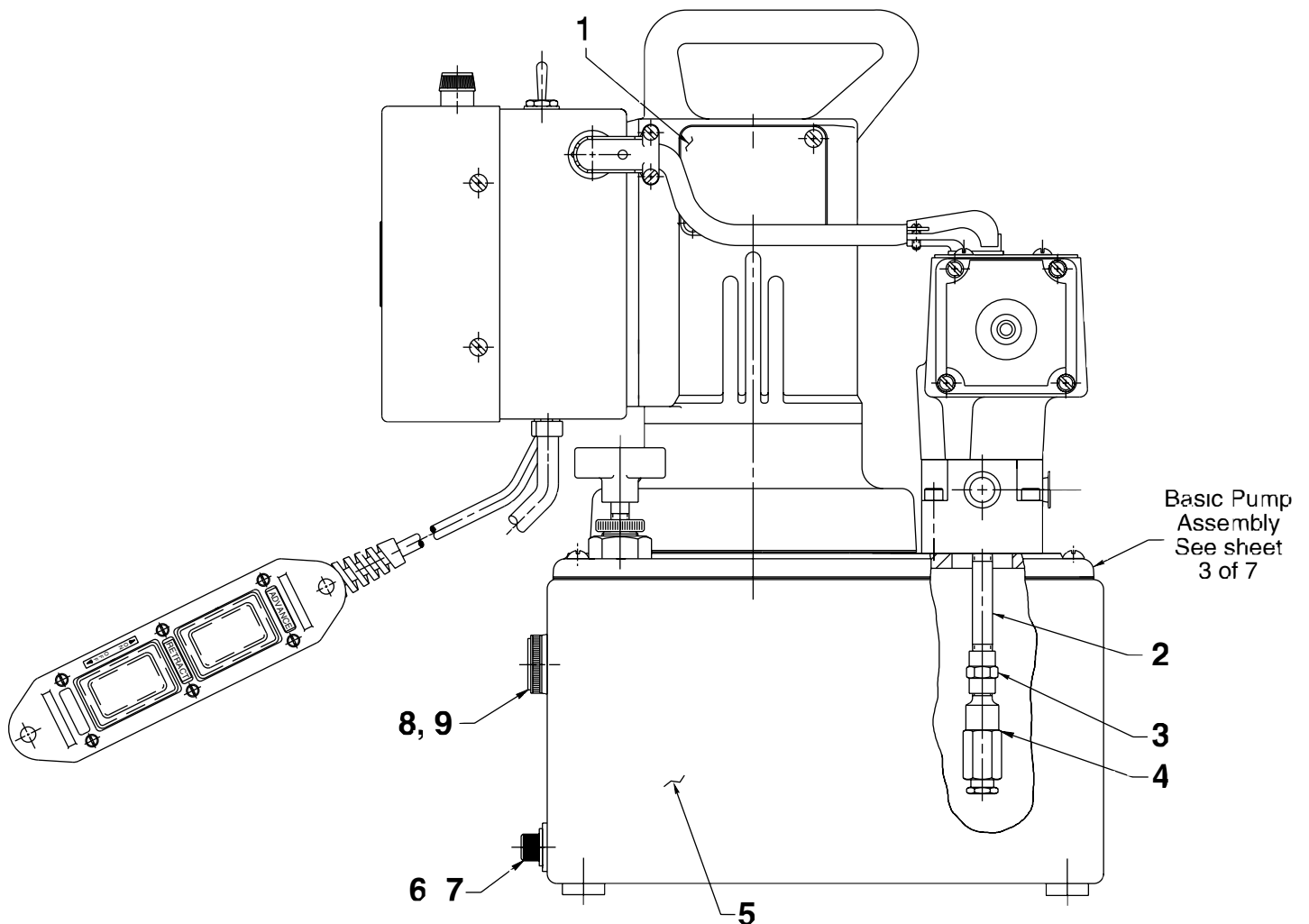


MODEL A ELECTRIC HYDRAULIC PUMP SIDE VIEW

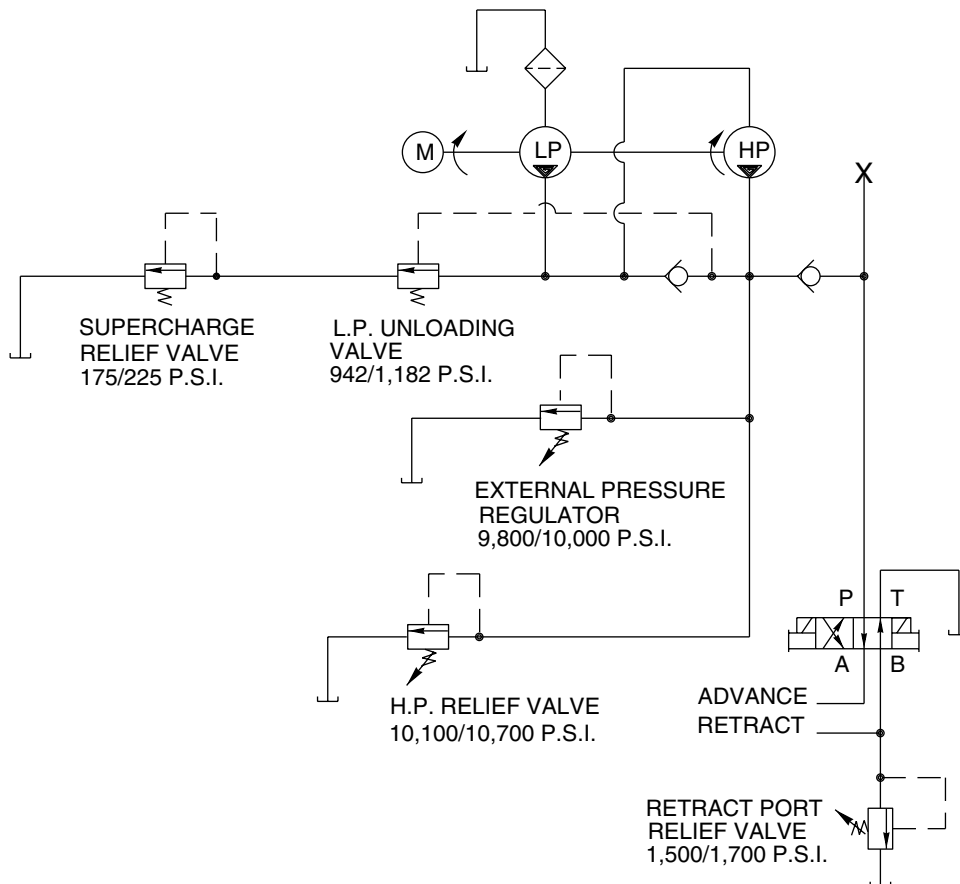


Item No.	Part No.	No. Req'd	Description
1	21008	2	Cover
2	15456	1	Nipple Fitting (1/8 NPTF)
3	18841	1	Straight Fitting
4	21278-15	1	Relief Valve (Set at 1,500/1,700 PSI)
5	*420327	1	Reservoir
6	10412	1	Soc. Hd. Cap Screw (3/8-16 UNC x 1/2 Lg.)
7	19779	1	Seal Washer
8	17586	1	Sight Gauge
9	253300	1	Seal Washer

*For a replacement reservoir, order no. 351118.

