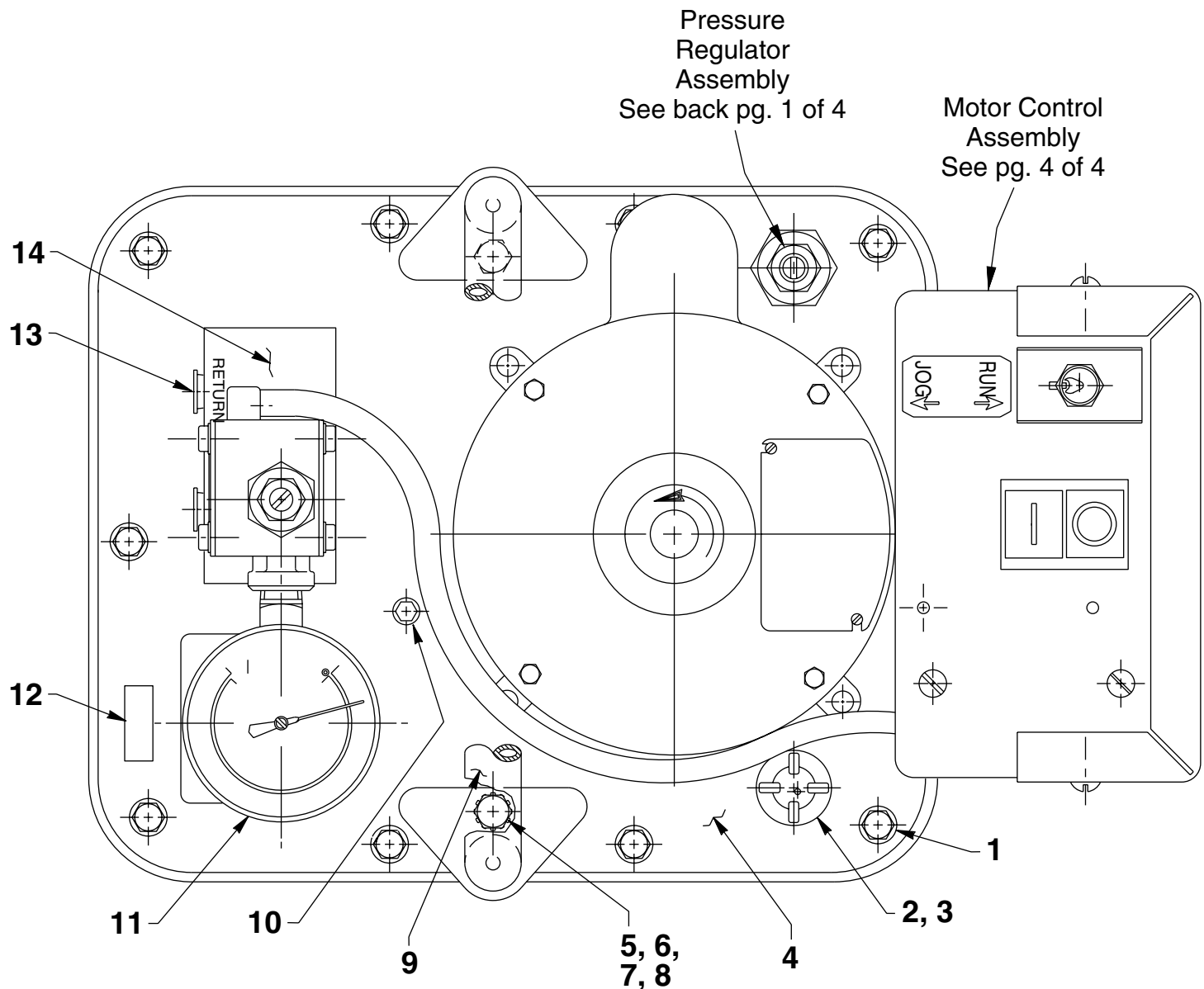


Parts List for:

