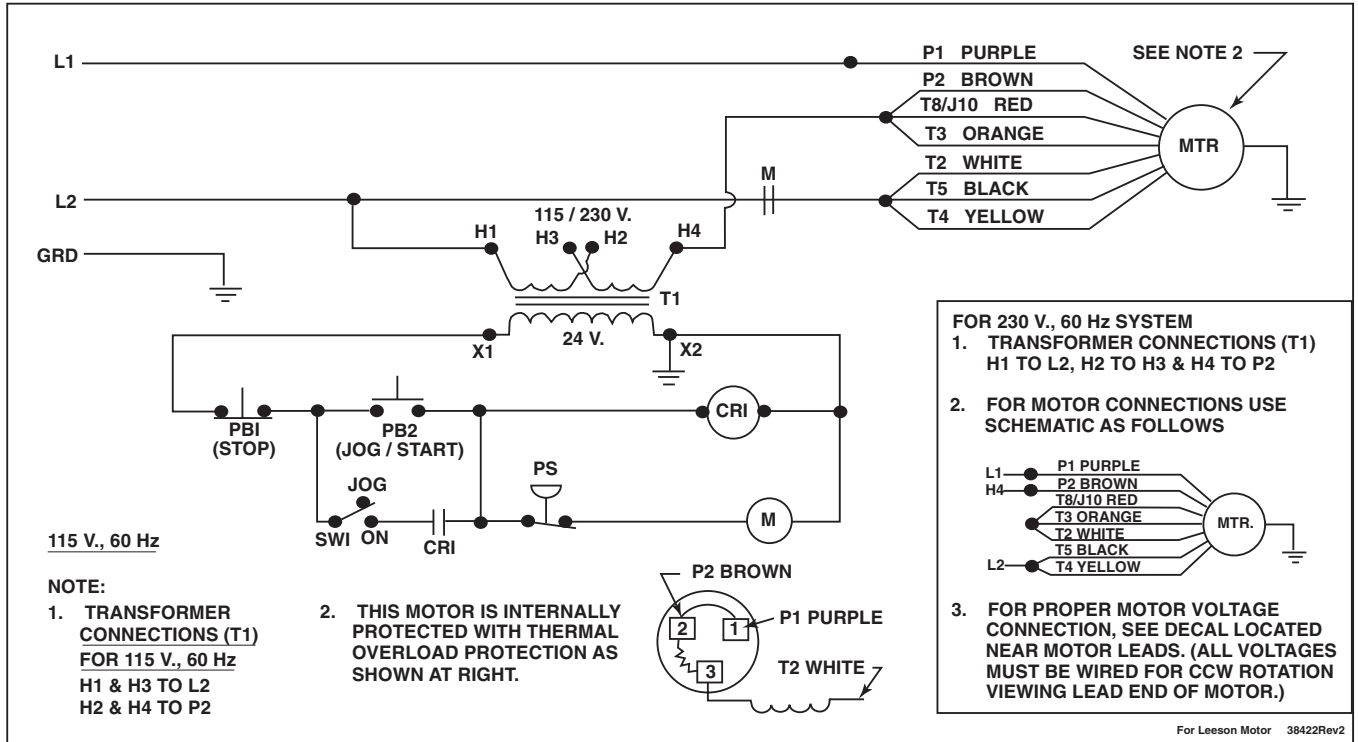


WARNING

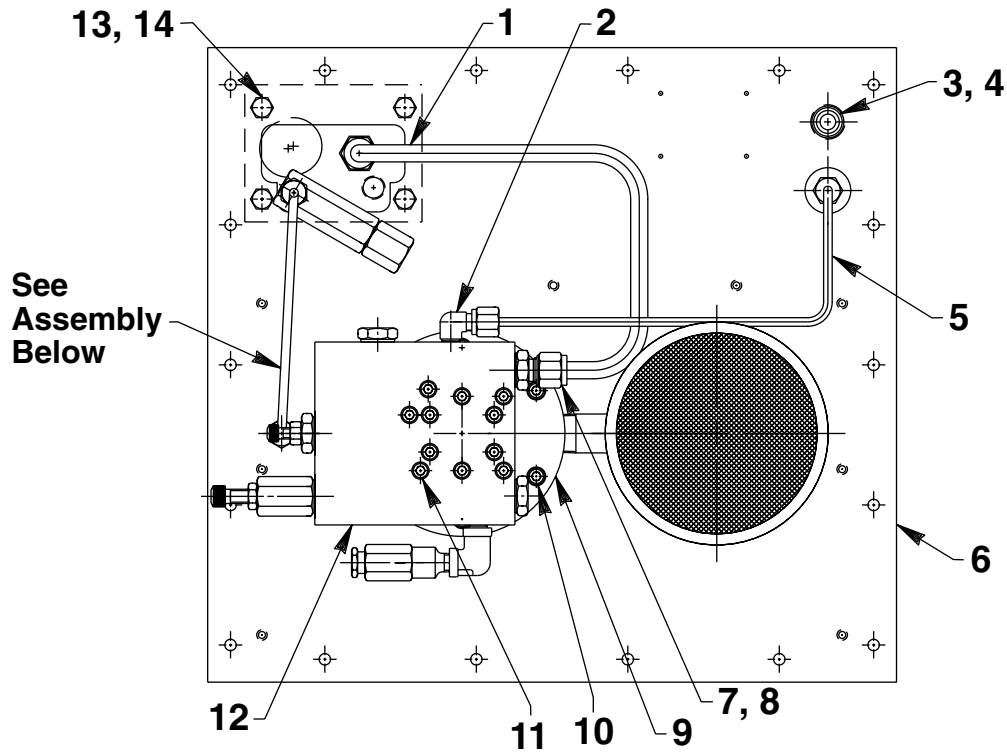
To help avoid personal injury, all electrical work must be done by a qualified electrician.

North American & International Color Codes

Conductors	North American	International
Line	Black	Brown
Neutral	White	Blue
Ground	Green	Green/Yellow

