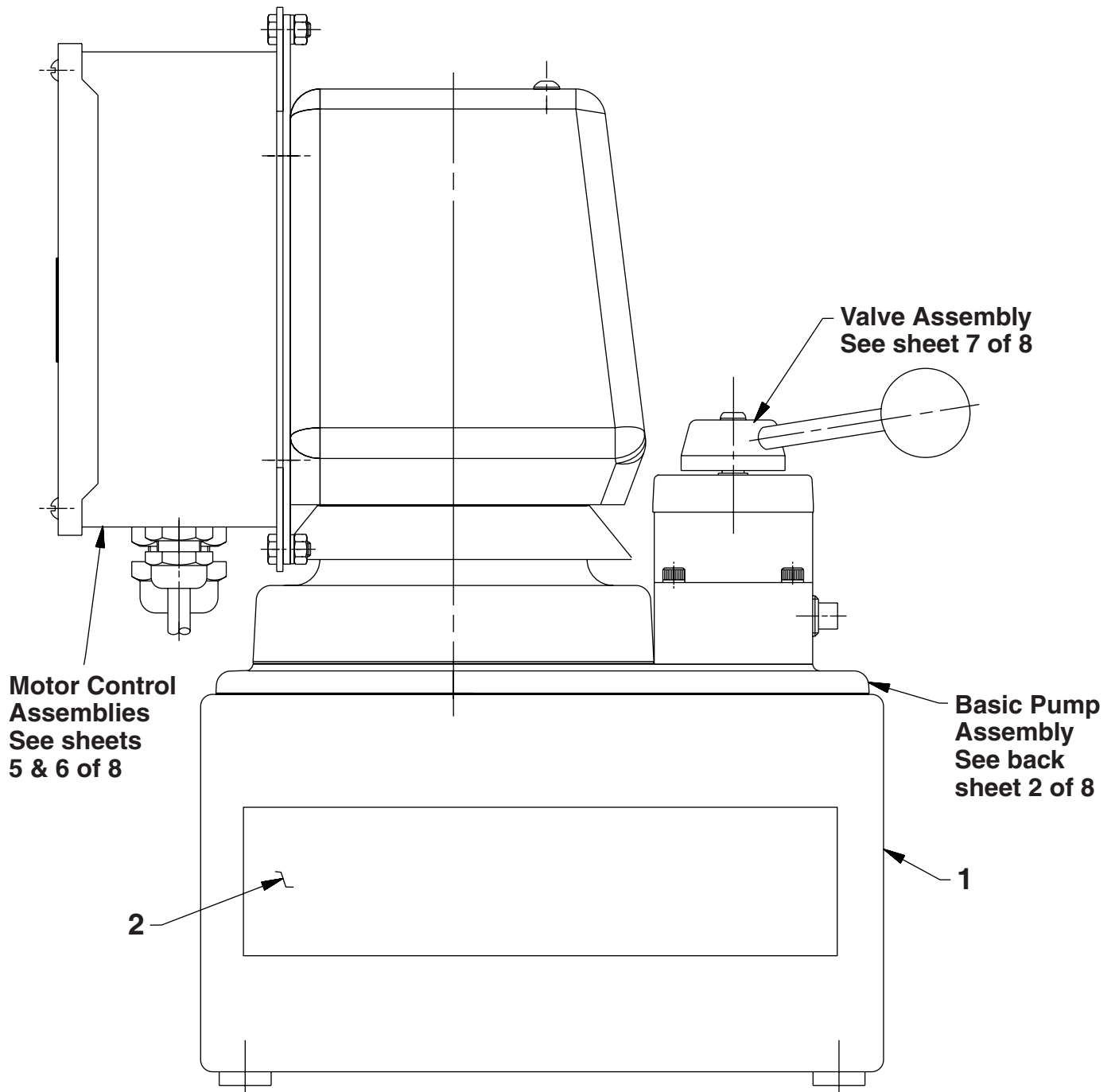
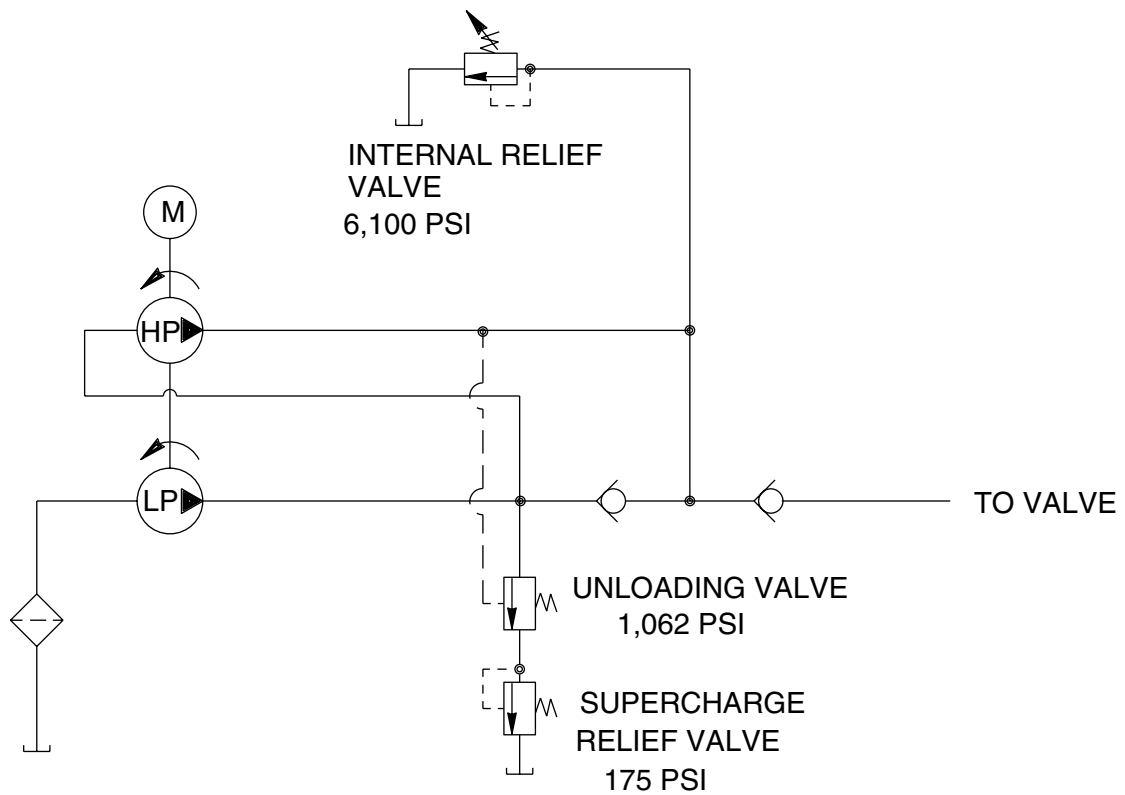