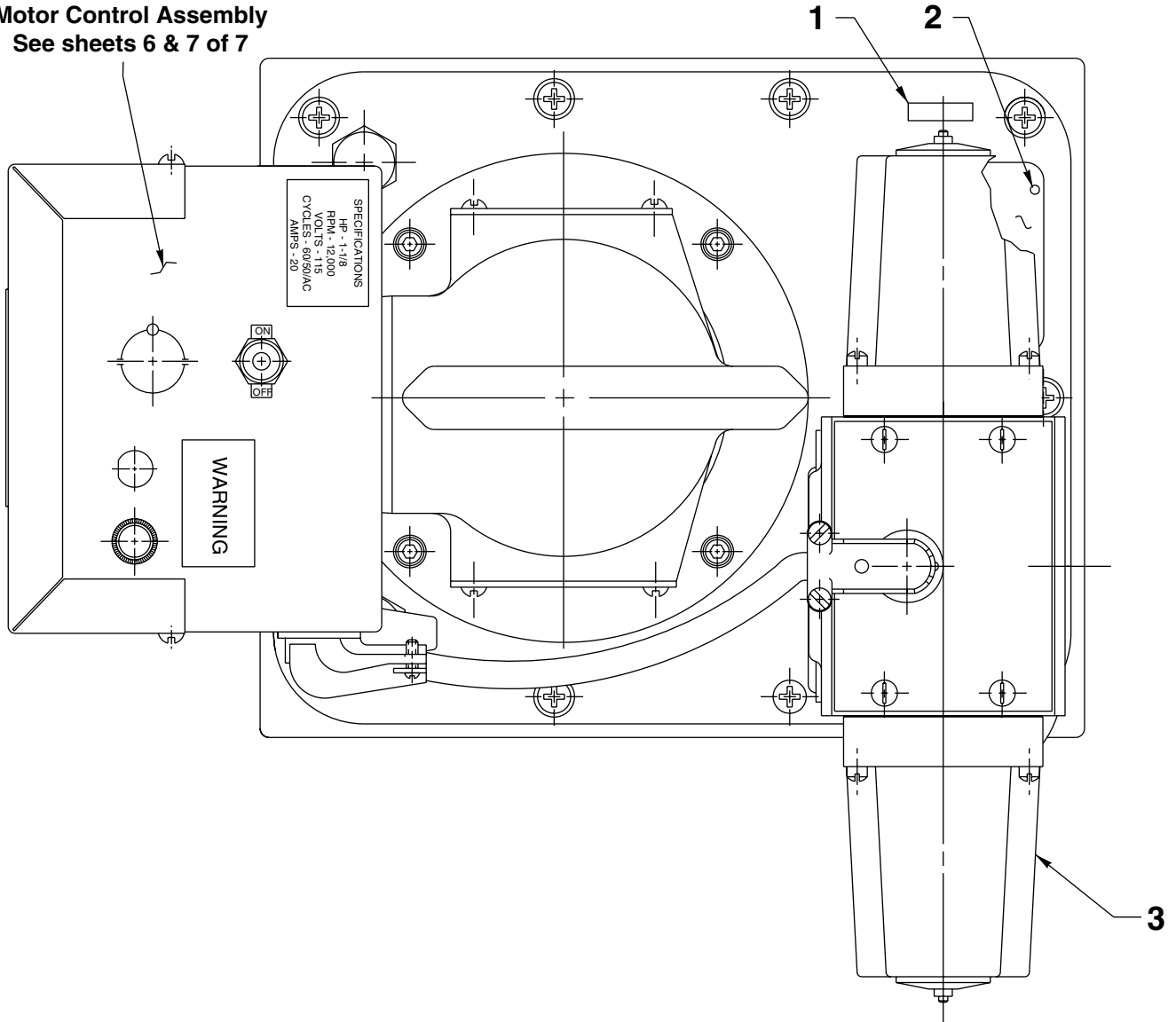


HYDRAULIC SCHEMATIC



TOP VIEW

Motor Control Assembly
See sheets 6 & 7 of 7



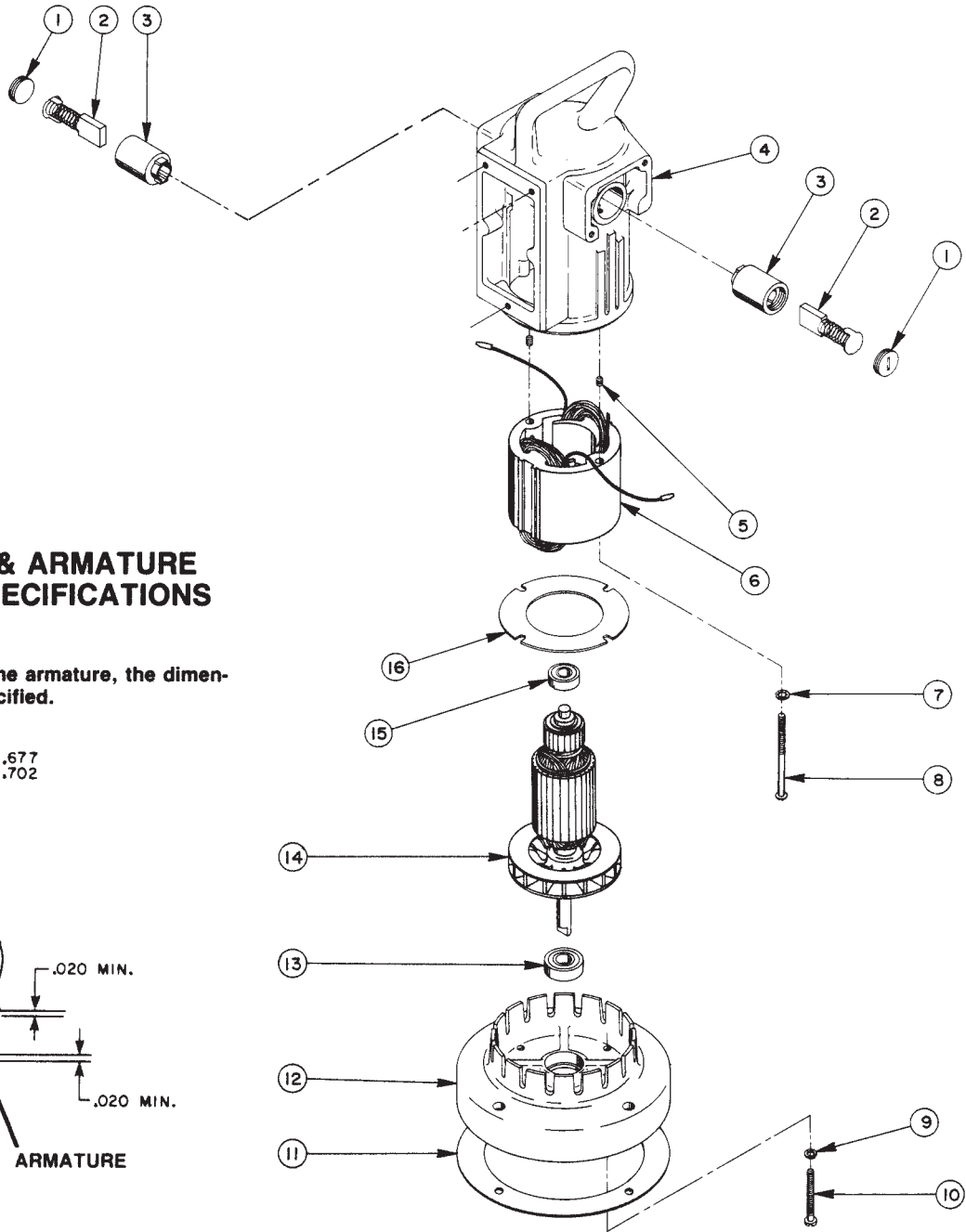
Item No.	Part No.	No. Req'd	Description
1	203972	1	Decal (CSA)
2	10575	4	Drive Screw
3	9592	1	Solenoid Valve (Two position, 4-way; For pumps manufactured before 2-1-97. See Form No. 100540.)
	66205-115	1	Solenoid Valve (Two position, 4-way; For pumps manufactured after 2-1-97. See Form No. 108066)