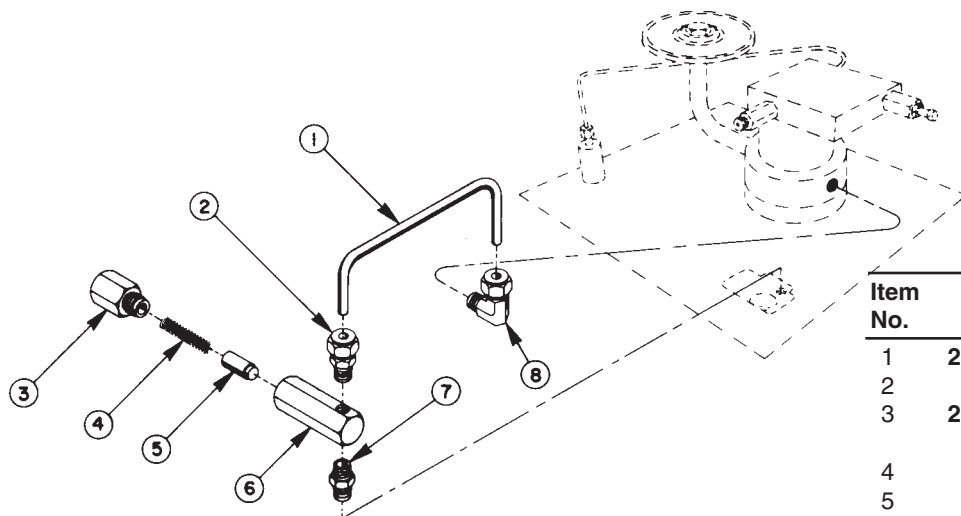


BASIC PUMP ASSEMBLY



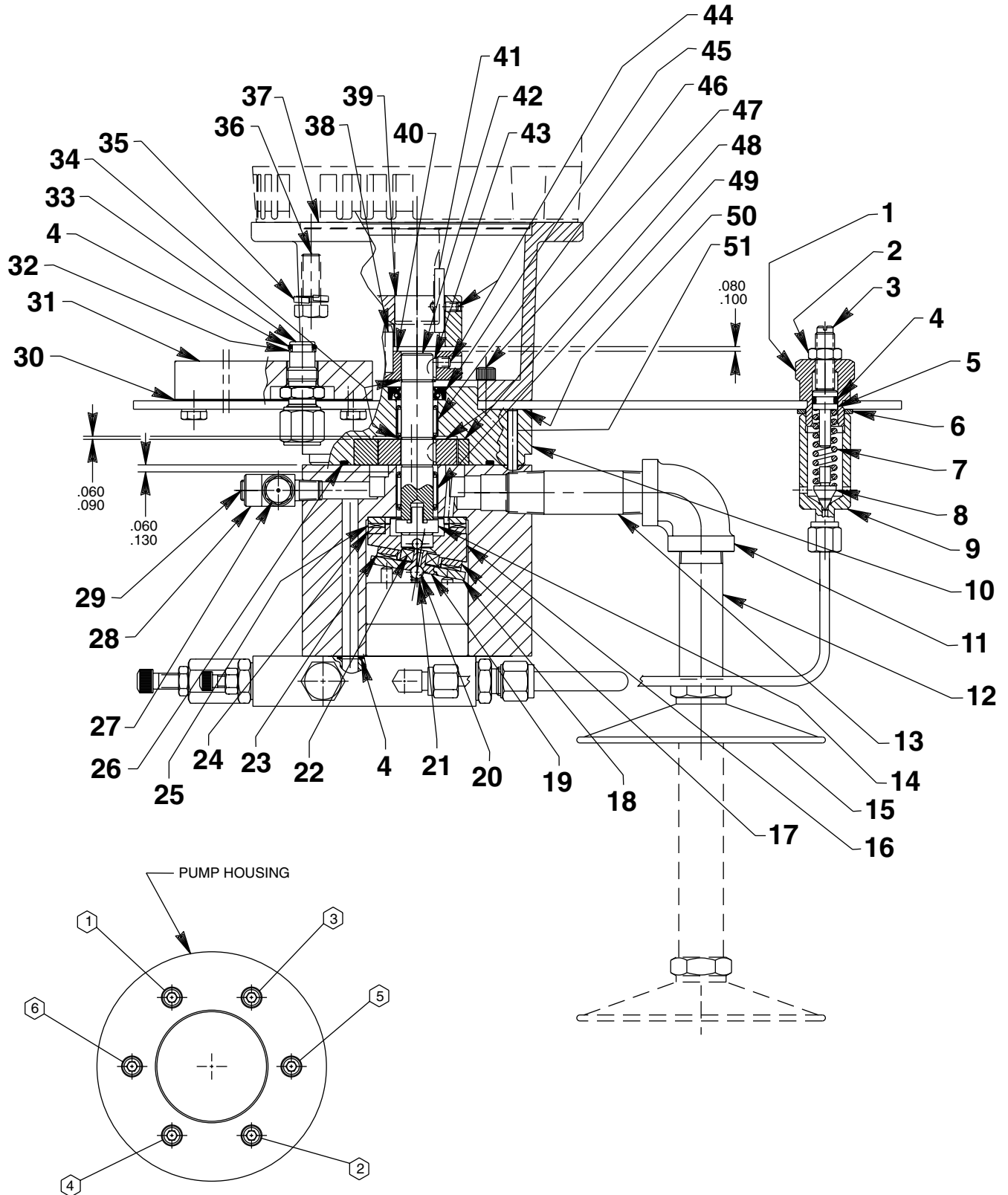
Item No.	Part No.	No. Req'd	Description	Item No.	Part No.	No. Req'd	Description
1	35281	1	Oil Line (3/8)	10	10854	6	Soc. Hd. Cap Screw (1/4-20 x 1-3/4 Lg.)
2	16177	1	90° Elbow Fitting	11	10022	5	Soc. Hd. Cap Screw (1/4-20 UNC x 1-1/2 Lg.; Torque to 110/120 in. lbs.)
3	20937	1	Filler Plug	12	420882	1	High Pressure Pump (6 pistons - See sheet 6 of 7)
4	200415	1	Washer (Rubber)	13	10005	4	Hex. Hd. Cap Screw (1/4-20 x 1/2 Lg.)
5	350524	1	Oil Line	14	10244	4	Lockwasher
6	60922	1	Cover				
7	10430	2	Tube Sleeve (For 3/8 tube)				
8	10431	2	Tube Nut (5/8-18 UNF)				
9	50705	1	Pump Housing				

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 Ass'y (Consists of items 3, 4, 5, & 6)

