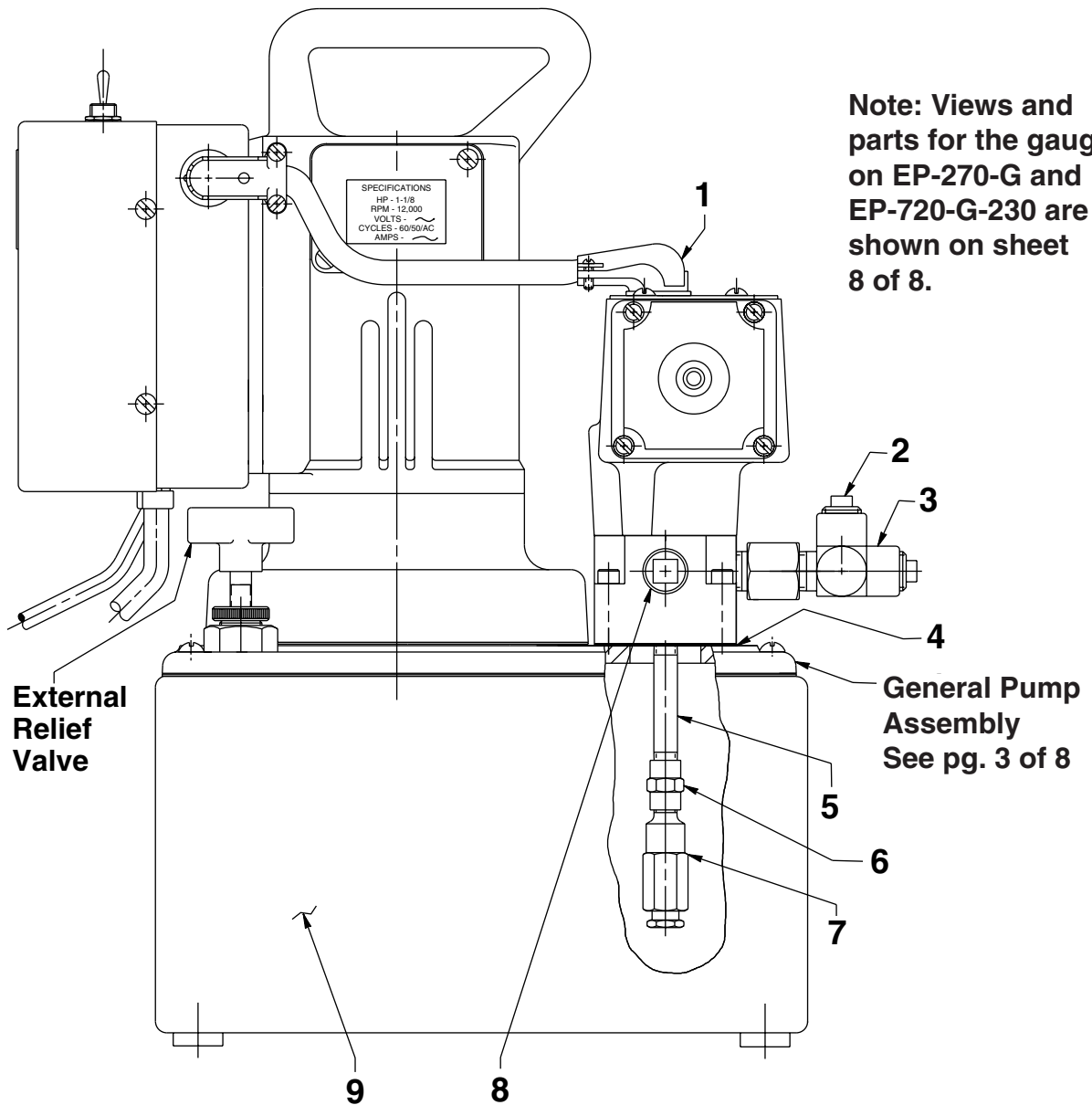


Parts List for:

 EP-720
 EP-720-G
 EP-720-G-230

 MODEL A
ELECTRIC TWO-STAGE HYDRAULIC PUMP


Item No.	Part No.	No. Req'd	Description
1	11144	1	90° Elbow Connector
2	11127	2	Plug Fitting (3/8 NPTF)
3	10623	1	Tee Fitting (3/8 NPTF)
4	200395	1	Gasket
5	15456	1	Straight Fitting (1/8 NPTF)
6	18841	1	Straight Fitting (1/8 NPTF)

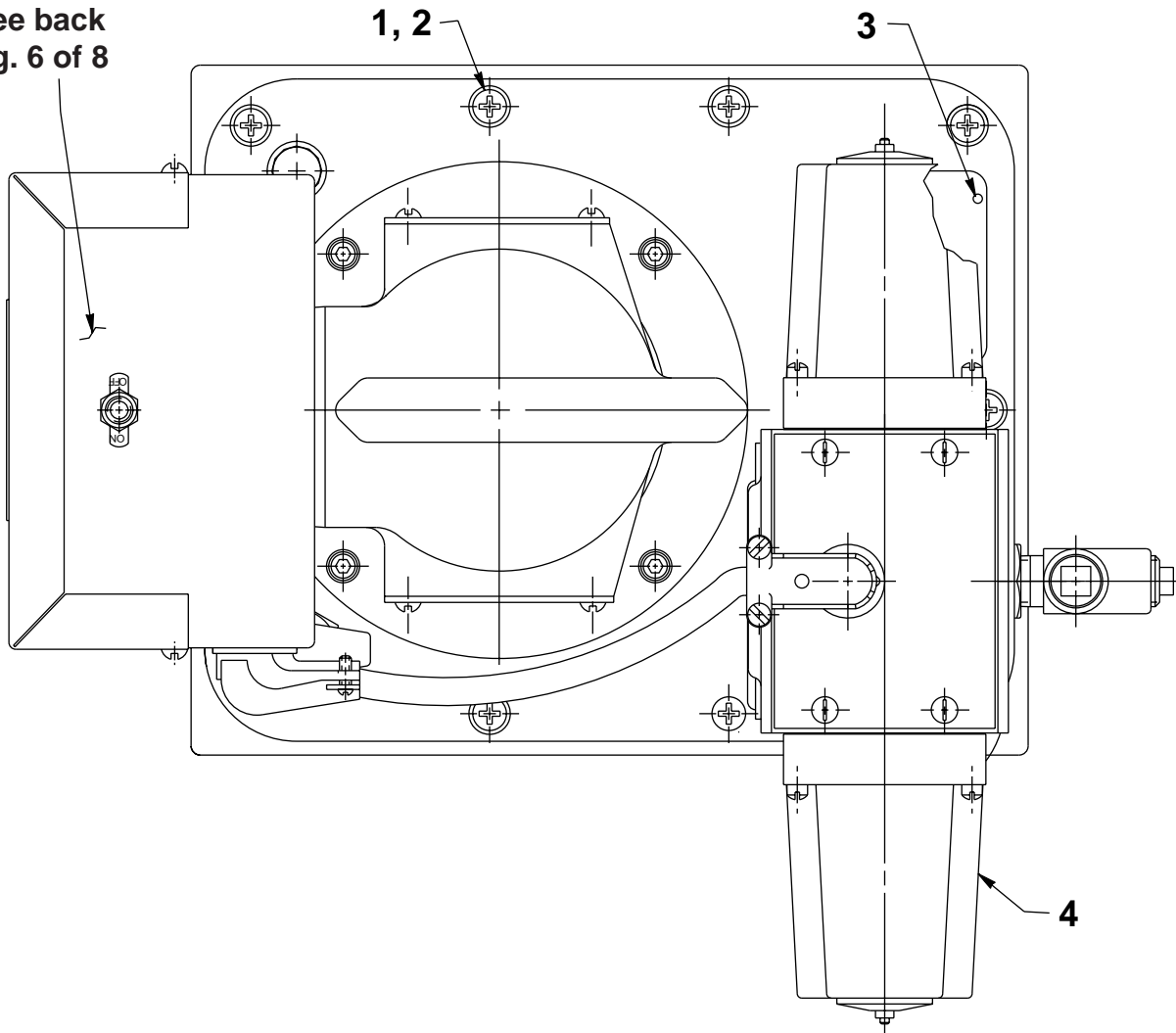
Item No.	Part No.	No. Req'd	Description
7	21278-10	1	Relief Valve (Set at 900/1000 PSI)
8	10970	1	Plug Fitting (1/4 NPTF)
9	64538BL10	1	Reservoir (Aluminum; 2 gal.)