MODEL C
ELECTRIC HYDRAULIC PUMP
GENERAL SECTION

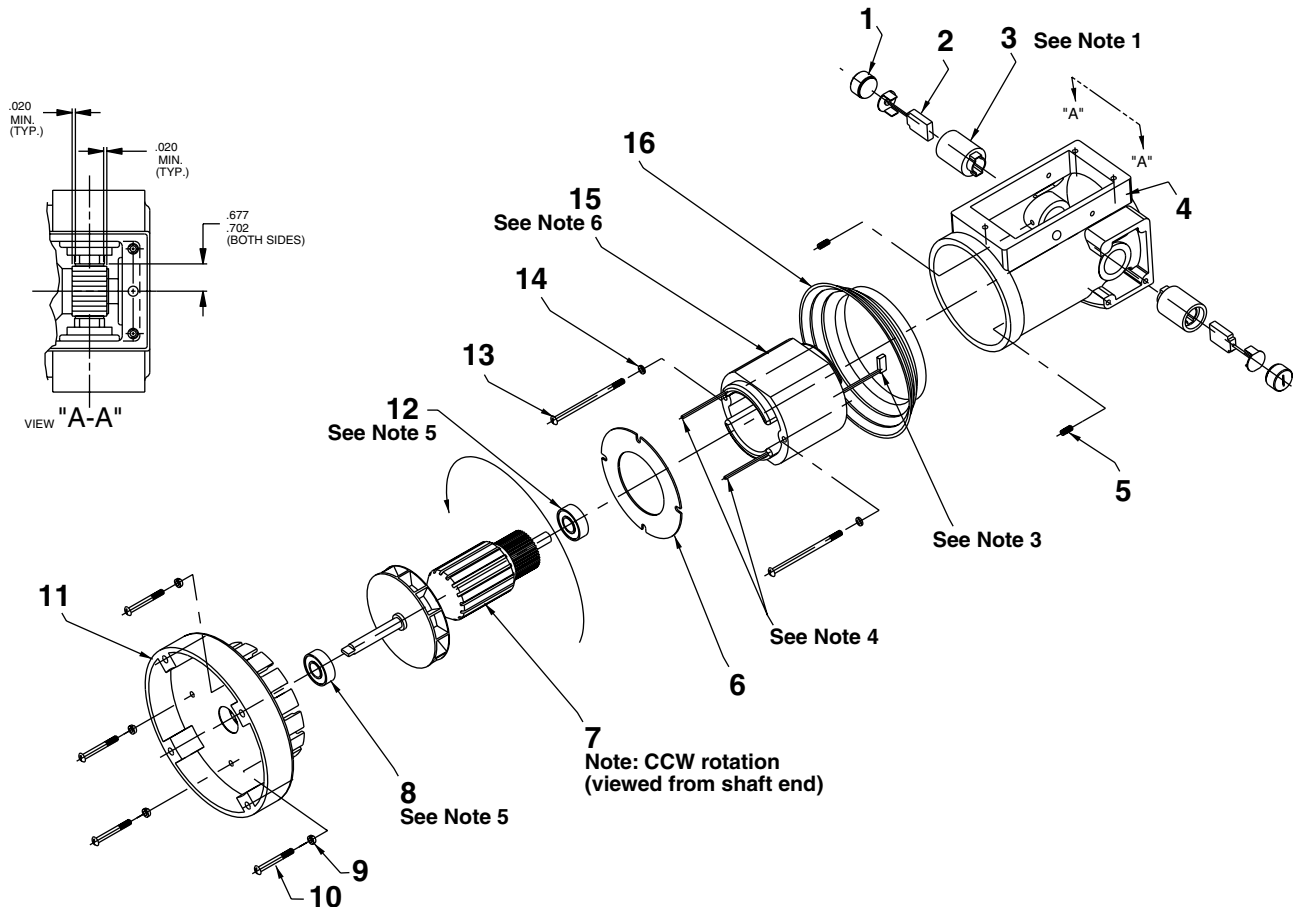


Item No.	Part No.	No. Req'd	Description
1	40063OR9	1	Reservoir
2	309219	2	Trade Name Decal

HYDRAULIC SCHEMATIC



UNIVERSAL MOTOR



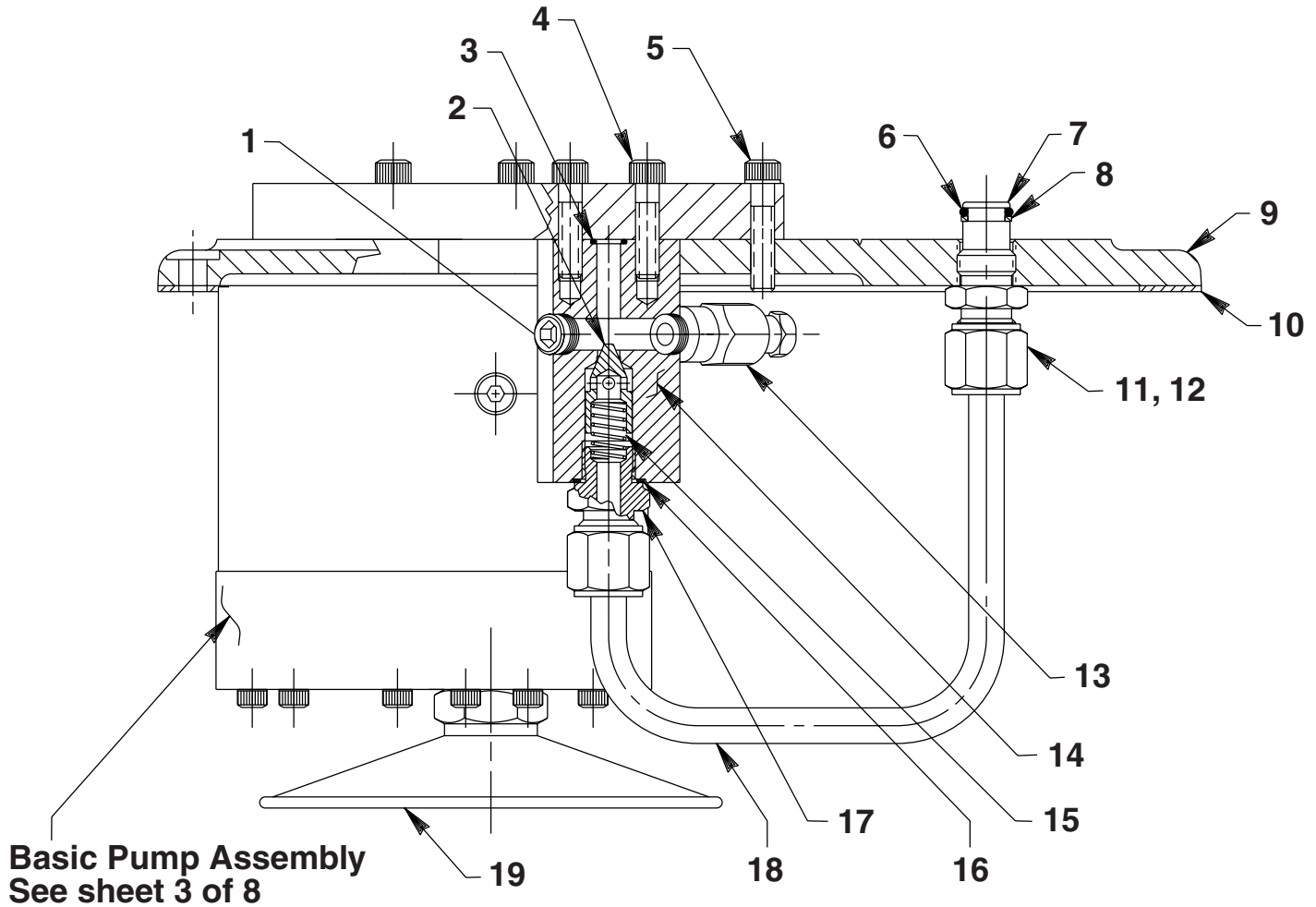
Item No.	Part No.	No. Req'd	Description
1	10806	2	Brush Holder Cap
2	10804	2	Brush
3	10805	2	Brush Holder
4	65064	1	Motor Shell
5	10133	2	Screw (#10-24 UNC x 1/4 Lg.)
6	20786	1	Baffle Plate
7	10800	1	Armature (115 V.)
	*58841A	1	Armature (230 V.)
8	10439	1	Ball Bearing
9	10241	4	Lockwasher (For #10 bolt)

