#### **POWER TEAM®**

SPX Hydraulic Technologies 5885 11th Street Rockford, IL 61109-3699 USA

Tech. Services: (800) 477-8326 Fax: (800) 765-8326 Order Entry: (800) 541-1418 Fax: (800) 288-7031

powerteam.com

#### OTC.

SPX Corporation 655 Eisenhower Drive Owatonna, MN 55060-0995 USA Phone: (507) 455-7000 Tech. Services: (800) 533-6127 Fax: (800) 955-8329 Order Entry: (507) 455-1480 Fax: (800) 283-8665 International Sales: (507) 455-7223

Fax: (507) 455-7746

#### Parts List for:

\* 4044 4044-50-110 4045 \* 4046 4046-50-110 4047 99150-B HE172 HE174 P116-10 PA172 PA174

PE17-PARK

# Form No. 100577 pei7-Solo \* Pei72AM

\* PE172 PE172-ABC PE172-ET-230 PE172-FS \* PE172A-BOC PE172A-DAYCO PE172A-EZE PE172A-FINN PE172A-GRC PE172A-ITR \* PE172AM PE172AM-50-220 PE172F-CLEV PE172H-CLEV

PE172H-CLEV

PE172M
PE172M-50-220
PE172SF-CLEV
PE172-220-PFAFF
PE173-PC

PE174

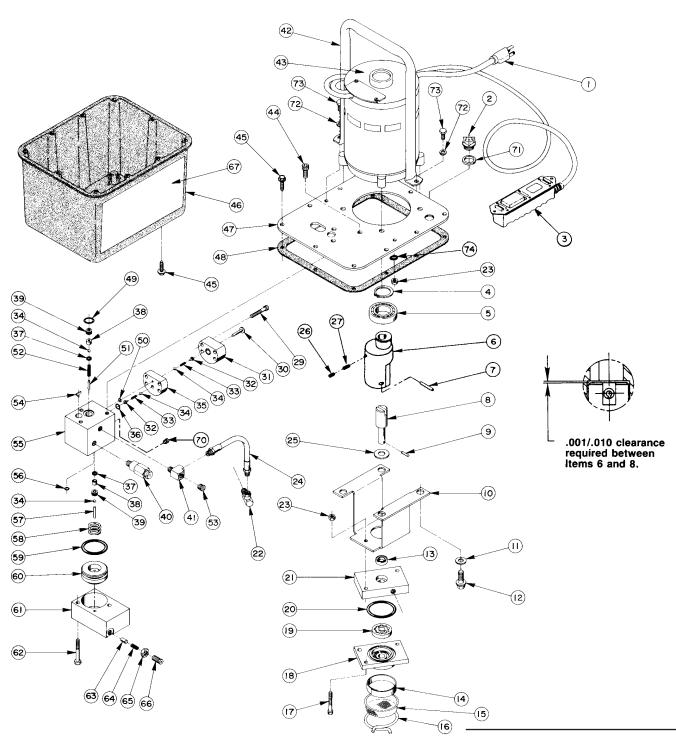
\* PE174M PE174M-ETT PE174M-50-220 PE174-220-PFAFF

\* Model B Units.

