

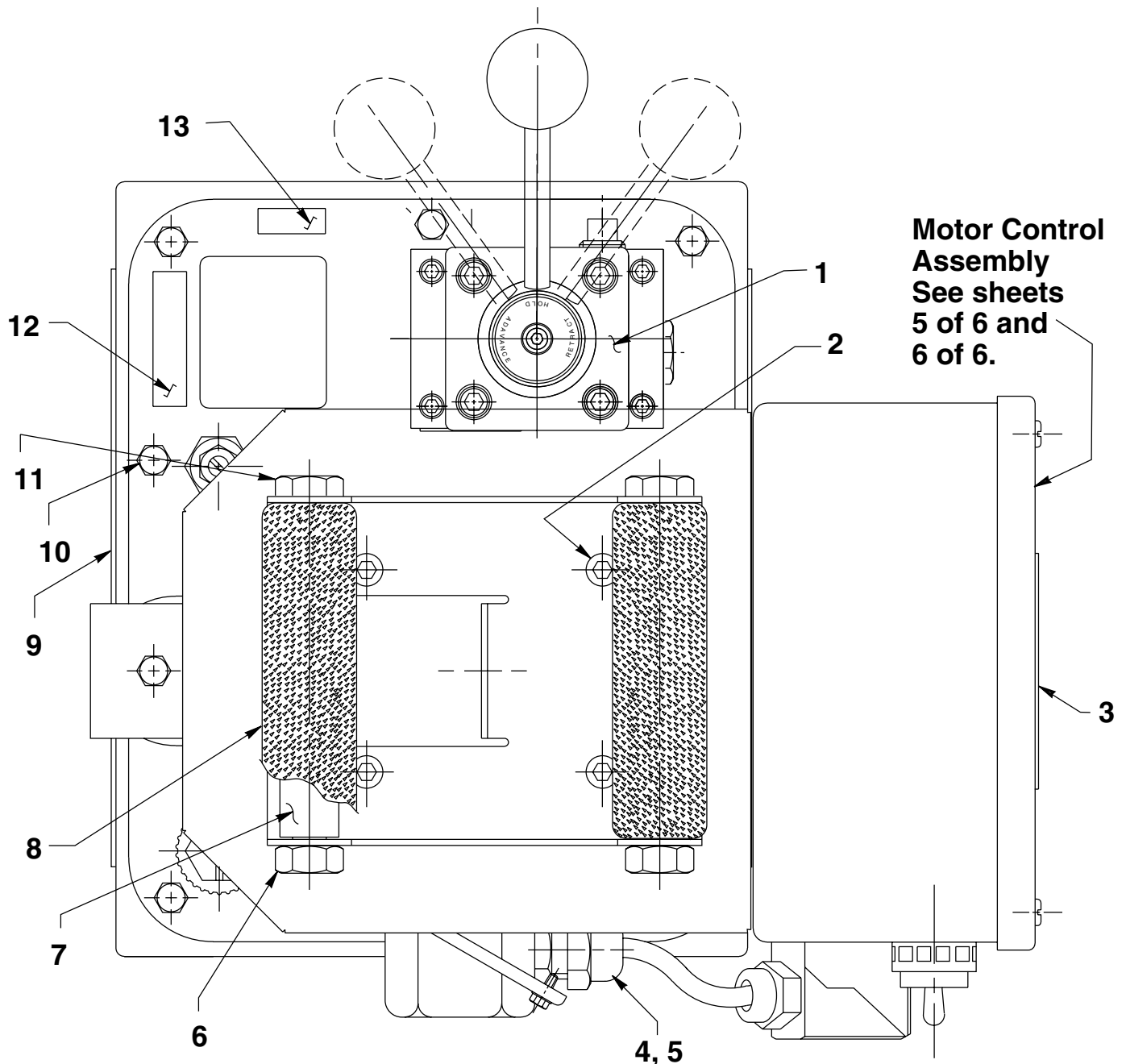
Parts List for:

PE213	PE214
PE213-50-220	PE214-50-220
PE213-230	PE214-230
PE213S	PE214S
PE213S-50-220	PE214S-50-220
PE213S-230	PE214S-230