Item No.	Part No.	No. Req'd	Description
10	10169	4	Screw (#10-24 UNC x 2" Lg.; Torque to 20/25 in. lbs.)
11	40059WH2	1	Motor Base
12	10438	1	Ball Bearing
13	10170	2	Screw (#10-24 UNC x 3-1/4 Lg.)
14	12356	2	Washer (#10 Internal Tooth)
15	10802	1	Field (115 V.)
	*58841F	1	Field (230 V.)
16	421204	1	Plastic Cover

- Notes:**
- Brush holders (Item #3) must be installed with slot and dimple facing the open end of the motor shell casting.
 - Stator must be installed with part no. and date code up (must be visible through the rectangular opening in the motor shell casting).
 - Insert flag terminals into adjacent brush holders.
 - Line leads must be routed through the rectangular opening in the motor shell casting.
 - Press bearings into armature and install as a unit into the motor shell casting.
 - Casting number must be on top when the motor base casting is fastened to the motor shell casting.

***NOTE:** If replacing the field or armature on 230 V. motors, order kit no. 252311.

BASIC PUMP SUBASSEMBLY

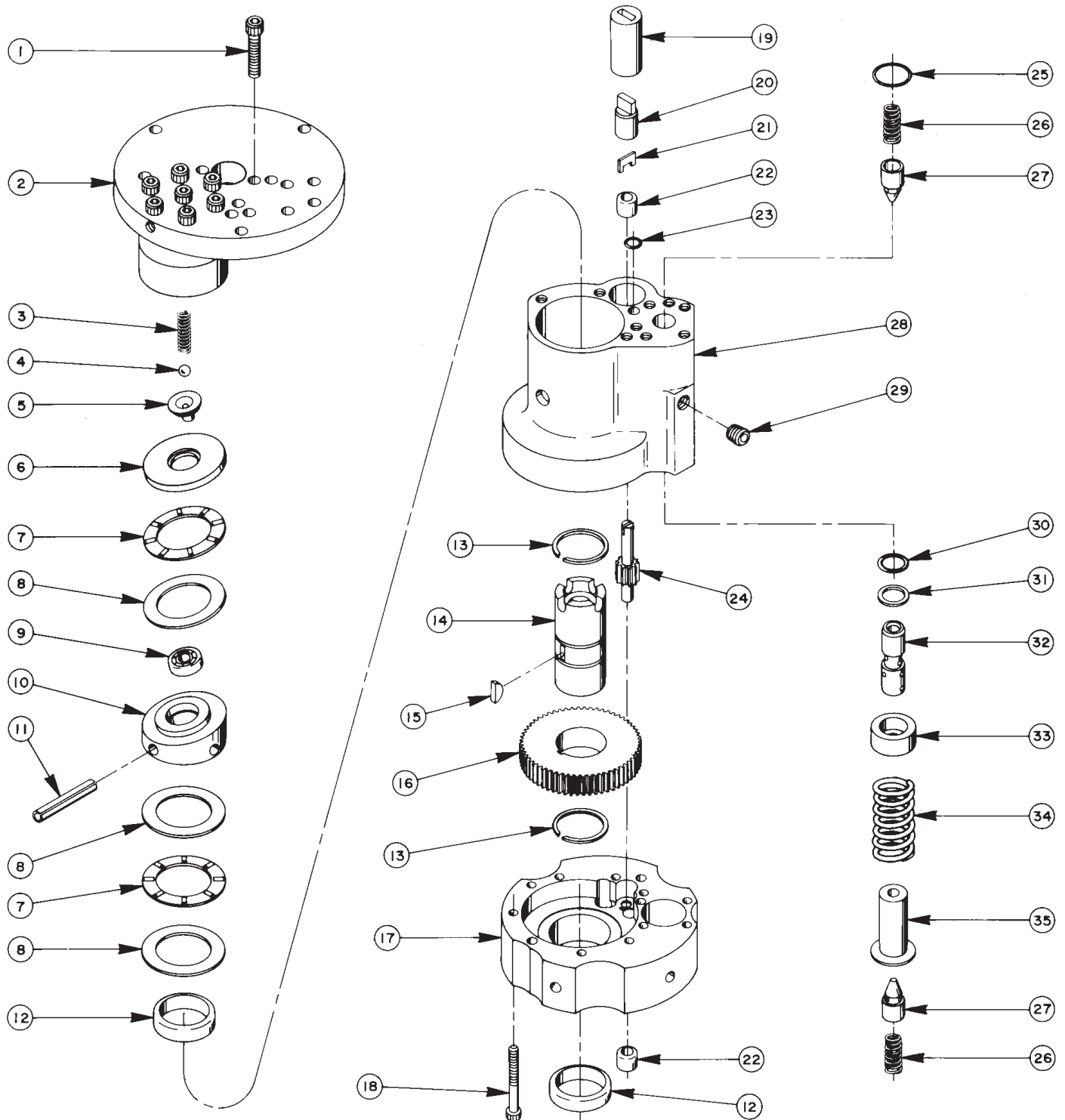


Item No.	Part No.	No. Req'd	Description
1	10427	1	Plug Fitting (1/8 NPTF)
2	20771	1	Poppet
3	10266	1	O-ring (.37 x .25 Nitrile)
4	10015	2	Soc. Hd. Screw (1/4-28 x 1; Torque to 130/180 in. lbs.)
5	10016	3	Soc. Hd. Screw (1/4-20 x 1)
6	10268	1	O-ring (.50 x .37 Nitrile)
7	20787	1	Valve Connector
8	11863	1	Backup Washer (.50 x .38)
9	64856WH2	1	Cover Plate
10	40164	1	Reservoir Gasket
11	10430	2	Tube Sleeve (3/8 dia.)
12	10431	2	Tube Nut Fitting (3/8 tube)
13	21278-57	1	Relief Valve Assembly (Set at 5,800/6,400 PSI)
14	20776	1	Valve Body
15	10425	1	Spring (.37 OD x .75 x .03 WS)
16	10261	1	Copper Washer (.75 x .60)
17	20770	1	Connector Fitting (9/16 x 5/8; Torque to 40/50 ft. lbs.)
18	21045	1	Oil Line Tube
19	21344	1	Filter Screen (Includes o-ring [Item #20])
20	10300	1	O-ring

PARTS INCLUDED BUT NOT SHOWN

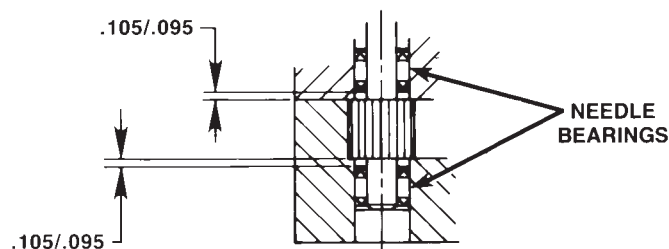
10177	10	Rnd. Hd. Screw (1/4-20 x 3/4; Mounts cover plate to reservoir)
20937	1	Vent Cap