PE172AF-CLEV

PE172AH-CLEV

## **HYDRAULIC PUMP**



Sheet No. 1 of 7

Rev. 19 Date: 4 Nov 2009

# Parts List, Form No. 100577, Back sheet 1 of 7

Item	Part	No.	
No.	No.	Req'd	Description
1	24733	1	Cord Set (Elect. Version)
2	20937	1	Filler/Vent Plug
0	†27142	1	Filler/Vent Plug
3	25017 10461	1	Remote Hand Switch Ass'y (Elect. Version; See Form No. 101644) Remote Foot Switch Ass'y (For P116-10, PE172AF-CLEV, PE172-FS
	10401	'	PE172F-CLEV, & PE172H-CLEV)
4	209798	1	Retaining Ring (1-3/16 Shaft)
5	209805	1	Ball Bearing
6	45596	1	Eccentric
7 8	10973 304835	1 1	Slotted Spring Pin Drive Shaft
9	209794	i i	Gerotor Drive Pin
10	52174	1	Pump Mounting Bracket
11	10258	4	Washer (3/8 bolt)
12	213663	4	Cap Screw (3/8-16 UNC X 1" Lg.; Torque to 230/250 in. lbs.)
13	*304830 †250156	1 1	Seal Seal
14	21846	i	Filter Support
15	21608	1	Filter
16	11461	1	Clamp Ring
17	10854	2	Cap Screw (1/4-20 UNC X 1-3/4 Lg.; Torque to 60/80 in. lbs.)
18 19	61169 304826	1 1	Lower Gerotor Housing Gerotor Set
20	*10922	i	O-ring (2-1/8 X 1-15/16 X 3/32)
	†250158	1	O-ring (2-1/8 X 1-15/16 X 3/32)
21	61170	1	Upper Gerotor Housing Note: Shaded areas
22	14440	1	Swivel Elbow Fitting reflect last revision(s)
23 24	10199 304819	4 1	Nut (Air & Electric Versions) Hose Ass'y  made to this form.
25	12595	i	Brass Washer (1/2 Bolt)
26	10519	1	Set Screw (Torque to 60/80 in. lbs.)
27	10136	1	Set Screw (Air Version)
29	10022	4	Cap Screw (1/4-20 UNC X 1-1/2 Lg.; Torque to 110/130 in. lbs.)
30 31	304820 45560	1 1	High Pressure Piston Piston Block
32	24549	2	Valve Guide
33	*10445	2	Compression Spring (5/32 O.D. X 3/4 Lg.)
34	*12223	4	Ball (3/16 Dia.)
35	45559	1	Check Block
36	*14763 †13472	1 1	O-ring (7/16 X 5/16 X 1/16) O-ring (7/16 X 5/16 X 1/16)
37	*10442	2	Copper Washer (3/8 X 1/4 X 1/32 Thk.)
38	*209787	2	Replaceable Seat
39	209797	2	Hollow Lock Screw (7/16-20 UNF-3A; Torque to 110/130 in. lbs.)
40	21278	1	Relief Valve Ass'y
41	21278-88 19463	1 1	Relief Valve Ass'y (For PE172A-ITR & PE172A-FINN; Set at 8,900/9,500) Tee Fitting
42	47492	i	Handle (Air & Electric Versions)
43	58196WH2	1	Electric Motor
	58196BK2	1	Electric Motor (For PE172AF-CLEV, PE172AH-CLEV, PE172F-CLEV, &
	58196BL20	1	PE172H-CLEV) Electric Motor (For P116-10)
	13643	i	Air Motor (For models 4045, 4047, PA172, & PA174 manufactured after July 1991)
44	10030	1	Cap Screw (5/16-18 UNC X 3/4 Lg.; Torque to 220/240 in. lbs.)
45	209799	AR	Self-Tapping Screw (1/4-10 X 7/8 Lg.)
46	10177	10	Screw (1/4-20 UNC X 3/4 Lg.; For pumps with metal reservoirs.)
46	61165 61165BK2	1	Reservoir Reservoir (For PE172AF-CLEV, PE172AH-CLEV, PE172SF-CLEV,
	OTTOOBKZ	ı	PE172F-CLEV, & PE172H-CLEV)
	64538OR9	1	Reservoir (For PE172M, PE172AM, PE174AM, PE172AM-50-220, PE172A-50-220 &
	4000000		PE174M-50-220)
	40063OR9	1	Reservoir (For PE17-SOLO) Continued
			3371111434