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

Sheet No. 2 of 7

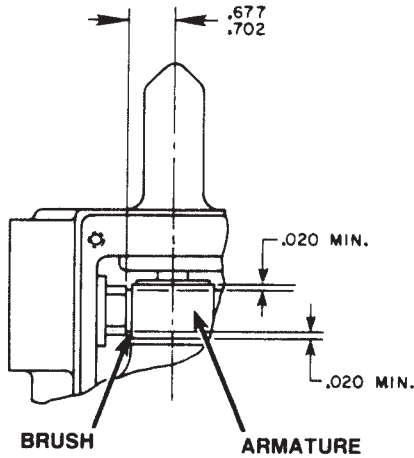
Rev. 4 Date: 19 Oct. 1999

ELECTRIC MOTOR ASSEMBLY



BRUSH HOLDER & ARMATURE INSTALLATION SPECIFICATIONS

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

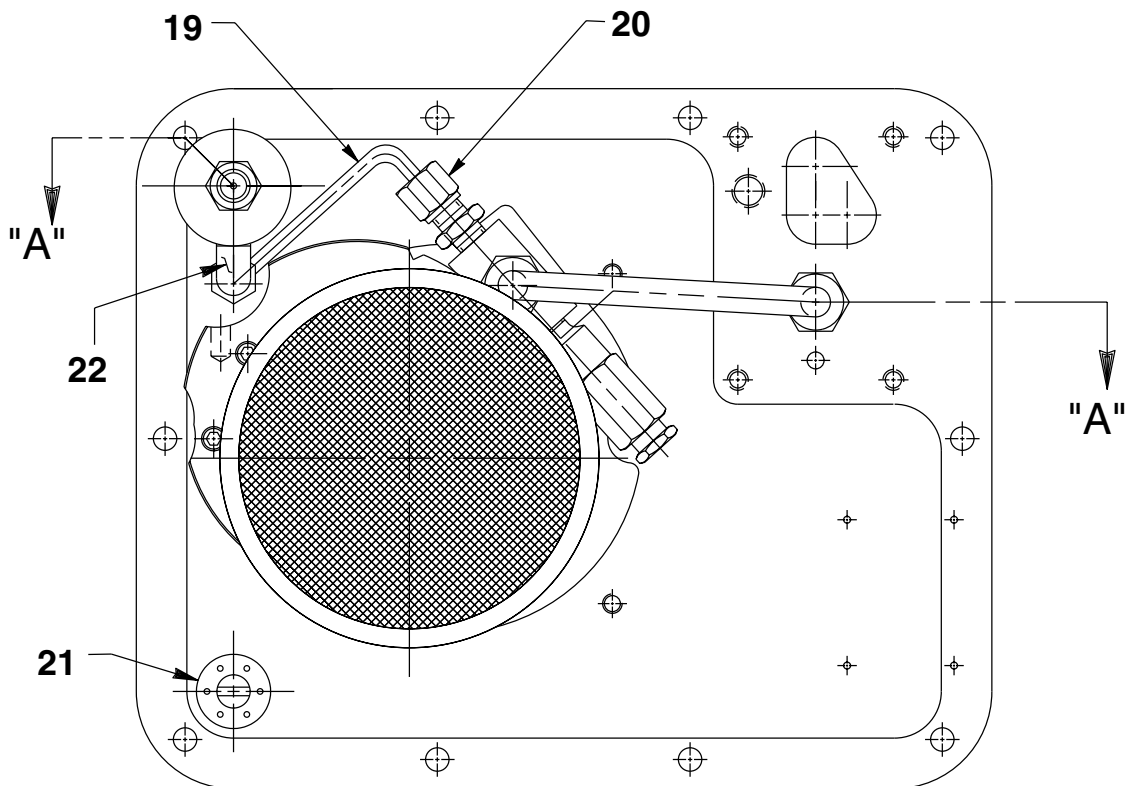
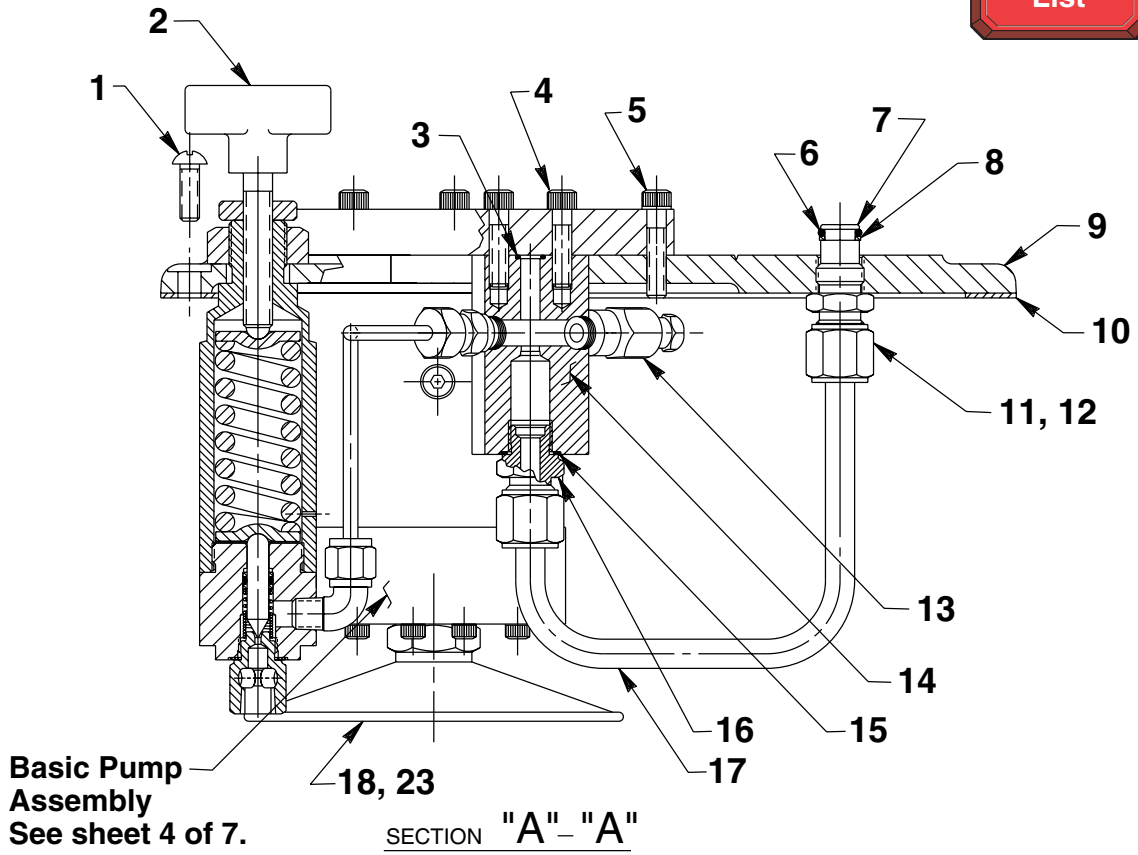