BASIC PUMP ASSEMBLY



BOLT TIGHTENING SEQUENCE

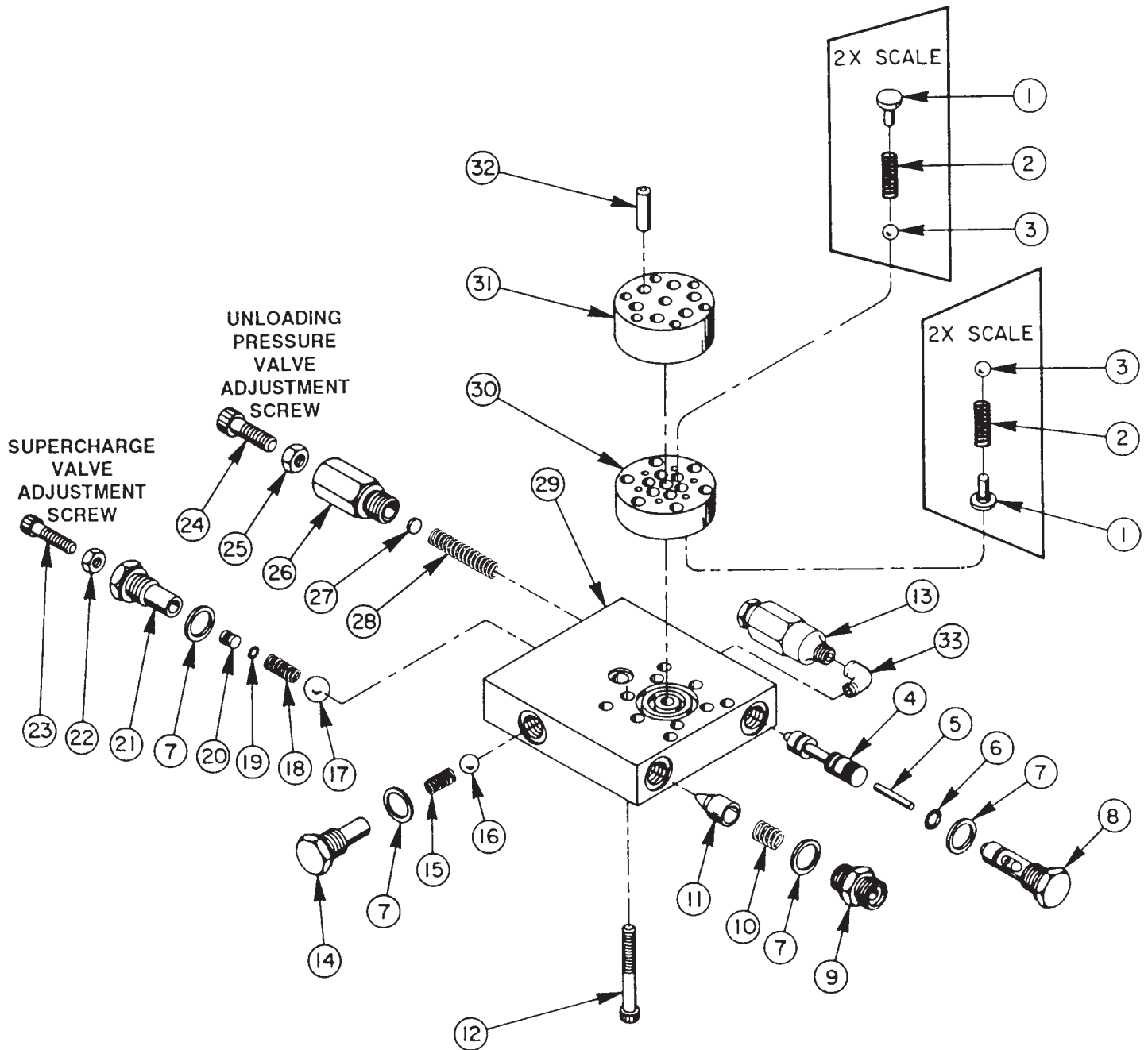
1. ALL BOLTS MUST BE INITIALLY TIGHTENED IN SEQUENCE SHOWN (DO NOT EXCEED 10 IN.LBS.).
2. ALL BOLTS MUST BE TORQUED IN SEQUENCE SHOWN. (TORQUE TO 115 IN.LBS. IN INCREMENTS OF 55 IN.LBS.)