**ELECTRIC
TWO-STAGE HYDRAULIC PUMP**

Max. Capacity: 10,000 PSI

TOP VIEW



**Motor Control
Assembly
See sheets
5 of 6 and
6 of 6.**

Parts List, Form No. 100807, Back sheet 1 of 6

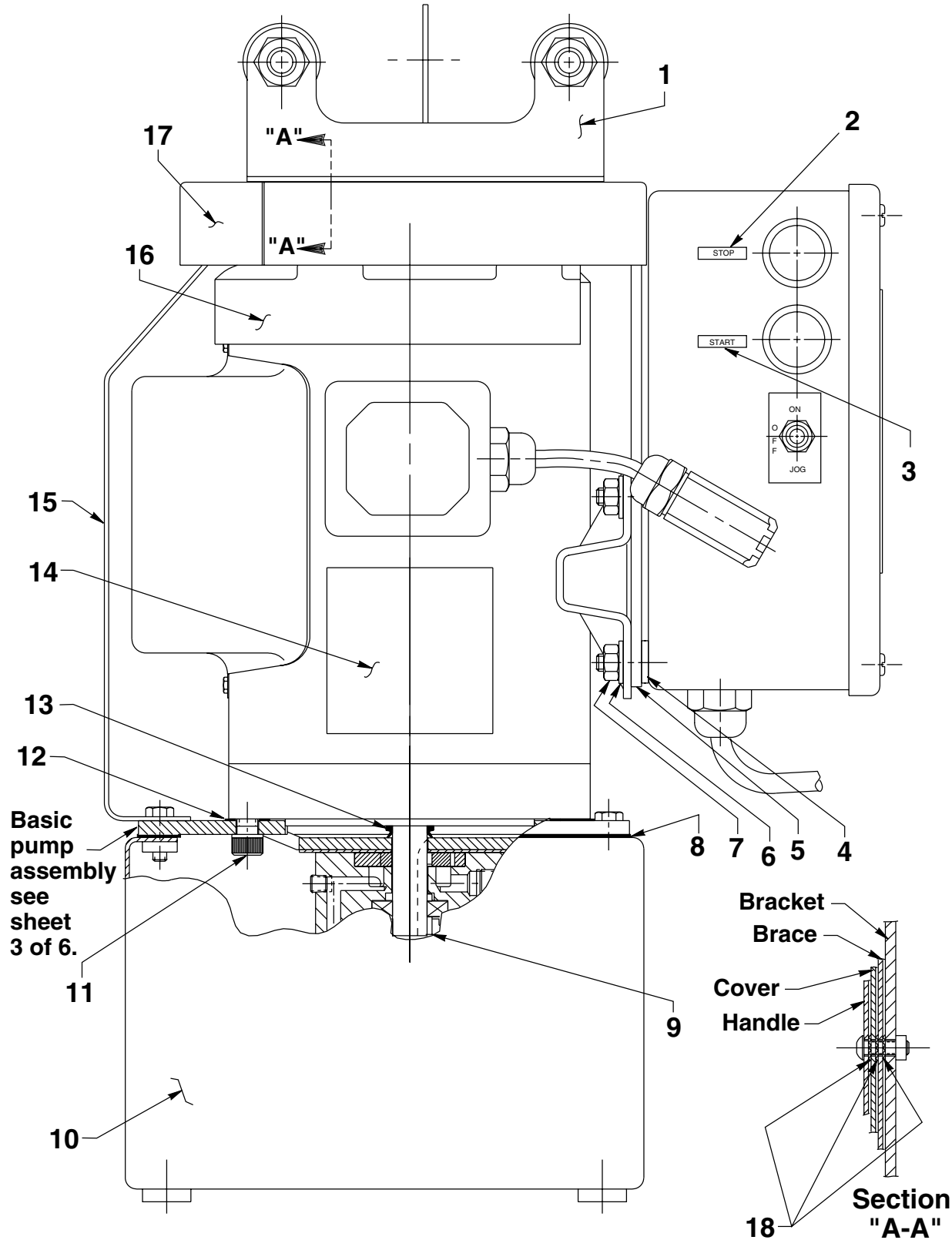
Item No.	Part No.	No. Req'd	Description
1	9520	1	3-way Manual Valve (For PE213, PE213-50-220 & PE213-230; See Form No.'s 101377 & 102527)
	9506	1	4-way Manual Valve (For PE214, PE214-50-220 & PE214-230; See Form No.'s 100628 & 102527)
	9599	1	Valve Assembly (For PE213S, PE213S-50-220 & PE213S-230; See Form No. 100422)
	9512	1	Valve Assembly (For PE214S, PE214S-50-220 & PE214S-230; See Form No. 101653)
2	250383	4	Button Hd. Cap Screw (1/4-20 UNC x 3/4 Lg.)
3	309114	1	Decal (Warning Portion)
4	216666	1	Strain Relief Bushing (For PE213, PE214 PE213-50-220, PE213S-50-220, PE213-230, PE213S-230 & PE214-230)
		2	Strain Relief Bushing (For PE213S, PE214S, PE214-50-220, PE214S-50-220 & PE214S-230)
5	216680	1	Locknut
6	10208	2	Hex. Nut (1/2-13 UNC)
7	216658	2	Tube Handle
8	216668	2	Handle Grip
9	309219	2	Trade Name Decal
10	10009	10	Hex. Hd. Cap Screw (1/4-20 UNC x 3/4 Lg.)
11	216681	2	Hex. Hd. Bolt (1/2-13 UNC x 5-1/2 Lg.)
12	213695	1	Decal (CSA; For PE213, PE213S, PE214, PE214S, PE213-230, PE213S-230, PE214-230 & PE214S-230)
13	203972	1	Decal (CSA; For PE213, PE213S, PE214, PE214S, PE213-230, PE213S-230, PE214-230 & PE214S-230)

Refer to any operating instructions included with the 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 Power Team replacement parts!**

Additional questions can be directed to our Technical Services Department.