Item No.	Part No.	No. Req'd	Description
1	10806	2	Brush Holder Cap
2	10804	2	Brush Assembly
3	10805	2	Brush Holder (See detail above)
4	61901WH2	1	Motor Shell
5	10133	2	Set Screw
6	10802	1	Field (For 115 volt)
	10803	1	Field (For 230 volt)
7	12356	2	Lockwasher
8	10170	2	Machine Screw
9	10241	4	Lockwasher

Item No.	Part No.	No. Req'd	Description
10	10169	4	Machine Screw (#10-24 x 2" Lg.; Torque to 20/25 in. lbs.)
11	30650	1	Gasket
12	40059WH2	1	Motor Base
13	10439	1	Ball Bearing
14	10800	1	Armature (For 115 volt; See detail above)
	10801	1	Armature (For 230 volt; See detail above)
15	10438	1	Ball Bearing
16	20786	1	Baffle Plate

BASIC PUMP ASSEMBLY

To Parts List



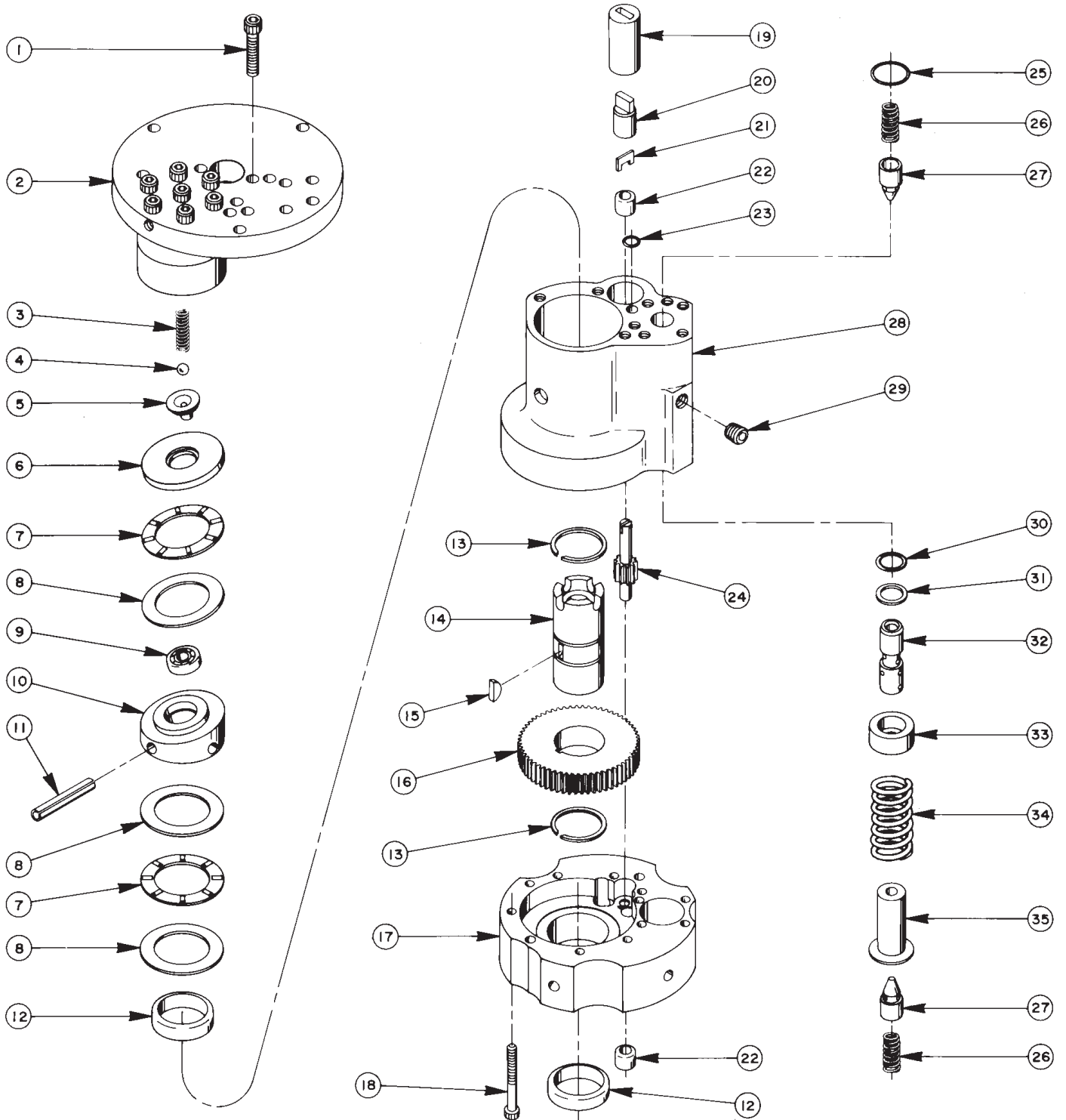
Item No.	Part No.	No. Req'd	Description
1	10177	10	Machine Screw (1/4-20 x 3/4 Lg.)
2	421280	1	Pressure Regulator Assembly (See Form No. 101697)
3	10266	1	O-ring (1/4 x 3/8 x 1/16)
4	10015	2	Cap Screw (1/4-28 x 1" Lg.; Torque to 180 in. lbs.)
5	10016	3	Cap Screw (1/4-20 UNC X 1" Lg.)
6	10268	1	O-ring (3/8 x 1/2 x 1/16)
7	20787	1	Valve Connector
8	11863	1	Teflon Backup Washer
9	40064WH2	1	Cover
10	40164	1	Gasket
11	10430	2	Tube Sleeve (3/8)
12	10431	2	Tube Nut
13	21278	1	Relief Valve Assembly (Set at 10,100-10,700 PSI)
14	20776	1	Valve Body
15	10261	1	Copper Washer
16	20770	1	Connector
17	21045	1	Oil Line
18	21344	1	Filter Assembly (Includes item no. 21)
19	201570	1	Pressure Control Valve Oil Line
20	14844	1	Male Connector
21	16177	1	90° Elbow Fitting
22	20937	1	Filler Plug
23	10300	1	O-ring (.62 x .46 Nitrile)