100178
100178-230
100178-LEX

**ELECTRIC
HYDRAULIC PUMP**

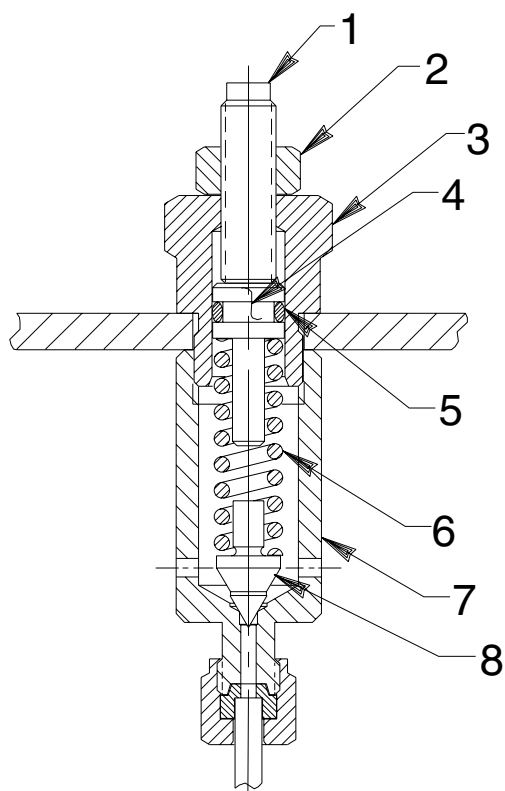
TOP VIEW



Item No.	Part No.	No. Req'd	Description
1	209799	10	Self Tapping Screw (Torque to 50/60 in. lbs.)
2	20937	1	Filler/Vent Plug
3	200415	1	O-ring (Square Section)
4	46064	1	Cover Plate
5	10009	2	Cap Screw (1/4-20 UNC X 3/4 Lg.; Torque to 60/80 in. lbs.)
6	11351	2	Washer
7	10245	2	Lockwasher
8	10199	2	Hex Nut (1/4-20)
9	47492	1	Handle
10	10030	1	Cap Screw (1/4-20 x 1/2 Lg.; Torque to 220/240 in. lbs.)
11	17946	1	Gauge
12	203972	1	Decal
13	13270	2	Plastic Cap
14	420029	1	Manifold Body

Part numbers marked with an asterisk (*) are contained in Repair Kit No. 300430.