BASIC PUMP ASSEMBLY



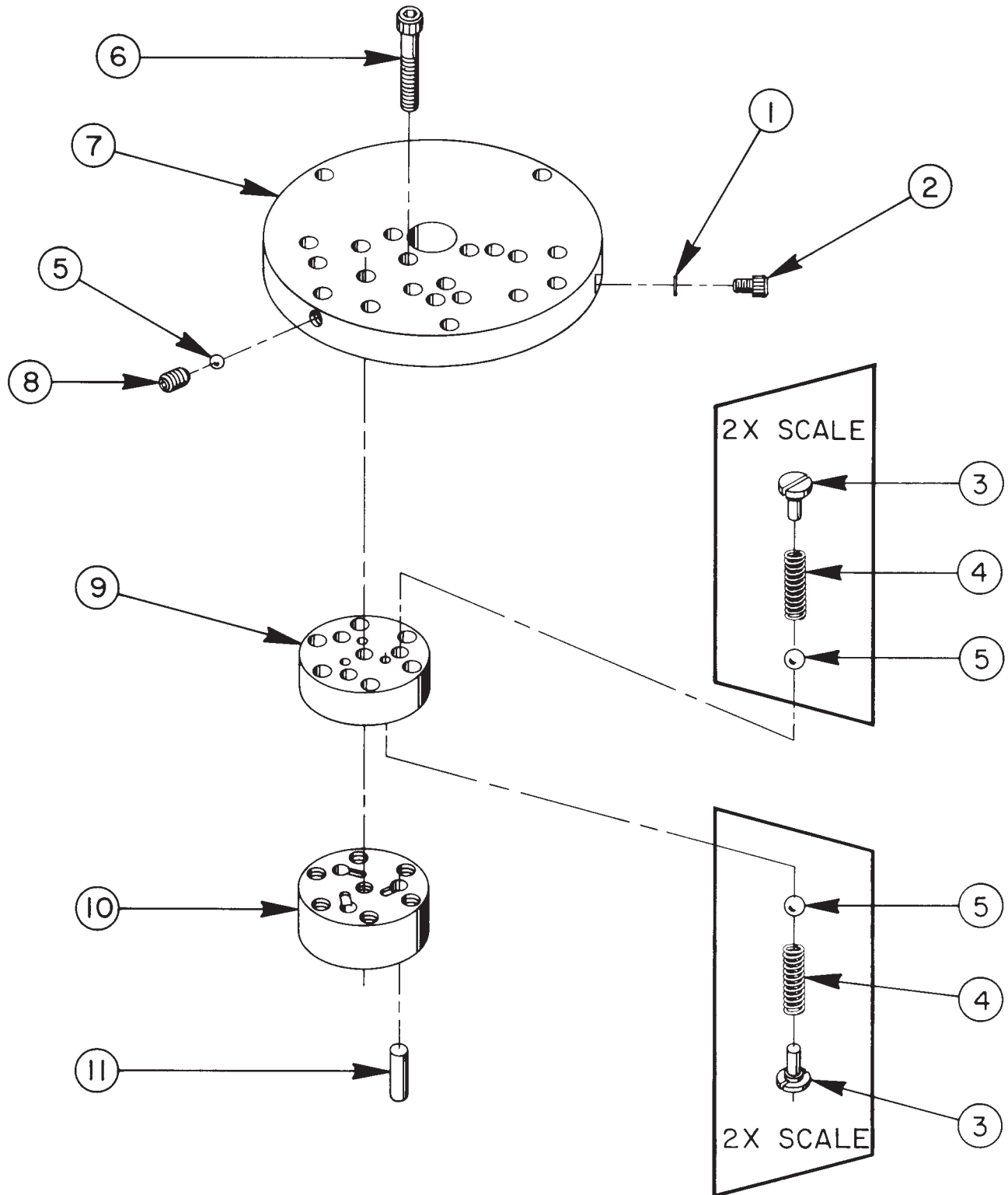
Item No.	Part No.	No. Req'd	Description
1	10020	9	Soc. Hd. Cap Screw (1/4-20 UNC X 1-1/4 Lg.; Torque to 170-180 in. lbs.)
2	33113	1	High Pressure Pump Ass'y (See sheet 4 of 8)
3	10361	1	Compression Spring (1/4 O.D. X 1" Lg.)
4	10375	1	Steel Ball (1/4" dia.)
5	23547	1	Bearing Top Plate
6	23548	1	Top Plate
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	Zinc 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

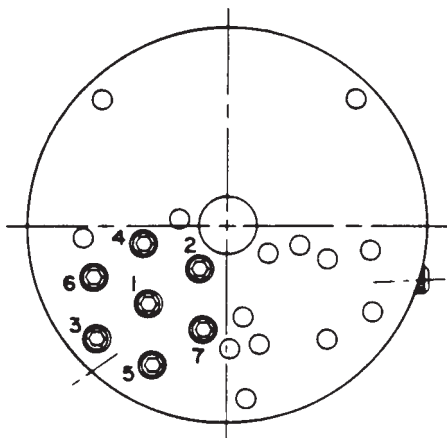


33113 PUMP ASS'Y

3 Pistons -- 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

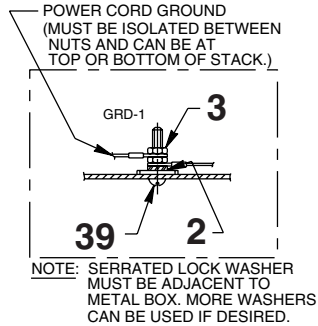


NOTE: Assemble in sequence shown. Lubricate under head and on threads. Torque to 180 in. lbs.