NOTE: All items on sheet 4 of 7 and items 3, 12, 13, 14, 15, & 17 on this sheet make up Basic Pump Assembly Replacement #27207.



BASIC PUMP ASSEMBLY

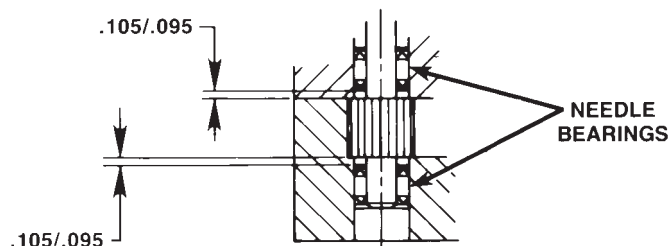
To Parts List



Item No.	Part No.	No. Req'd	Description
1	10020	9	Soc. Hd. Cap Screw (1/4-20 UNC X 1-1/4 Lg.: Torque to 170-180 in. lbs.)
2	33113	1	High Pressure Pump Ass'y (See sheet 5 of 7)
3	10361	1	Compression spring (1/4 O.D. X 1" Lg.)
4	10375	1	Steel Ball (1/4 dia.)
5	23547	1	Bearing Top Plate
6	23548	1	Top Plate
7	11228	2	Thrust Bearing
8	11813	3	Bearing Race
9	11814	1	Ball Bearing
10	23549	1	Angle Plate
11	11955	1	Roll Pin (1/4 dia. X 1-3/4 Lg.)
12	11064	2	Needle Bearing
13	11261	2	Retaining Ring
14	23556	1	Shaft
15	11821	1	Woodruff Key
16	23574	1	Gear
17	40072	1	Pump End Plate
18	10001	13	Soc. Hd. Cap Screw (#10-32 UNF X 1-3/4 Lg.; Torque to 50 in. lbs.)
19	21091	1	Nylon Coupling
20	21092	1	Adapter
21	21093	1	Key
22	11198	2	Needle Thrust Bearing (See Note below)
23	10266	1	O-ring (3/8 X 1/4 X 1/16)
24	20774	1	Drive Gear
25	10303	1	O-ring (7/8 X 3/4 X 1/16)
26	10425	2	Compression Spring (3/8 O.D. X 3/4 Lg.)
27	20771	2	Poppet
28	40071	1	Pump Body
29	10427	1	Pipe Plug (1/8" NPTF)
30	10271	1	O-ring (11/16 X 1/2 X 3/32)
31	12389	1	Teflon Backup Washer (11/16 X 1/2 X 1/16)
32	20849	1	Spool
33	23255	1	Spring Guide
34	10426	1	Compression Spring (1" O.D. X 1-13/16 Lg.)
35	23256	1	Spring Guide



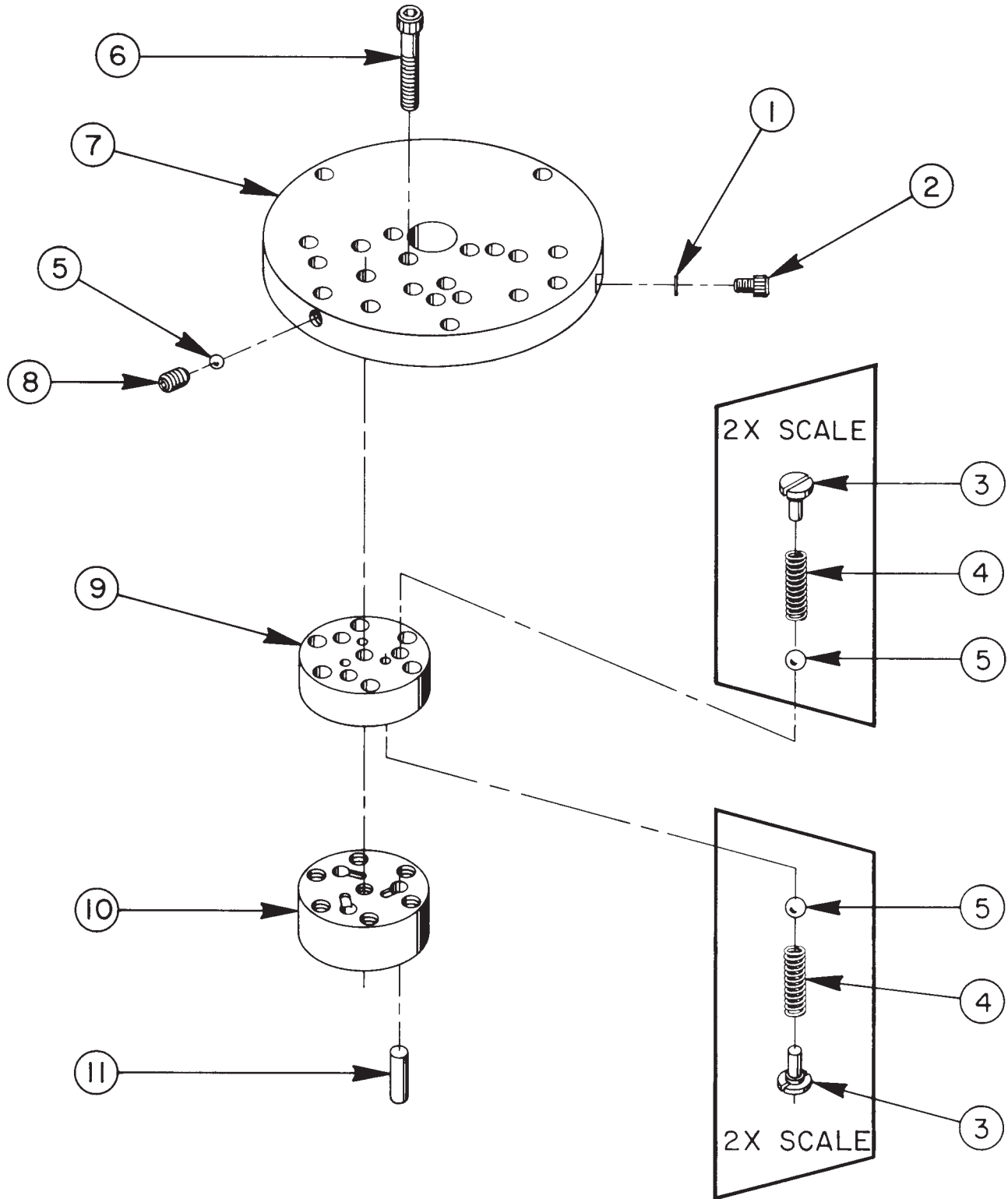
NEEDLE BEARING INSTALLATION SPECIFICATIONS