PRESSURE REGULATOR ASSEMBLY



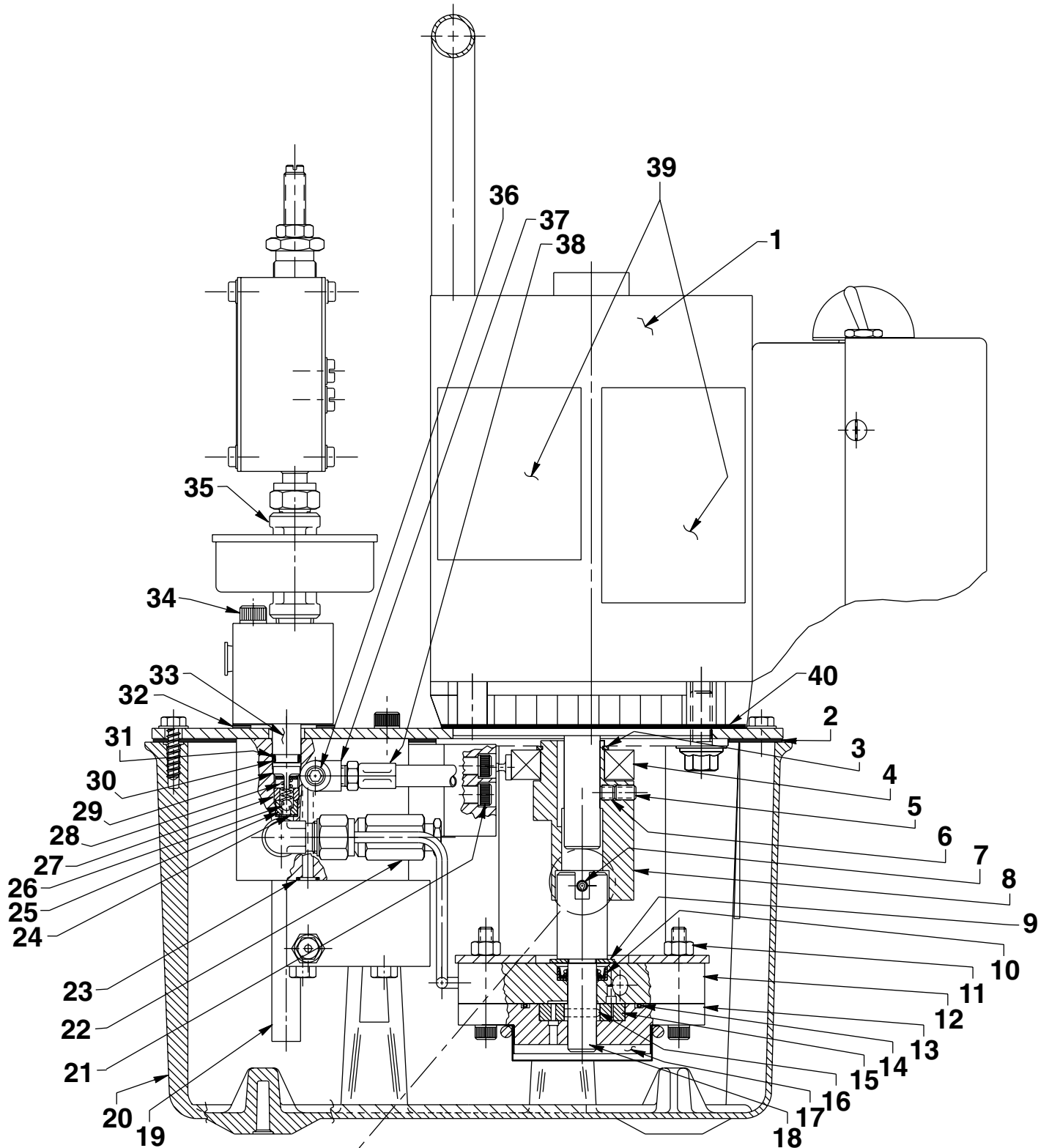
Item No.	Part No.	No. Req'd	Description
1	22362	1	Adjusting Screw
2	10386	1	Locknut (3/8-24)
3	21305	1	Valve Cap
4	21306	1	Spring Guide
5	10268	1	O-ring (1/2 x 3/8 x 1/16)
6	10495	1	Compression Spring
7	22361	1	Pressure Regulator Body
8	21046	1	Poppet

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.

