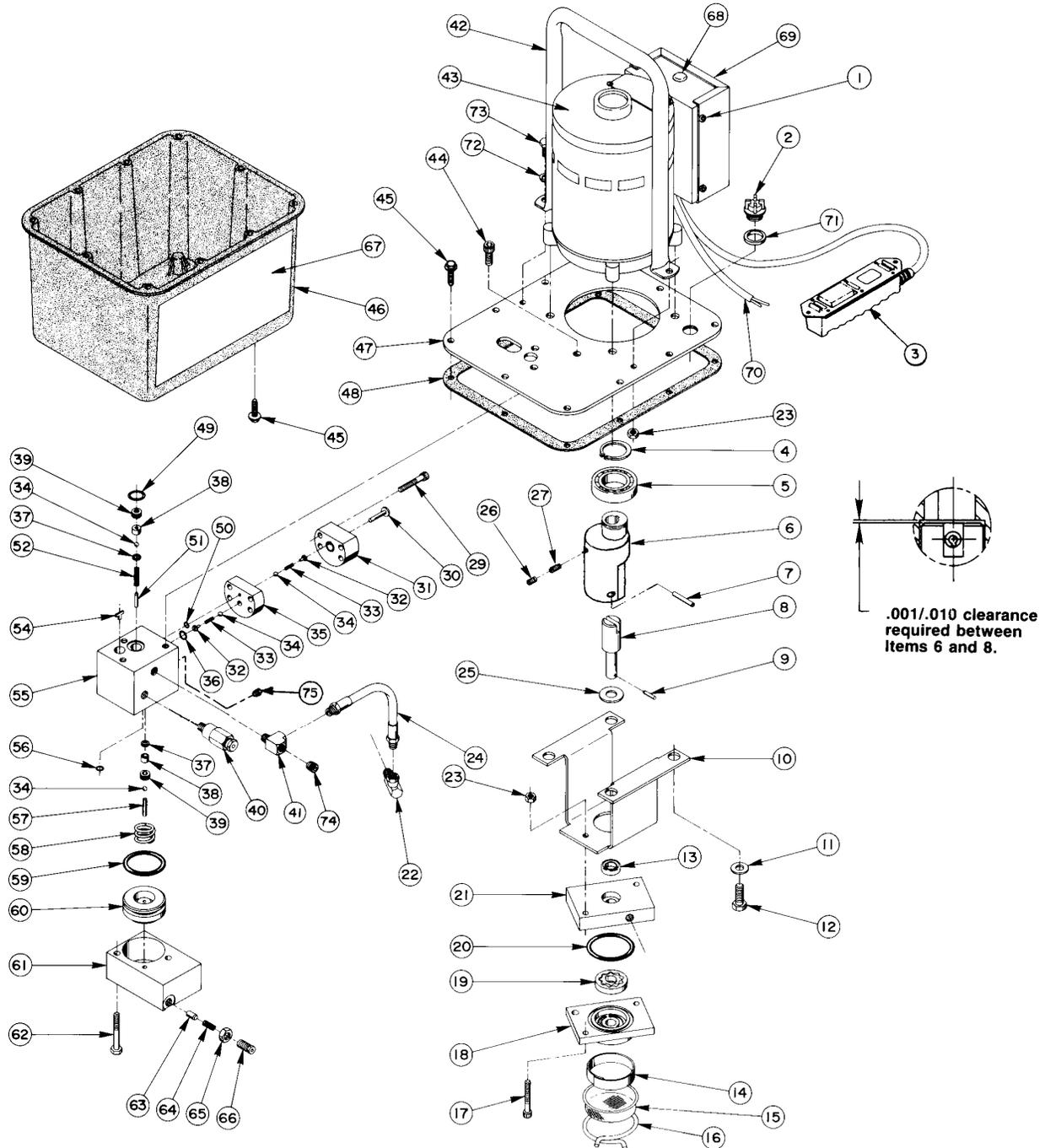


Parts List For:

4044-50-220
4046-50-220
HE172 (220V, 50 Hz)
HE174 (220 V., 50 Hz)