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



HIGH PRESSURE PUMP ASSEMBLY

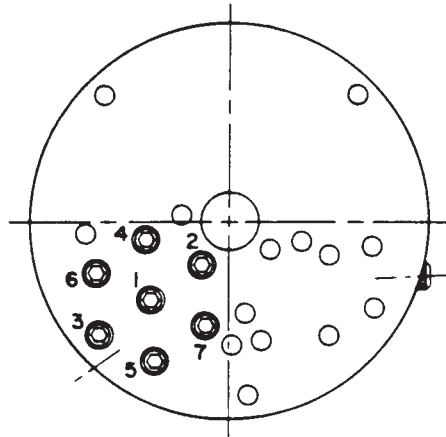


33113 PUMP ASSEMBLY
3 PISTON - 9/32 DIA.

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
6	10023	7	Soc. Hd. Cap Screw (1/4-20 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

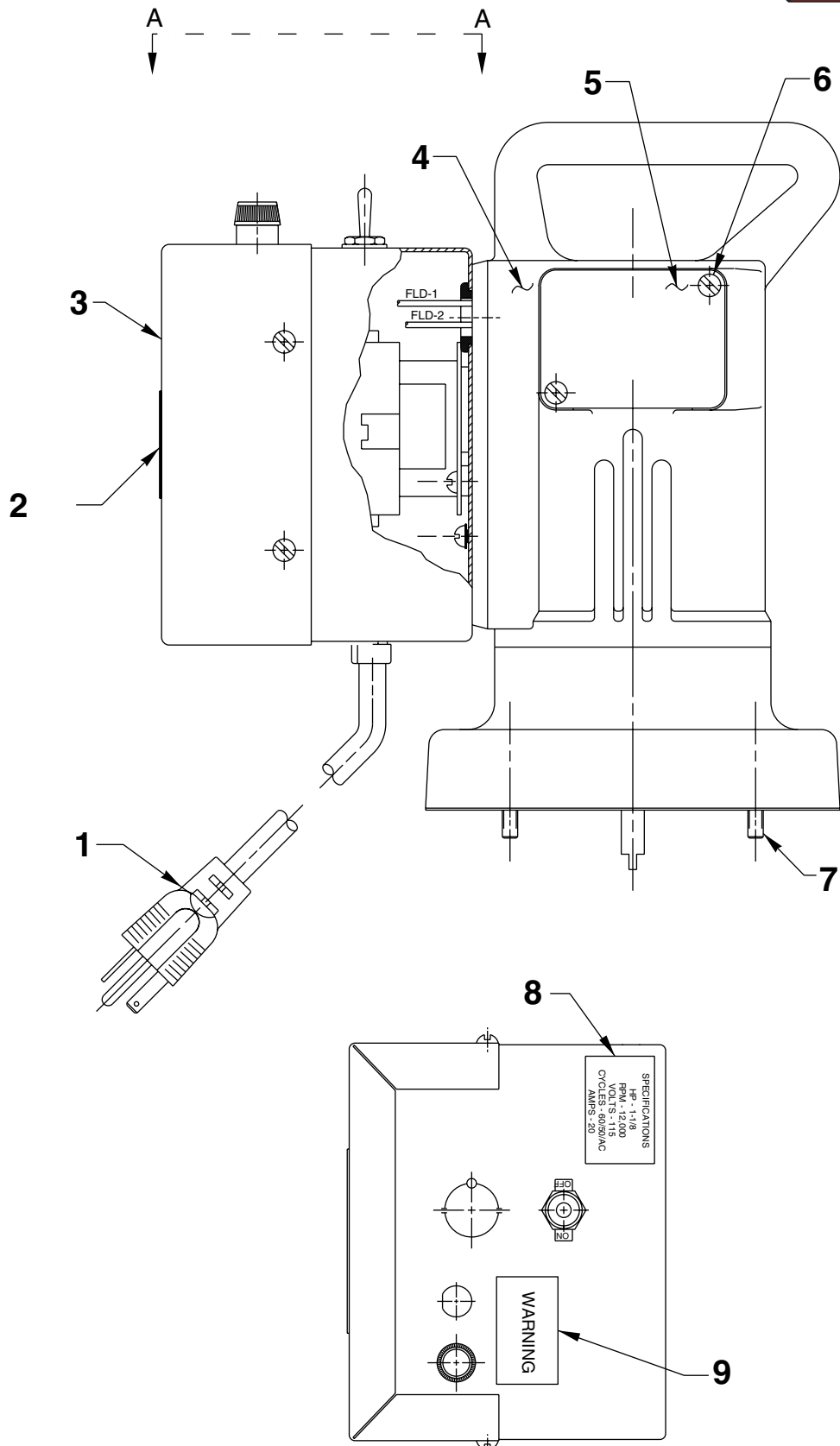


BOLT TIGHTENING SEQUENCE



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

MOTOR CONTROL ASSEMBLY



Item No.	Part No.	No. Req'd	Description
1	350155	1	Cord Set (12/3)
2	200188	1	Warning/Important Decal
3	43126WH2	1	Control Box Cover
4	53338	1	Electric Motor Assembly (115V., 60 Hz., See back sheet 2 of 7)
5	21008	2	Cover
6	11539	4	Screw (#10-24 X 1/4 Lg.)
7	10022	4	Screw (1/4-20 UNC X 1-1/2 Lg.)
8	215164	1	Specifications Decal
9	252305	1	Warning Decal