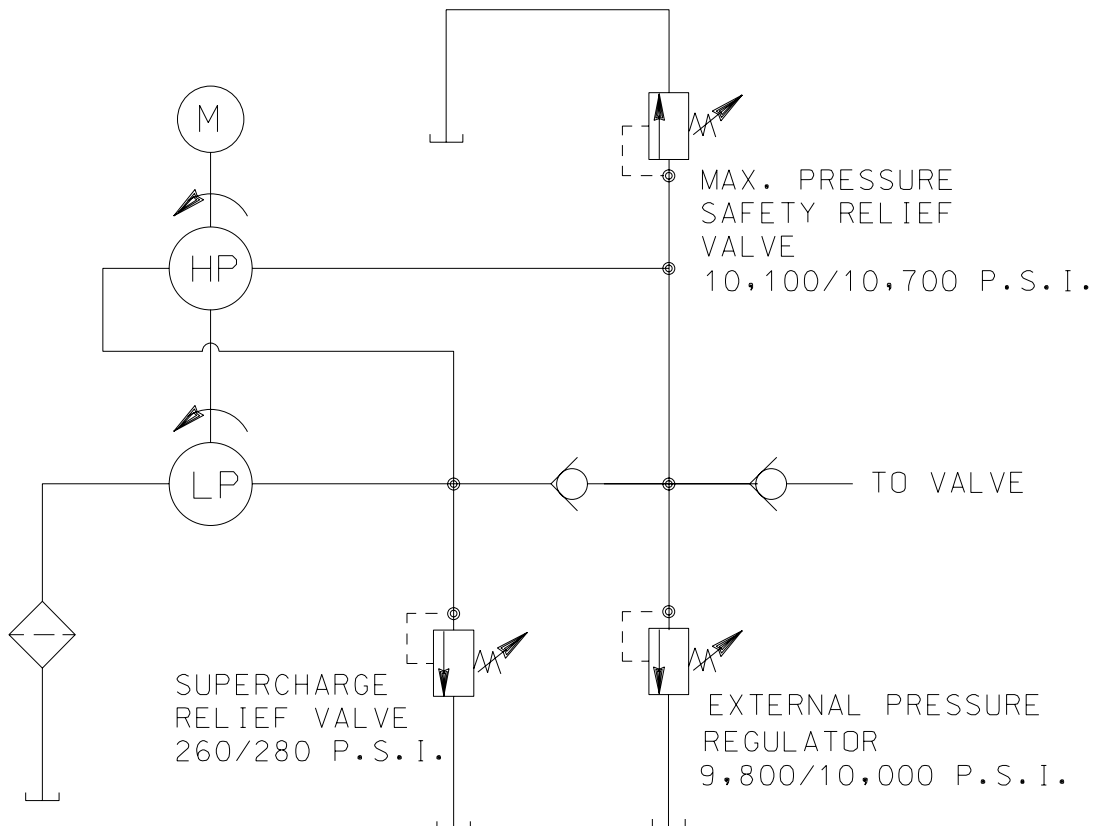
SIDE VIEW



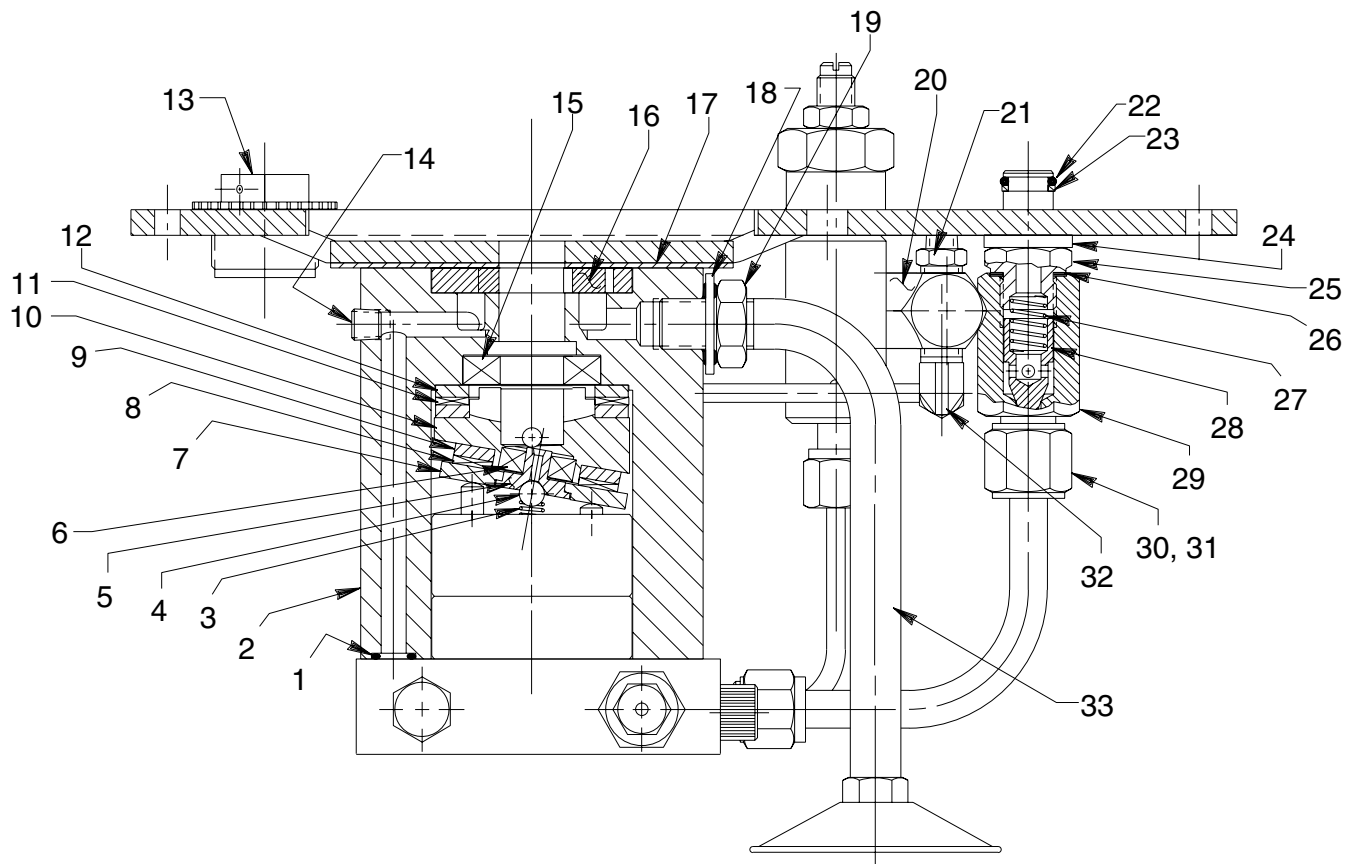
NOTE: Place lockwasher between each layer of sheet metal at each screw location.

Item No.	Part No.	No. Req'd	Description
1	53513BK2	1	Handle Bracket
2	203769	1	Decal (Stop)
3	203808	1	Decal (Start)
4	16450	4	Washer (1" x .260 x .120)
5	53514BK2	1	Mounting Bracket
6	12719	4	Washer (.630 x .286 x .065)
7	10199	4	Hex. Nut (1/4-20 UNC)
8	40164	1	Reservoir Gasket
9	214097	1	Key
10	40063OR9	1	Reservoir
11	10050	4	Soc. Hd. Cap Screw (3/8-16 UNC x 1" Lg.; Torque to 90/100 in. lbs.)
12	307425	1	Motor Gasket
13	213674	1	Shaft Seal
14	309114	1	Decal (Important portion)
15	53515BK2	1	Brace
16	53518	1	Electric Motor (For PE213, PE213S, PE214, PE214S, PE213-230, PE213S-230, PE214-230 & PE214S-230)
	58030	1	Electric Motor (For PE213-50-220, PE213S-50-220, PE214-50-220 & PE214S-50-220)
17	53516BK2	1	Cover
18	11351	12	External Tooth Washer