PE17-AMKUS
PE172-50-220
PE172A-50-220
PE172-CCL
PE174-50-220

ELECTRIC HYDRAULIC PUMP



PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY.
1	11141	SELF-TAPPING SCREW (#6-20 X 3/8 Lg.)	4
2	20937	FILLER/VENT PLUG	1
	†27142	FILLER/VENT PLUG	1
3	25017	REMOTE HAND SWITCH ASSEMBLY (See Page 13)	1
4	209798	RETAINING RING	1
5	209805	BALL BEARING	1
6	45596	ECCENTRIC	1
7	10973	SLOTTED SPRING PIN	1
8	304835	DRIVE SHAFT	1
9	209794	GEROTOR DRIVE PIN	1
10	52174	PUMP MOUNTING BRACKET	1
11	10258	WASHER	4
12	213663	SCREW (3/8-16 UNC X 1" Lg.; Torque to 230/250 in. lbs.)	4
13	*304830	SEAL	1
	†250156	SEAL	1
14	21846	FILTER SUPPORT	1
15	21608	FILTER	1
16	11461	CLAMP RING	1
17	10854	CAP SCREW (1/4-20 UNC X 1-3/4 Lg.; Torque to 60/80 in. lbs.)	2
18	61169	LOWER GEROTOR HOUSING	1
	45912	LOWER GEROTOR HOUSING (For PE17-AMKUS)	1
19	304826	GEROTOR SET	1
20	*10922	O-RING (2-1/8" X 1-15/16" X 3/32)	1
	†250158	O-RING (2-1/8" X 1-15/16" X 3/32)	1
21	61170	UPPER GEROTOR HOUSING	1
	45913	UPPER GEROTOR HOUSING (For PE17-AMKUS)	1
22	14440	SWIVEL ELBOW FITTING	1
23	10199	NUT	4
24	304819	HOSE ASSEMBLY	1
25	12595	BRASS WASHER	1
26	10519	SET SCREW (1/4-20 UNC X 3/8 Lg.; Torque to 60/80 in. lbs.)	1
27	10136	SET SCREW (1/4-20 X 1/4 Lg.; Torque to 60/80 in. lbs.)	1
29	10022	CAP SCREW (1/4-20 UNC X 1-1/2" Lg.; Torque to 110/130 in. lbs.)	4
30	304820	HIGH PRESSURE PISTON	1
31	45560	PISTON BLOCK	1
32	24549	VALVE GUIDE	2
33	*10445	COMPRESSION SPRING (5/32 O.D. X 3/4 Lg.)	2
34	*12223	BALL	4
35	45559	CHECK BLOCK	1
36	*14763	O-RING (7/16 X 5/16 X 1/16)	1
	†13472	O-RING (7/16 X 5/16 X 1/16)	1