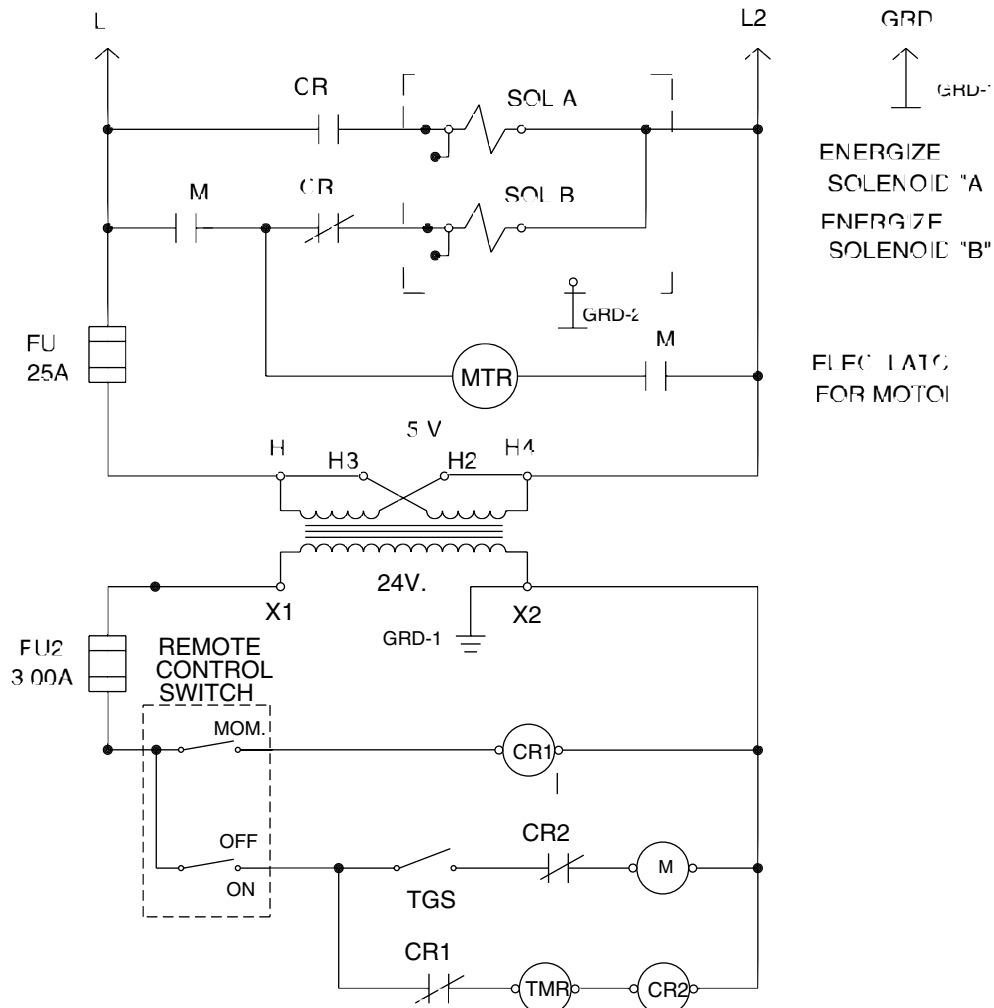
ELECTRICAL SCHEMATIC



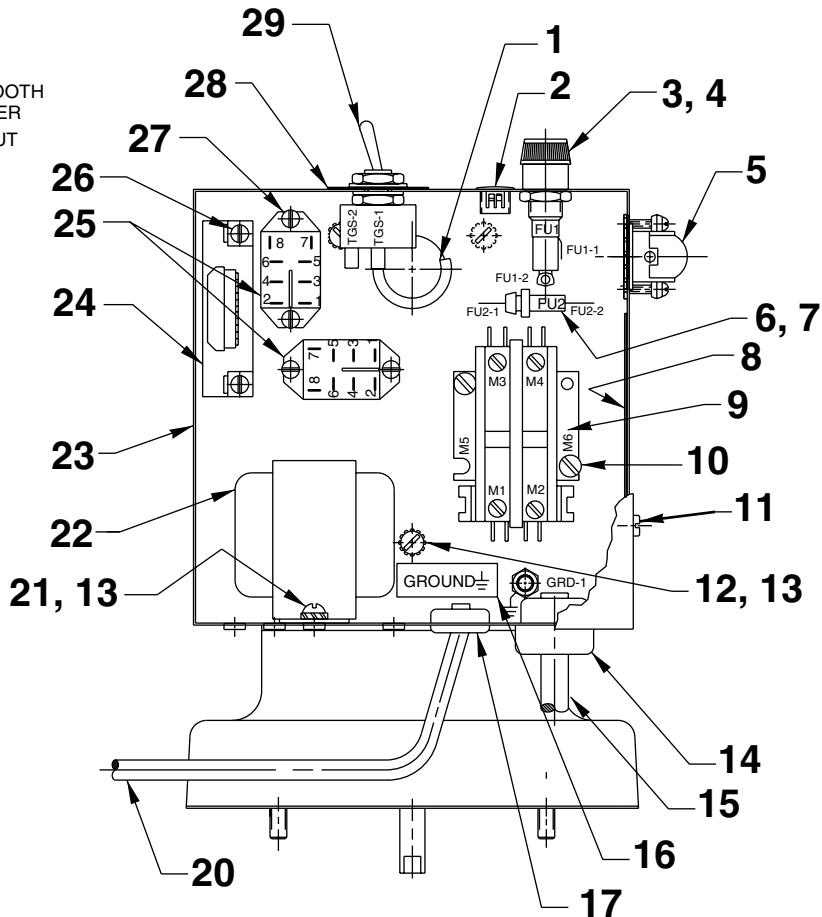
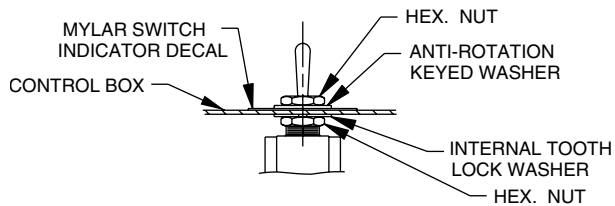
WARNING: To help avoid personal injury, all electrical work must be done by a qualified electrician.