SIDE VIEW



.001
.010
Clearance
Required

Sheet No. 2 of 4

Rev. 5 Date: 9 Apr. 2001

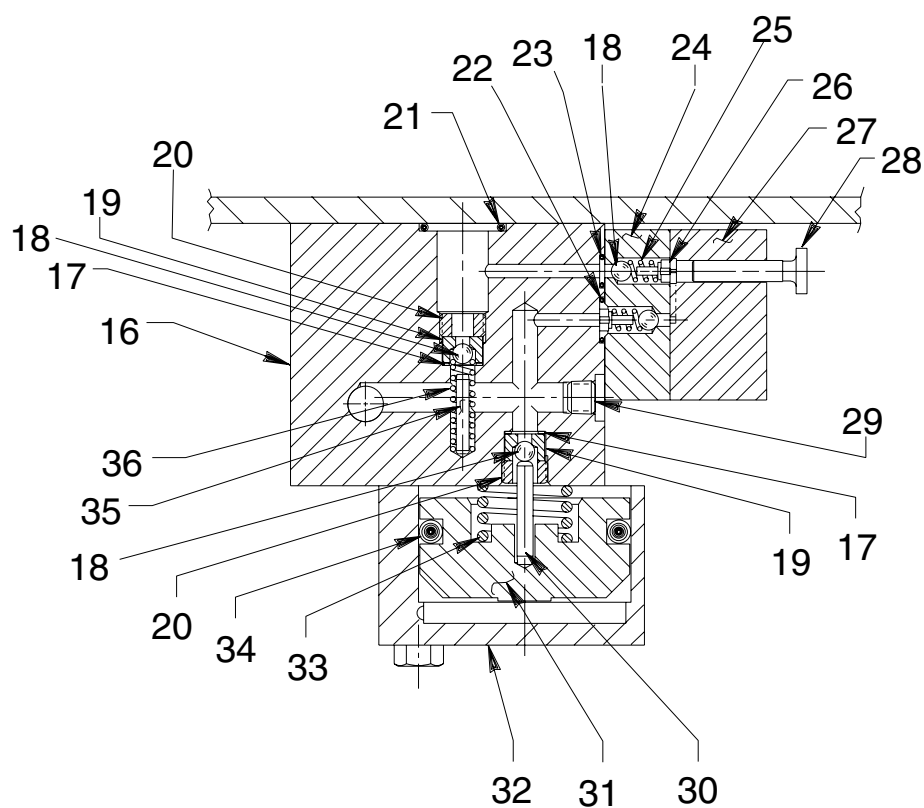
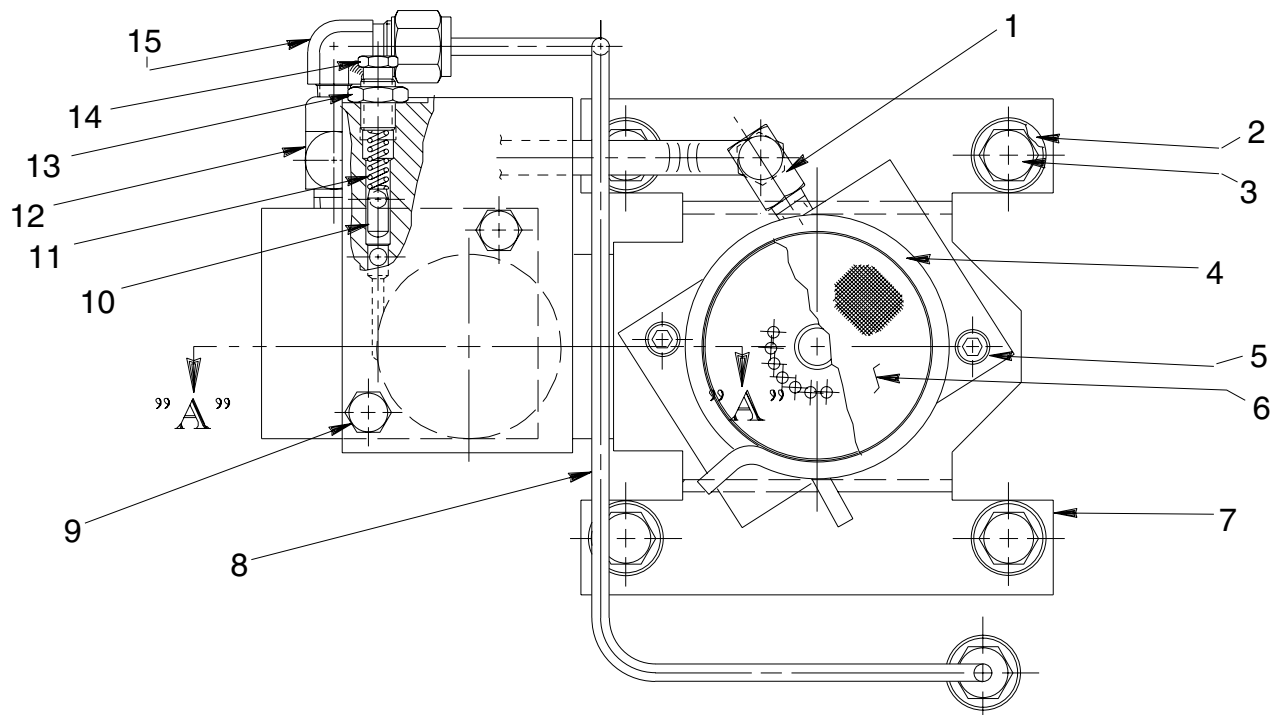
Item No.	Part No.	No. Req'd	Description
1	58196WH2	1	Electric Motor
2	*40164	1	Gasket
3	209798	1	Retaining Ring
4	209805	1	Bearing
5	10519	1	Set Screw (1/4-20 x 3/8 Lg.; Torque to 60/80 in. lbs.)
6	10136	1	Set Screw (1/4-20 UNC x 1/4 Lg.; Torque to 60/80 in. lbs.)
7	10973	1	Slotted Spring Pin (3/16 O.D. x 1-1/4 Lg.) NOTE: Locate slot as shown in detail.
8	45596	1	Eccentric
9	12595	1	Washer
10	*304830	1	Oil Seal
11	10199	2	Hex Nut (1/4-20)
12	61170	1	Upper Gerotor Housing
13	61169	1	Lower Gerotor Housing
14	*10922	1	O-ring (2-1/8 x 1-15/16 x 3/32)
15	304826	1	Gerotor Set
16	209794	1	Pin
17	21846	1	Filter Support
18	304835	1	Drive Shaft
19	200609	1	Drain Tube
20	61165	1	Reservoir