Parts List Continued

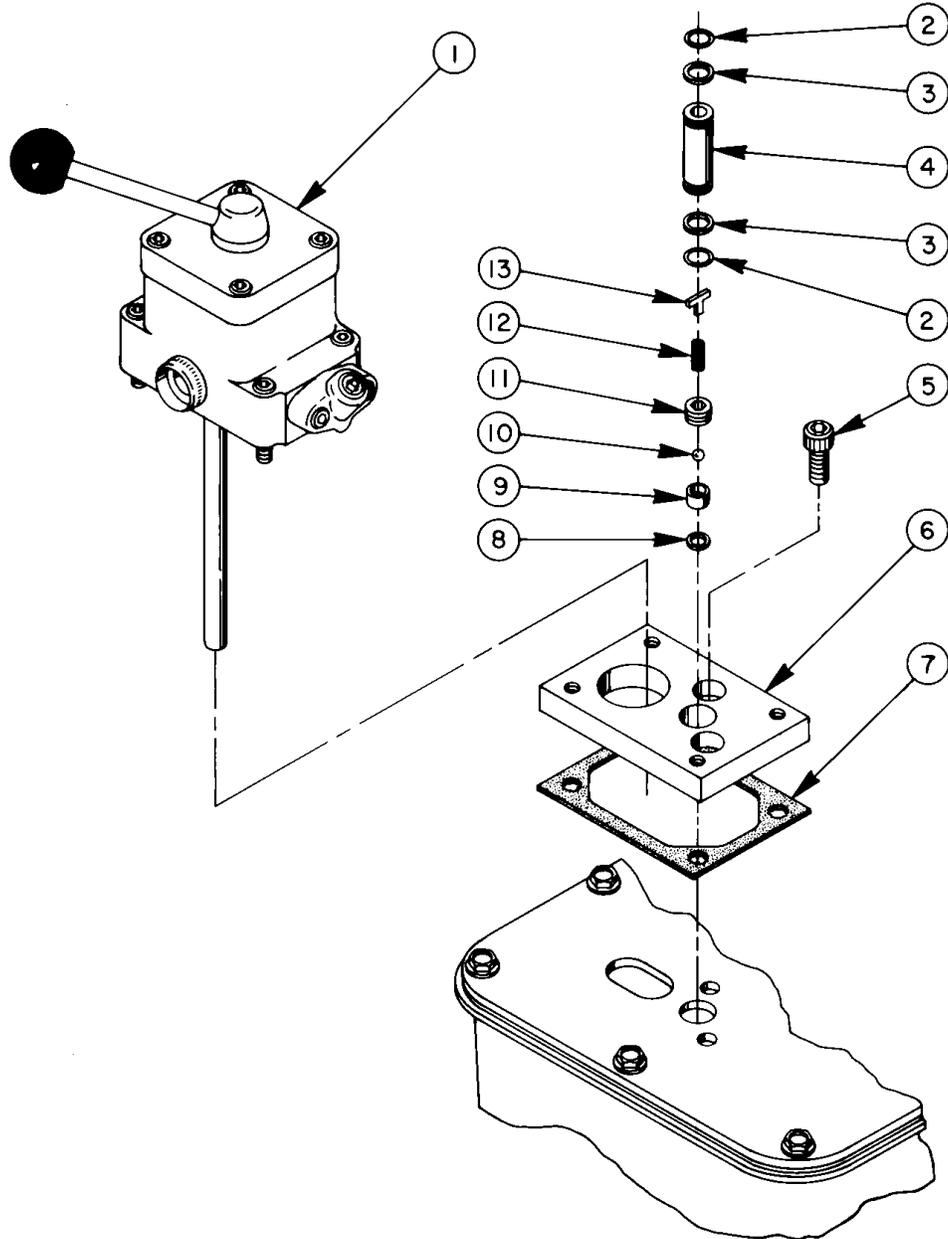
ITEM	PART NO.	DESCRIPTION	QTY.
37	*10442	COPPER WASHER	2
38	*209787	REPLACEABLE SEAT	2
39	209797	HOLLOW LOCK SCREW (7/16-20 UNF-3A; Torque to 110/130 in. lbs.)	2
40	21278	RELIEF VALVE ASSEMBLY (Set at 10,100/10,700 PSI)	1
	21278-6	LOW PRESSURE RELIEF VALVE (For PE17-AMKUS, Set at 600/640 PSI)	1
	207975-105	RELIEF VALVE (For PE172-CCL; 10,500 PSI)	1
41	19463	TEE FITTING	1
42	47492	HANDLE	1
43	59314BK2	ELECTRIC MOTOR (115/230V 50/60HZ 1PH .5HP)	1
	250313	ELECTRIC MOTOR (For PE17-AMKUS; includes toggle switch and power cord)	1
44	10030	CAP SCREW (5/16-18 UNC X 3/4 Lg.; Torque to 220/240 in. lbs.)	1
45	209799	SELF-TAPPING SCREW (1/4-10 X 7/8 Lg.; For plastic reservoir)	14
46	61165	RESERVOIR	1
47	61166BK2	COVER PLATE	1
48	*40164	COVER GASKET	1
49	*10273	O-RING (13/16 X 5/8 X 3/32)	1
	†250157	O-RING (13/16 X 5/8 X 3/32)	1
50	*10265	O-RING (5/16 X 3/16 X 1/16)	1
	†17714	O-RING (5/16 X 3/16 X 1/16)	1
51	12149	DOWEL PIN	1
52	*16057	COMPRESSION SPRING	1
54	209795	OUTLET BALL STOP	1
55	61167	CHECK BODY	1
56	*10266	O-ring (3/8 X 1/4 X 1/16)	1
	†17715	O-ring (3/8 X 1/4 X 1/16)	1
57	211843	DOWEL PIN (Loctite pin in piston hole with radius end out)	1
58	*16346	COMPRESSION SPRING (1" O.D. X 7/8 Lg.)	1
59	*10283	O-RING (2" X 1-5/8 X 3/16)	1
	†250159	O-RING (2" X 1-5/8 X 3/16)	1
60	46063	AUTO. VALVE PISTON	1
61	*52167	AUTO. VALVE BLOCK	1