North American & International Color Codes

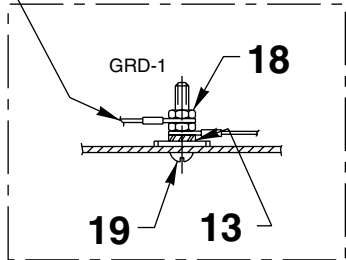
Conductors	North American	International
Line.....	Black.....	Brown
Neutral.....	White.....	Blue
Ground.....	Green.....	Green/Yellow



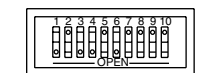
MOTOR CONTROL ASSEMBLY



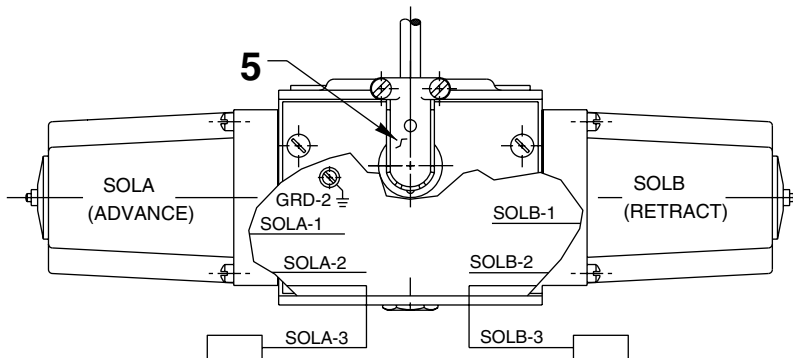
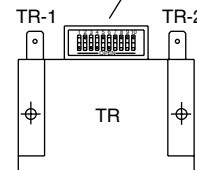
POWER CORD GROUND
(MUST BE ISOLATED BETWEEN
NUTS AND CAN BE AT
TOP OR BOTTOM OF STACK.)



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



NOTE: TURN ON SWITCHES 1,3,4, & 6.
SET ALL OTHER SWITCHES
AWAY FROM OPEN POSITION.



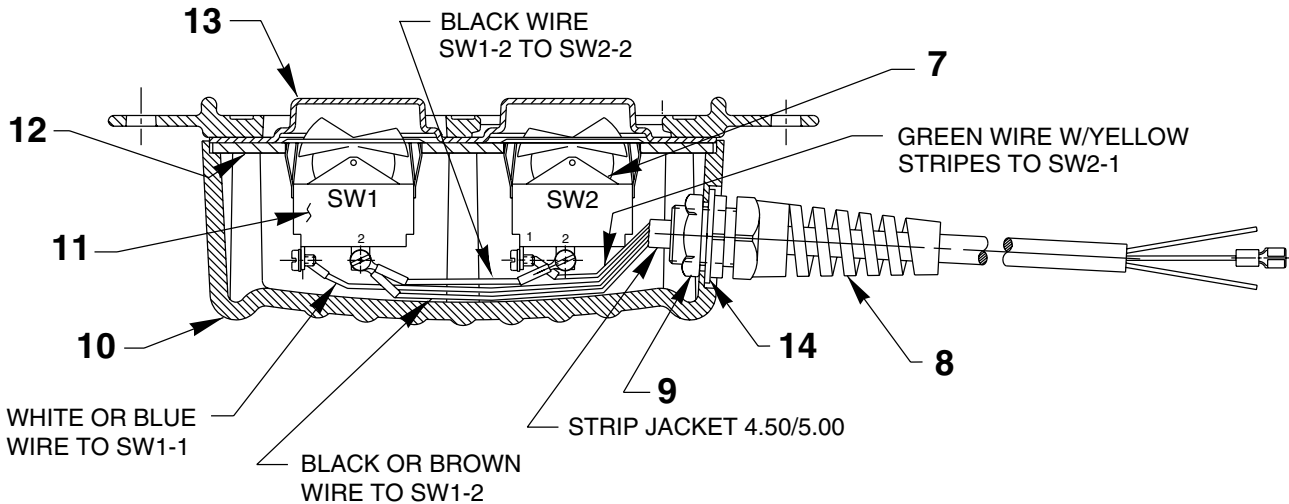
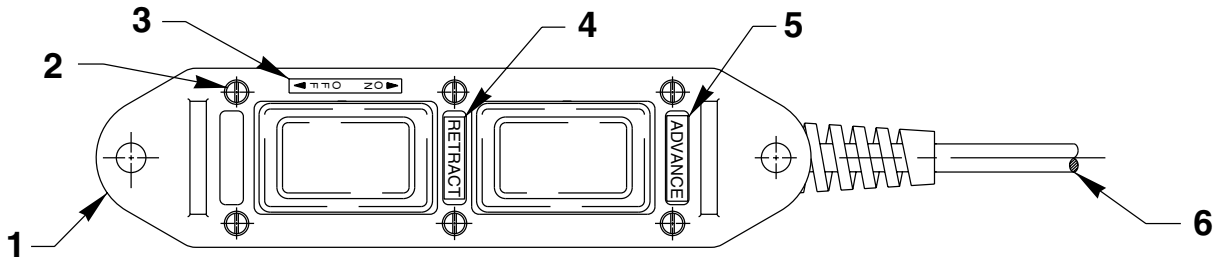
Parts List, Form No. 101754, Back sheet 7 of 7

Item No.	Part No.	No. Req'd	Description
1	15497	1	Rubber Grommet
2	17782	1	Snap Plug
3	18292	1	Fuse Holder
4	252289	1	Fuse (25 Amp, 125 V.)
5	11144	2	90° Elbow Connector
6	206962	1	Fuse (3 Amp, 250 V.)
7	16887	1	Fuse Holder
8	250150	1	Warning Decal
9	420718-4	1	Contact
10	10166	2	Screw (#10-24 UNC X 1/2 Lg.)
11	14812	4	Screw (#8-18 X 3/8 Lg.)
12	10164	3	Screw (#10-24 UNC X 3/8 Lg.)
13	11108	6	Lockwasher
14	210112	1	Strain Relief Bushing
15	15565	2.33 ft.	Electrical Cable (16/4)

Item No.	Part No.	No. Req'd	Description
16	205189	1	Ground Decal
17	15993	1	Strain Relief Bushing
18	10197	2	Hex Nut (#10-24 UN)
19	11856	1	Screw (#10-24 X 1" Lg.)
20	351070	1	Hand Control (See below)
21	11539	2	Screw (#10-24 X 1/4 Lg.)
22	11852	1	Transformer
23	65264WH2	1	Electrical Control Box
24	251467	1	Adjustable Timer
25	251046	2	Relay
26	11426	2	Screw (6-32 UNC x 1/2 Lg.)
27	17563	4	Screw (6-32 UNC X 1/4 Lg.)
28	13890	1	Indicator Plate
29	12301	1	Toggle Switch



REMOTE HAND CONTROL ASSEMBLY



Item No.	Part No.	No. Req'd	Description
1	251044	1	Plastic Cover
2	250248	6	Screw (4-24 x 3/4 Lg.)
3	250538	1	Decal (On-Off)
4	29664	1	Decal (Retract)
5	29663	1	Decal (Advance)
6	12908	21 ft.	Cable (18/3 SJTO)
7	16772	1	Rocker Switch

Item No.	Part No.	No. Req'd	Description
8	251818	1	Strain Relief Bushing
9	251802	1	Locknut (Torque to 30/35 in. lbs.)
10	420050-4	1	Switch Housing
11	46131	1	Rocker Switch
12	420050-3	1	Switch Mounting Plate
13	420050-2	1	Gasket
14	253607	1	Gasket

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