HYDRAULIC SCHEMATIC



BASIC PUMP ASSEMBLY SIDE VIEW

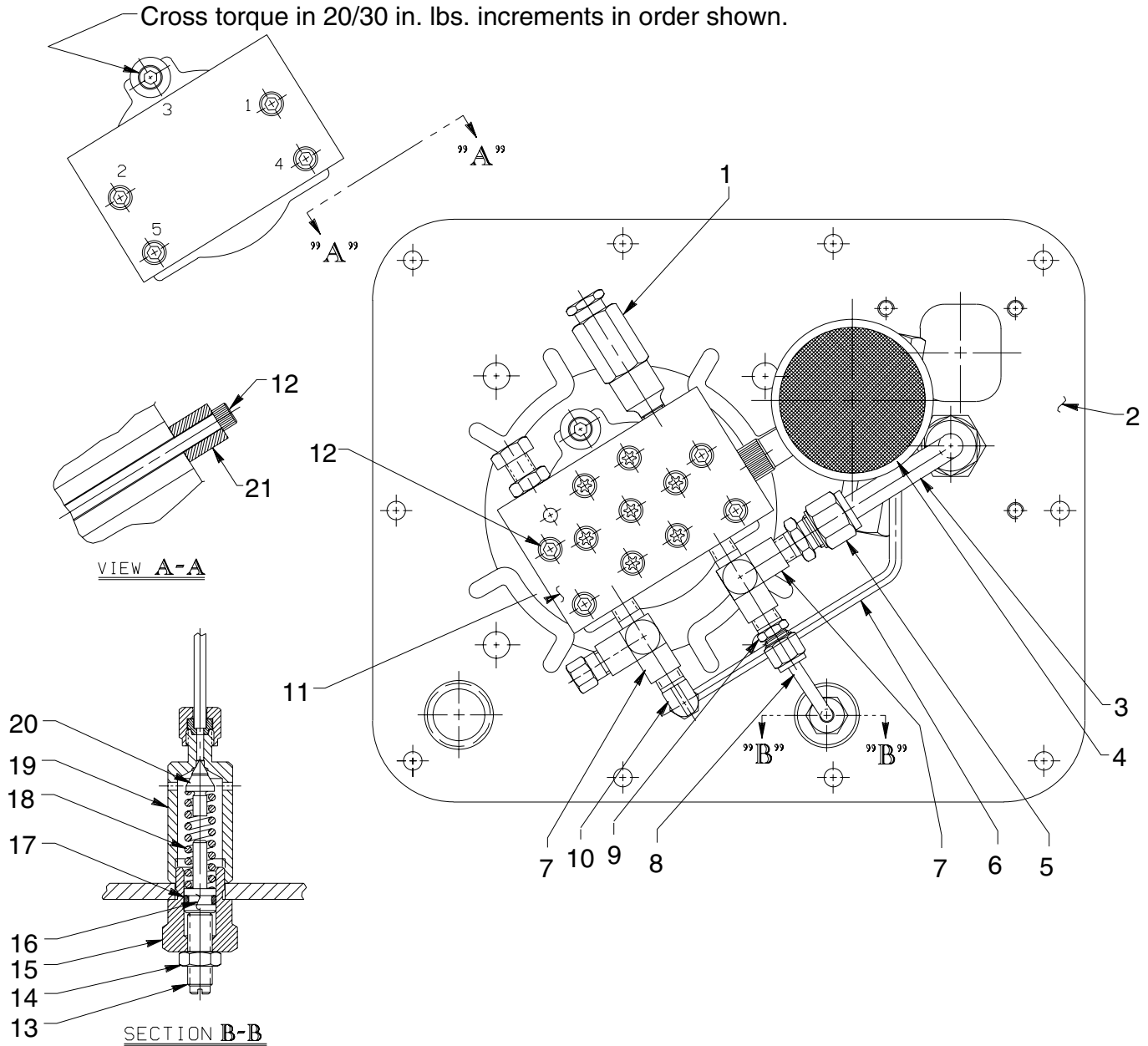


Item No.	Part No.	No. Req'd	Description
1	10267	1	O-ring (7/16 x 5/16 x 1/16)
2	52883	1	Pump Body
3	16320	1	Compression Spring (1/4 O.D. x 3/4 Lg.)
4	10375	1	Steel Ball (1/4 dia.)
5	23547	1	Top Plate Bearing
6	11814	1	Ball Bearing
7	23548	1	Top Plate
8	15431	1	Needle Thrust Bearing
9	15432	1	Needle Thrust Race Bearing
10	35271	1	Angle Plate
11	11228	1	Needle Thrust Bearing
12	11227	2	Needle Thrust Race Bearing
13	213706	1	Filler Cap
14	11084	1	Pipe Plug (1/16 NPTF)
15	15695	1	Ball Bearing
16	15693	1	Gerotor Set
17	307296	1	Wear Plate
18	213709	1	Seal Washer (Turn on -- Do not push on)
19	10390	1	Hex. Jam Nut (1/2-20 UNF)
20	21943	1	Accumulator (For PE213S, PE213S-50-220 & PE213S-230)
21	215373	1	Straight Fitting (1/16 NPTF x 1/8 NPTF; For PE213S-50-220, PE213S & PE213S-230)

Item No.	Part No.	No. Req'd	Description
22	10268	1	O-ring (1/2 x 3/8 x 1/16)
23	11863	1	Teflon Backup Washer
24	21484	1	Washer
25	214762	1	Valve Connector (Note: Torque valve connector to 20/30 ft. lbs. into coverplate. Hold valve connector & torque check valve body and tube nut to 40/50 ft. lbs.)
26	10261	1	Copper Washer (3/4 x 19/32 x 1/32)
27	10425	1	Compression Spring (3/8 O.D. x 3/4 Lg.)
	16669	1	Compression Spring (3/8 O.D. x 1-1/4 Lg.; For PE213S, PE213S-230 & PE213S-50-220)
28	20771	1	Poppet
29	201879	1	Check Valve Body
30	10430	1	Tube Sleeve (For 3/8 tube)
31	10431	1	Tube Nut (5/8-18 UNF; Torque to 40/50 ft. lbs. while holding Valve Connector item #24)
32	11278	1	90° Fitting (1/8 NPTF x .188 tube; For PE213S, PE213S-50-220 & PE213S-230)
33	213686	1	Intake Tube