62	13037	CAP SCREW (1/4-20 UNC X 2" Lg.; Torque to 40/50 in. lbs.)	2
63	15156	DOWEL PIN (Tapered end toward spring.)	1
	211170	DOWEL PIN (For PE17-AMKUS; Tapered end toward threaded plug.)	1
64	*11221	COMPRESSION SPRING (1/4 O.D. X 1" Lg.)	1
65	10386	LOCKNUT	1

Parts List Continued

ITEM	PART NO.	DESCRIPTION	QTY.
66	29786	ADJUSTING SCREW	1
	10047	ADJUSTING SCREW (For PE17-AMKUS)	1
67	304840	TRADE NAME DECAL (For 4044-50-220)	2
	304841	TRADE NAME DECAL (For PE Series)	2
	305101	TRADE NAME DECAL (For HE172)	2
	305257	TRADE NAME DECAL (For HE174)	2
	307137	TRADE NAME DECAL (For 4046-50-220)	2
68	17782	SNAP BUTTON	1
69	42576WH2	CONTROL BOX COVER	1
70	12293	POWER CORD	1
71	200415	RUBBER SEAL	1
	†17723	RUBBER SEAL	1
72	10245	LOCKWASHER	2
73	10009	CAP SCREW (1/4-20 UNC X 3/4 Lg.; Torque to 60/80 in. lbs.)	2
74	10427	PIPE PLUG (1/8 NPTF)	1
75	15130	PIPE PLUG (1/16 NPTF)	1
PARTS INCLUDED BUT NOT SHOWN			
	*200188	WARNING DECAL	1
	†11278	TUBE ELBOW	1
	†15061	MALE CONNECTOR	1
	†251229	OIL LINE	1
	†250328	DECAL (EPR Seals)	1
	351060	GASKET (Between motor and cover plate)	1
	10020	CAP SCREW (1/4-20 X 1-1/4" Lg.; For PE17-AMKUS)	3
	18969	TEE FITTING (For PE17-AMKUS)	1
	211594	RUBBER BUMPER (For PE17-AMKUS)	2
	250607	Seal Washer (For PE172-CCL)	2
	25600-1	CYLINDER HALF COUPLER (For PE172-CCL)	1
	9040	GAUGE (10,000 PSI; For PE17-AMKUS)	1
	9670	TEE FITTING (For PE172-CCL)	1
	9797	DUST CAP (For PE172-CCL)	1