Sheet No. 1 of 8

Rev. 5 Date: 24 Mar. 2000

TOP VIEW

Motor Control
Box Assembly
See back
Pg. 6 of 8



Item No.	Part No.	No. Req'd	Description
1	10008	10	Cap Screw (1/4-20 x 3/4 Lg.; Torque to 90/100 in. lbs.)
2	10442	10	Copper Washer (3/8 x 1/4 x 1/32)
3	10575	4	Drive Screw (2 x 3/16 Lg.)
4	66205-115	1	4-way Solenoid Valve (115 V.; For EP-720 & EP-720-G; See Form No. 108066)
	66205-230	1	4-way Solenoid Valve (230 V.; For EP-720-G-230; See Form No. 108066)

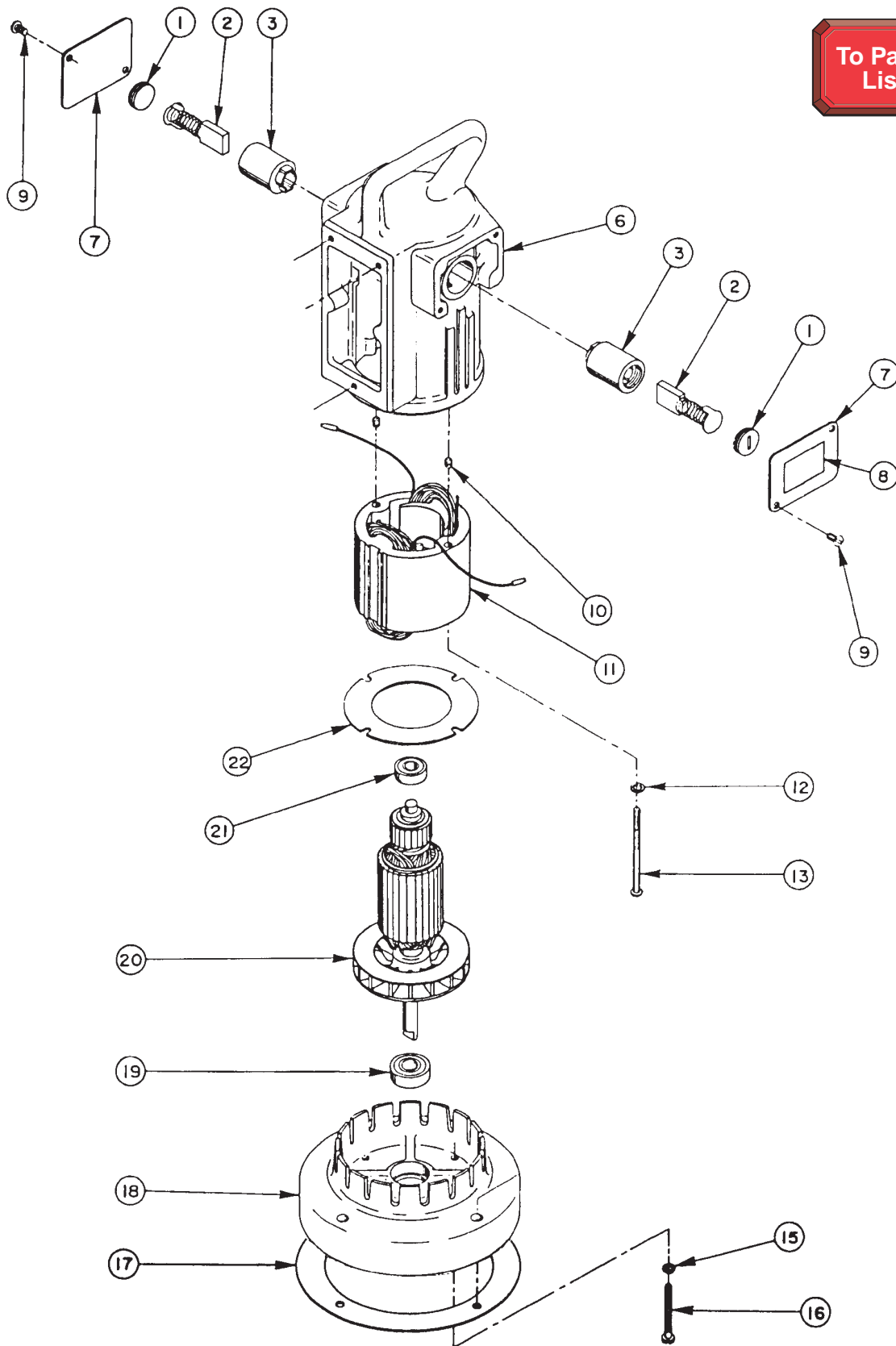
PARTS INCLUDED BUT NOT SHOWN

9689 1 Reducer Connector

UNIVERSAL MOTOR ASSEMBLY

12,000 R.P.M. -- 115 & 230 Volt, 50/60 Hz.

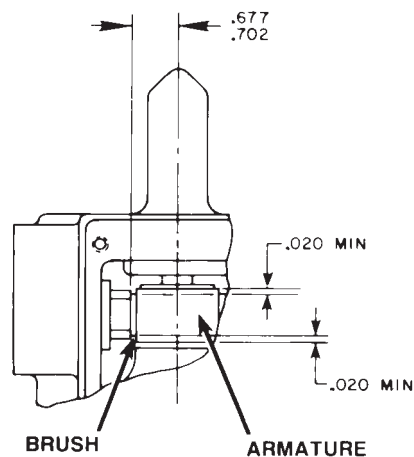
To Parts List



Item No.	Part No.	No. Req'd	Description
1	10806	2	Brush Holder Cap
2	10804	2	Brush Assembly
3	10805	2	Brush Holder (See note below)
6	61901YE3	1	Motor Shell (For EP-720)
	66185YE3	1	Motor Shell (For EP-720-G & EP-720-G-230)
7	21008	2	Cover (For EP-720; See sheet 8 of 8 for parts on pumps with gauges)
8	215164	1	Specifications Decal (For 115 volt)
	215163	1	Specifications Decal (For 230 volt)
9	11539	2	Machine Screw (10-24 x 1/4 Lg.)
10	10133	2	Set Screw
11	10802	1	Field (For EP-720 & EP-720-G)
	58841F	1	Field (For EP-720-G-230)
12	12356	2	Lockwasher
13	10170	2	Machine Screw
15	10241	4	Lockwasher
16	10169	4	Machine Screw (#10-24 x 2" Lg.; Torque to 20/25 in. lbs.)
17	30650	1	Gasket
18	40059YE3	1	Motor Base
19	10439	1	Ball Bearing
20	10800	1	Armature (For EP-720 & EP-720-G; See note below)
	58841A	1	Armature (For EP-720-G-230; See note below)
21	10438	1	Ball Bearing
22	20786	1	Baffle Plate