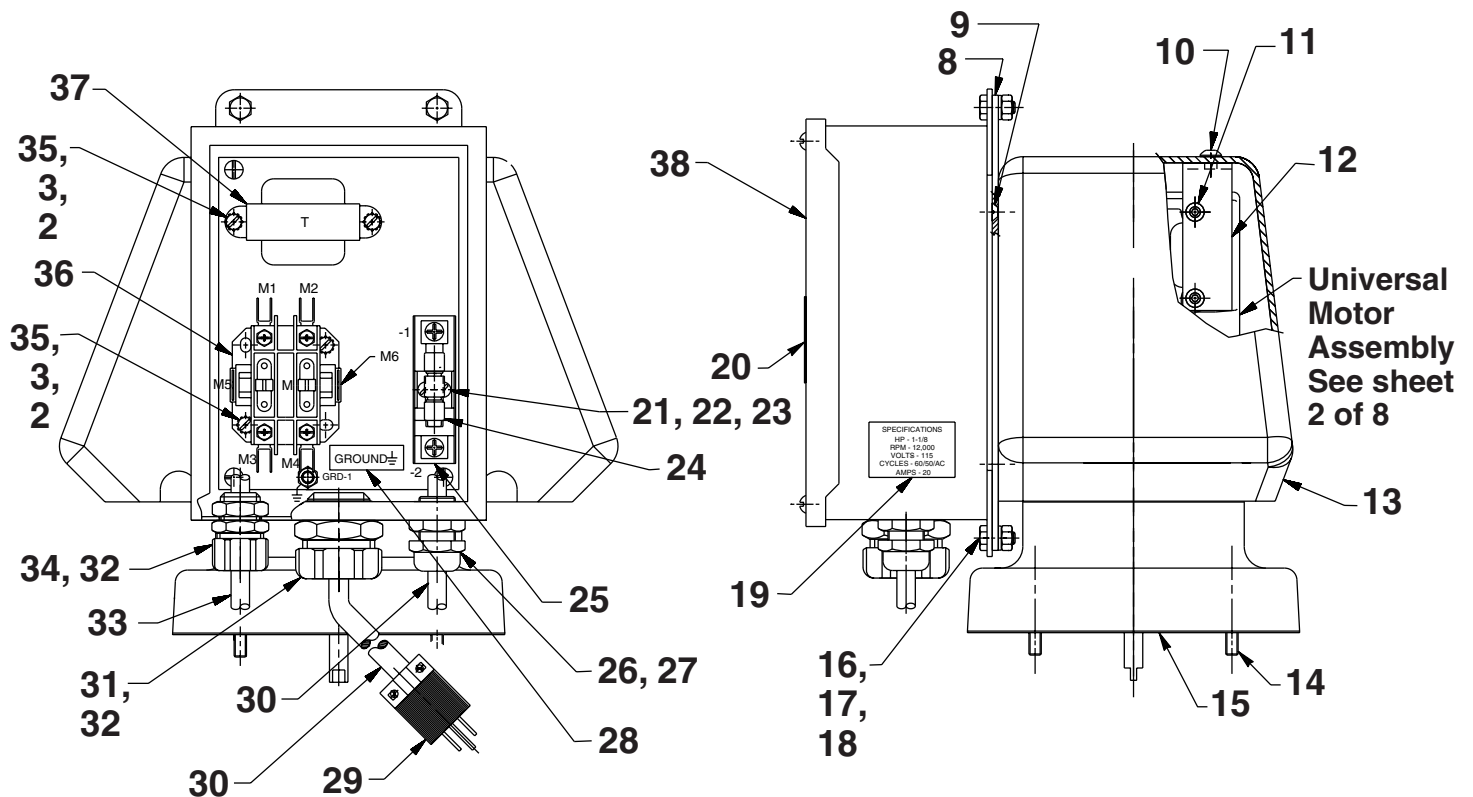
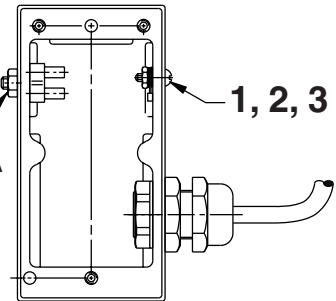
MOTOR CONTROL ASSEMBLY FOR PUMP #66027

TB1
CUT A SEGMENT OF 2 POLES
FROM A 12 POLE STRIP

DETAIL "A"



4, 5, 6, 7
See Detail A

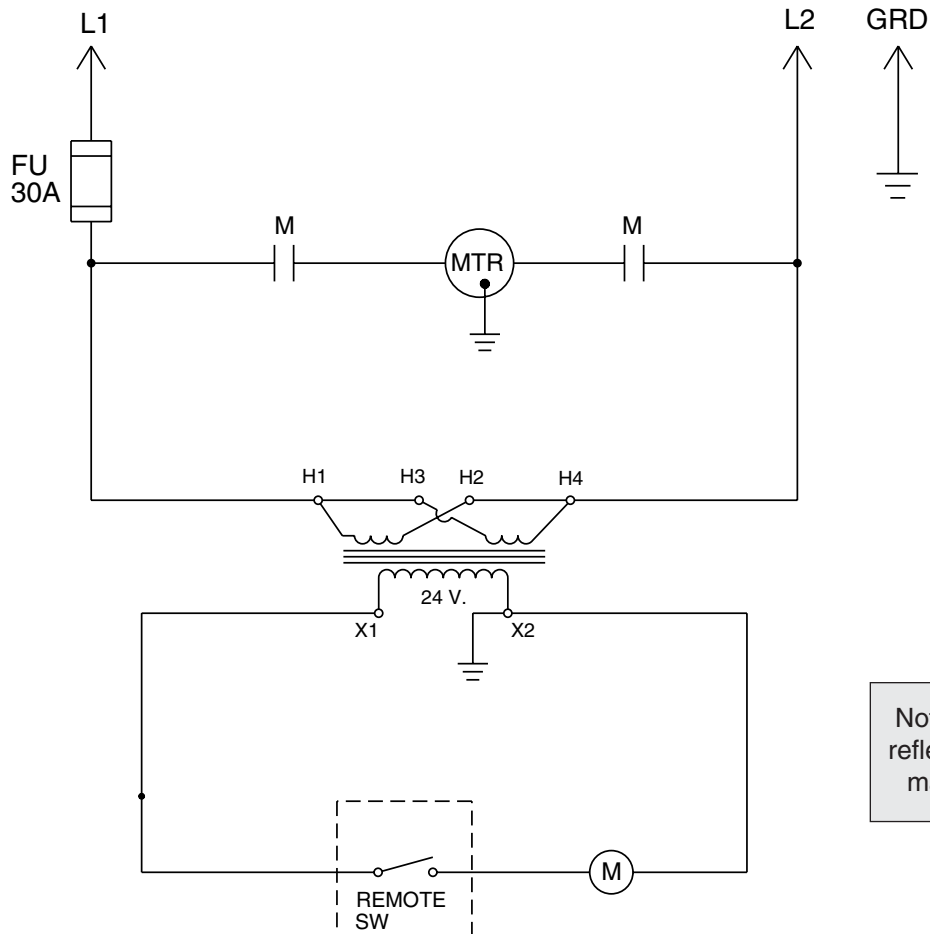


Parts List, Form No. 108019, Back sheet 5 of 8

Item No.	Part No.	No. Req'd	Description
1	12354	1	Rnd. Hd. Screw (10-24 x 5/8)
2	11108	7	Ext. Tooth Washer (.40 x .20)
3	10197	7	Hex Nut (10-24)
4	16099	1	Rnd. Hd. Screw (6-32 x 3/4)
5	15906	1	Ext. Tooth Washer (.31 x .15)
6	10195	1	Hex Nut (6-32)
7	351130	.16	Terminal Block
8	59185	1	Plate
9	252529	3	Flat Hd. Screw (10-24 x 1/2)
10	251437	2	Button Hd. Screw (1/4-20 x 1/2)
11	251486	4	Button Hd. Screw (10-24 x 1/2)
12	421212	1	Bracket
13	65053	1	Cover
14	10022	4	Soc. Hd. Screw (1/4-20 x 1/2)
15	30650	1	Motor Base Gasket
16	12825	2	Cap Screw (1/4-20 x 5/8)
17	10245	4	Lockwasher (.49 x .26)
18	10199	4	Hex Nut (1/4-20)
19	215164	1	Specifications Decal
20	200188	1	Warning/Important Decal
21	10447	2	Rnd. Hd. Screw (8-32 x 5/16)

