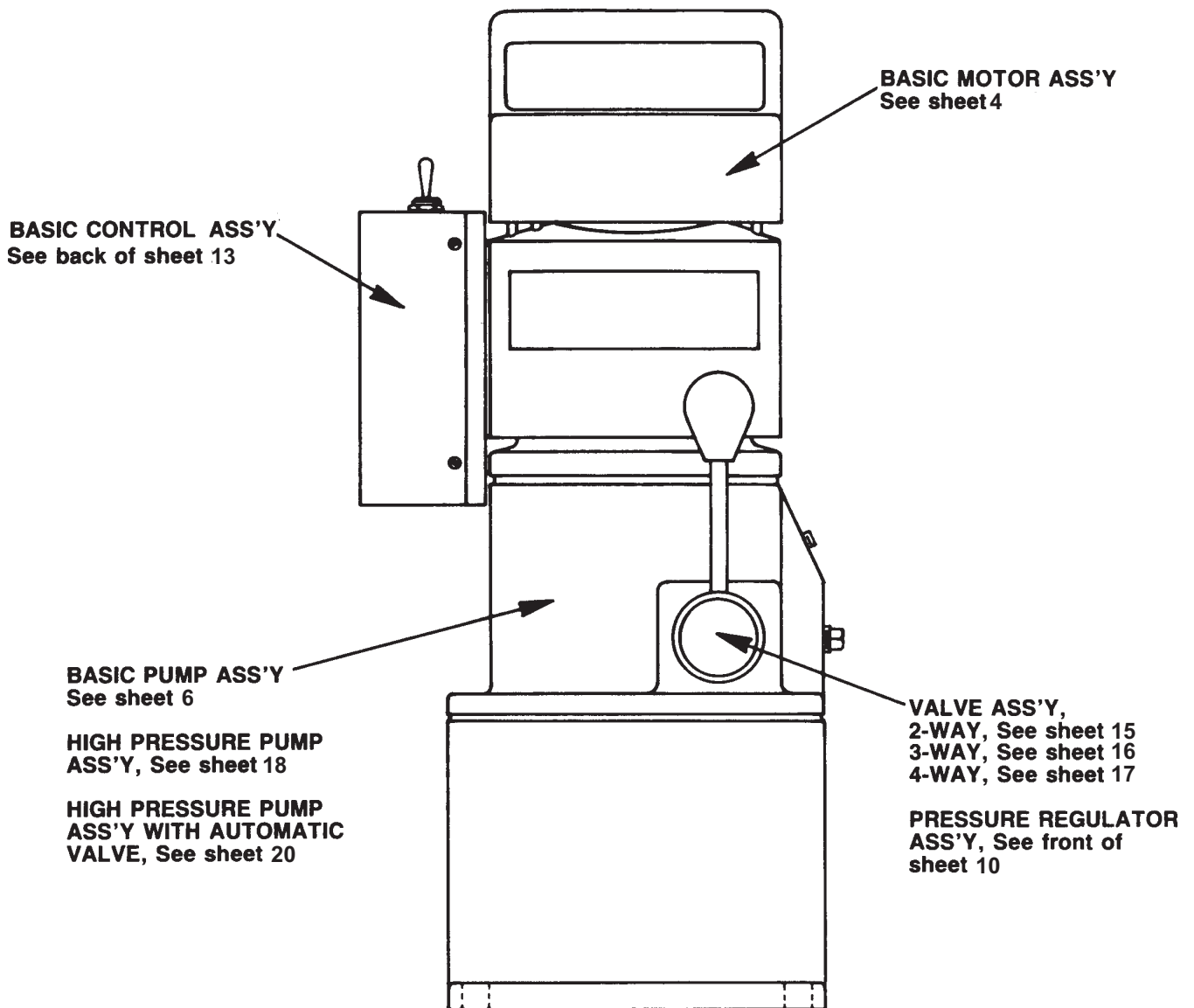


Parts List for:

2P-5500	P120-10
4031	PE18 Series
4033	
4035	
4036	

MODEL C & D HIGH SPEED HYDRAULIC PUMP

GENERAL SECTION



ELECTRICAL SCHEMATICS

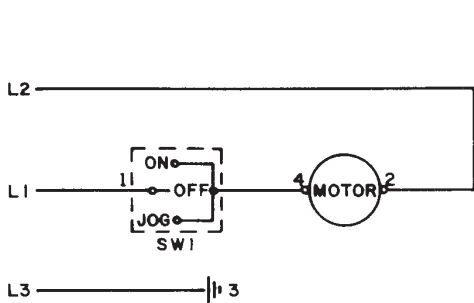
!

WARNING

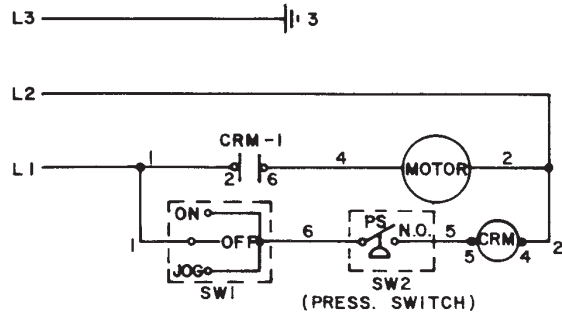
To help avoid personal injury, all electrical work must be done by a qualified electrician.

North American & International Color Codes

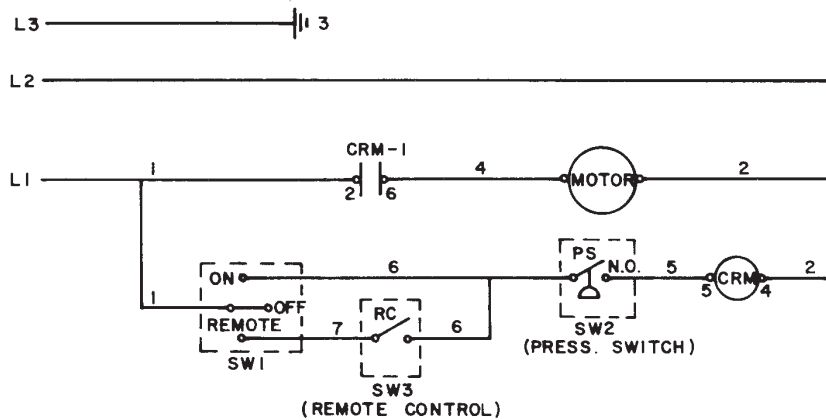
Conductors	North American	International
Line	Black	Brown
Neutral	White	Blue
Ground	Green	Green/Yellow



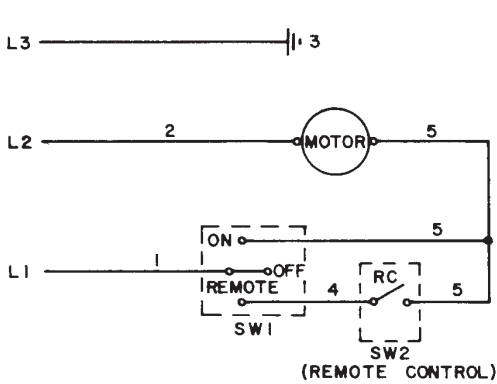
115/230 Volt with
ON/OFF/JOG Switch only