Parts List, Form No. 19262, Back sheet 5 of 7

Item No.	Part No.	No. Req'd	Description
1	21305	1	Valve Cap
2	10386	1	Nut (3/8-24 UNF)
3	22362	1	Valve Adjusting Screw
4	10268	3	O-ring (1/2 X 3/8 X 1/16)
5	21306	1	Spring Guide
6	14857	1	Flat Washer
7	10495	1	Spring (1/2 O.D. X 1-5/8 Lg.)
8	21046	1	Valve Stem
9	22361	1	Body
10	50706	1	Gerotor Pump Housing
11	260023	1	90° Elbow Fitting
12	260021	1	Tube Extension
13	260022	1	Straight Fitting (1/2 NPT)
14	200397	1	Key
15	21345	1	Filter
16	35271	1	Angle Plate
17	15432	1	Needle Thrust Race
18	23548	1	Top Plate
19	23547	1	Top Bearing Plate
20	10375	1	Steel Ball (1/4 dia.)
21	10361	1	Spring (1/4 O.D. X 1" Lg.)
22	11814	1	Ball Bearing
23	15431	1	Needle Thrust Bearing
24	11227	2	Needle Thrust Race
25	11228	1	Needle Thrust Bearing
26	12504	1	O-ring (3" X 2-13/16 X 3/32)
27	306957	1	Air Bleed Valve
28	18969	1	Pipe Tee

Item No.	Part No.	No. Req'd	Description
29	10427	1	Pressure Plug (1/8 NPTF)
30	200395	1	Gasket
31	43110	1	Valve Mounting Block
32	11863	1	Backup Washer (1/2 X 3/8 X 1/16)
33	20787	1	Connector
34	12178	2	Retaining Ring (For 5/8 shaft)
35	10247	4	Lockwasher (3/8)
36	10049	4	Hex. Hd. Cap Screw (3/8-16 X 1" Lg.)
37	41838	1	Motor Mount
38	27003	2	Nylon Pin
39	207440	1	Coupling
40	27001	1	Coupling
41	27778	1	Square Key
42	303009	1	Pump Shaft
43	12179	2	Woodruff Key
44	10133	2	Soc. Hd. Set Screw (#10-24 UNC X 1/4 Lg.)
45	12194	1	Oil Seal (1-1/8 X 5/8 X 1/4 Thk.)
46	15430	1	Needle Bearing (13/16 O.D. X 5/8 I.D. X 5/8 Lg.)
47	10012	6	Soc. Hd. Cap Screw (1/4-20-UNC X 7/8 Lg.; Torque to 110/120 in. lbs.)
48	15428	1	Gerotor Set
49	15461	1	Needle Bearing (13/16 O.D. X 5/8 I.D. X 3/4 Lg.)
50	35266	1	Gasket
51	13152	1	Dowel Pin (3/16 X 1-1/2 Lg.)

HIGH PRESSURE PUMP ASSEMBLY (6 Piston)



SEE DIAGRAM ON REVERSE
SIDE FOR IMPORTANT
ASSEMBLY INFORMATION

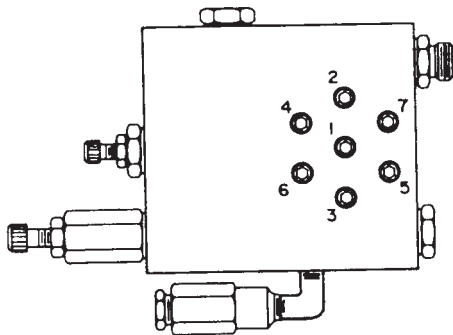
Note: Supercharge Valve and Unloading Pressure Valve of the high pressure pump assembly are NOT factory set! They require adjustment at final pump assembly. Refer to the pump's hydraulic schematic for specifications.