BASIC PUMP ASSEMBLY BOTTOM VIEW

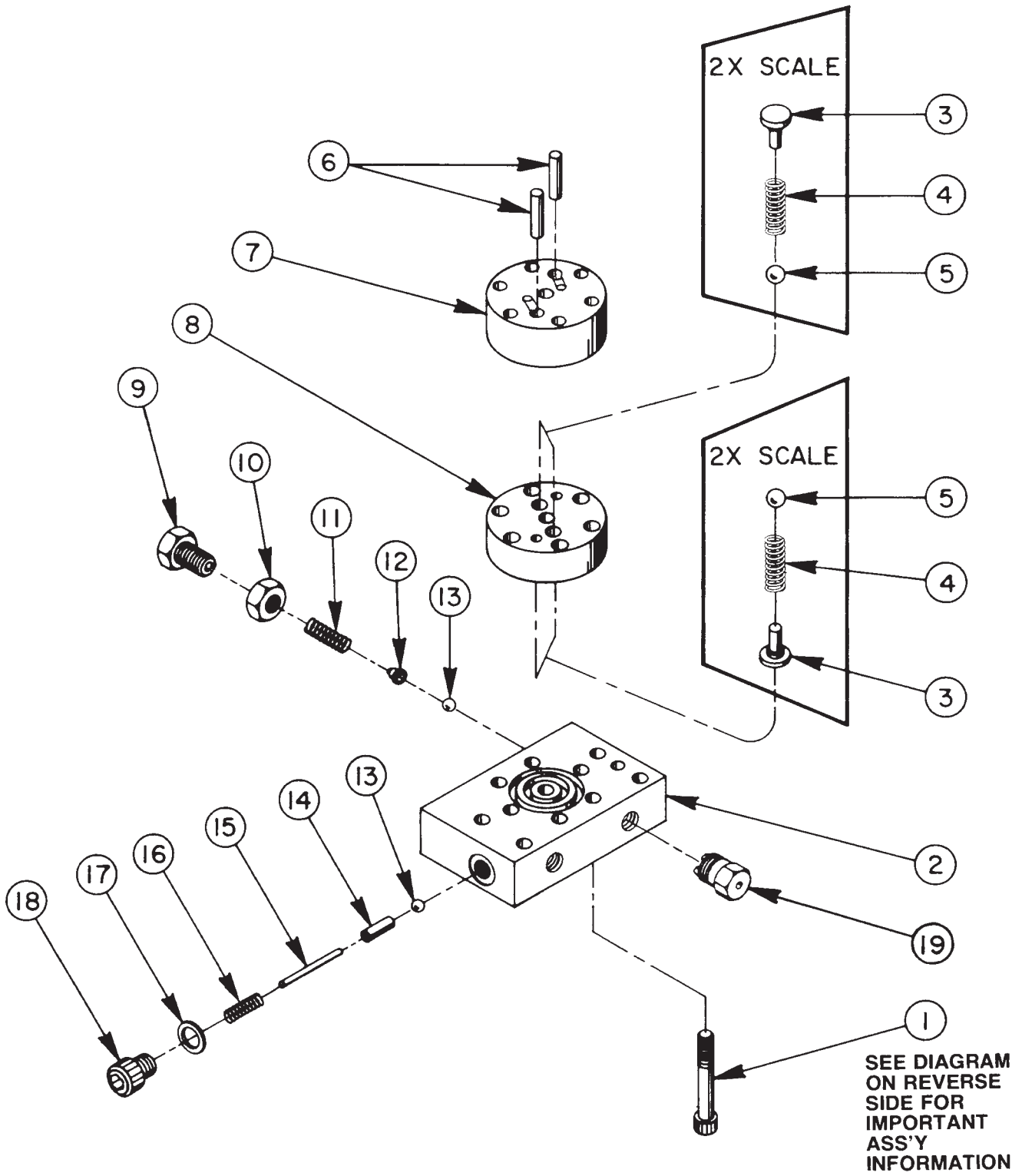
Cross torque in 20/30 in. lbs. increments in order shown.



Item No.	Part No.	No. Req'd	Description
1	21278	1	Relief Valve (Set at 10,100/10,700 PSI)
2	47404BK2	1	Reservoir Cover
	420002	1	Reservoir Cover (For PE213S, PE213S-50-220 & PE213S-230)
3	214866	1	Tube (Oil Line)
4	29682	1	Filter Strainer
5	12696	1	Straight Fitting (1/8 NPTF x 3/8 tube)
6	420400	1	Oil Line (Pilot; For PE213S, PE213S-50-220 & PE213S-230)
7	18969	1	Tee Fitting (1/8 x 1/8 x 1/8 NPTF; For PE213, PE214, PE213-50-220, PE214-50-220, PE214S, PE214s-50-220 & PE214S-230)
	18969	2	Tee Fitting (1/8 x 1/8 x 1/8 NPTF; For PE213S, PE213S-50-220 & PE213S-230)
8	214868	1	Regulator Oil Line Assembly

Item No.	Part No.	No. Req'd	Description
9	14844	1	Straight Fitting (1/8 NPTF x .188 tube)
10	11278	1	Tube Elbow (For PE213S, PE213S-50-220 & PE213S-230)
11	36922	1	High Pressure Pump Assembly (See pg. 4 of 6)
12	15642	5	Soc. Hd. Cap Screw (1/4-20 UNC x 5" Lg.; Torque to 55/65 in. lbs.)
13	22362	1	Valve Adjusting Screw
14	10386	1	Hex. Jam Nut (3/8-24 UNF)
15	21305	1	Valve Cap
16	21306	1	Spring Guide
17	10268	1	O-ring (1/2 x 3/8 x 1/16)
18	10495	1	Compression Spring (1/2 O.D. x 1-5/8 Lg.)
19	22361	1	Valve Body
20	21046	1	Valve Stem
21	214720	1	Spacer

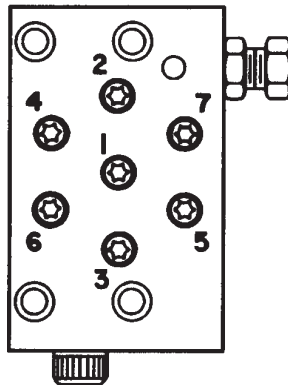
HIGH PRESSURE PUMP ASSY.