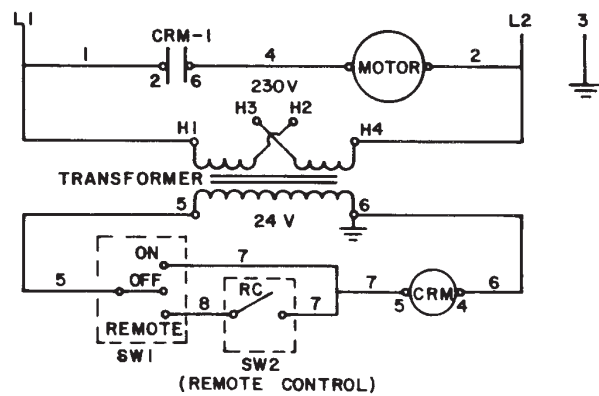
115/230 Volt with
ON/OFF/JOG & Pressure Switch



115/230 Volt with ON/OFF/REMOTE, Pressure Switch & Remote Control



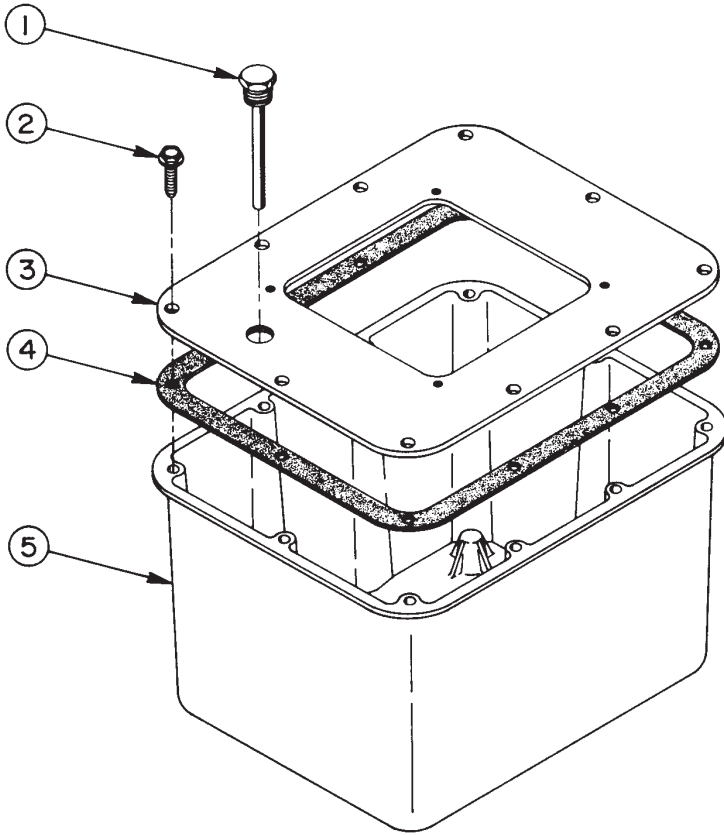
115/230 Volt with ON/OFF/REMOTE
Switch & Remote Control



230/24 Volt with ON/OFF/REMOTE
Switch & Remote Control

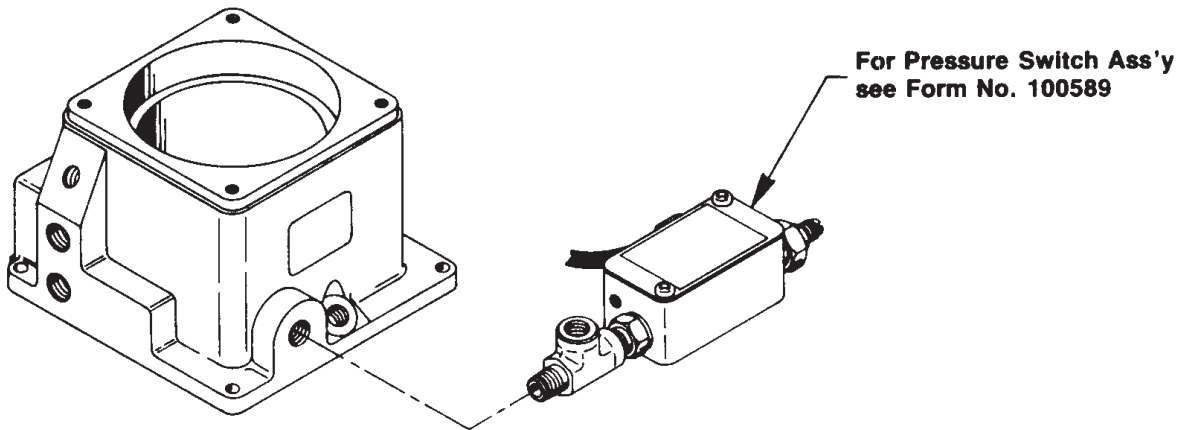
NOTE: For 115 volt system, connect transformer lines H1 & H3 together and H2 & H4 together.

TWO GALLON RESERVOIR ASSEMBLY



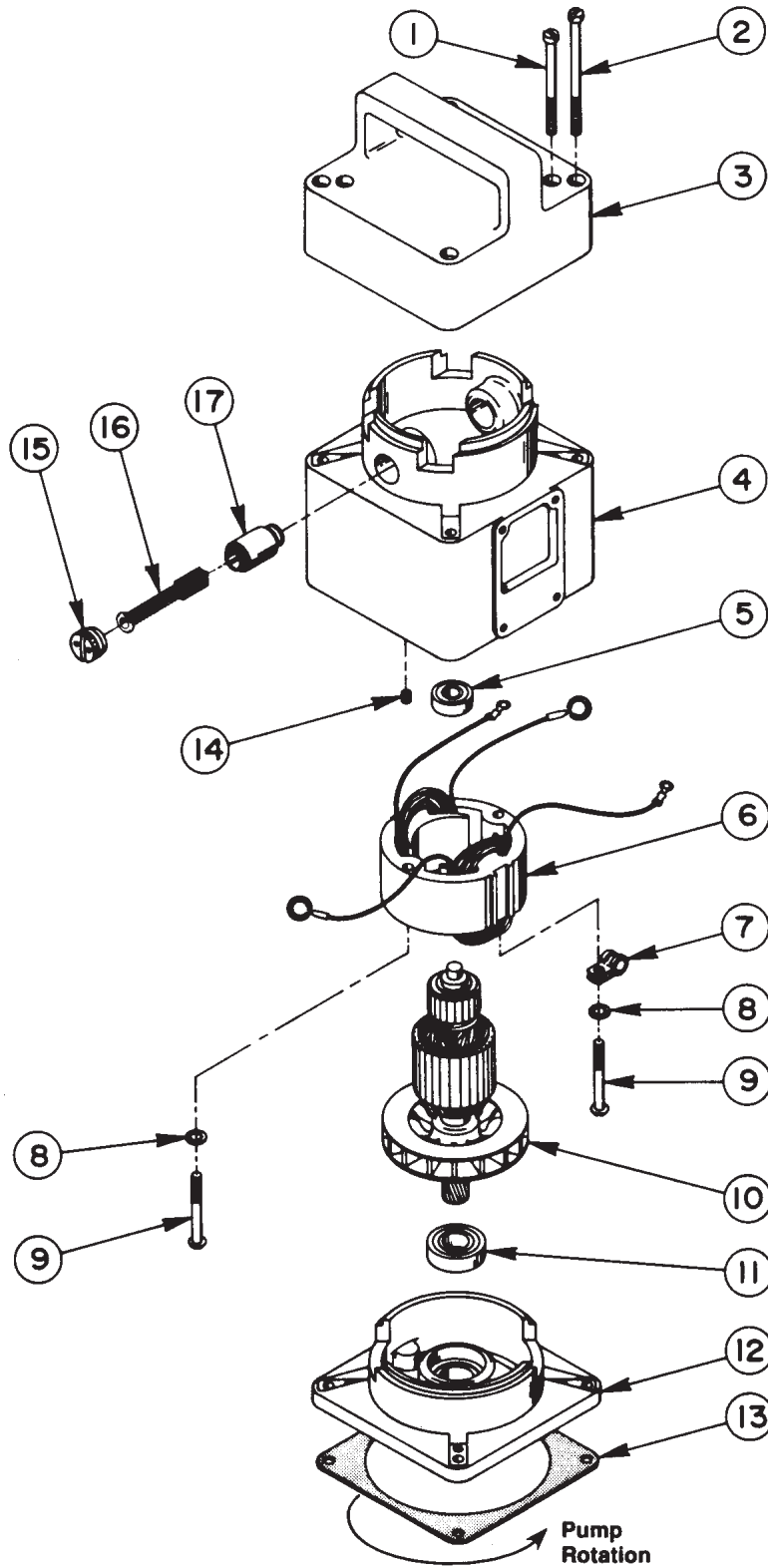
ITEM	PART NO.	QTY.	DESCRIPTION
1	200291	1	Filler Plug & Dipstick
2	209799	10	Self-tapping Screw (1/4-10 x 7/8 Lg.)
3	41174	1	Cover Plate
4	40164	1	Cover Plate Gasket
5	61165	1	Reservoir