Parts List, Form No. 19262, Back sheet 6 of 7

Item No.	Part No.	No. Req'd	Description	Item No.	Part No.	No. Req'd	Description
1	*24549	12	Valve Guide	18	15319	1	Compression spring (1/4 O.D. X 3/4 Lg.)
2	*10445	12	Compression Spring (5/32 O.D. X 3/4 Lg.)	19	12099	1	O-ring (9/32 X 5/32 X 1/16)
3	*12223	12	Steel Ball (3/16 Dia.)	20	200271	1	Adapter
4	200273	1	Spool	21	200270	1	Super Charge Fitting (Torque to 30/35 ft. lbs.)
5	16471	1	Dowel Pin (1/8 Dia. X 1" Lg.)	22	10383	1	Finished Jam Nut (1/4-20)
6	14763	1	O-ring (7/16 X 5/16 X 1/16)	23	10016	1	Soc. Hd. Cap Screw (1/4-20 X 1" Lg.)
7	10261	4	Copper Washer (3/4 X 19/32 X 1/32)	24	10809	1	Soc. Hd. Cap Screw (5/16-18 X 1-1/4 Lg.)
8	202561	1	Actuating Pin Adapter (Torque to 30/35 ft. lbs.)	25	10385	1	Finished Jam Nut (5/16-18)
9	20770	1	Connector (Torque to 40/45 ft. lbs.)	26	36545	1	Unloading Fitting (Torque to 30/35 ft. lbs.)
10	10425	1	Compression Spring (3/8 O.D. X 3/4 Lg.)	27	16528	1	Disc
11	20771	1	Poppet	28	203031	1	Compression Spring (.300 O.D. X 1-3/4" Lg.)
12	*15318	7	Soc. Hd. Cap Screw (1/4-28 X 2" Lg.; See Diagram Below)	29	*50691	1	Valve Body
13	21278-50	1	Relief Valve Assembly (Set at 5,100/5,700 PSI)	30	*41048	1	Valve Head
14	200269	1	Adapter Plug (Torque to 30/35 ft. lbs.)	31	*41063	1	Pump Barrel
15	11451	1	Compression Spring (1/4 O.D. X 5/8 Lg.)	32	*21628	6	Piston (9/32 Dia.)
16	10378	1	Steel Ball (3/8 Dia.)	33	13229	1	90° Elbow Fitting
17	10379	1	Steel Ball (1/2 Dia.)				

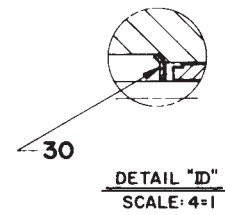
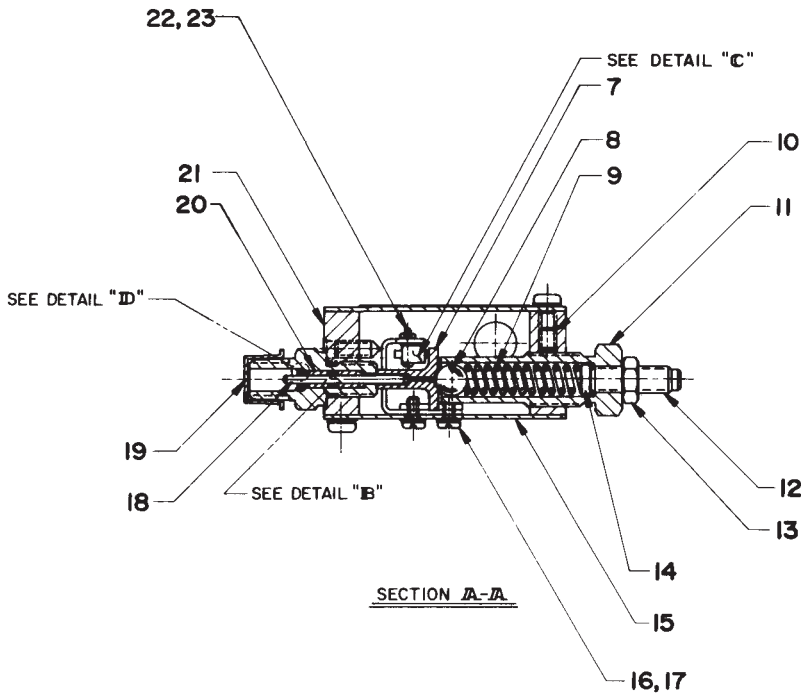
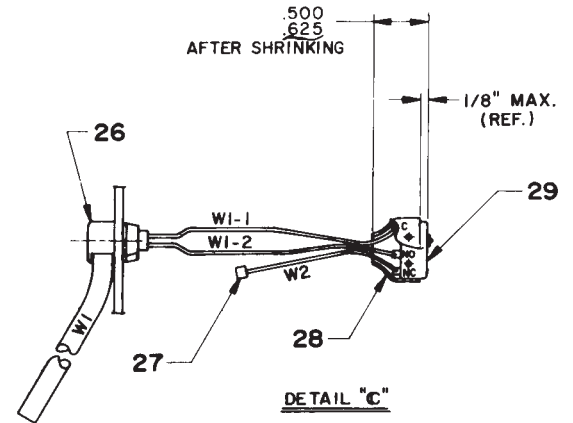
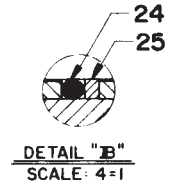
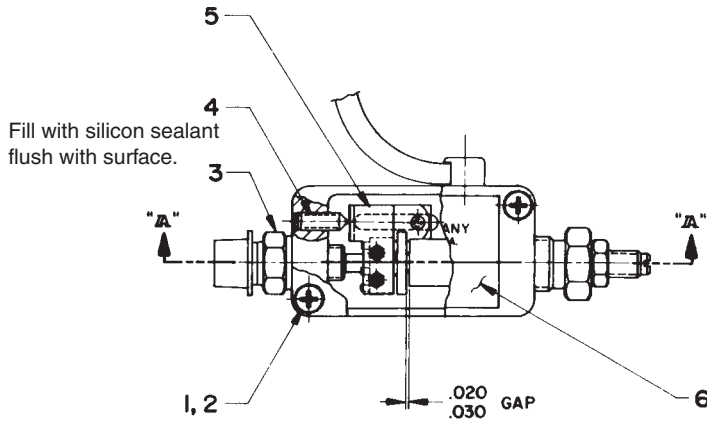
When replacing items marked with an asterisk (*), consult Hytec Technical Services Department.