Item No.	Part No.	No. Req'd	Description
1	*16747	7	Torx Drive Cap Screw (1/4-28 x 1-3/4 Lg.; See diagram below)
2	*36912	1	Pump End Plate
3	*24549	4	Valve Guide
4	*10445	4	Compression Spring (.161 O.D. x 23/32 Lg.)
5	*12223	4	Steel Ball (3/16 dia.)
6	*20775	2	Piston (7/32 dia.)
7	*41006	1	Pump Barrel
8	*41007	1	Valve Head
9	200797	1	Adjusting Screw
10	10386	1	Jam Nut (3/8-24 UNF)
11	15691	1	Compression Spring (1/4 O.D. x 5/8 Lg.)
12	200796	1	Spring & Ball Adapter
13	10375	2	Steel Ball (1/4 dia.)
14	201998	1	Sleeve
15	12571	1	Roll Pin (1/8 dia. x 1-3/8 Lg.)
16	14431	1	Compression Spring (3/16 O.D. x 3/4 Lg.)
17	12042	1	Copper Washer (9/16 x 3/8 x 1/32)
18	29690	1	Cap Screw (Torque to 180 in. lbs.)
19	306957	1	Air Bleed Valve (For PE213, PE213-50-220, PE214, PE214-50-220, PE214S-50-220, PE213-230, PE214-230 & PE214S-230)

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

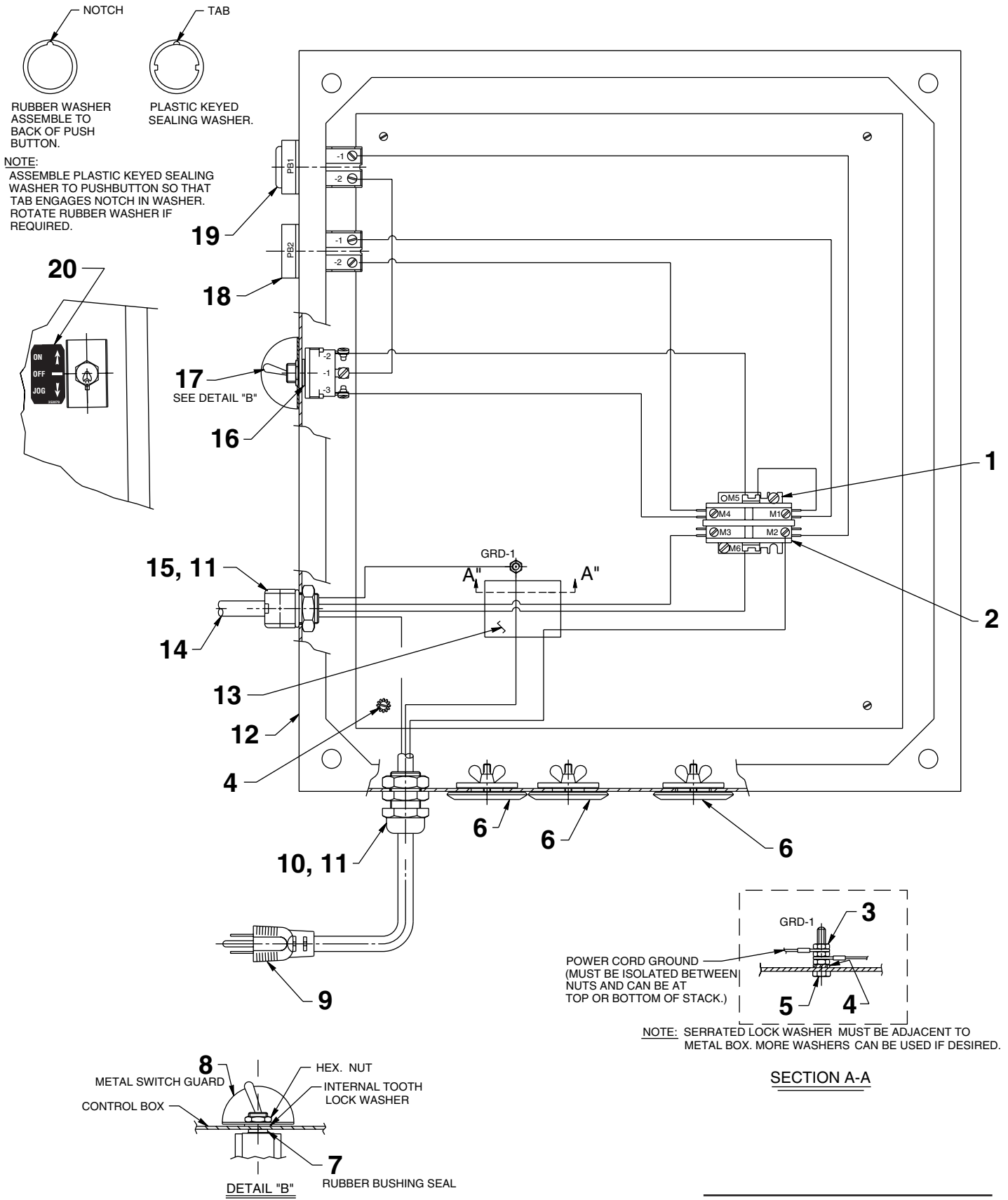
BOLT TIGHTENING SEQUENCE



NOTE: Assemble in sequence shown. Lubricate under head and on threads. Torque to 170 in. lbs.

MOTOR CONTROL ASSEMBLY - MANUAL VALVE

(For PE213, PE214, PE213-50-220, PE214-50-220, PE213-230 & PE214-230)



Parts List, Form No. 100807, Back sheet 5 of 6

Item No.	Part No.	No. Req'd	Description
1	10166	2	Machine Screw (#10-24 UNC X 1/2 Lg.)
2	420718-1	1	Contactor (For PE213 & PE214)
	420718-2	1	Contactor (For PE213-50-220, PE214-50-220, PE213-230 & PE214-230)
3	10197	3	Hex. Nut (#10-24)
4	11108	2	Washer (#10 External Tooth)
5	104484	1	Hex. Hd. Machine Screw (#10-24 x 3/4 Lg.)
6	216669	3	Hole Plug
7	216670	1	Rubber Bushing Seal
8	352061	1	Metal Switch Guard
9	25229	1	Cord Set (14/3 SJTO; For PE213 & PE214)
	308752	8 ft.	Electrical Cable (14/3 SJO; For PE213-50-220, PE214-50-220, PE213-230 & PE214-230)
10	216666	1	Strain Relief
11	216680	2	Conduit Lock
12	250001	1	Electrical Control Box with Cover & Panel
13	205189	1	Decal (Ground)
14	309022	1.42 ft.	Electrical Cable (14/4 SJO)
15	216667	1	90° Strain Relief
16	216670	1	Sealing Washer
17	16617	1	Toggle Switch (On-Off-Jog)
18	39282	1	Pushbutton Switch (Green)
19	39283	1	Pushbutton Switch (Red)
20	360133	1	Decal (On-Off-Jog)