OPTIONAL VALVE ASSEMBLIES

4-Way Tandem Center Directional Valve



Parts List Continued

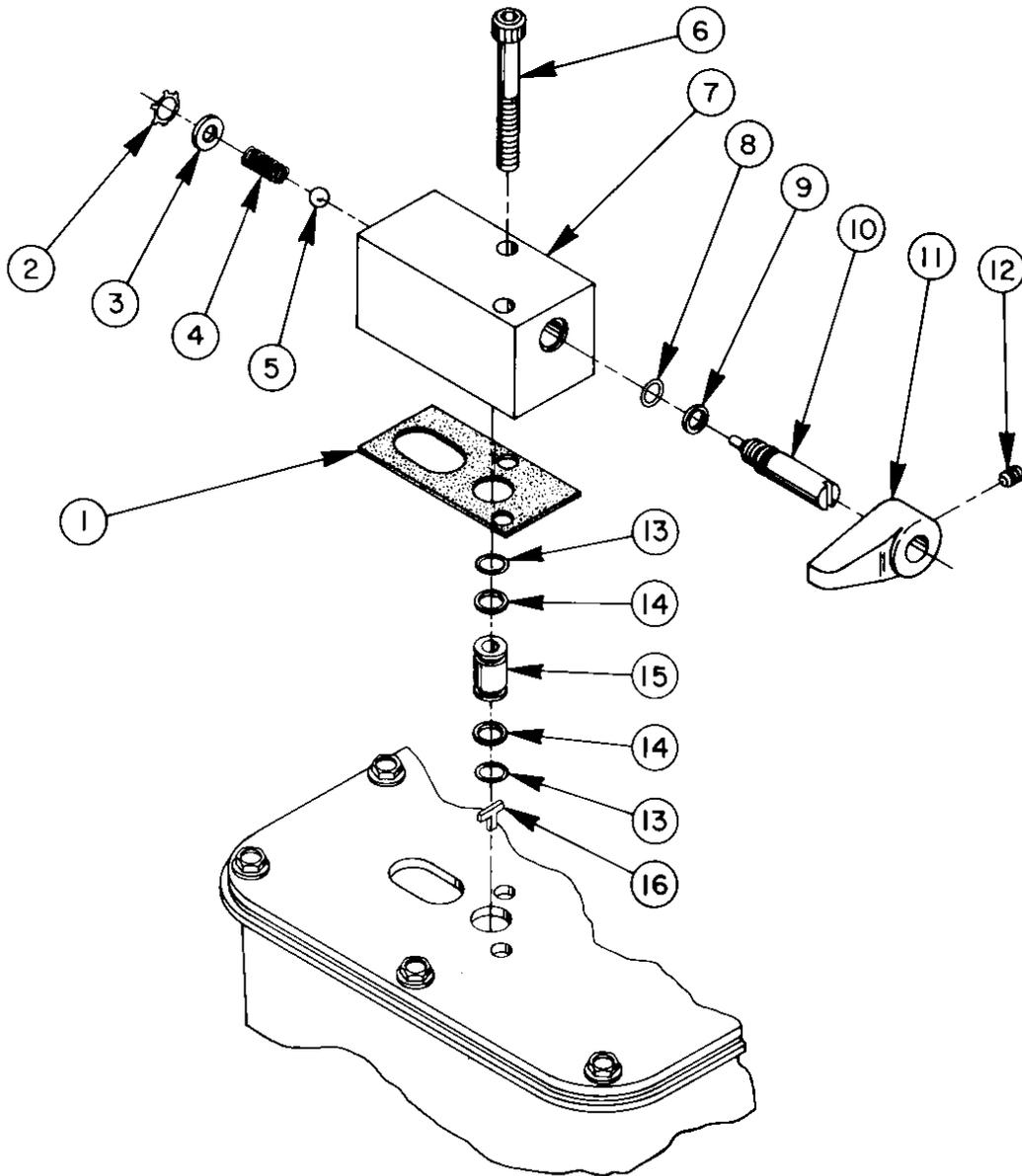
ITEM	PART NO.	DESCRIPTION	QTY.
1	9500	4-WAY VALVE ASSEMBLY (See Form No. 100623)	1
2	•*10268	O-RING (1/2 X 3/8 X 1/16)	2
	†17716	O-RING (1/2 X 3/8 X 1/16)	2
3	•*11863	BACKUP WASHER	2
4	209809	COUPLING	1
5	10030	CAP SCREW (5/16-18 UNC X 3/4 Lg.; Torque to 220/240 in. lbs.)	2
6	52165	ADAPTER BLOCK MANIFOLD	1
7	*200395	GASKET	1
8	●*10442	COPPER WASHER	1
9	●*209787	REPLACEABLE SEAT	1
10	●*12223	STEEL BALL	1
11	209797	HOLLOW LOCK SCREW (7/16-20 UNF-3A; Torque to 110/130 in. lbs.)	1
12	*211797	COMPRESSION SPRING (5/32 O.D. X 5/8 Lg.)	1
13	● 209795	OUTLET BALL STOP	1