lto	Dant	No	
Item	Part	No.	Description
No.	No.	Req'd	Description
47	61166BK2	1	Cover Plate
	61166RE2	1	Cover Plate (For P116-10)
40	66218BK2	1	Cover Plate (For PE17-PARK, PE172-ABC, PE172A-BOC & PE17-SOLO)
48	*40164	1	Cover Gasket
49	*10273	1	O-ring (13/16 X 5/8 X 3/32)
50	†250157 *10265	1 1	O-ring (13/16 X 5/8 X 3/32) O-ring (5/16 X 3/16 X 1/16)
30	†17714	1	O-ring (5/16 X 3/16 X 1/16)
51	12149	i	Dowel Pin (1/8 Dia. X 3/4 Lg.)
52	*16057	i	Compression Spring (3/16 O.D. X 1" Lg.)
53	10427	1	Pipe Plug (1/8 NPTF)
54	209795	1	Outlet Ball Stop
55	61167	1	Check Body .
56	*10266	1	O-ring (3/8 X 1/4 X 1/16)
	†17715	1	O-ring (3/8 X 1/4 X 1/16)
57	211843	1	Dowel Pin (3/16 Dia. X 1" Lg.; Loctite Pin in Piston Hole with Radius End Out)
58	*16346	1	Compression Spring (1" O.D. X 7/8 Lg.)
59	*10283	1	O-ring (2" X 1-5/8 X 3/16)
00	†250159	1	O-ring (2" X 1-5/8 X 3/16)
60 61	46063	1	Automatic Valve Plack
61 62	52167 13037	1 2	Automatic Valve Block Cap Screw (1/4-20 UNC X 2" Lg.; Torque to 40/50 in. lbs.)
63	15156	1	Dowel Pin (1/4 Dia. X 1/2 Lg.; Tapered End Toward Spring)
64	11221	i	Compression Spring (1/4 O.D. X 1" Lg.)
65	10386	i	Locknut (3/8-24 UNF)
66	*29786	1	Adjusting Screw
67	350126	2	Trade Name Decal (For 4044, 4045, 4046, 4046-50-220 & 4047)
	304840	2	Trade Name Decal (For 4044-50-110)
	307137	2	Trade Name Decal (For 4046-50-110)
	309219	2	Trade Name Decal (For PE17 Series)
	305101	2	Trade Name Decal (For HE172)
	305257	2	Trade Name Decal (For HE174)
	211929	2	Trade Name Decal (For 99150-B)
70	252187 15130	2 1	Trade Name Decal (For PE172-220-PFAFF & PE174-220-PFAFF) Pipe Plug (1/8 NPTF)
70 71	200415	1	Rubber Seal
7 1	†17723	i	Rubber Seal
72	10245	2	Lockwasher (1/4 Bolt; Air & Electric Versions)
73	10009	2	Cap Screw (1/4-20 UNC X 3/4 Lg.; Torque to 60/80 in. lbs.; Air & Electric Versions)
74	11351	2	Washer (Electric Versions)
			,
			PARTS INCLUDED BUT NOT SHOWN
	*200188	1	Warning Decal (Elect. versions)
	203972	1	Decal (CSA Approval; For 4044, 4046-50-220, 4046, PE172A-ITR & PE172A-FINN)
	†250328	1	Decal (EPR Seals)
	†11278	1	Tube Elbow
	†15061 †251229	1 1	Male Connector Oil Line
	10673	1	Fitting (For PE172AF-CLEV & PE172AH-CLEV)
	251617	1	Coupler (For PE172AF-CLEV, PE172AH-CLEV, PE172F-CLEV,
	201017	•	& PE172H-CLEV)
	10909	1	Plug Fitting (3/8 NPTF; For PE172AF-CLEV, & PE172AH-CLEV)
	251874	1	Decal (ISO; For PE172A-DAYCO)
	9796	1	Coupler (For PE172A-EZE)
	351060	1	Gasket (Between motor and cover plate)
	253524	1	Serial No. Decal (PFAFF; For PE172-220-PFAFF)
	16339	1	Foot Switch Guard (For P116-10)
	42576WH2	1	Control Box Cover (For PE17-SOLO)
	16254	1	90° Elbow Fitting (For PE172F-CLEV & PE172H-CLEV)

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.

Sheet No. 2 of 7

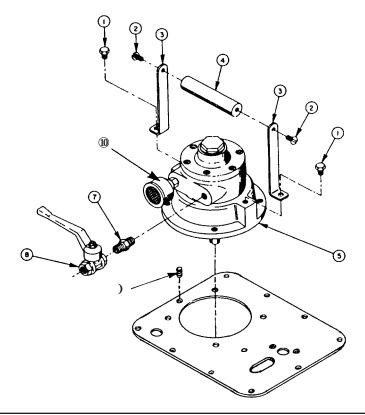
Note: Shaded areas reflect last revision(s) made to this form.

Rev. 19 Date: 4 Nov 2009

#### AIR MOTOR VERSION

(For model no.'s 4045, 4047, PA172 & PA174 manufactured before July 1991)

Note: For air version pump models manufactured after July 1991, refer to the list on back sheet 1 of 7.



Item No.	Part No.	No. Req'd	Description
		<u> </u>	<u> </u>
1	11573	2	Cap Screw (5/16-18 UNC X 1/2 Lg.)
2	10174	2	Machine Screw (1/4-20 UNC X 1/2 Lg.)
3	28157	2	Bracket
4	28158	1	Handle
5	*33405	1	Air Motor
6	15668	1	Set Screw (1/4-20 UNC X 1/2 Lg.;
			Turn in Until Flush with Cover Plate)
7	10672	1	Straight Fitting (For 4045 & 4047)
	12328	1	Straight Fitting (For PA172 & PA174)
8	211629	1	Directional Valve (For 4045 & 4047)
	13645	1	Directional Valve (For PA172 & PA174)
10	252579	1	Muffler

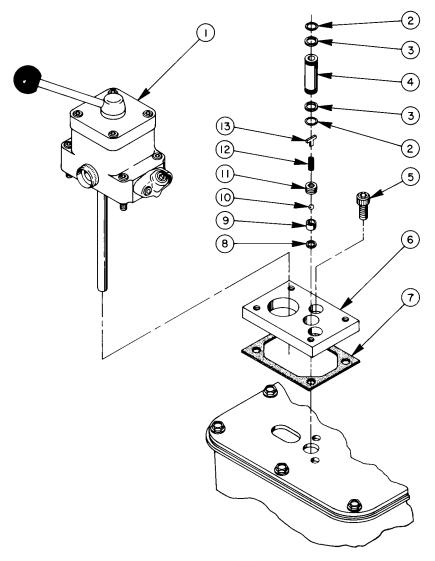
\*Note: For air motor repair kit, order no. 252170.