PARTS INCLUDED BUT NOT SHOWN

11209	1	Electrical Plug (For PE213-230 & PE214-230)
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ELECTRICAL SCHEMATIC - MANUAL VALVE

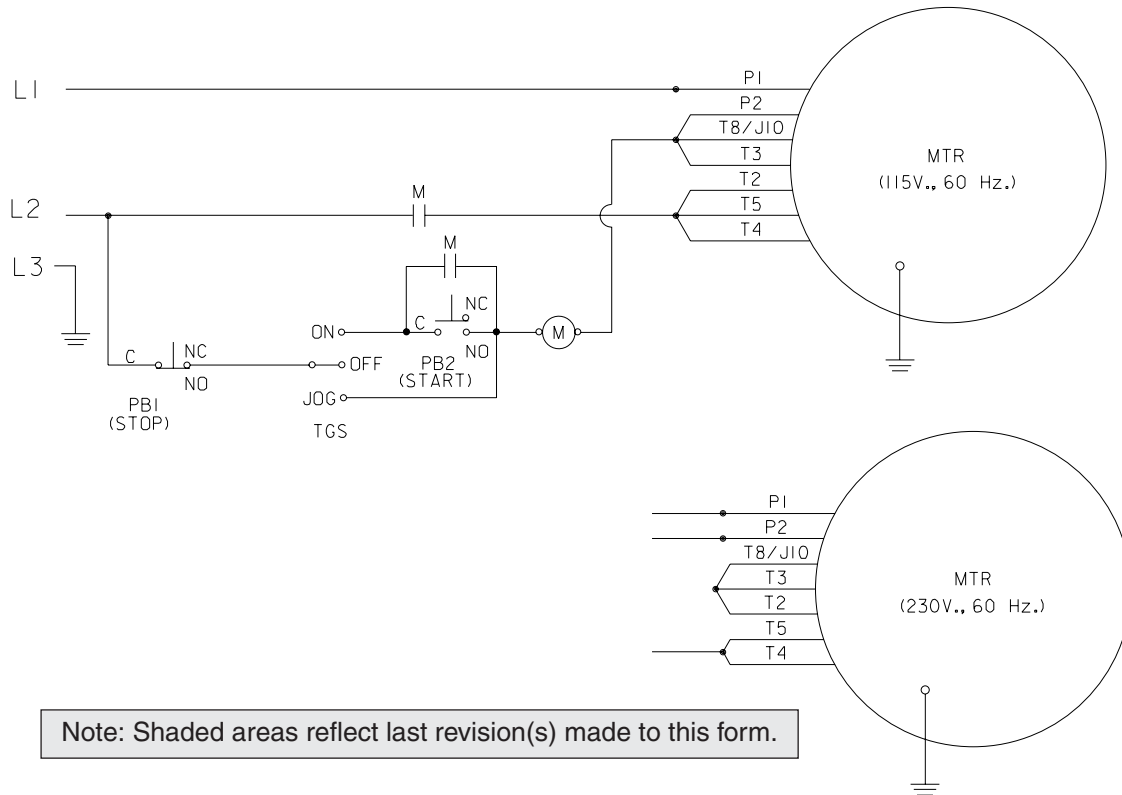


WARNING

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

North American & International Color Codes

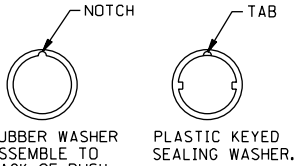
Conductors	North American	International
Line	Black.....	Brown
Neutral	White	Blue
Ground	Green	Green/Yellow



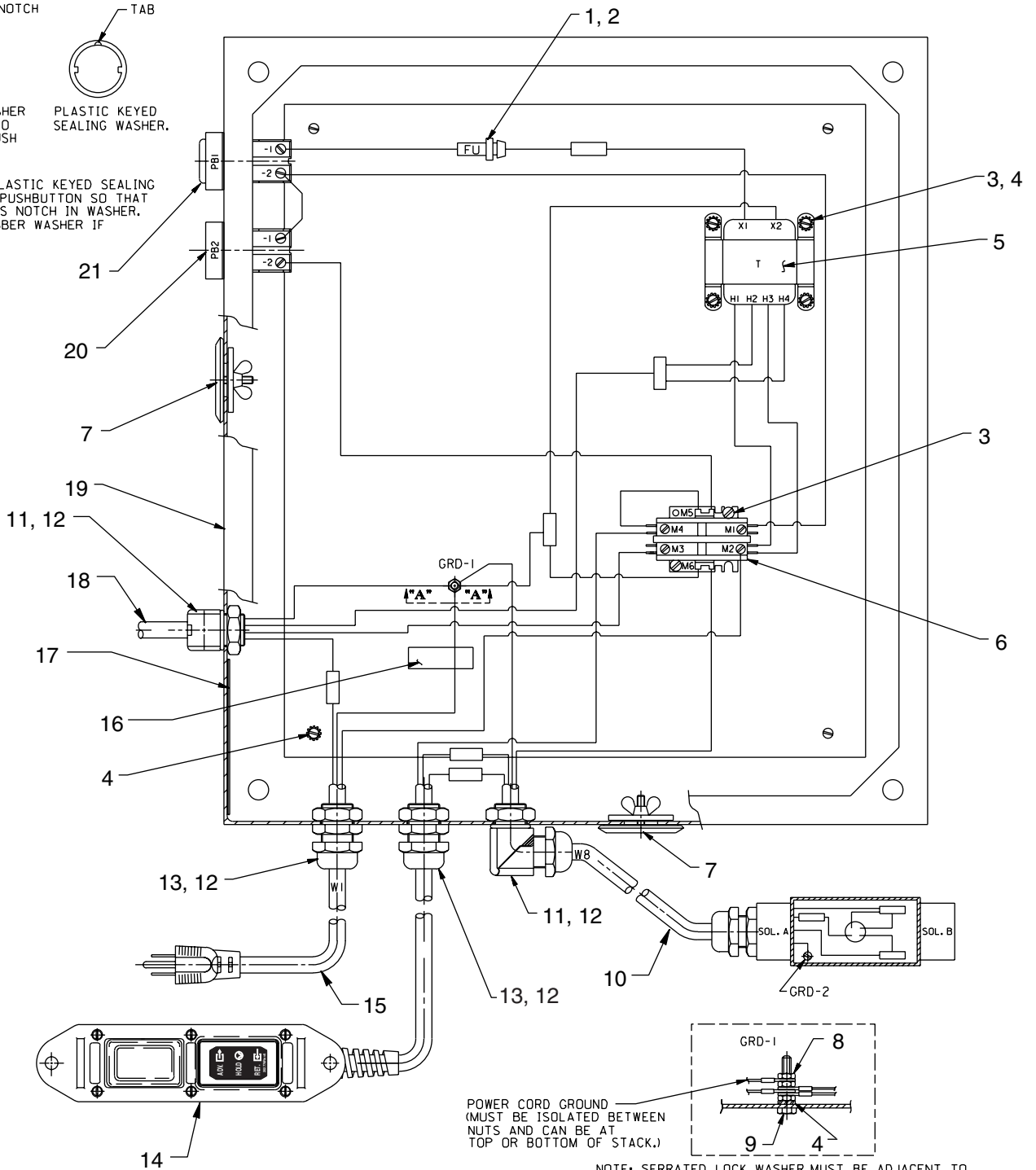
Note: Shaded areas reflect last revision(s) made to this form.