PRESSURE SWITCH ASS'Y



Form No. 100360

BASIC MOTOR ASSEMBLY



Parts List continued

ITEM	PART NO.	QTY.	DESCRIPTION
1	12802	2	Machine Screw (10-24 UNC x 5-1/2 Lg.)
2	12820	4	Machine Screw (10-24 UNC x 6" Lg.)
3	32395	1	Motor Shell Cover
4	40750	1	Motor Shell
5	16768	1	Ball Bearing
6	12140	1	Field (115 Volt)
	12141	1	Field (230 Volt)
7	13111	1	Speed Clamp
8	12356	2	Lockwasher (#10 Internal Tooth)
9	12515	2	Machine Screw (10-24 UNC x 1-3/4 Lg.)
10	16769	1	Armature (115 Volt)
	16770	1	Armature (230 Volt)
11	12133	1	Ball Bearing
12	40753	1	Motor Base
13	†32714	1	Gasket
14	12131	2	Set Screw (10-24 UNC x 3/16 Lg.)
15	12143	2	Brush Cap
16	12144	2	Brush Assembly
17	12142	2	Brush Holder
PARTS INCLUDED BUT NOT SHOWN			
	202210	1	Spec. Decal, 115 V.
	203630	1	Spec. Decal, 230 V. (PE18 Series Only)
	202173	1	Trade Name Decal (PE18 Series)
	12858	1	Trade Name Decal (Y27 Series, 4030, 4031, 4032, 4033, 4034, 4035, 4036, & 4037)

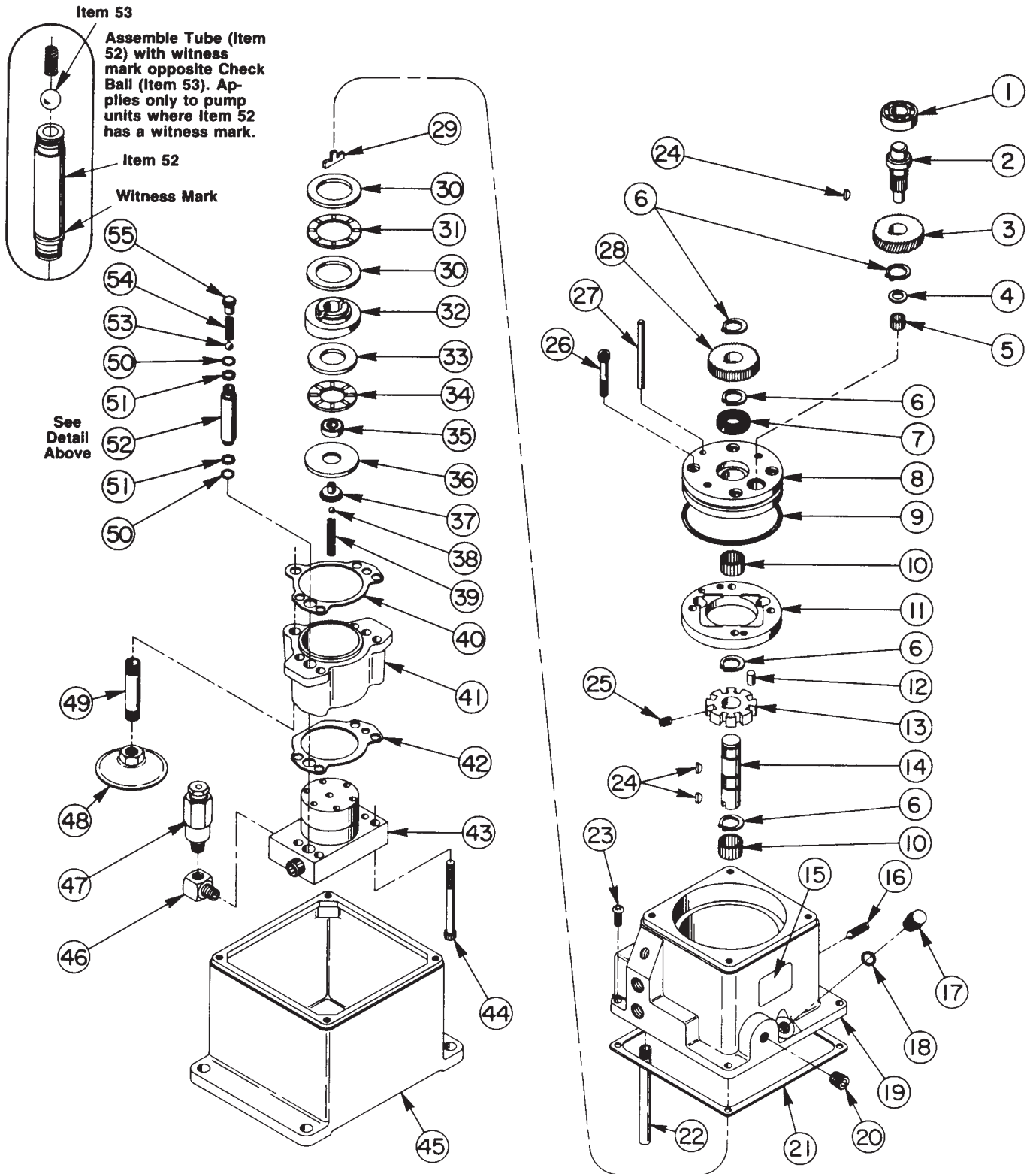
Part numbers marked with an asterisk () are **NOT** used with Pump using Automatic Valve.
 Part numbers marked with a dagger (†) are contained in Repair Kit No. 300914.