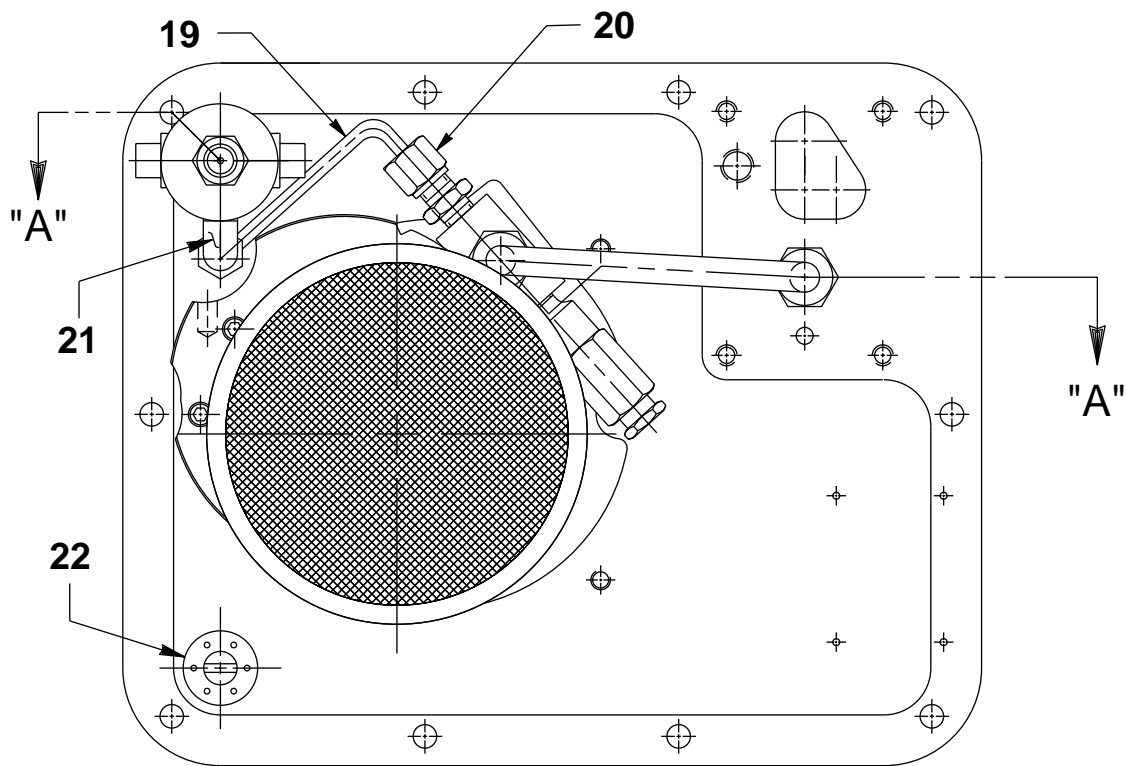
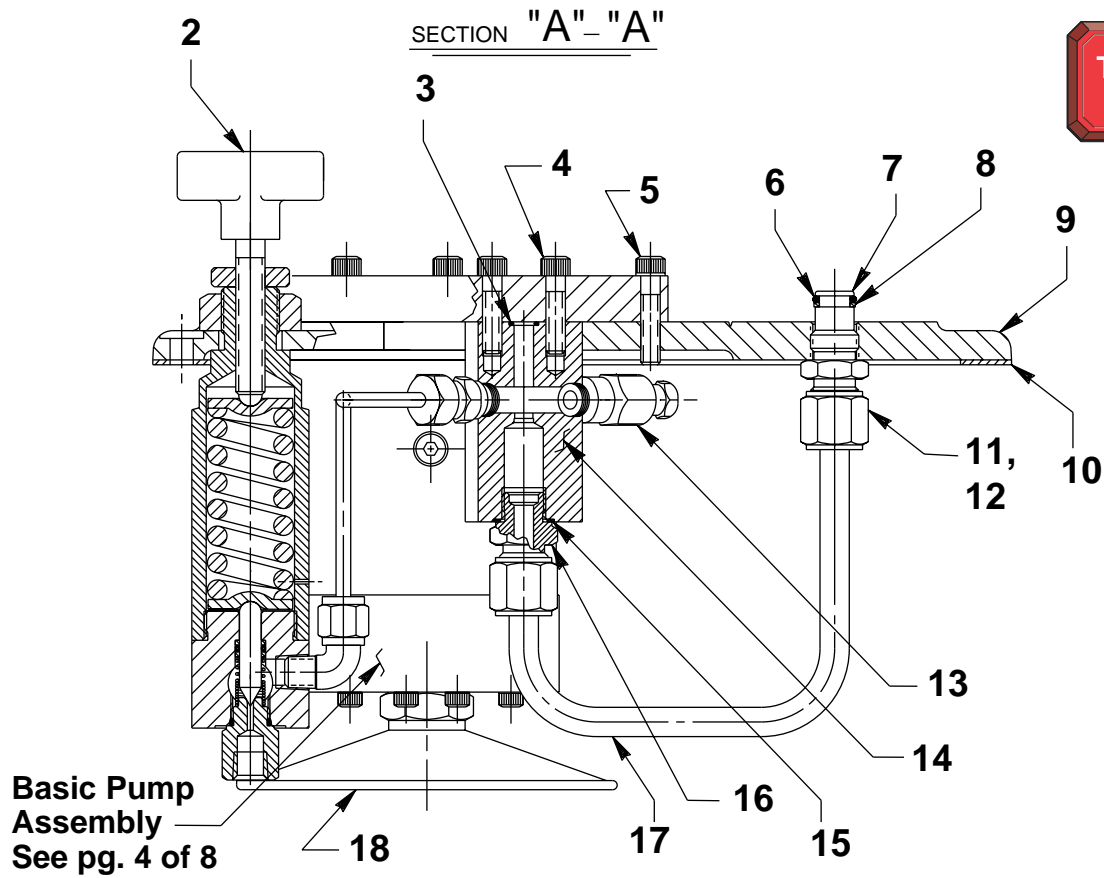


BRUSH HOLDER & ARMATURE INSTALLATION SPECIFICATIONS



When replacing brushes or the armature, the dimensions shown must be as specified.