Part numbers marked with an asterisk (*) are contained in Repair Kit No. 300430.

Part numbers marked with a dagger (†) are contained in EPR Seal Kit No. 300648.

Part numbers marked with a bullet (●) are contained in Outlet Check Repair Kit No. 300606.

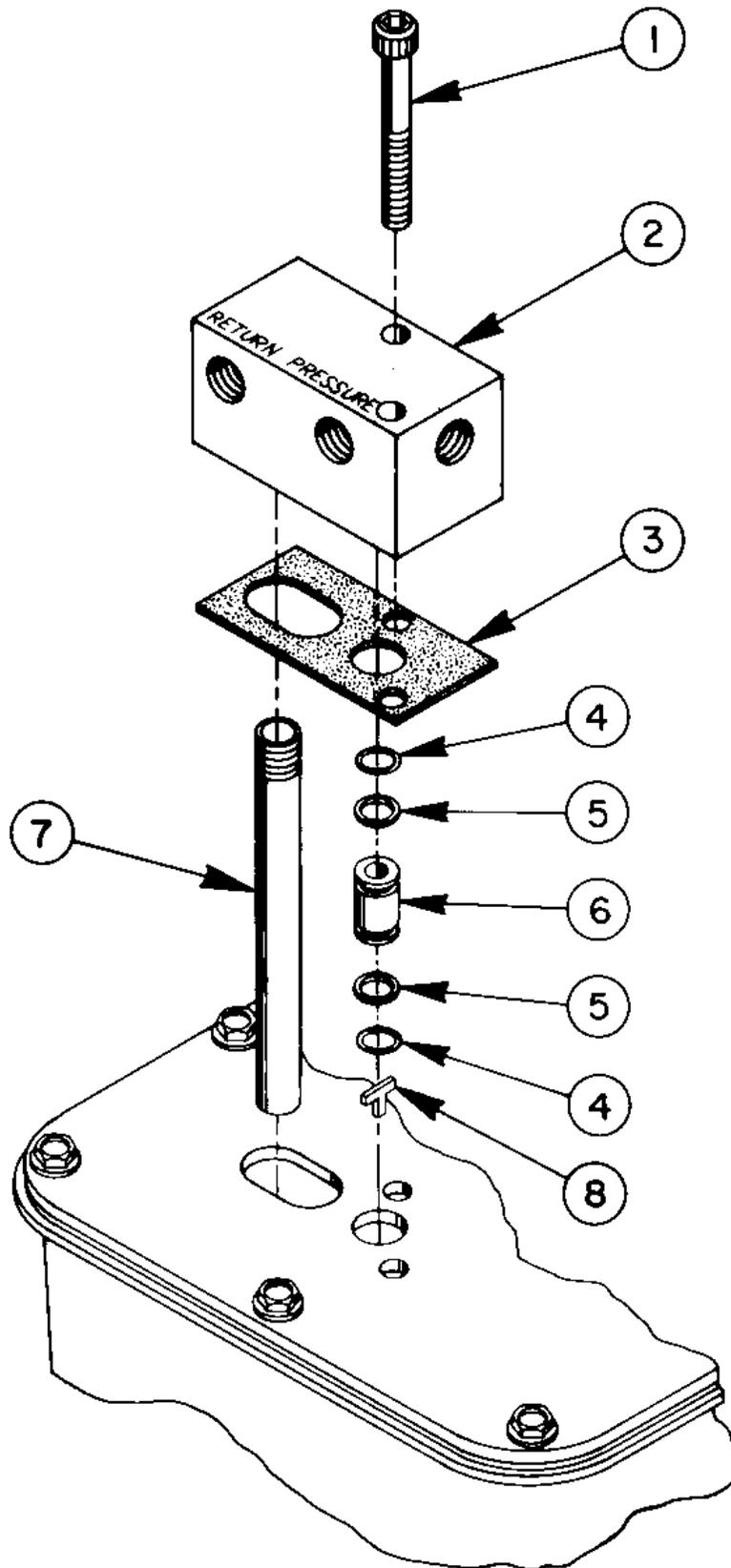
Two Position, 2-Way Manual Valve



Parts List Continued

ITEM	PART NO.	DESCRIPTION	QTY.
1	*304829	GASKET	1
2	*11088	RETAINING RING	1
3	11089	WASHER	1
4	*11024	COMPRESSION SPRING (1/4 O.D. X 5/8 Lg.)	1
5	*10375	STEEL BALL	1
6	209945	CAP SCREW (5/16-18 UNC X 2-1/2 Lg.; Torque to 220/240 in. lbs.)	2
7	52168	VALVE BODY	1
8	*10267	O-RING (7/16 X 15/16 X 1/16)	1
	†13472	O-RING (7/16 X 15/16 X 1/16)	1
9	*15085	BACKUP WASHER	1
10	304849	RELEASE VALVE SCREW	1
11	213109	RELEASE VALVE HANDLE	1
12	10556	SET SCREW (1/4-20 UNC X 1/4 Lg.)	1
13	*10268	O-RING (1/2 X 3/8 X 1/16)	2
	†17716	O-RING (1/2 X 3/8 X 1/16)	2
14	*11863	BACKUP WASHER	2
15	202505	COUPLING	1
16	209795	OUTLET BALL STOP (Part of the Basic Pump Assembly)	1
	52170	COMPLETE VALVE ASSEMBLY (Consists of items 1 thru 15)	1
<p>Part numbers marked with an asterisk (*) are contained in Repair Kit No. 300430. Part numbers marked with a dagger (†) are contained in EPR Seal Kit No. 300648.</p>			