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 replacement parts!**

Additional questions can be directed to one of our Technical Services Departments.

BASIC PUMP ASSEMBLY



Parts List, continued

ITEM	PART NO.	QTY.	DESCRIPTION
1	13115	1	Ball Bearing
2	32069	1	Pinion Shaft
3	24536	1	Helical Gear
4	24744	1	Thrust Washer
5	12191	1	Needle Bearing
6	12178	5	Retaining Ring (5/8 shaft)
7	†12194	1	Oil Seal
8	33463	1	Pump End Plate
9	†10297	1	O-ring (3-1/2 x 3-1/4 x 1/8)
10	12192	2	Needle Bearing
11	33464	1	Pump Ring
12	12193	8	Roller
13	24632	1	Rotor
	28357	1	Rotor (For Automatic Valve only)
14	202857	1	Shaft
15	12204	1	Decal (Venting Instructions)
16	15305	1	Set Screw (1/4-20 UNC x 1"Lg.)
	251700	1	Seal Washer (.56 x 1/4-20 UNC)
	10383	1	Hex Jam Nut (1/4-20)
17	350974	1	Filler Cap
18	10300	1	O-ring (5/8 x 15/32 x 5/64)
19	42521	1	Pump Body (For Automatic Valve only; for other Pump Bodies, see Valve section sheets 5 of 8 and 6 of 8.)
20	10479	1	Pipe Plug (1/4 NPTF)
21	†32713	1	Gasket
22	27323	1	Tube Return
23	13026	4	Machine Screw (10-24 UNC x 3/4 Lg.)
24	12179	3	Woodruff Ket
25	14070	8	Compression Spring (1/4 O.D. x 3/8 Lg.; For Automatic Valve only)

Part numbers marked with an asterisk () are **NOT** used with Pump using Automatic Valve.
 Part numbers marked with a dagger (†) are contained in Repair Kit No. 300914.

Parts List, continued

ITEM	PART NO.	QTY.	DESCRIPTION
26	10022	4	Soc. Hd. Cap Screw (1/4-20 UNC x 1-1/2 Lg.)
27	24758	1	Locating Pin
28	24567	1	Spur Gear
29	200397	1	Key
30	11227	2	Bearing Race
31	11228	1	Needle Thrust Bearing
32	35271	1	Angle Plate
33	15432	1	Bearing Race
34	15431	1	Thrust Bearing
35	11814	1	Ball Bearing
36	23548	1	Top Plate
37	23547	1	Top Plate Bearing
38	10375	1	Ball (1/4 dia.)
39	10361	1	Compression Spring (1/4 O.D. x 1" Lg.)
40	†202691	1	Upper Gasket
41	36923	1	Spacer
42	†202690	1	Lower Gasket
43	36915	1	Pump Assembly, High Pressure (See sheet 7 of 8)
	36918	1	Pump Assembly, High Pressure (Used with Automatic Valve only, see sheet 8 of 8)
44	11956	4	Soc. Hd. Cap Screw (1/4-20 UNC x 3" Lg.; Torque to 110/120 in. lbs.)
45	40756OR9	1	Reservoir, 1/2 Gal. (PE18 Series)
	40756BL2	1	Reservoir, 1/2 Gal. (Y27 Series, 4030, 4031, 4032, 4033, 35117, & 201636-INT)
	40756GR19	1	Reservoir, 1/2 Gal. (29610 & 205242)
	40756GR4	1	Reservoir, 1/2 Gal. (27571)
	40756BR13	1	Reservoir, 1/2 Gal. (D-01023AA, D-01026-AA, & 201905)
	40756BL10	1	Reservoir, 1/2 Gal. (P120-10)
	40756RE2	1	Reservoir, 1/2 Gal. (LRE-Y27-A)
	40756BL3	1	Reservoir, 1/2 Gal. (TO-15)

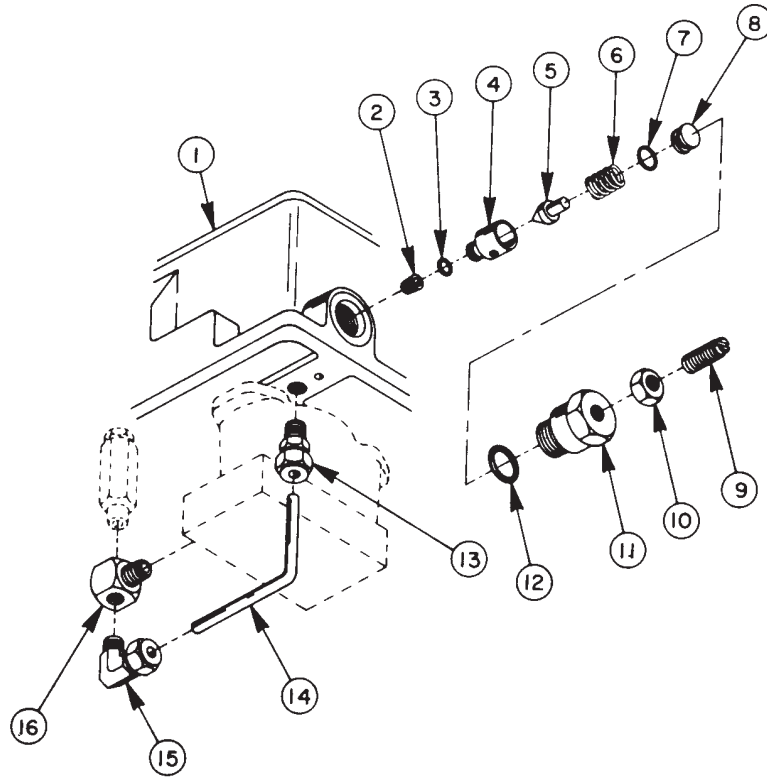
Part numbers marked with an asterisk () are **NOT** used with Pump using Automatic Valve.
 Part numbers marked with a dagger (†) are contained in Repair Kit No. 300914.

Parts List, continued

ITEM	PART NO.	QTY.	DESCRIPTION
45 (cont.)	40756TA2	1	Reservoir, 1/2 Gal. (2P-5500 & 2P-5550)
	34072	1	Reservoir, 1/2 Gal. - Special (28557)
46	24730	1	Elbow
47	21278	1	Relief Valve Assembly (Pressure setting indicated on Pump Name Plate)
48	29682	1	Filter Assembly
49	202781	1	Suction Tube
	29681	1	Suction Tube (Used with 2 gal. Reservoir)
50	†10267	2	O-ring (7/16 x 5/16 x 1/16)
51	†15085	2	Backup Washer (7/16 x 5/16 x 3/64 Thk.)
52	202688	1	Tube
53	*10377	1	Steel Ball (5/16 dia.)
54	*15141	1	Compression Spring (3/16 O.D. x 5/8 Lg.)
55	*202681	1	Ball Stop
PARTS INCLUDED BUT NOT SHOWN			
	200257	1	Prime Decal

Part numbers marked with an asterisk () are **NOT** used with Pump using Automatic Valve.
 Part numbers marked with a dagger (†) are contained in Repair Kit No. 300914.