GENERAL PUMP ASSEMBLY

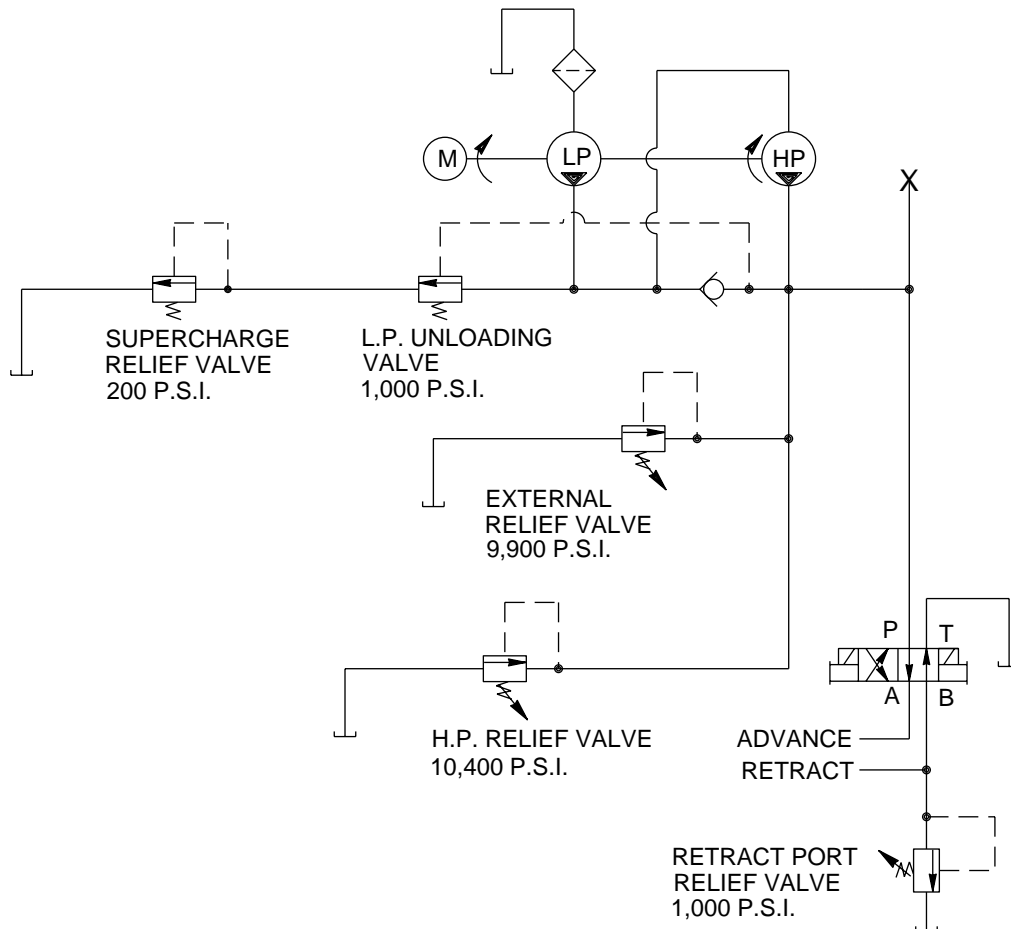


Item No.	Part No.	Req'd	Description
2	47647	1	Pressure Regulator Assembly (See Form No. 102581)
3	10266	1	O-ring (3/8 X 1/4 X 1/16; Nitrile)
	11438	1	O-ring (3/8 X 1/4 X 1/16; Viton)
	17715	1	O-ring (3/8 X 1/4 X 1/16; EPR)
4	10015	2	Soc. Hd. Screw (1/4-28 X 1" Lg.; Torque to 130/180 in. lbs.)
5	10016	3	Soc. Hd. Screw (1/4-20 X 1" Lg.)
6	10268	1	O-ring (1/2 X 3/8 X 1/16; Nitrile)
	11439	1	O-ring (1/2 X 3/8 X 1/16; Viton)
	11716	1	O-ring (1/2 X 3/8 X 1/16; EPR)
7	20787	1	Valve Connector
8	11863	1	Backup Washer (1/2 X 3/8 X 1/16)
9	40064YE3	1	Cover Plate
10	420484	1	Reservoir Gasket

Item No.	Part No.	Req'd	Description
11	10430	2	Tube Sleeve (3/8 Dia.)
12	10431	2	Tube Nut Fitting (3/8 Tube)
13	21278	1	Relief Valve (Set at 10,100 to 10,700 PSI)
14	20776	1	Valve Body
15	10261	1	Copper Washer
16	20770	1	Connector Fitting (9/16 X 5/8)
17	21045	1	Oil Line Tube
18	21344	1	Filter Screen
19	201570	1	Pressure Regulator Tube
20	14844	1	Straight Fitting (1/8 NPTF)
21	16177	1	90° Elbow Fitting (1/8 NPTF)
22	20937	1	Vent Cap



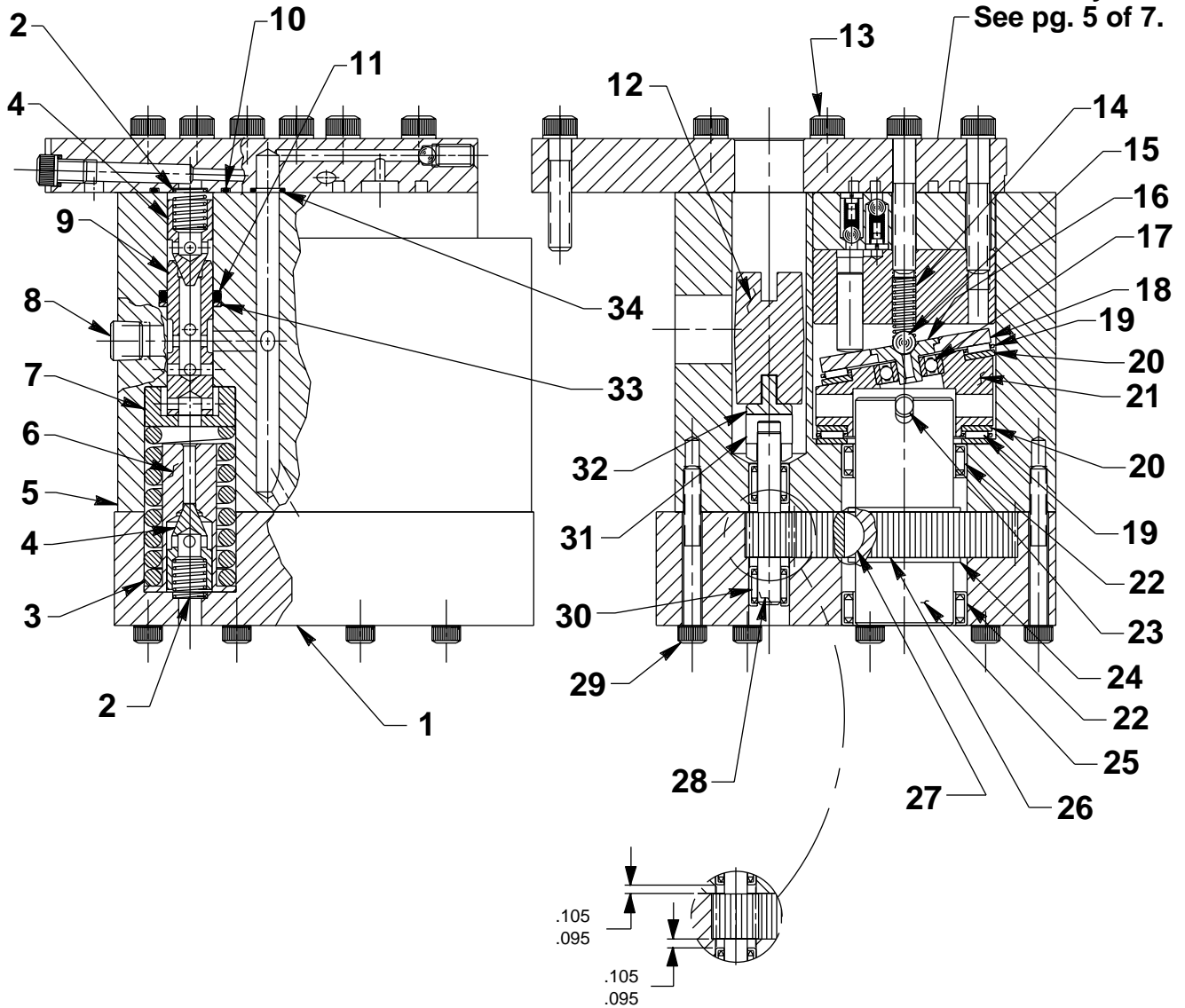
HYDRAULIC SCHEMATIC



BASIC PUMP ASSEMBLY

To Parts List

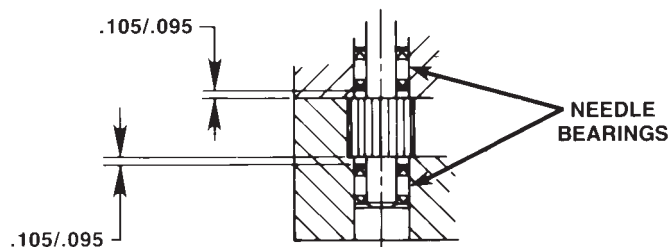
High Pressure Pump Assembly See pg. 5 of 7.