21	10022	4	Cap Screw (1/4-20 x 1-1/2 Lg.; Torque to 180/200 in. lbs.)
22	21278-50	1	Relief Valve (Set at 5,100/5,700 PSI; For 100178 & 100178-230)
	21278-20	1	Relief Valve (Set at 1,900/2,200 PSI; For 100178-LEX)
23	*10266	1	O-ring (3/8 x 1/4 x 1/16)
24	†10442	1	Copper Washer (3/8 x 1/4 x 1/32)
25	†*209787	1	Replaceable Seat
26	†*12223	1	Ball (3/16 dia.)
27	209797	1	Hollow Lock Screw (7/16-20; Torque to 180/200 in. lbs.)
28	*211797	1	Compression Spring
29	†209795	1	Outlet Ball Stop
30	†*10268	2	O-ring (1/2 x 3/8 x 1/16)
31	†*11863	2	Backup Washer
32	*304829	1	Gasket
33	202505	1	Bushing
34	209945	2	Soc. Hd. Cap Screw (5/16-18 UNC x 2-1/2 Lg.; Torque to 220/240 in. lbs.)
35	10618	1	Tee Fitting
36	10427	1	Pipe Plug (1/8 NPTF)
37	19463	1	Tee Fitting (Brass)
38	304819	1	Hose Assembly
39	200188	1	Decal (Two portions; One a WARNING and one an IMPORTANT)
40	351060	1	Gasket