MOTOR CONTROL ASSEMBLY - SOLENOID VALVE

(FOR PE213S, PE214S, PE213S-50-220, PE214S-50-220, PE213S-230, & PE214S-230)



NOTE:
ASSEMBLE PLASTIC KEYED SEALING WASHER TO PUSHBUTTON SO THAT TAB ENGAGES NOTCH IN WASHER. ROTATE RUBBER WASHER IF REQUIRED.



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.

SECTION A-A

Parts List, Form No. 100807, Back sheet 6 of 6

Item No.	Part No.	No. Req'd	Description
1	16887	1	Fuseholder
2	250176	1	Fuse (6.25 AMP)
3	10164	4	Rd. Hd. Machine Screw (#10-24 x 3/8 Lg.)
4	11108	6	Washer (#10 External Tooth)
5	39692	1	Transformer
6	420718-4	1	Contactors
7	216669	2	Hole Plug
8	10197	3	Hex. Nut (#10-24)
9	104484	1	Hex. Hd. Machine Screw (#10-24 x 3/4 Lg.)
10	11391	2.42 ft.	Electrical Cable (18/4 SJO)
11	216667	2	90° Strain Relief
12	216680	4	Conduit Locknut
13	216666	2	Strain Relief
14	202777	1	Remote Hand Switch Ass'y (For PE213S, PE213S-50-220 & PE213S-230; See Form no. 101644)
	202778	1	Remote Hand Switch Ass'y (For PE214S, PE214S-50-220 & PE214S-230; See Form no. 101644)

Item No.	Part No.	No. Req'd	Description
15	25229	1	Cord Set (14/3 SJTO; For PE213S & PE214S)
	308752	8 ft.	Electrical Cable (14/3 SJO; For PE213S-50-220 & PE214S-50-220)
16	205189	1	Ground Decal
17	250271	1	Specifications Decal
18	309022	1.42 ft.	Electrical Cable (14/4 SJO)
19	250001	1	Electrical Control Box with Cover & Panel
20	39282	1	Pushbutton Switch (Green)
21	39283	1	Pushbutton Switch (Red)
22	10166	2	Machine Screw (#10-24 UNC X 1/2 Lg.)
PARTS INCLUDED BUT NOT SHOWN			
	11209	1	Electrical Plug (For PE213S-230 & PE214S-230)

ELECTRICAL SCHEMATIC - SOLENOID VALVE

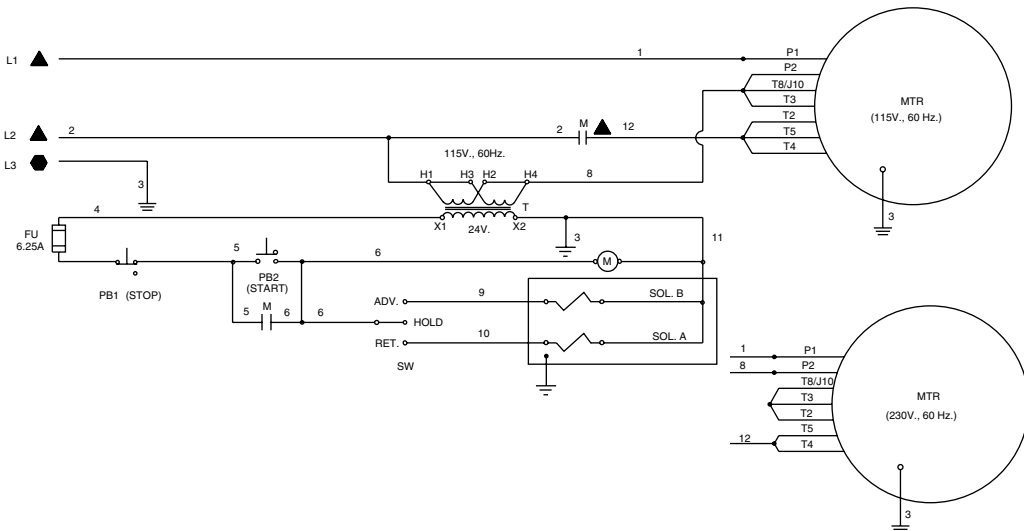


WARNING

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:

UNLESS OTHERWISE SPECIFIED ALL UNITS ARE TO BE WIRED FOR 115V. - 60Hz. (CCW ROTATION FROM LEAD END)
TRANSFORMER CONNECTIONS ARE AS SHOWN FOR 115V. - 60Hz. FOR 230V. - 60Hz. UNITS, TRANSFORMER CONNECTIONS TO BE AS FOLLOWS:

- H1 TO L1
- H2 TO H3
- H4 TO L2