Item No.	Part No.	No. Req'd	Description	Item No.	Part No.	No. Req'd	Description
1	40072	1	End Plate	18	23548	1	Top Plate
2	10425	2	Spring (3/8 O.D. X 3/4 Lg.)	19	11228	2	Needle Bearing
3	10426	1	Spring (1" O.D. X 1-13/16 Lg.)	20	11813	3	Bearing Race
4	20771	2	Poppet	21	23549	1	Angle Plate
5	40071	1	Pump Body	22	11064	2	Needle Bearing
6	23256	1	Spring Guide	23	11955	1	Slotted Spring Pin
7	23255	1	Spring Guide	24	11261	2	External Retaining Ring
8	10427	1	Plug Fitting (1/8 NPTF)	25	23556	1	Shaft
9	20849	1	Spool	26	23574	1	Drive Gear
10	10303	1	O-ring (7/8 X 3/4 X 1/16; Nitrile)	27	11821	1	Woodruff Key
	19407	1	O-ring (7/8 X 3/4 X 1/16; EPR)	28	20774	1	Drive Gear
	11443	1	O-ring (7/8 X 3/4 X 1/16; Viton)	29	10001	13	Soc. Hd. Screw (10-32 X 1-3/4 Lg.; Torque to 50/60 in. lbs.)
11	10271	1	O-ring (11/16 X 1/2 X 3/32; Nitrile)	30	11198	2	Needle Bearing
	19406	1	O-ring (11/16 X 1/2 X 3/32; EPR)	31	21093	1	Key
	11445	1	O-ring (11/16 X 1/2 X 3/32; Viton)	32	21092	1	Adapter
12	251206	1	Coupling	33	12389	1	Backup Washer (11/16 x 1/2 X 1/16)
13	10020	9	Soc. Hd. Screw (1/4-20 X 1-1/4 Lg.; Torque to 170/180 in. lbs.)	34	10266	1	O-ring (3/8 X 1/4 X 1/16; Nitrile)
14	10361	1	Spring (1/4 O.D. X 1" Lg.)		17715	1	O-ring (3/8 X 1/4 X 1/16; EPR)
15	10375	1	Steel Ball (1/4" Lg.)		11438	1	O-ring (3/8 X 1/4 X 1/16; Viton)
16	23547	1	Bearing Top Plate				
17	11814	1	Ball Bearing				



NEEDLE BEARING INSTALLATION SPECIFICATIONS

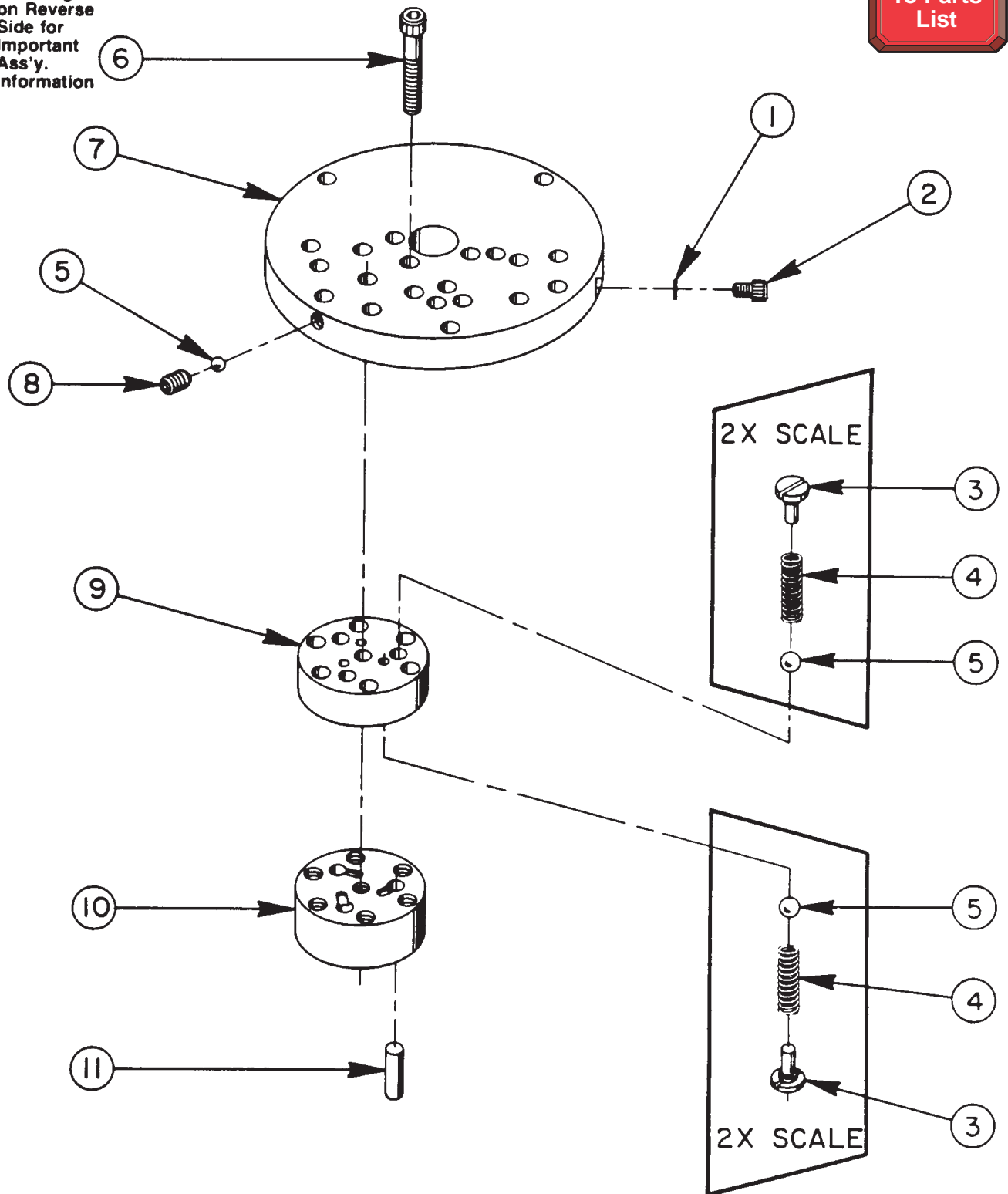


When replacing the needle bearings on the drive gear of the basic pumps, the dimensions shown must be as specified.

HIGH PRESSURE PUMP ASSEMBLY

See Diagram on Reverse Side for Important Ass'y. Information

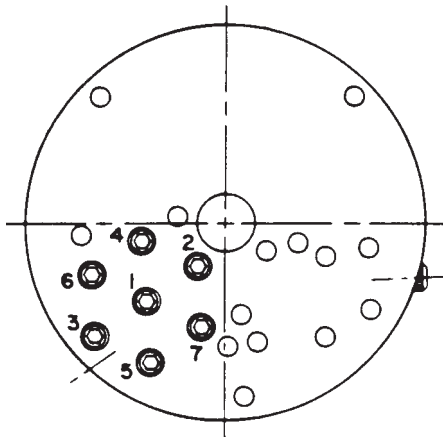
To Parts List



Item No.	Part No.	No. Req'd	Description
1	10442	1	Copper Washer (3/8 X 1/4 X 1/32)
2	10002	1	Soc. Hd. Cap Screw (1/4-20 UNC X 3/8" Lg.; Torque to 140/160 in. lbs.)
3	24549	6	Valve Guide
4	10445	6	Compression Spring (5/32" O.D. X 3/4" Lg.)
5	12223	7	Steel Ball (3/16" Dia.)
6	10023	7	Soc. Hd. Cap Screw (1/4-28 UNF X 1-1/2 Lg.; Torque to 170/180 in. lbs.; See note below)
7	50411	1	Top Plate
8	10519	1	Soc. Set Screw (1/4-20 UNC X 3/8 Lg.; Torque to 65/70 in. lbs.)
9	40630	1	Valve Head
10	41062	1	Pump Barrel
11	21628	3	Piston