PARTS INCLUDED BUT NOT SHOWN

309233	2	Trade Name Decal
--------	---	------------------

Part numbers marked with an asterisk (*) are contained in Repair Kit No. 300430.
Part numbers marked with a dagger (†) are contained in Release Valve Replacement Kit No. 300606.

SECTION VIEWS



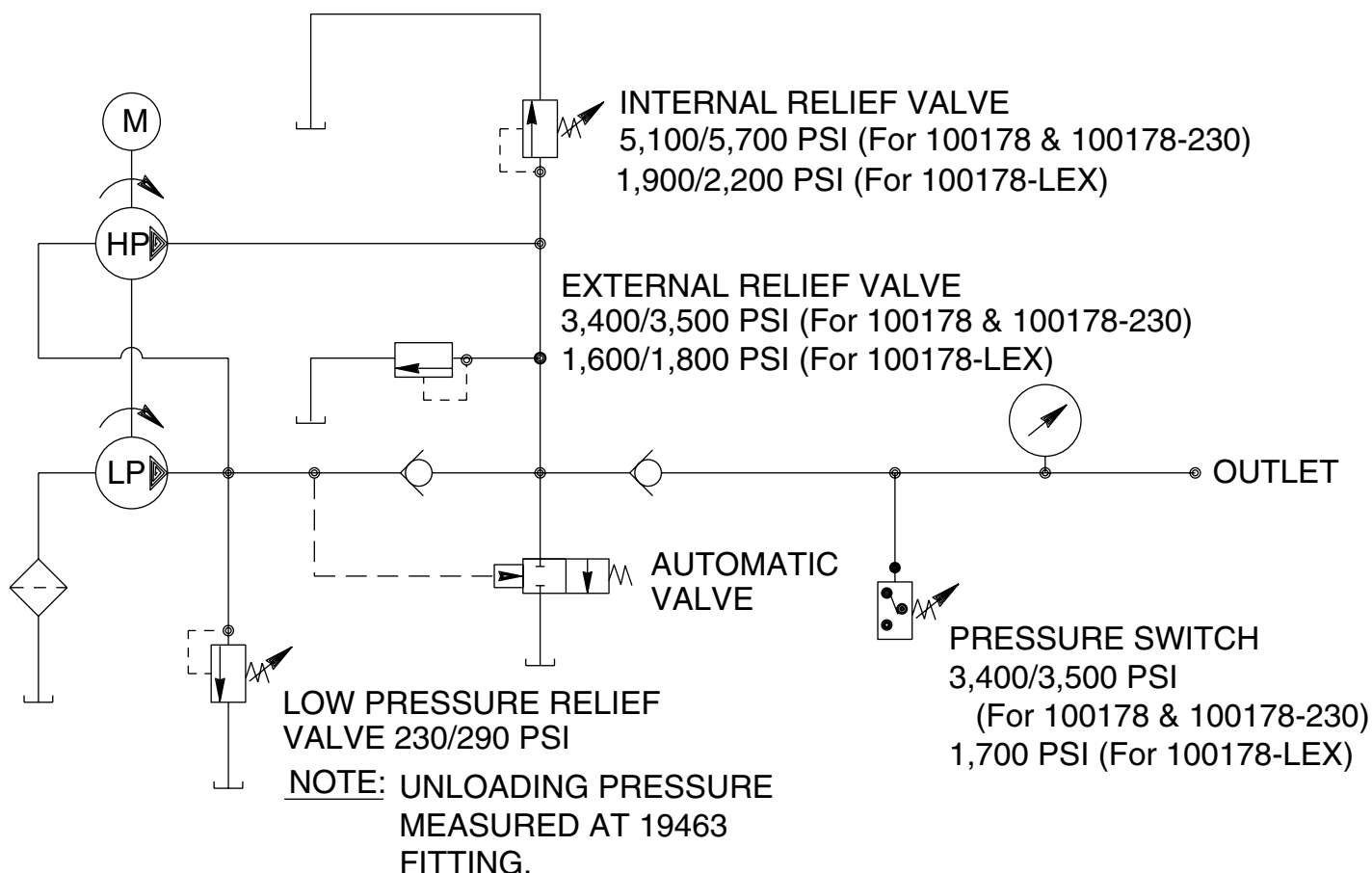
SECTION A-A

Item No.	Part No.	No. Req'd	Description
1	14440	1	90° Elbow Fitting
2	10258	4	Washer (13/16 x 3/8 x 1/16)
3	213663	4	Flange Hd. Screw (3/8-16 x 1" Lg.; Torque to 230/250 in. lbs.)
4	11461	1	Clamp Ring
5	10854	2	Cap Screw (Torque to 60/80 in. lbs.)
6	21608	1	Filter
7	52174	1	Bracket
8	306171	1	Tube Assembly
9	13037	2	Cap Screw (1/4-20 x 2" Lg.; Torque to 40/50 in. lbs.)
10	211080	1	Dowel Pin (1/4 O.D. x 1/2 Lg.)
11	*11221	1	Compression Spring
12	18969	1	Tee Fitting
13	10386	1	Hex Locknut (3/8-24)
14	*29786	1	Adjusting Screw (Unloading Relief Valve)
15	11278	1	90° Elbow Fitting
16	61167	1	Check Body
17	*10442	2	Copper Washer (3/8 x 1/4 x 1/32)