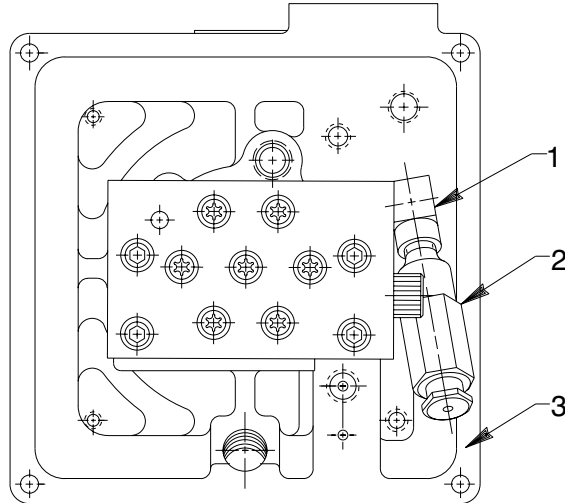
PRESSURE REGULATOR ASSEMBLY



Parts List, continued

ITEM	PART NO.	QTY.	DESCRIPTION
1	42513	1	Pump Body (For 2-way Valve & Pressure Regulator)
	42511	1	Pump Body (For 3-way Valve & Pressure Regulator)
	42517	1	Pump Body (For 4-way Valve & Pressure Regulator)
	42519	1	Pump Body (For Automatic Valve & Pressure Regulator)
	64401	1	Pump Body (For 4-way Valve & Pressure Regulator for PE184-RAY only. See illustration below.)
2	11084	1	Pipe Plug (1/16 NPTF)
3	12522	1	O-ring (3/8 x 1/4 x 1/16)
4	24634	1	Valve Seat
5	21046	1	Valve Stem
6	10428	1	Compression Spring (1/2 O.D. x 3/4 Lg.)
7	10268	1	O-ring (1/2 x 3/8 x 1/16)
8	24629	1	Spring Button
9	22362	1	Valve Adjusting Screw
10	10386	1	Jam Nut
11	21305	1	Valve Cap
12	10527	1	O-ring (13/16 x .644 x .087)
13	11173	1	Tube Connector
14	24788	1	Tube (For 2-way, 3-way, & 4-way Valve)
15	11278	1	Tube Connector Elbow
16	24702	1	Tee

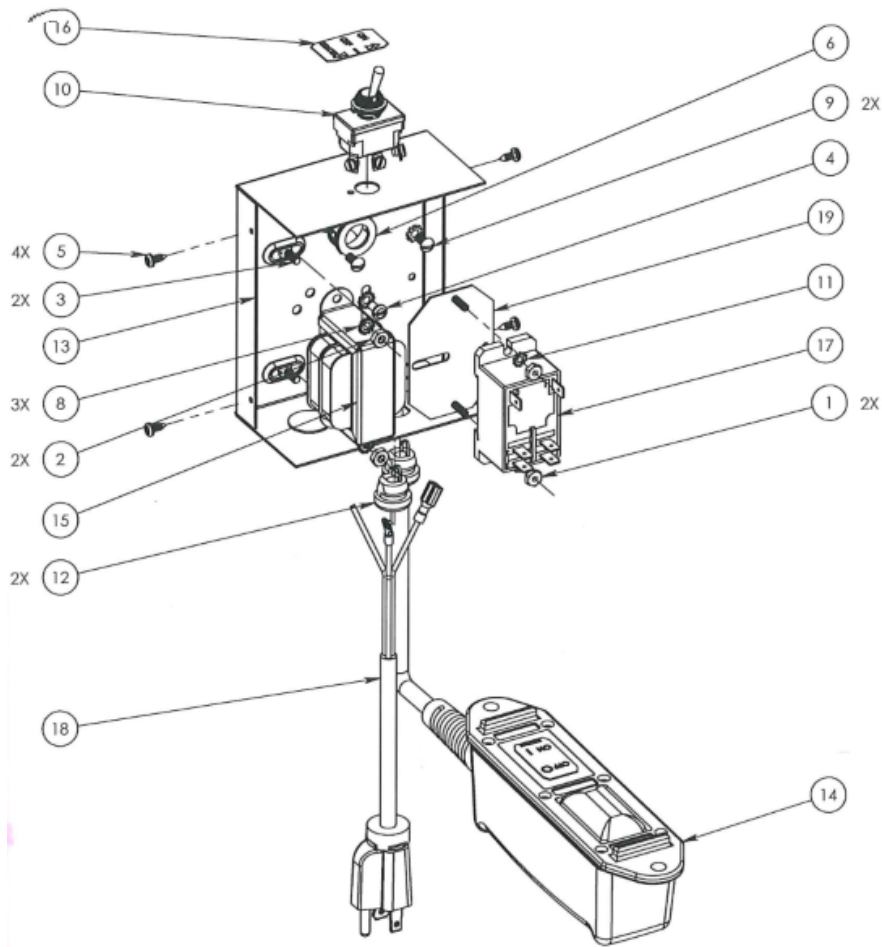
Parts List



BASIC PUMP FOR PE184-RAY ONLY			
ITEM	PART NO.	QTY.	DESCRIPTION
1	19121	1	Tee Fitting
2	21278-10	1	Relief Valve (Position as shown at left and set at 900/1, 100 PSI)
3	64401	1	Pump Body

Parts List

BASIC CONTROL ASSEMBLY



(Example) Control Box 42571R

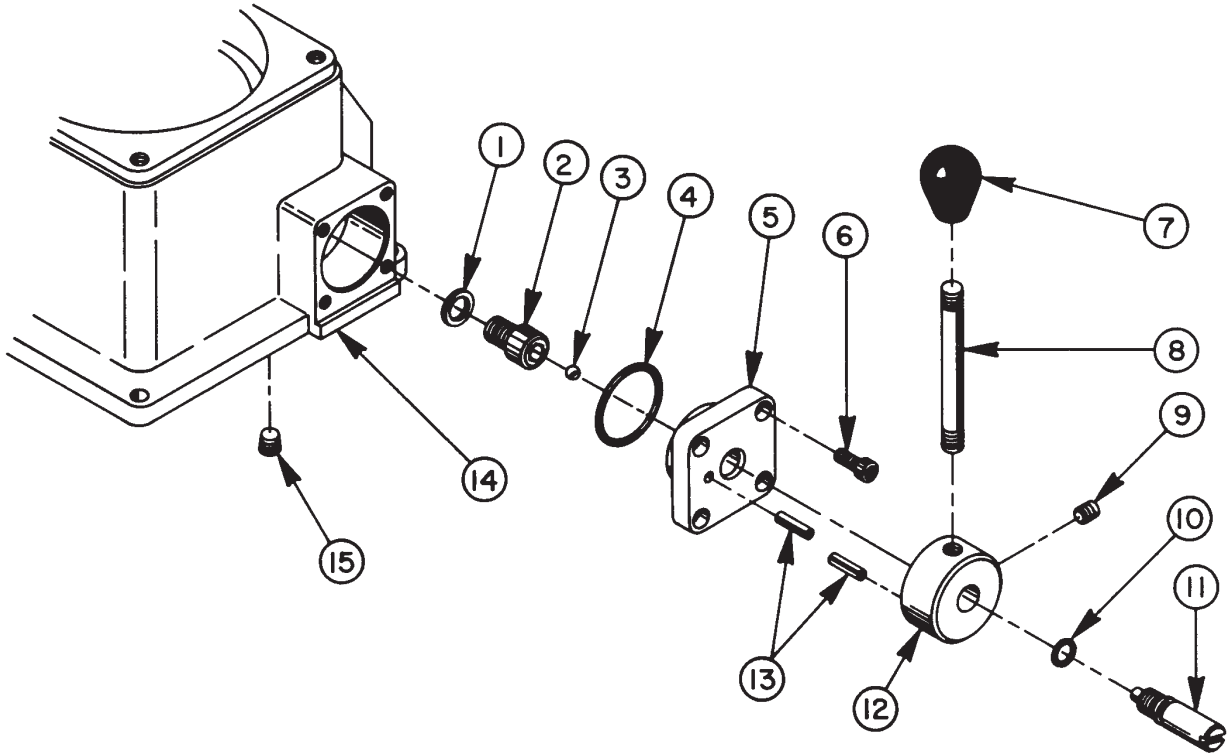
ITEM	PART NO.	QTY.	DESCRIPTION
1	10195	2	Nut, #6-32 Hex
2	10196	2	Nut, Hex 8-32
3	10962	2	Screw, Flat 8-32 X 0.50
4	10975	1	Screw, Pan 8-32 X 0.31
5	11141	4	Screw, Pan HD Tapping - Phillips 6-20 X 3/8
6	11143	1	Snap Bushing
7	11361	1	Washer, Tooth Ext 0.380 X 0.170
8	11388	3	Washer, Tooth Ext 0.370 X 0.170
9	12062	2	Screw, Rnd 8-32 X 0.38
10	12665	1	Switch, Toggle