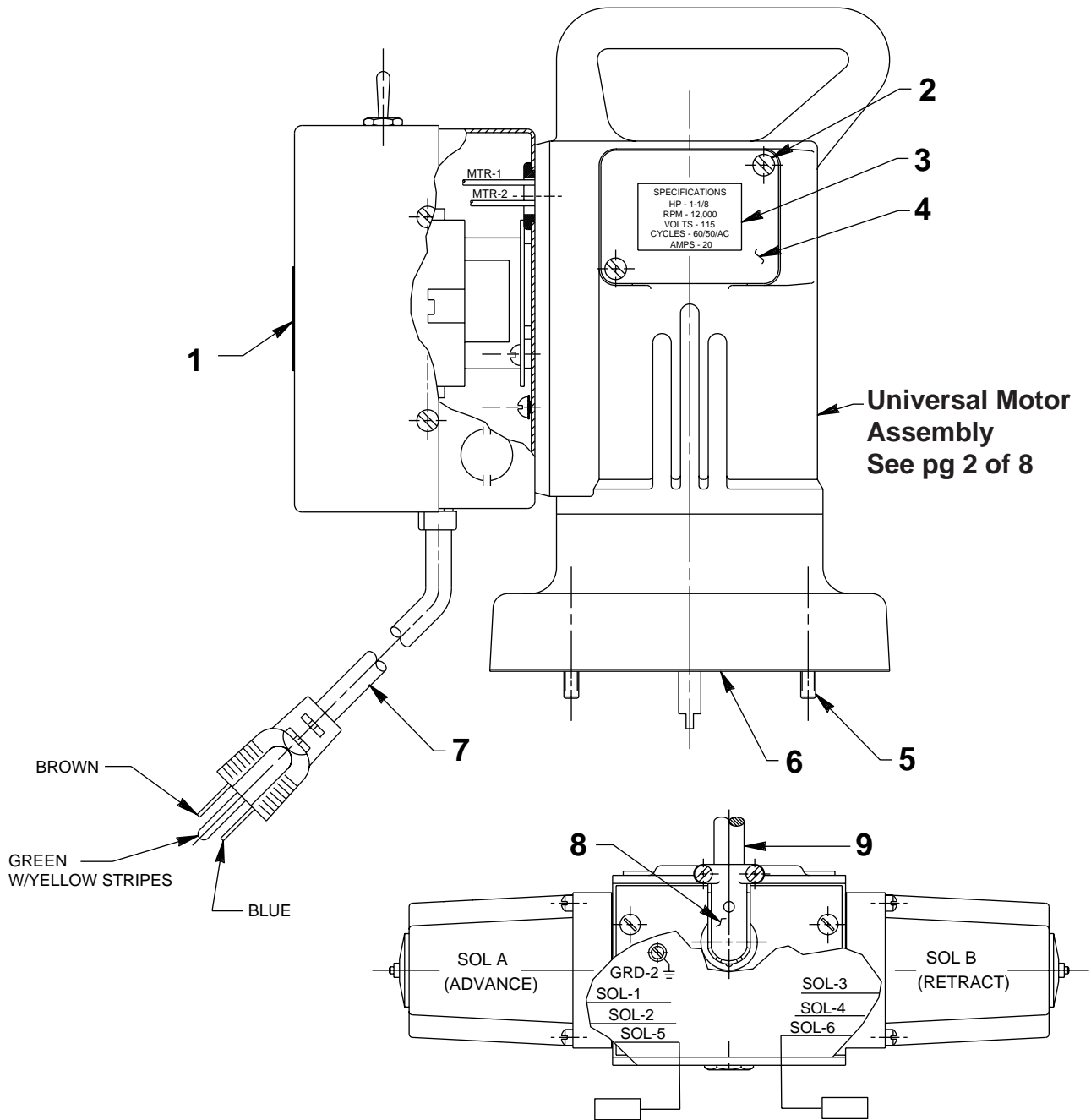


BOLT TIGHTENING SEQUENCE



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

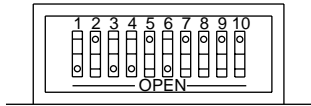
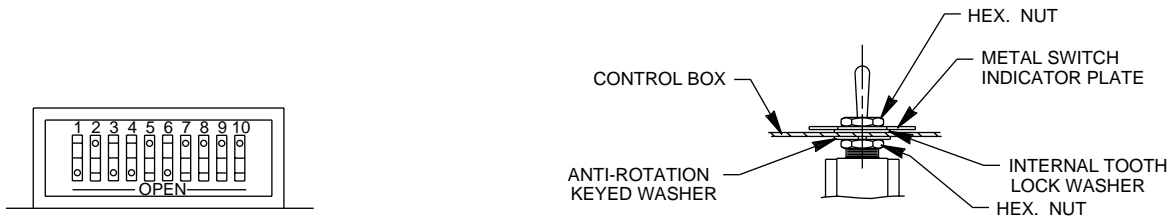
MOTOR ASSEMBLY



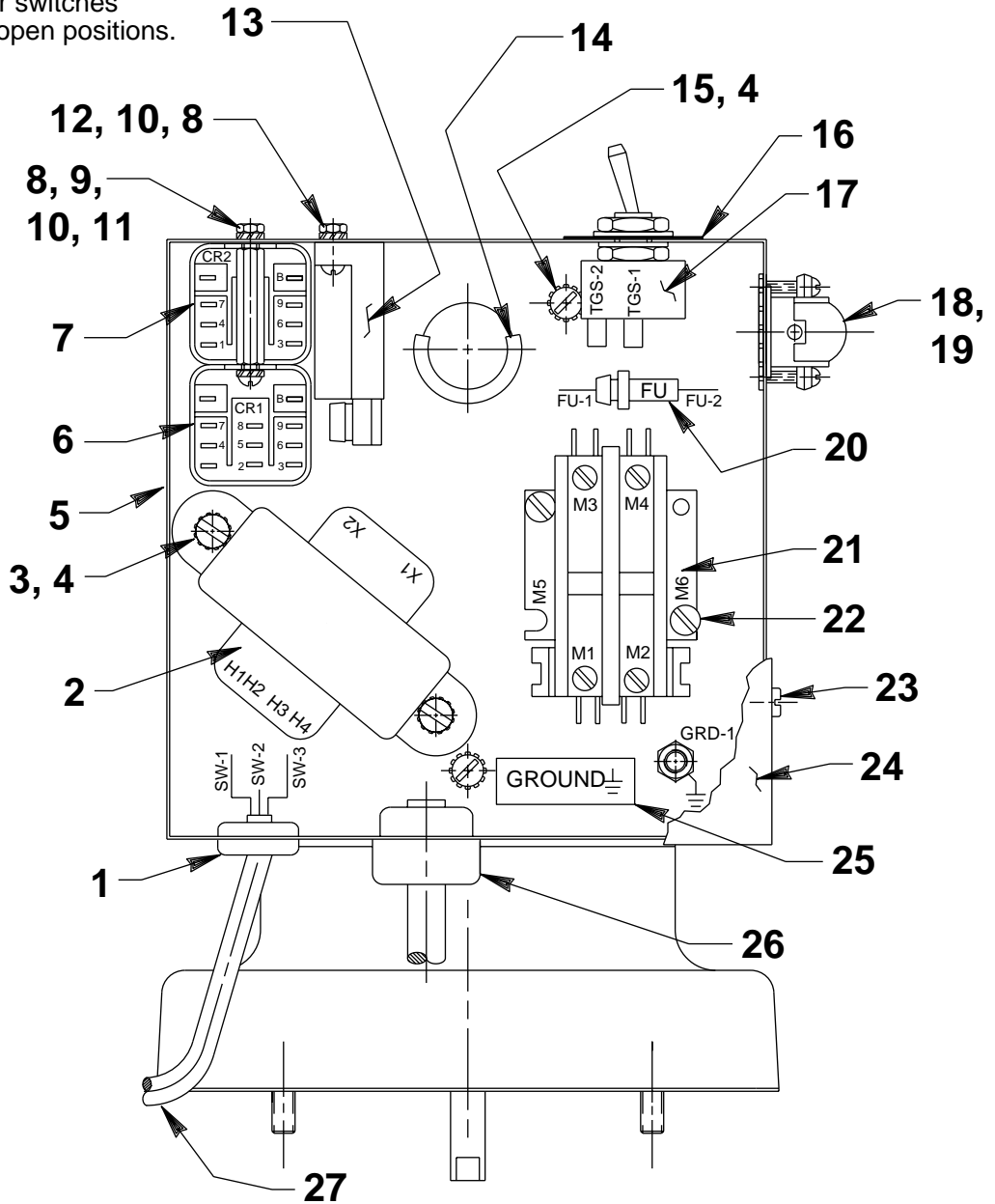
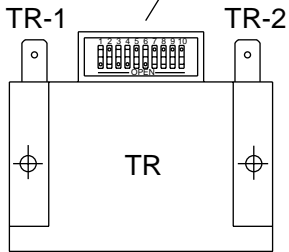
Item No.	Part No.	No. Req'd	Description
1	200188	1	Warning Important Decal
2	11539	4	Rd. Hd. Cap Screw (10-24 X 1/4 Lg.; For EP-720)
	11539	8	Rd. Hd. Cap Screw (10-24 X 1/4 Lg.; For EP-720-G & EP-720-G-230)
3	215164	1	Specifications Decal (For EP-720 & EP-720-G)
	215163	1	Specifications Decal (For EP-720-G-230)
4	21008	2	Cover (See sheet 8 of 8 for covers on pumps with gauges)