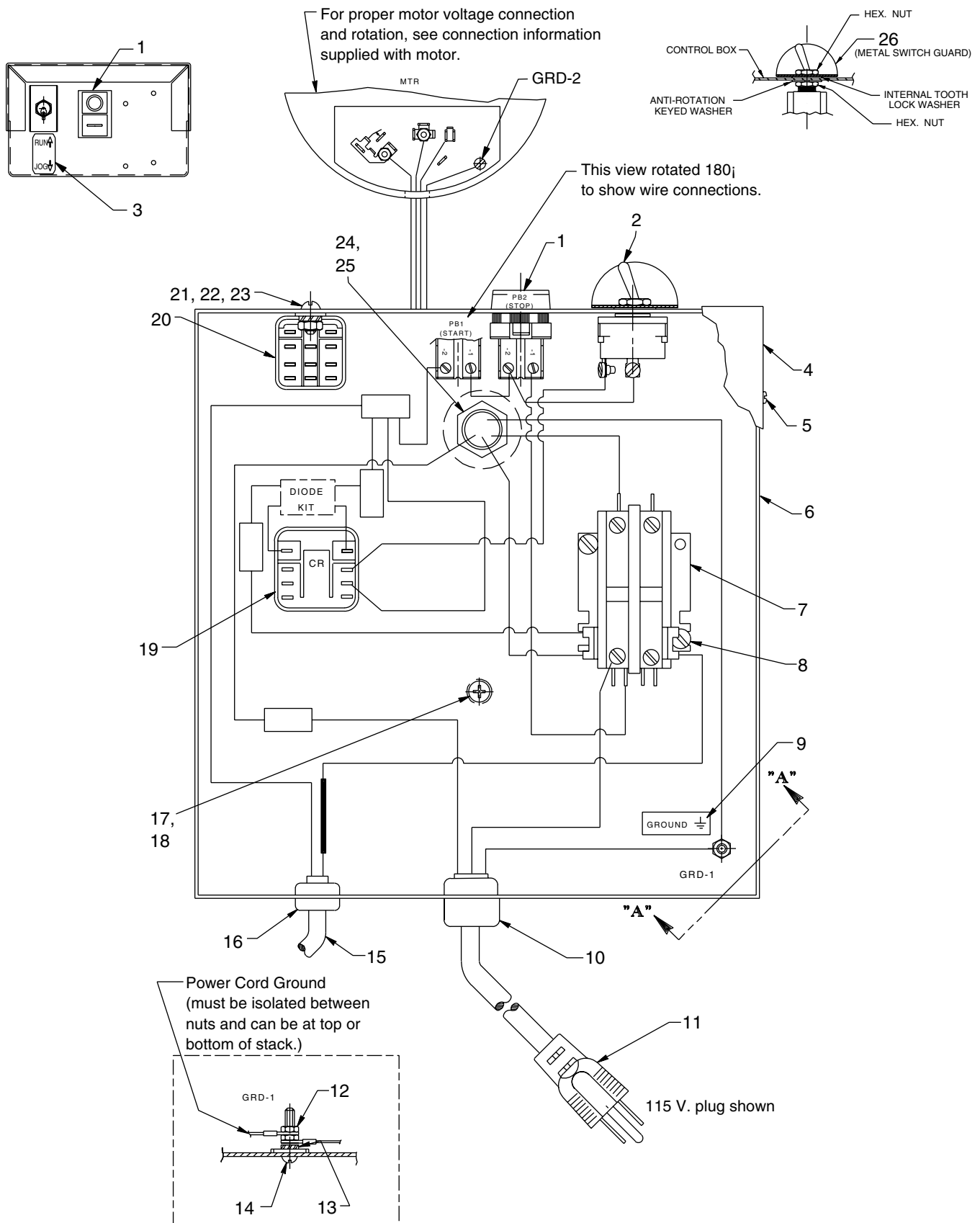
Item No.	Part No.	No. Req'd	Description
18	*12223	4	Ball (3/16 dia.)
19	*209787	2	Replaceable Seat
20	209797	2	Hollow Lock Screw (7/16-20; Torque to 180/200 in. lbs.)
21	*10273	1	O-ring (13/16 x 5/8 x 3/32)
22	*14763	1	O-ring (7/16 X 5/16 X 1/16)
23	*10265	1	O-ring (5/16 x 3/16 x 1/16)
24	45559	1	High Pressure Check Block
25	*10445	2	Compression Spring
26	24549	1	Valve Guide
27	45866	1	High Pressure Piston Block
28	305526	1	High Pressure Piston
29	15130	1	Plug
30	211843	1	Dowel Pin (3/16 O.D. x 1" Lg.) NOTE: Install with radius end out..
31	46063	1	Automatic Valve Piston
32	52167	1	Automatic Valve Block
33	*16346	1	Compression Spring
34	*10283	1	O-ring (2" x 1-5/8 x 3/16)
35	12149	1	Dowel Pin (1/8 O.D. x 3/4 Lg.)
36	*16057	1	Compression Spring

Part numbers marked with an asterisk (*) are contained in Repair Kit No. 300430.

HYDRAULIC SCHEMATIC



MOTOR CONTROL ASSEMBLY



Note: Serrated lockwasher must be adjacent to metal box. More washers can be used if desired.