Parts List, continued

ITEM	PART NO.	QTY.	DESCRIPTION
11	15906	2	Washer , Tooth Ext 0.310 X 0.15
12	15993	2	Bushing, Str Rel .325/.360 OD .625 Hole
13	42575WH2	1	Box, Electrical Control
14	252160	1	Remote Control Hand Switch Assy
	203225	1	Remote Control (For PE184-RAY)
	10461	1	Remote Control (Foot Operated - Not shown)
	25017	1	Remote Control (Hand Operated; See Form No. 101644)
15	305665	1	Transformer, 120V/240V to 24V, 20VA
16	352080	1	Label
17	2007848	1	Relay, DPST 230 VAC
	2007913	1	Relay, DPST 24 VAC
	2008166	1	Relay Starter (115 volt)
18	2007912	1	Cord Set (115V, 16/3 SJTO)
	25015	1	Cord Set (230 volt)
19	3000641	1	Bracket, Relay Mounting

PARTS INCLUDED BUT NOT SHOWN			
	352080	1	Indicator Decal (On/Off/Remote)
	352079	1	Indicator Decal (On/Off/Jog)
	352061	1	Metal Switch Guard
	200188	1	Warning Decal

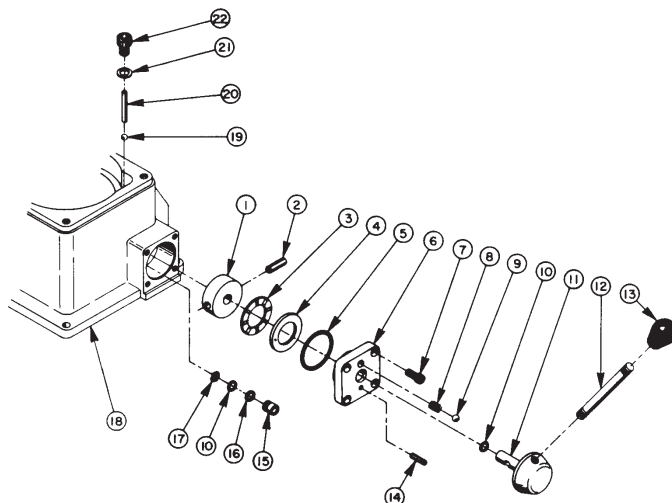
TWO-WAY VALVE ASSEMBLY



ITEM	PART NO.	QTY.	DESCRIPTION
1	12042	1	Copper Washer (9/16 x 3/8 x 1/32)
2	202774	1	Replaceable Seat (Torque to 180/200 in. lbs.)
3	10375	1	Steel Ball (1/4 dia.)
4	10914	1	O-ring (1-3/8 x 1-3/16 x 3/32)
5	27321	1	Cover
6	11434	4	Soc. Hd. Cap Screw (10-24 UNC x 1/2 Lg.)
7	12821	1	Knob
8	24564	1	Stud
9	10519	1	Set Screw (1/4-20 UNC x 3/8 Lg; Torque to 87 in. lbs.)
10	†10267	1	O-ring (7/16 x 5/16 x 1/16)
11	202775	1	Valve Stem
12	33137	1	Collar
13	11587	2	Roll Pin (1/8 dia. x 1/2 Lg.)
14	42516	1	Pump Body (For 2-way Valve only)
	42515	1	Pump Body (For 53005 only)
15	15130	1	Pipe Plug (1/16 NPTF)

Part numbers marked with a dagger (†) are contained in Repair Kit No. 300914.