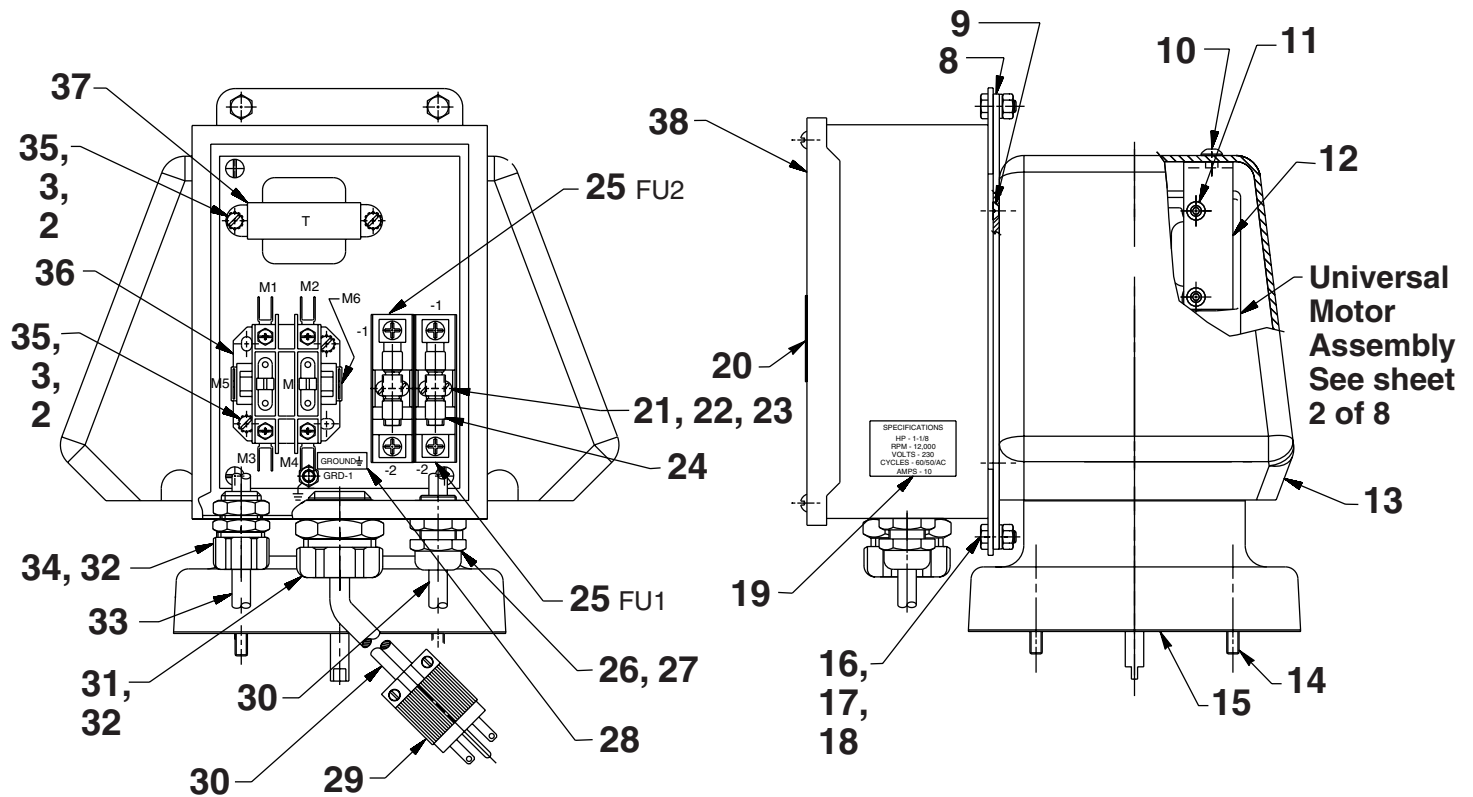
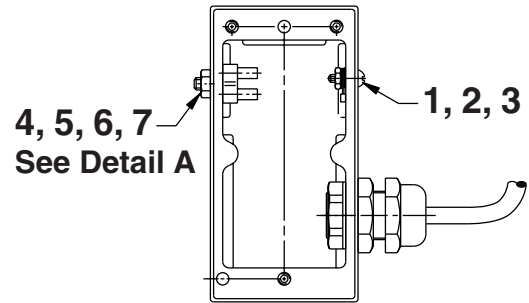
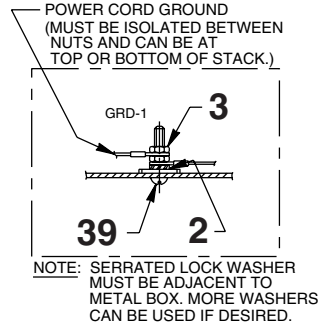
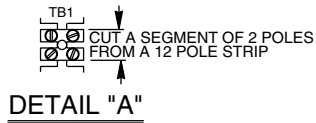
Item No.	Part No.	No. Req'd	Description
22	11388	2	Ext. Tooth Washer (.37 x .17)
23	10196	2	Hex Nut (8-32)
24	253135	1	Fuse (30 AMP 600V)
25	351891	1	Fuse Holder
26	216666	2	Strain Relief Bushing
27	216680	2	Conduit Locknut
28	205189	1	Ground Decal
29	16896	1	Electrical Plug
30	307439	2.5'	Cable (12/3 SJTO)
31	253500	1	Strain Relief Bushing
32	11362	2	Conduit Locknut
33	252304	1	Remote Hand Control Assembly (See sheet 8 of 8)
34	253418	1	Strain Relief Bushing
35	10166	4	Rnd. Hd. Screw (10-24 x 1/2)
36	420718-4	1	2 Pole Contactor
37	305665	1	Transformer
38	421879WH2	1	Control Box Assembly
39	11856	1	Rnd. Hd. Screw (10-24 x 1)

ELECTRICAL SCHEMATIC 115 V., 60 Hz.



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

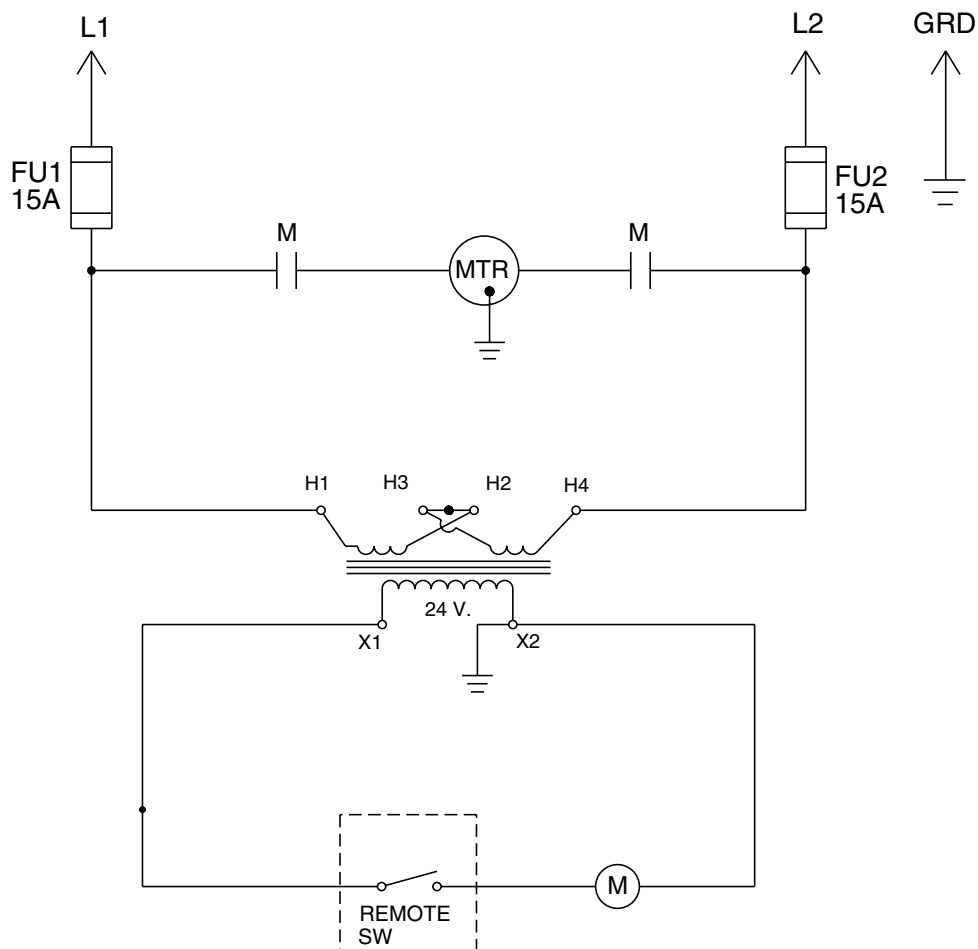
MOTOR CONTROL ASSEMBLY FOR PUMP #66027-230