Item No.	Part No.	No. Req'd	Description
5	10022	4	Soc. Hd. Screw (1/4-20 X 1-1/2 Lg.)
6	30650	1	Motor Base Gasket
7	307440	1	Cord (8 ft; 115V; 12/3 SJTO; For EP-720 & EP-720-G)
	308752	8'	Cable (230V; 14/3 SJTO; For EP-720-G-230)
8	11144	1	90° Elbow Connector
9	15565	2.33 ft.	Cable (16/4 SO)

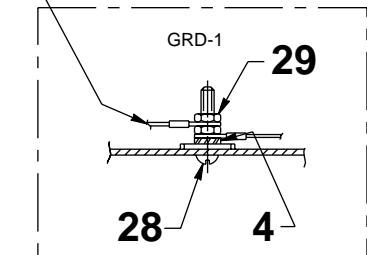
MOTOR CONTROL BOX ASSEMBLY



NOTE: Turn on switches 1, 3, 4, & 6. Set all other switches away from open positions.



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



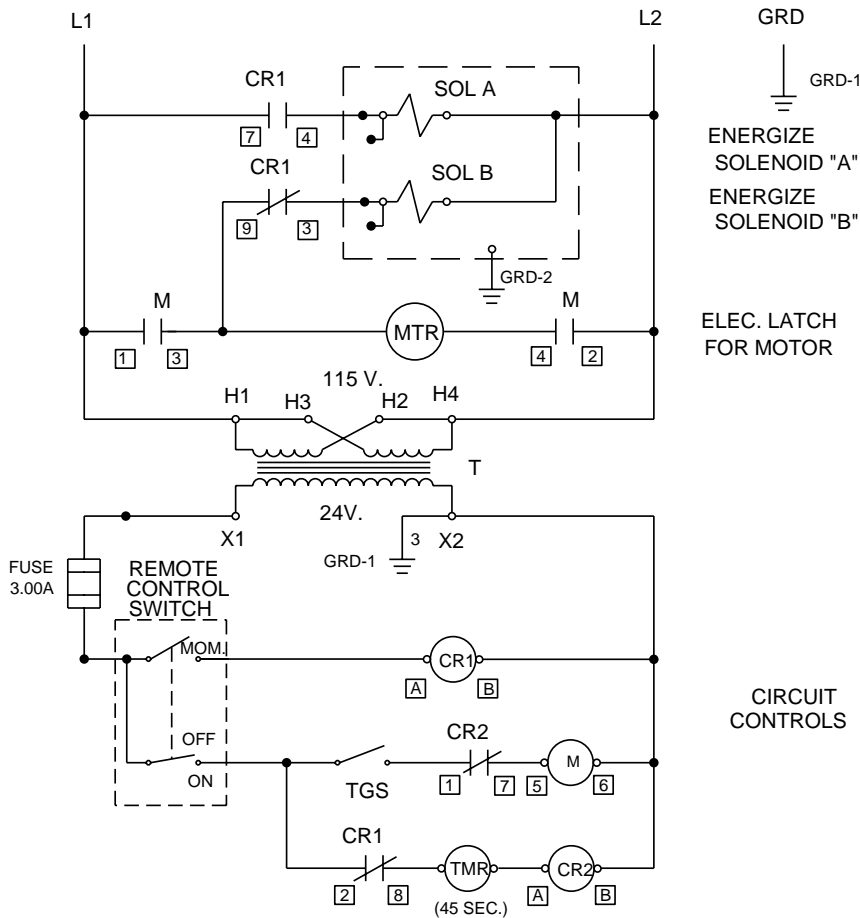
NOTE: SERRATED LOCK WASHER MUST BE ADJACENT TO METAL BOX. MORE WASHERS CAN BE USED IF DESIRED.

Item No.	Part No.	No. Req'd	Description
1	15993	1	Strain Relief Bushing
2	11852	1	Transformer
3	11539	2	Rd. Hd. Screw (10-24 X 1/4 Lg.)
4	11108	6	Washer (#10 External Tooth)
5	51218YE3	1	Electrical Control Box
6	305602	1	General Purpose Relay
7	39092	1	General Purpose Relay
8	10195	2	Hex Nut (#6-32 UNC)
9	17563	2	Pan Head Screw (6-32 X 1/4 Lg.)
10	15906	6	Washer (#6 External Tooth)
11	215376	2	Threaded Standoff
12	11426	2	Rd. Hd. Screw (6-32 X 1/2 Lg.)
13	251467	1	Adjustable Timer
14	15497	1	Rubber Grommet
15	10164	7	Rd. Hd. Screw (10-24 X 3/8 Lg.)
16	13890	1	Indicator Plate

Item No.	Part No.	No. Req'd	Description
17	12301	1	Toggle Switch
18	11144	1	90° Elbow Connector
19	16887	1	Fuse Holder
20	206962	1	Fuse (3 Amp; 250V)
21	420718-4	1	Contactor (2-pole)
22	10166	2	Rd. Hd. Screw (10-24 X 1/2 Lg.; For EP-720)
	11539	2	Rd. Hd. Screw (10-24 X 1/4 Lg.; For EP-720-G & EP-720-G-230)
23	14812	4	Pan Hd. Screw (8-18 X 3/8 Lg.)
24	43126YE3	1	Control Box Cover
25	205189	1	Ground Decal
26	210112	1	Strain Relief Bushing
27	250023	1	Hand Control Assembly (See back pg. 7 of 8)
28	11856	1	Rd. Hd. Screw (10-24 X 1" Lg.)
29	10197	2	Hex Nut (#10-24 UNC)