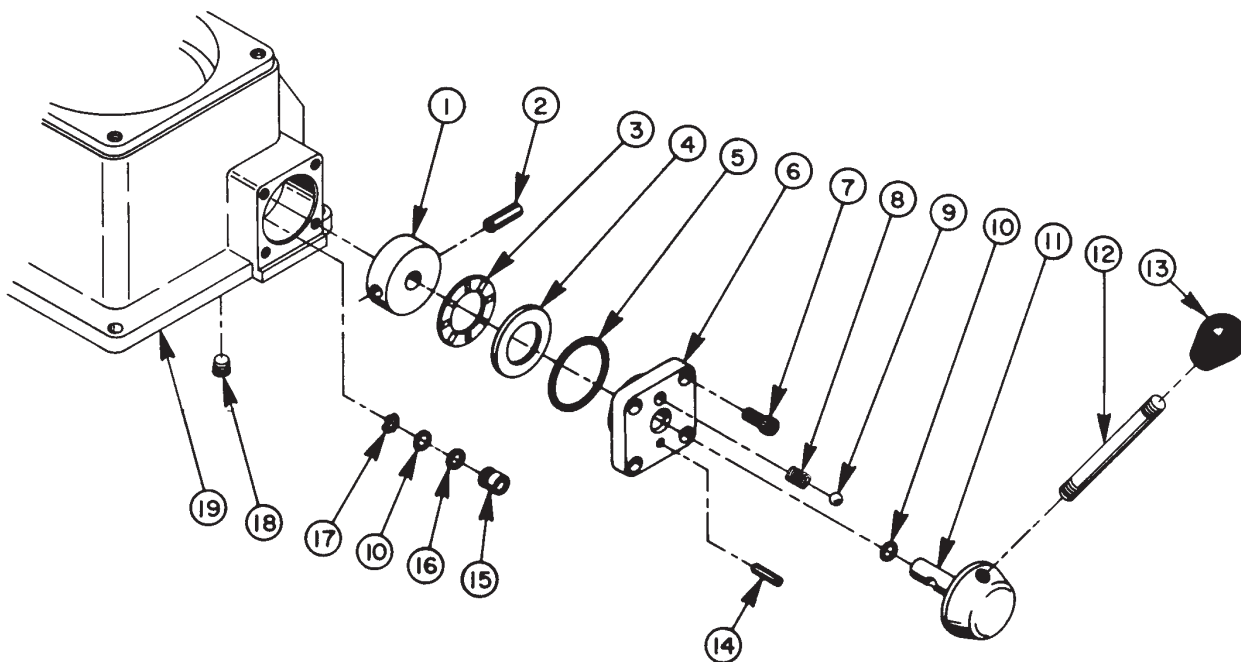
THREE-WAY VALVE ASSEMBLY



ITEM	PART NO.	QTY.	DESCRIPTION
1	27200	1	Rotor
2	10716	1	Roll Pin (1/4 dia. x 3/4 Lg.)
3	12188	1	Needle Thrust Bearing
4	12189	1	Bearing Race
5	†10930	1	O-ring (1-1/2 x 1-5/16 x 3/32)
6	25821	1	Cover
7	11434	4	Soc. Hd. Cap Screw (10-24 UNC x 1/2 Lg.)
8	12195	1	Compression Spring (1/4 O.D. x 1/2 Lg.)
9	10375	1	Steel Ball (1/4 dia.)
10	†10266	3	O-ring (3/8 x 1/4 x 1/16)
11	33117	1	Stem
12	24564	1	Stud
13	12821	1	Knob
14	11587	1	Roll Pin (1/8 dia. x 1/2 Lg.)
15	24570	2	Shear Seal
16	†12184	2	Backup Washer (3/8 x 1/4 x 0.58)
17	†12187	2	Spring Washer
18	42522	1	Pump Body (For 3-way Valve only)
19	10374	1	Steel Ball (7/32 dia.)
20	13574	1	Roll Pin (1/8 dia. x 1-1/8 Lg.)
21	†11031	1	Copper Washer (15/32 x 5/16 x 1/32)
22	25683	1	Cap Screw
	201288	1	Directional Decal (Not Shown)

Part numbers marked with a dagger (†) are contained in Repair Kit No. 300914.

FOUR-WAY VALVE ASSEMBLY

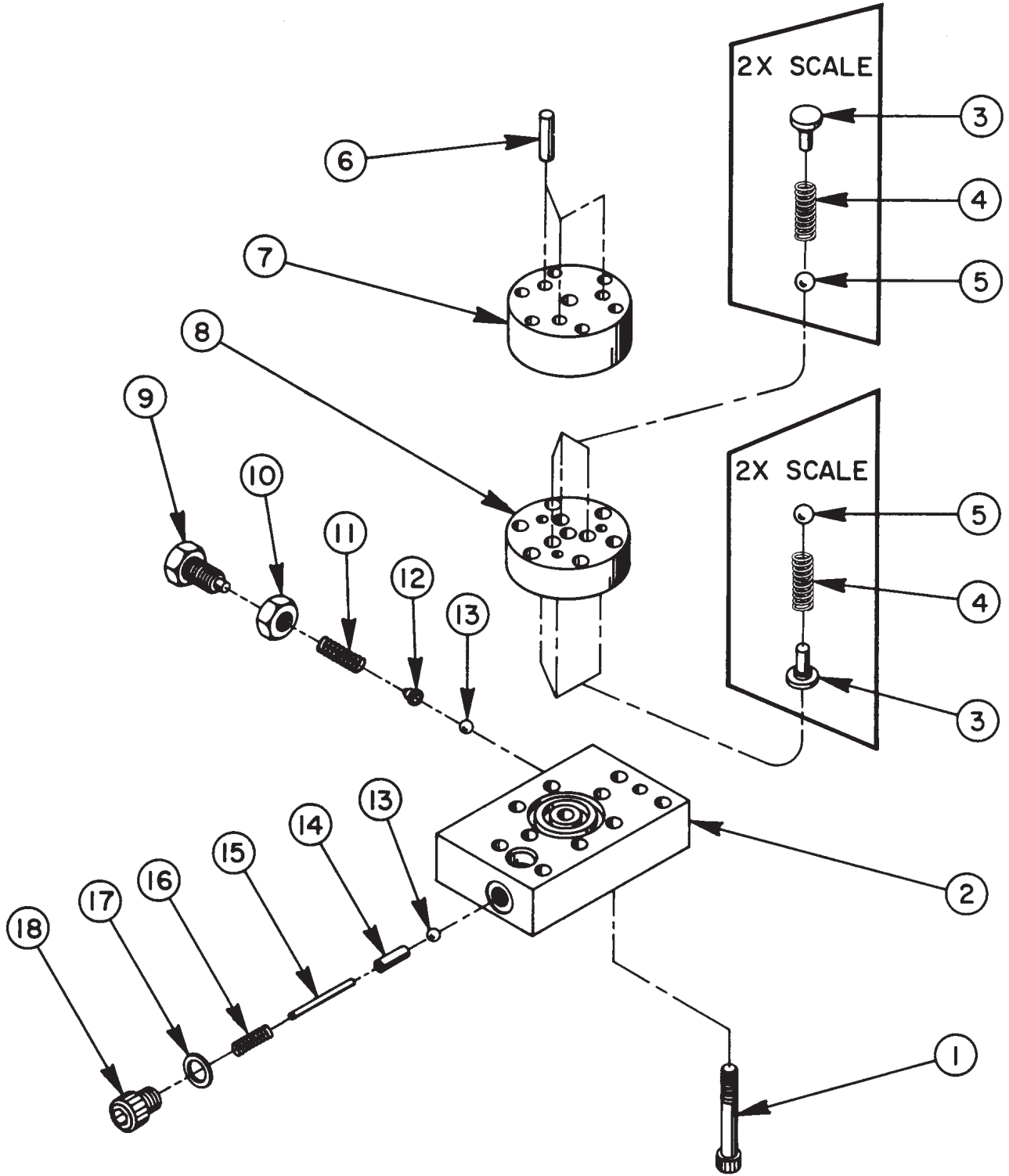


ITEM	PART NO.	QTY.	DESCRIPTION
1	32071	1	Rotor
2	10716	1	Roll Pin (1/4 dia. x 3/4 Lg.)
3	12188	1	Needle Thrust Bearing
4	12189	1	Bearing Race
5	†10930	1	O-ring (1-1/2 x 1-5/16 x 3/32)
6	25821	1	Cover
7	11434	4	Soc. Hd. Cap Screw (10-24 UNC x 1/2 Lg.)
8	12195	1	Compression Spring (1/4 O.D. x 1/2 Lg.)
9	10375	1	Steel Ball (1/4 dia.)
10	†10266	3	O-ring (3/8 x 1/4 x 1/16)
11	32070	1	Stem
12	24564	1	Stud
13	12821	1	Knob
14	11587	1	Roll Pin (1/8 dia. x 1/2 Lg.)
15	24570	3	Shear Seal
16	12184	3	Spring Water
17	12187	3	Spring Washer
18	15130	1	Pipe Plug (1/16 NPTF)
19	42520	1	Pump Body (For 4-way Valve only)
	203444	1	Directional Decal (Not Shown)

Part numbers marked with a dagger (†) are contained in Repair Kit No. 300914.