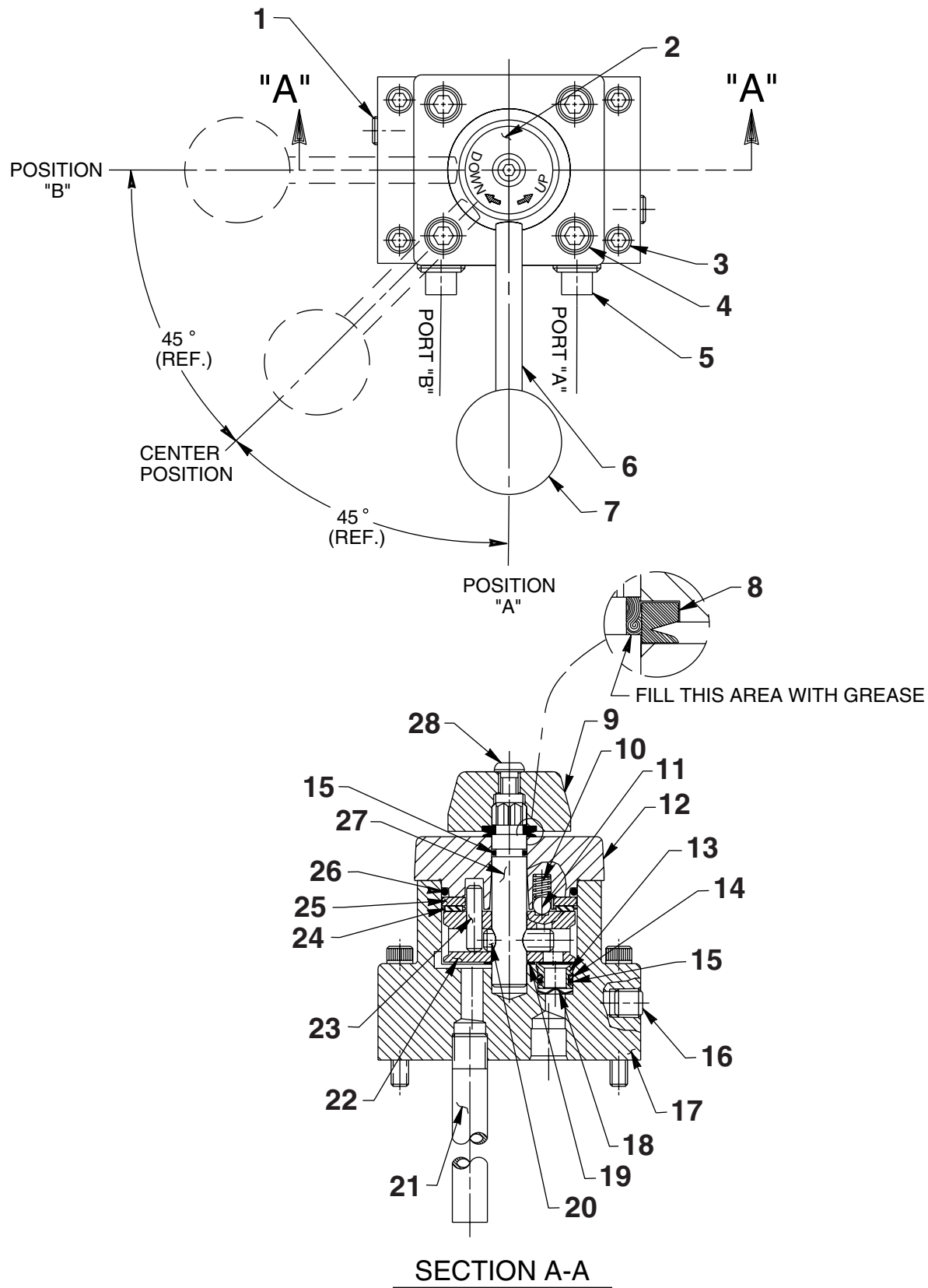
Parts List, Form No. 108019, Back sheet 6 of 8

Item No.	Part No.	No. Req'd	Description	Item No.	Part No.	No. Req'd	Description
1	12354	1	Rnd. Hd. Screw (10-24 x 5/8)	22	11388	2	Ext. Tooth Washer (.37 x .17)
2	11108	7	Ext. Tooth Washer (.40 x .20)	23	10196	2	Hex Nut (8-32)
3	10197	7	Hex Nut (10-24)	24	253112	2	Fuse (15 AMP 600V)
4	16099	1	Rnd. Hd. Screw (6-32 x 3/4)	25	351891	2	Fuse Holder
5	15906	1	Ext. Tooth Washer (.31 x .15)	26	216666	2	Strain Relief Bushing
6	10195	1	Hex Nut (6-32)	27	216680	2	Conduit Locknut
7	351130	.16	Terminal Block	28	205189	1	Ground Decal
8	59185	1	Plate	29	11209	1	Electrical Plug
9	253416	3	Flat Hd. Screw (8-32 x 1/2)	30	308752	2.5'	Cable (14/3 SJTO)
10	251437	2	Button Hd. Screw (1/4-20 x 1/2)	31	253500	1	Strain Relief Bushing
11	251486	4	Button Hd. Screw (10-24 x 1/2)	32	11362	2	Conduit Locknut
12	421212	1	Bracket	33	252304	1	Remote Hand Control Assembly (See sheet 8 of 8)
13	65053	1	Cover	34	253418	1	Strain Relief Bushing
14	10022	4	Soc. Hd. Screw (1/4-20 x 1/2)	35	10166	4	Rnd. Hd. Screw (10-24 x 1/2)
15	30650	1	Motor Base Gasket	36	420718-4	1	2 Pole Contactor
16	12825	2	Cap Screw (1/4-20 x 5/8)	37	305665	1	Transformer
17	10245	4	Lockwasher (.49 x .26)	38	421879WH2	1	Control Box Assembly
18	10199	4	Hex Nut (1/4-20)	39	11856	1	Rnd. Hd. Screw (10-24 x 1)
19	215163	1	Specifications Decal				
20	200188	1	Warning/Important Decal				
21	10447	2	Rnd. Hd. Screw (8-32 x 5/16)				

ELECTRICAL SCHEMATIC 230 V., 50 Hz.