HIGH PRESSURE PUMP BOLT TIGHTENING SEQUENCE



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

PRESSURE SWITCH #52203



Parts List, Form No. 19262, Back sheet 7 of 7

Item No.	Part No.	No. Req'd	Description
1	16613	4	Pan Hd. Machine Screw (#10-24 X 5/16 Lg.)
2	11108	4	Lockwasher (#10)
3	304949	1	Cartridge (Torque to 80/120 in. lbs.)
4	210270	1	Set Screw (1/4-20 X 3/4 Lg.)
5	45637	1	Switch Bracket
6	304960	1	Decal
7	210198	1	Platen
8	16920	1	Ball (7/16 dia.)
9	10495	1	Compression Spring
10	16028	1	Set Screw (1/4-20 X 5/16 Lg. w/brass insert; Torque to 70/78 in. lbs.)
11	304951	1	Spring Retainer
12	22362	1	Adjusting Screw
13	10386	1	Hex Jam Nut (3/8-24)
14	210201	1	Spring Disc
15	304950	2	Cover Plate
16	10975	2	Pan Hd. Machine Screw (#8-32 X 5/16 Lg.)
17	11388	2	Lockwasher (#8)
18	23062	1	Dowel Pin (Note: Pin must bottom out in platen [Item #7] bore.)
19	12545	1	Cap Plug
20	210197	2	Bushing (NOTE: Insert with flat surface against o-ring and backup ring)
21	52201	1	Switch Body
22	10157	2	Rd. Hd. Machine Screw (#2-56 X 1/2 Lg.)
23	10193	2	Hex Nut (#2-56)
24	10264	1	O-ring (1/4 X 1/8 X 1/16)
25	214992	1	O-ring Backup Washer
26	12176	1	Strain Relief Bushing
27	15525	1	Splice Cap
28	19441	.10 ft.	Heat Shrink Tubing (Black)
29	10489	1	Limit Switch
30	12041	1	Retaining Ring (Internal)

PARTS INCLUDED BUT NOT SHOWN

11423 2.5 ft. Electric Cord (18/2 SJTO)

PRESSURE SWITCH ADJUSTMENT PROCEDURE

1. Place a .025 thick shim between spring retainer (Item #11) and platen (Item #7). Tighten spring retainer until it contacts shim. Lock in place with set screw (Item #10).
2. Slide switch mounting bracket (Item #5) towards platen until switch button is close to platen surface and secure in place by tightening screws (Item #16).
3. Connect volt/ohm meter to electrical cord. Tighten set screw (Item #4) against switch mounting bracket until switch button contacts platen and actuates. Continue tightening set screw approximately 1/8 turn after switch button actuates.
Note: Verify that .020/.030 is maintained between spring retainer and platen.
4. Verify operation (ON/OFF) by depressing pin with spring tension applied to platen.