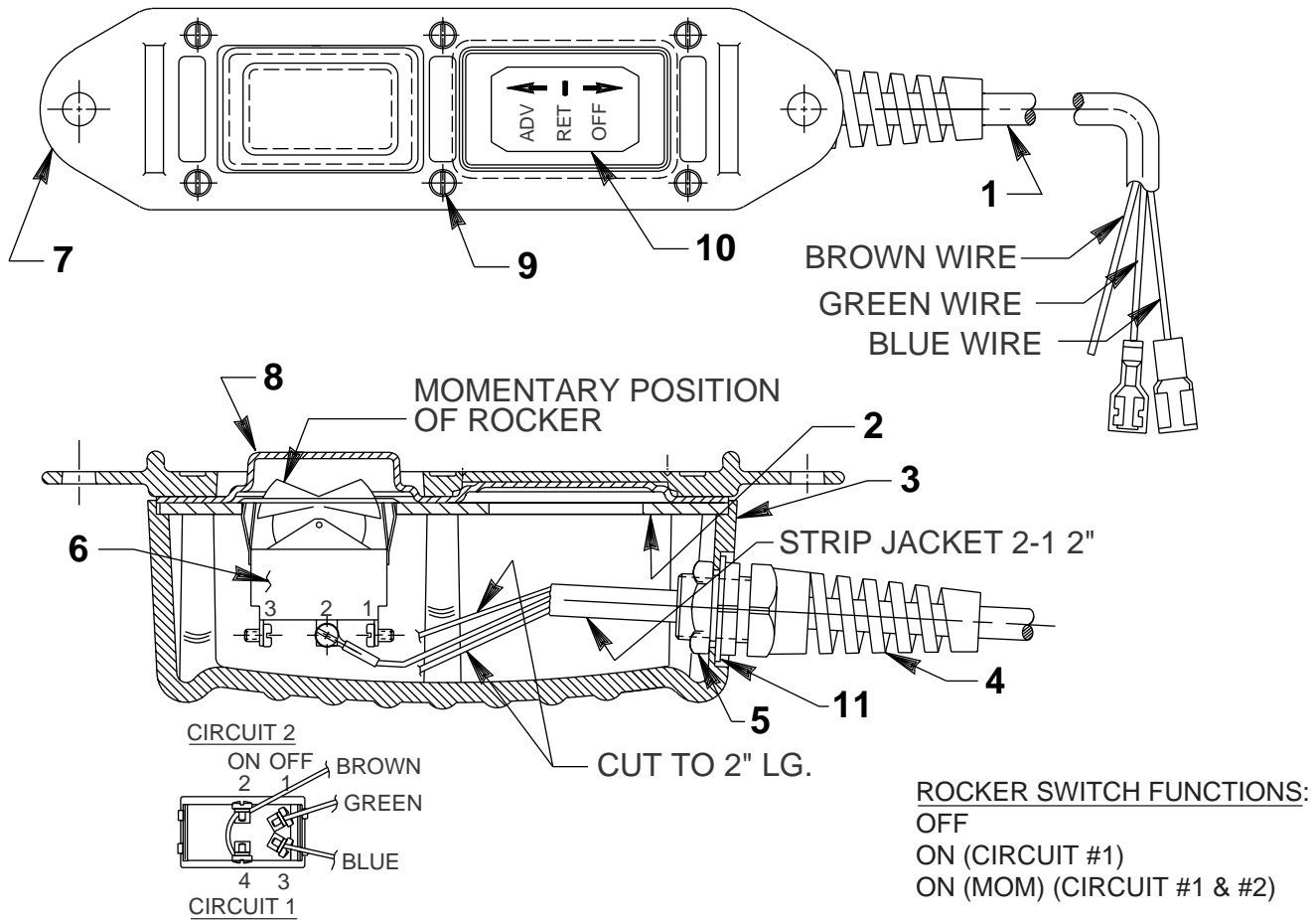


ELECTRICAL SCHEMATIC



For 230 V. connections:
 L1 to H1
 H3 to H2
 H4 to L2

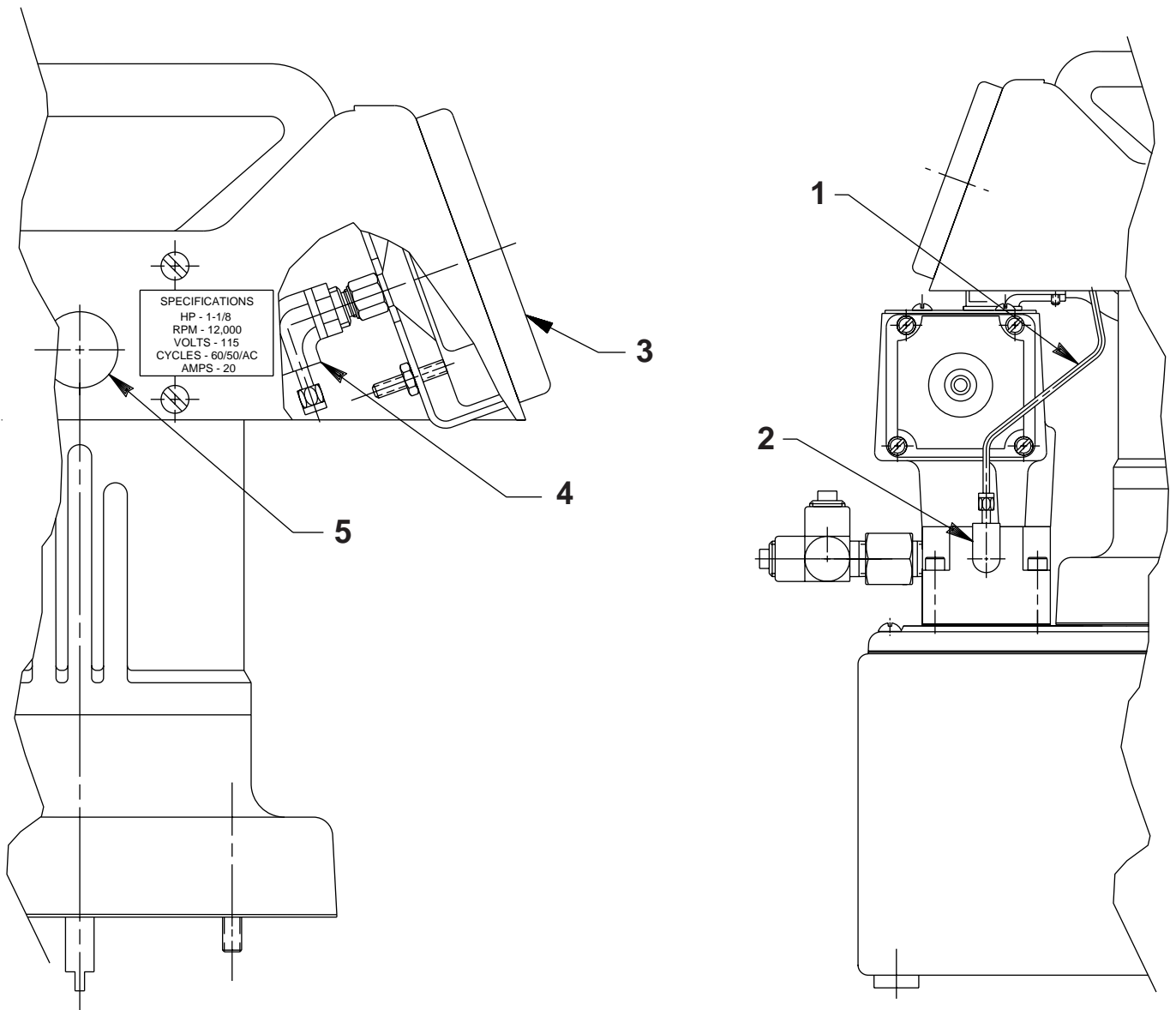
REMOTE CONTROL HAND SWITCH ASSEMBLY



Item No.	Part No.	No. Req'd	Description
1	12908	21 ft.	Cable (18/3 SJTO)
2	420050-3	1	Switch Mounting Plate
3	420050-4	1	Switch Housing
4	251818	1	Strain Relief Connector
5	251802	1	Locknut (Torque to 30/35 in. lbs.)
6	420017	1	Rocker Switch
7	420050-1	1	Cover
8	420050-2	1	Gasket
9	250248	6	Screw (4-24 x 3/4 Lg.)
10	203086	1	Decal
11	253607	1	Gasket

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

GAUGE & GAUGE MOUNTING



Item No.	Part No.	No. Req'd	Description
1	351990	1	Oil Line Tube
2	253159	1	90° Elbow Fitting
3	252426	1	Gauge (10,000 PSI; 4" dia.)
4	253160	1	90° Elbow Fitting
5	19502	2	Hole Plug