Manifold Assembly

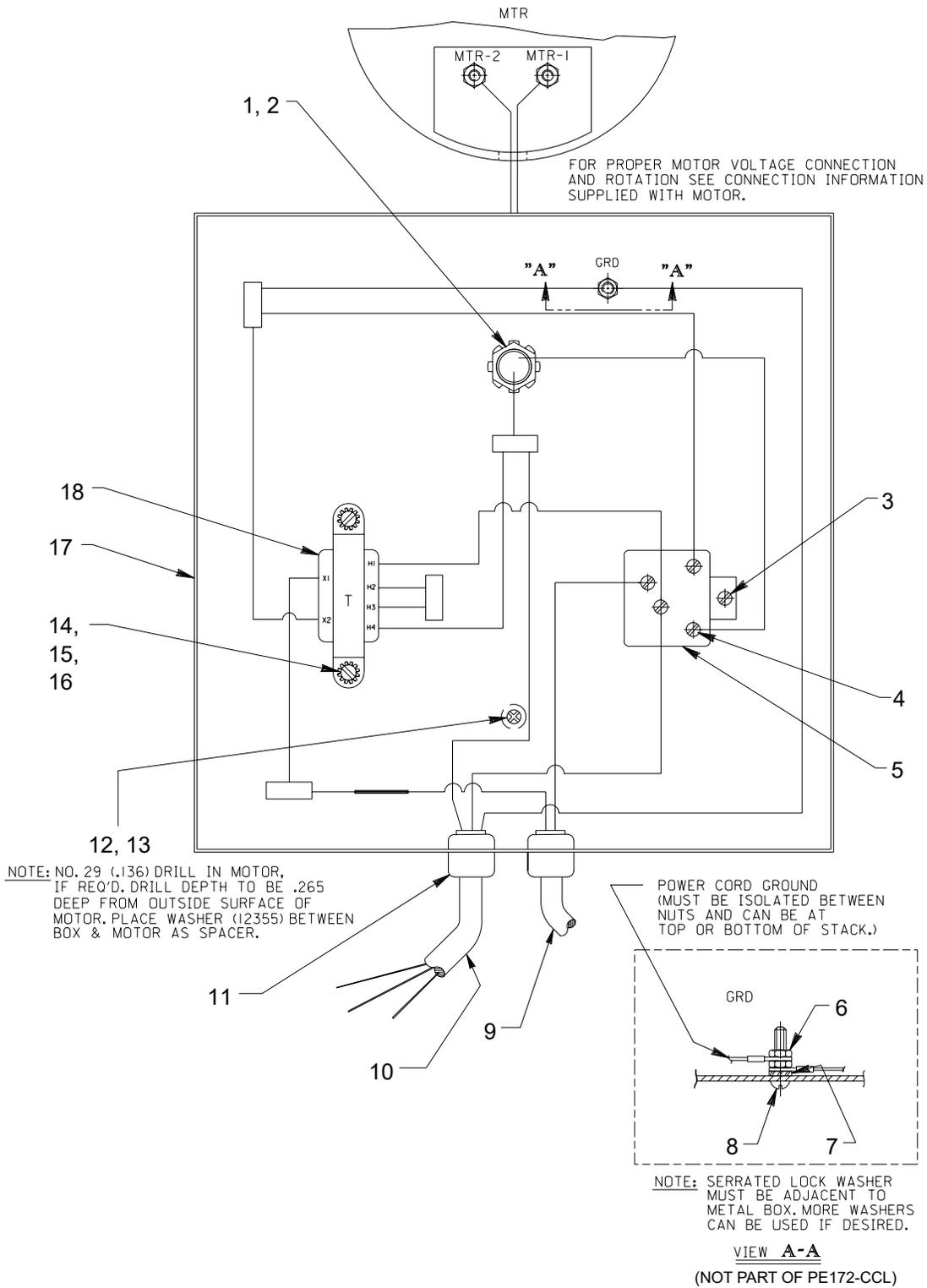


Parts List Continued

ITEM	PART NO.	DESCRIPTION	QTY.
1	209945	CAP SCREW (5/16-18 UNC X 2-1/2 Lg.; Torque to 220/240 in. lbs.)	2
2	45554	MANIFOLD	1
3	*304829	GASKET	1
4	*10268	O-RING (1/2 X 3/8 X 1/16)	2
	†17716	O-RING (1/2 X 3/8 X 1/16)	2
5	*11863	BACKUP WASHER	2
6	202505	COUPLING	1
7	200609	DRAIN LINE	1
8	209795	OUTLET BALL STOP (Part of the Basic Pump Assembly)	1

Part numbers marked with an asterisk (*) are contained in Repair Kit No. 300430.
 Part numbers marked with a dagger (†) are contained in EPR Seal Kit No. 300648.

MOTOR CONTROL ASSEMBLY

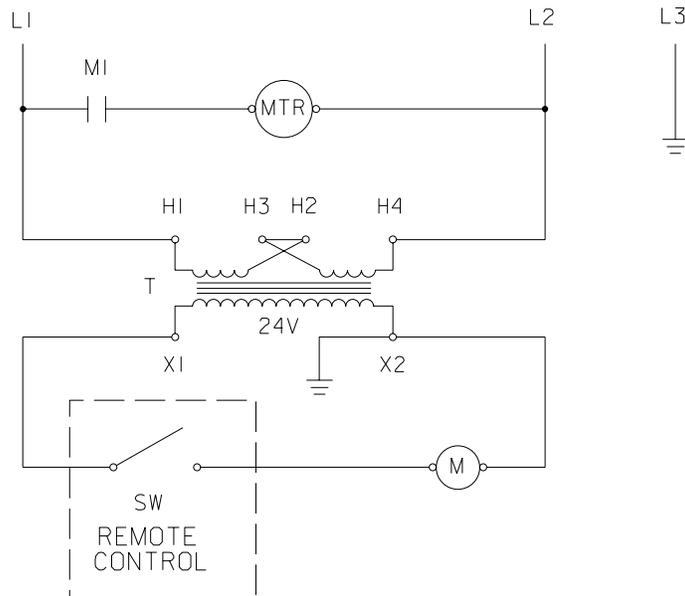


Parts List Continued

ITEM	PART NO.	DESCRIPTION	QTY.
1	11202	NIPPLE	1
3	17370	SCREW (6-20 X 1/4 Lg.)	1
4	10975	MACHINE SCREW (#8-32 UNC X 5/16 Lg.)	4
5	14667	STARTER	1
6	10197	NUT	1
7	11108	WASHER	1
8	10167	MACHINE SCREW (10-24 UNC X 3/4 Lg.)	1
9	25017	REMOTE HAND SWITCH (See Page 13)	1
10	12293	POWER CORD	7.25 ft.
11	15993	BUSHING	2
12	252253	SCREW (#8-32 X 1/2 Lg.)	1
13	12355	WASHER	1
14	10962	MACHINE SCREW (8-32 UNC X 1/2 Lg.)	2
15	10196	NUT	2
16	11388	LOCKWASHER	2
17	42575WH2	ELECTRICAL CONTROL BOX	1
18	305665	TRANSFORMER	1