Form No. 100360

HIGH PRESSURE PUMP ASSEMBLY

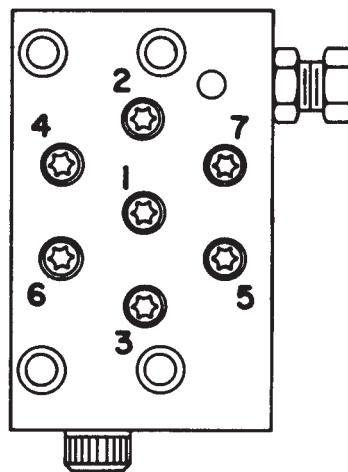


Parts List

ITEM	PART NO.	QTY.	DESCRIPTION
1	*16747	7	Torx Drive Cap Screw (See diagram below)
2	*36908	1	Pump End Plate
3	*24549	6	Valve Guide
4	*10445	6	Compression Spring (5/32 O.D. x 3/4 Lg.)
5	*12223	6	Steel Ball (3/16 dia.)
6	*20775	3	Piston
7	*40629	1	Pump Barrel
8	*40630	1	Valve Head
9	200797	1	Adapter
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	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.)

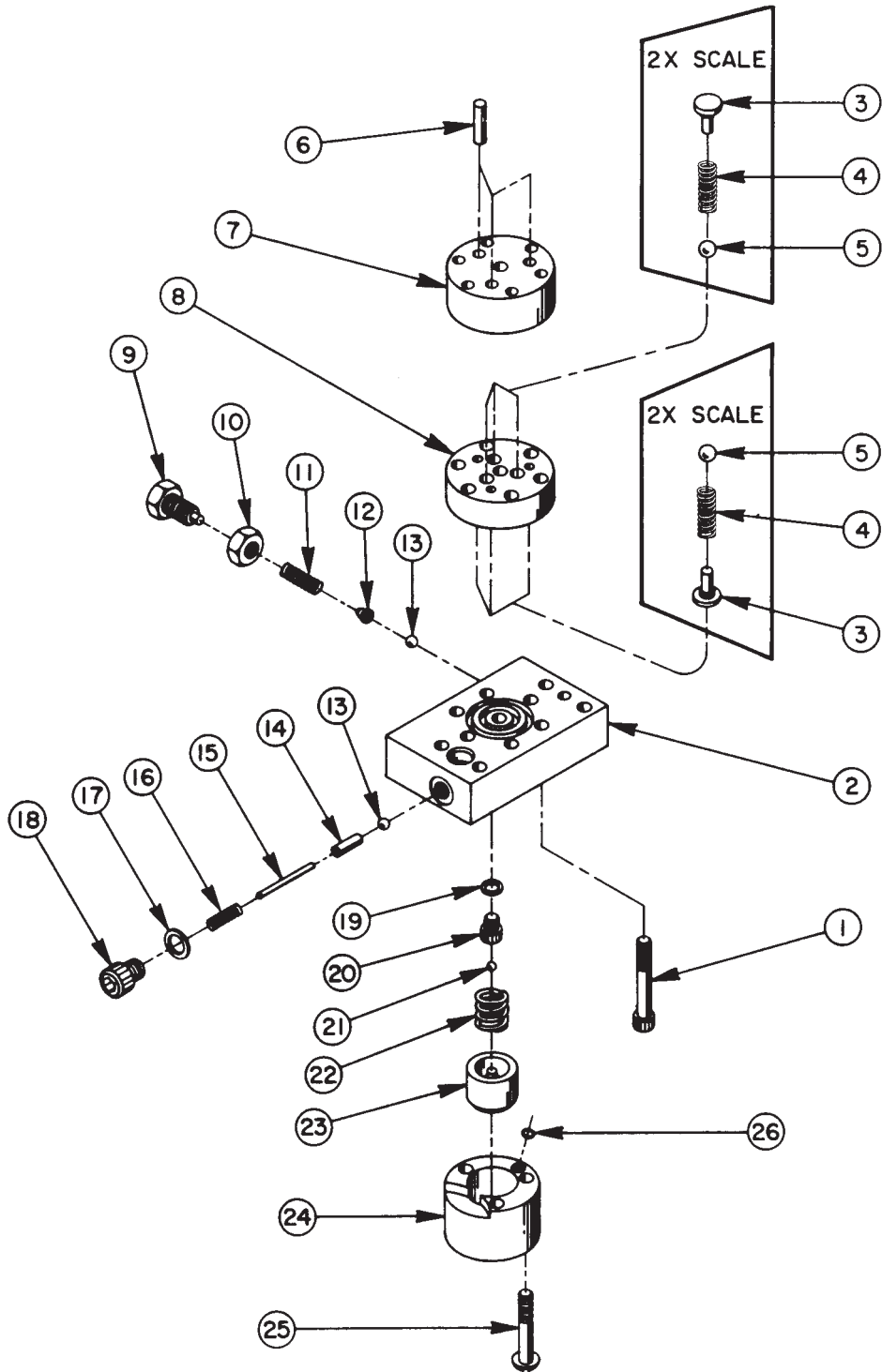
Part numbers marked with an asterisk () are **NOT** used with Pump using Automatic Valve.
 Part numbers marked with a dagger (†) are contained in Repair Kit No. 300914.

BOLT TIGHTENING SEQUENCE



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

HIGH PRESSURE PUMP ASS'Y WITH AUTOMATIC VALVE

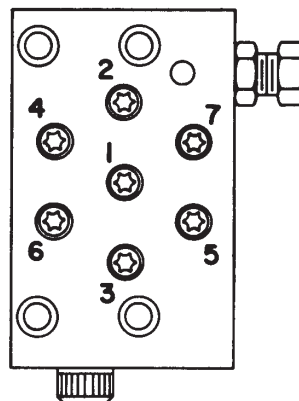


Parts List

ITEM	PART NO.	QTY.	DESCRIPTION
1	*16747	7	Torx Drive Cap Screw (See diagram below)
2	*36910	1	Pump End Plate
3	*24549	6	Valve Guide
4	*10445	6	Compression Spring (5/32 O.D. x 3/4 Lg.)
5	*12223	6	Steel Ball (3/16 dia.)
6	*20775	3	Piston
7	*40629	1	Pump Barrel
8	*40630	1	Valve Head
9	200797	1	Adapter
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	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	15129	1	Compression Spring (3/16 O.D. x 7/8 Lg.)
17	†12042	1	Copper Washer (9/16 x 3/8 x 1/32)
18	26690	1	Cap Screw (Torque to 80/90 in. lbs.)
19	†10442	1	Copper Washer (3/8 x 1/4 x 1/32)
20	201995	1	Cap Screw (Torque to 80/90 in. lbs.)
21	10419	1	Steel Ball (5/32)
22	16465	1	Compression Spring (5/8 O.D. x 3/4 Lg.)
23	202088	1	Piston
24	32077	1	Valve Cylinder
25	10614	3	Rd. Hd. Machine Screw (1/4-20 UNC x 1-1/2 Lg.)
26	†10264	1	O-ring (1/4 x 1/8 x 1/16)

Consult factory when replacing items marked with an asterisk (*).
 Part numbers marked with a dagger (†) are contained in Repair Kit No. 300914.

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



Form No. 100360