VALVE ASSEMBLY

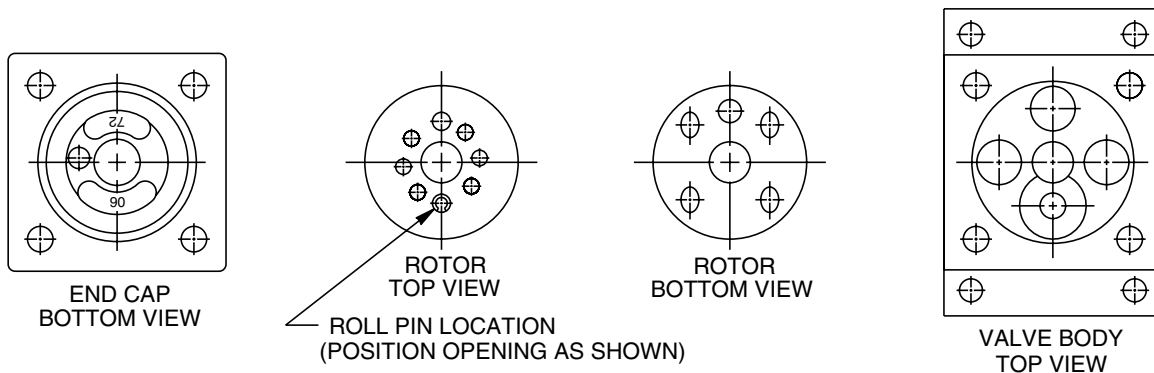


Item No.	Part No.	No. Req'd	Description
1	15130	2	Plug Fitting (1/16 PTF)
2	253284	1	Controls Decal
3	10854	4	Soc. Hd. Screw (1/4-20 x 1-3/4)
4	11013	4	Soc. Hd. Screw (5/16-18 x 1; Torque to 300/325 in. lbs.)
5	11127	2	Plug Fitting (3/8 NPTF)
6	21639	1	Stud
7	211911	1	Ball Knob
8	*213674	1	V-ring (.79 x .55 x .22 L)
9	46057	1	End Stem
10	15691	1	Spring (.24 OD x .63 x .04 WS)
11	10375	1	Ball (1/4 dia. steel)
12	61343	1	Valve Cap
13	252460	3	Seal
14	*11863	3	Backup Washer (.50 x .38)
15	*10268	4	O-ring (.50 x .37 Nitrile)

Item No.	Part No.	No. Req'd	Description
16	14972	1	Plug Fitting (1/4 PTF)
17	61288	1	Valve Body
18	21975	3	Spring Washer (.49 x .35)
19	214801	1	Spacer Washer (.73 x .51)
20	10496	1	Slotted Spring Pin (.31 x 1.00)
21	200609	1	Drain Tube
22	421472	1	Rotor
23	250056	1	Slotted Spring Pin (.22 x .94)
24	11228	1	Needle Bearing
25	11227-1	1	Bearing Race
26	*15892	1	O-ring (1.95 x 1.72 Nitrile)
27	46048	1	Stem
28	15911	1	Button Hd. Screw (1/4-20 x 5/8; Torque to 60/80 in. lbs. NOTE: Apply Loctite No. 222 or equivalent at assembly.)

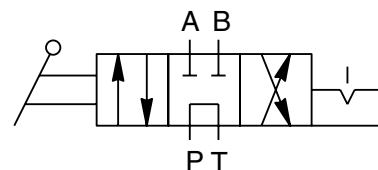
Part numbers marked with an asterisk (*) are contained in Repair Kit No. 300451.

INTERNAL ASSEMBLY ORIENTATION OF PARTS



SPECIFICATIONS

Valve, pump mounted manual detented
3-position, 4-way tandem center
Rated pressure: 10,000 PSI
Case pressure: 500 PSI max.
Rated flow: 5 GPM



HYDRAULIC SCHEMATIC

Function:

Center Position:

"A" and "B" ports blocked
"PRESSURE" port to tank

"A" Position:

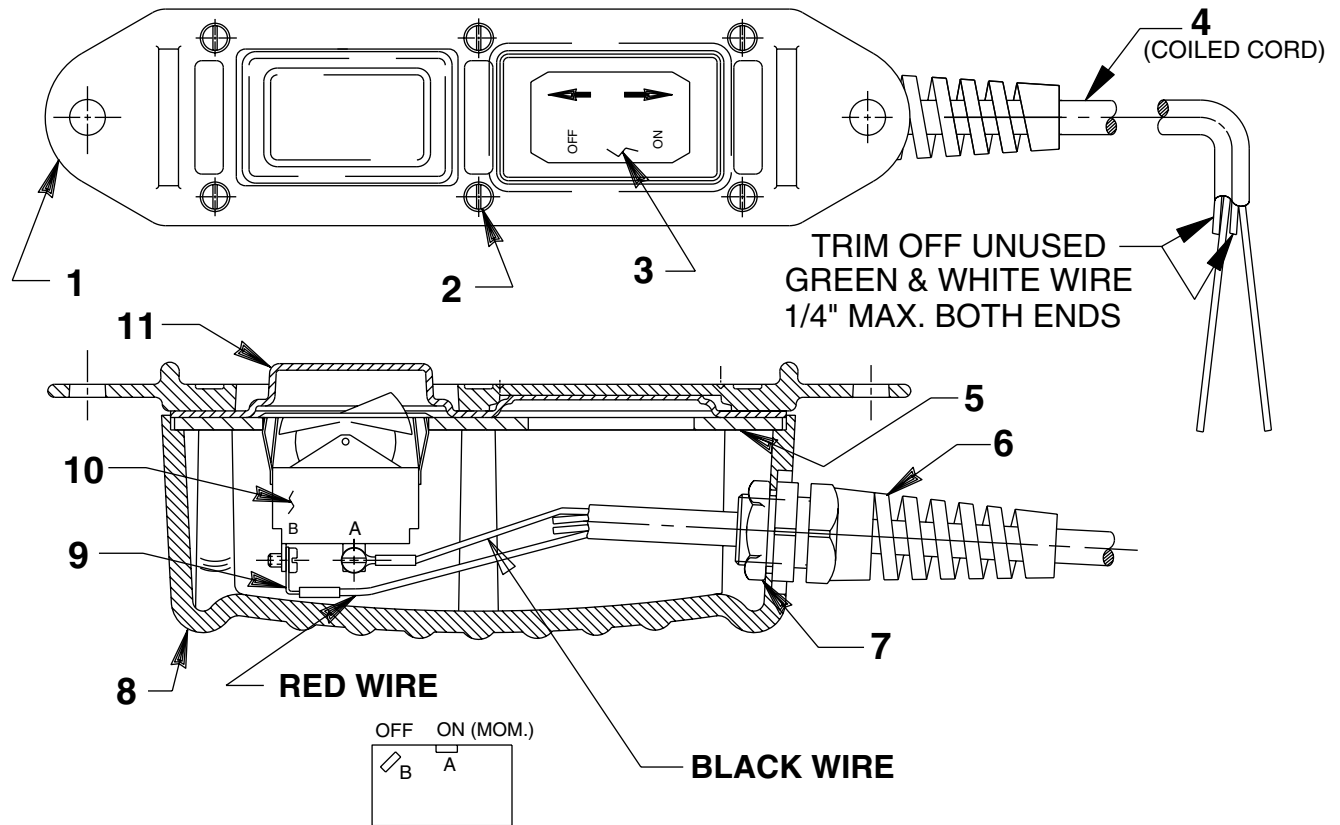
Pressure to "A" port
"B" port to tank

"B" Position:

Pressure to "B" port
"A" port to tank

NOTE: All port open to tank during transition between valve positions.

#252304 REMOTE CONTROL ASSEMBLY



Item No.	Part No.	No. Req'd	Description
1	420050-1	1	Plastic Cover
2	250248	6	Pan Head Screw (4-24 X 3/4 Lg.)
3	202763	1	Decal (On/Off)
4	350642	1	Cable (18/4 SJO; Coiled)
5	420050-3	1	Plastic Cover
6	251818	1	Strain Relief Bushing
7	251802	1	Hex Lock Nut (PG11 Thread)
8	420050-4	1	Switch Housing
9	10525	2	Ring Tongue Terminal
10	16772	1	Rocker Switch
11	420050-2	1	Remote Hand Switch Gasket