ELECTRICAL SCHEMATIC

220 V., 50 Hz.



⚠ 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

ASSEMBLY INSTRUCTIONS

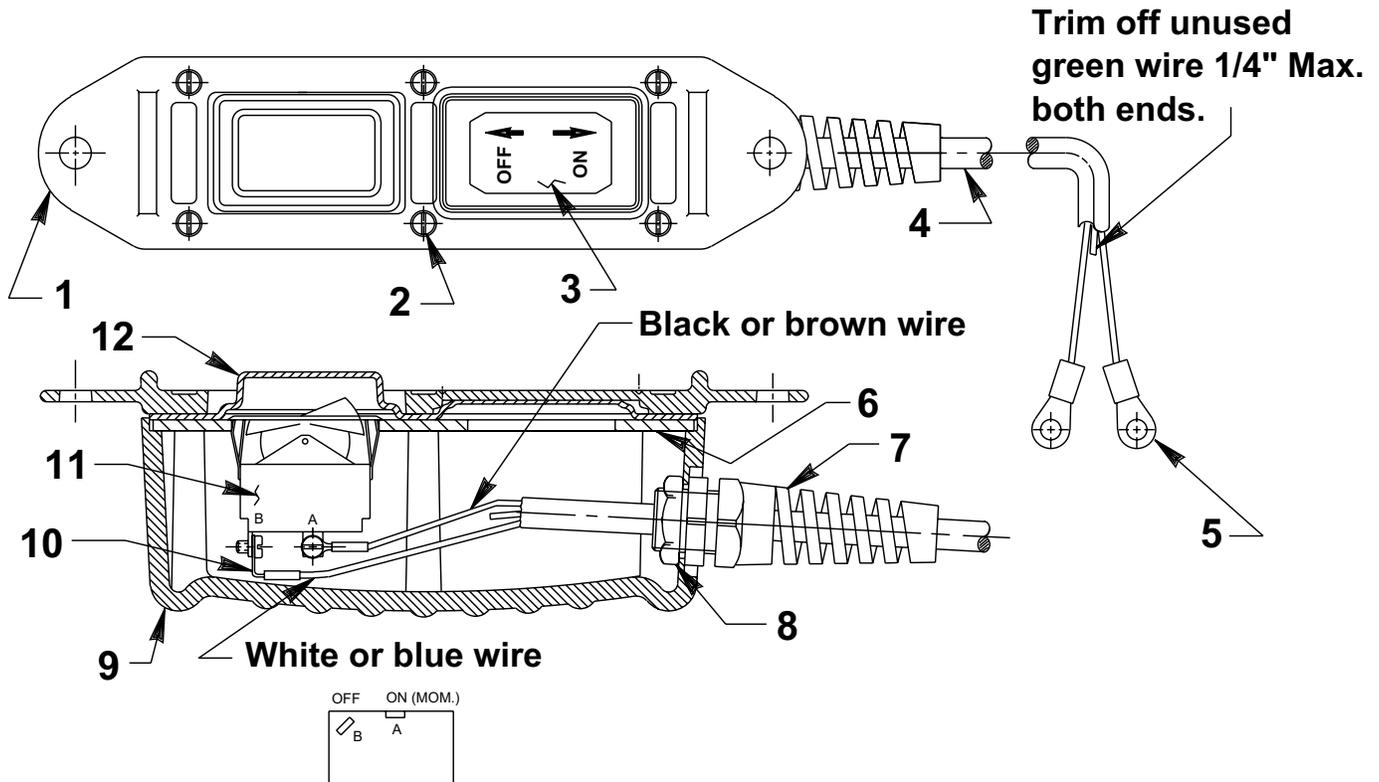
After all components have been installed and torqued, the electric motor/gerotor shafts must turn freely when rotated by hand. If binding is encountered, proceed as follows:

1. Loosen electric motor mounting screws and gerotor housing bolts.
2. Retighten screws finger tight.
3. Rotate shafts by hand until free (no binding).
4. Retorque per print.
5. Rotate shafts again by hand to verify that binding is not encountered after torquing.

Adjust the alignment of the low pressure pump section and the alignment of the high pressure pump section to reduce noise to a minimum. Torque screw #10030 (Item #44 on Page 3) and screws #209945 (Item #6 on Page 8, if pump is equipped with a two position, 2-way valve. Item #1 on Page 10, if pump is equipped with a manifold.) or screws #10030 (Item #5 on Page 6, if pump is equipped with a 4-way tandem valve) before testing and after any alignment of the high pressure pump section. Always replace washers #10258 (Item #11 on Page 2) if the low pressure pump section has been realigned and the washers have been deformed.

REMOTE HAND SWITCH ASSEMBLY

No. 25017



ITEM	PART NO.	DESCRIPTION	QTY.
1	420050-1	COVER	1
2	250248	SCREW (4-24 x 3/4 Lg.)	6
3	202763	DECAL	1
4	12908	CABLE (18/3 SJTO)	11 ft.
5	10458	RING TERMINAL	2
6	420050-3	SWITCH MOUNTING PLATE	1
7	251818	STRAIN RELIEF CONNECTOR	1
8	251802	LOCKNUT (3/4-16 UNF; Torque to 30/35 in. lbs.)	1
9	420050-4	SWITCH HOUSING	1
10	10525	RING TERMINAL	2
11	16772	ROCKER SWITCH	1
12	420050-2	GASKET	1

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.