VIEW "A-A"

Parts List, Form No. 100819, Back sheet 4 of 4

Item No.	Part No.	No. Req'd	Description
1	309019	1	Pushbutton Switch
2	12301	1	Toggle Switch
3	352081	1	Decal (Run - Jog)
4	43126WH2	1	Motor Control Box Cover
5	14812	4	Pan Hd. Tapping Screw
6	51218WH2	1	Motor Control Box
7	420718-1	1	Contactor (115 V.; For 100178 & 100178-LEX)
	420718-2	1	Contactor (230 V.; For 100178-230)
8	11539	2	Round Hd. Screw (10-24 x 1/4)
9	205189	1	Decal (Ground)
10	210112	1	Strain Relief
11	25229	1	Cord Set (14/3 SJT0; For 100178 & 100178-LEX)
	308752	8 ft.	Electrical Cable (14/3 SJT0; For 100178-230)
	11209	1	Electrical Plug (For 100178-230)
12	10197	2	Hex Nut (#10-24)
13	11108	1	Washer (#10 External Tooth)
14	11856	1	Rd. Hd. Machine Screw (#10-24 x 1" Lg.)

Item No.	Part No.	No. Req'd	Description
15	52203	1	Pressure Switch Assembly (See Form No. 102507)
16	215857	1	Strain Relief Bushing
17	13532	1	Pan Hd. Tapping Screw (#8-32 x 3/8 Lg.)
18	206857	1	Washer
19	250608	1	Diode Kit
20	18842	1	Control Relay (For 100178 & 100178-LEX)
	39520	1	Control Relay (For 100178-230)
21	10159	2	Rd. Hd. Machine Screw (#6-32 UNC x 5/16 Lg.)
22	10195	2	Hex Nut (#6-32 UNC)
23	15906	2	Lockwasher (#6 External Tooth)
24	11202	1	Conduit Nipple
25	212434	1	Washer
26	352061	1	Metal Switch Guard

PARTS INCLUDED BUT NOT SHOWN

200188	1	Decal
213695	1	Decal (Intermittent Duty)

ELECTRICAL SCHEMATIC

115/230 V., 60 Hz

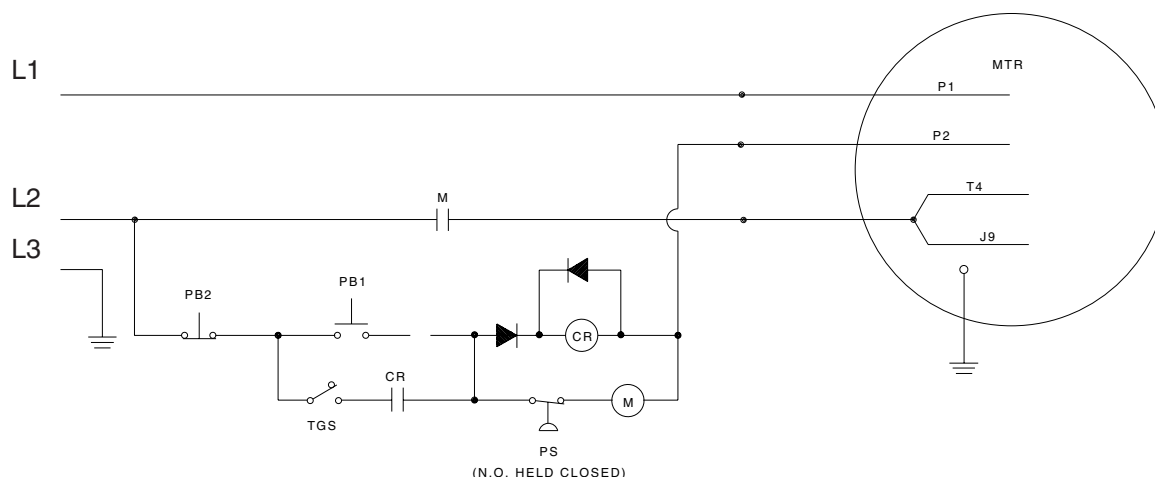


WARNING

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



NOTE: A limited production of pumps used a Lesson brand electric motor wired as in the schematic at the right. It contained a manually reset thermal overload. If a replacement motor is needed, it will have an automatically reset thermal overload that must be wired according to the schematic above.

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