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 our Technical Services Department.

# **OPTIONAL VALVE ASSEMBLIES 4-Way Tandem Center Directional Valve**

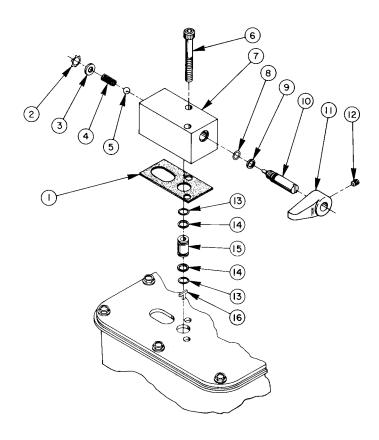


Item No.	Part No.	No. Req'd	Description	Item No.	Part No.	_	lo. eq'd	Description
1	9500	1	4-Way Valve Ass'y	7	*200395	1	Gas	sket
			(see Form No. 100623)	8	·*10442	1	Cop	pper Washer (1/4 Bolt)
2	·*10268	2	O-ring (1/2 X 3/8 X 1/16)	9	·*209787	1	Rep	placeable Seat
	†17716	2	O-ring (1/2 X 3/8 X 1/16)	10	·*12223	1	Stee	el Ball (3/16 Dia.)
3	·*11863	2	Backup Washer (1/2 X 3/8 X 1/16)	11	209797	1	Holl	low Lock Screw (7/16-20
4	209809	1	Coupling					NF-3A; Torque to 110/130 in. lbs.)
5	10030	2	Cap Screw (5/16-18 UNC X 3/4 Lg.; Torque to 220/240 in. lbs.)	12	*211797	1		npression Spring 32 O.D. X 5/8 Lg.)
6	52165	1	Adapter Block Manifold	13	·209795	1	Out	let Ball Stop

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.

Sheet No.	3 of 7
Rev. 19	Date: 4 Nov 2009

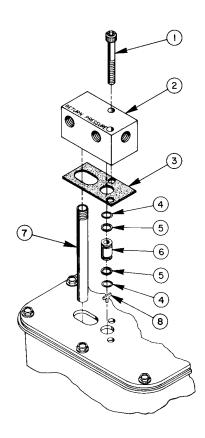
# **OPTIONAL VALVE ASSEMBLIES 2 Position, 2-Way Manual Valve**



Item No.	Part No.	No. Req'd	Description	Item No.	Part No.		o. q'd	Description
1	*304829	1	Gasket	10	304849	1	Re	lease Valve Screw
2	*11088	1	Retaining Ring (9/16 Shaft)	11	213109	1	Re	lease Valve Handle
3	11089	1	Washer (3/16 Bolt)	12	10556	1	Se	t Screw (1/4-20 UNC X 1/4 Lg.;
4	*11024	1	Compression Spring				To	orque to 30/50 in. lbs.)
			(1/4 O.D. X 5/8 Lg.)	13	*10268	2	O-1	ring (1/2 x 3/8 X 1/16)
5	*10423	1	Steel Ball (9/32 Dia.)		†17716	2	O-1	ring (1/2 x 3/8 X 1/16)
6	209945	2	Cap Screw (5/16-18 UNC X 2-1/2 Lg.;	14	*11863	2	Ba	ckup Washer (1/2 X 3/8 X 1/16)
			Torque to 220/240 in. lbs.)	15	202505	1	Co	upling
7	52168	1	Valve Body	16	209795	1	Ou	tlet Ball Stop (Part of the Basic
8	*10267	1	O-ring (7/16 X 5/16 X 1/16)				Р	ump Ass'y)
	†13472	1	O-ring (7/16 X 5/16 X 1/16)				_	
9	*15085	1	Backup Washer (7/16 X 5/16 X 3/64 Thk.)		52170	1		mplete Valve Ass'y (Consists of ems 1 thru 15)

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.

#### **MANIFOLD ASSEMBLY**

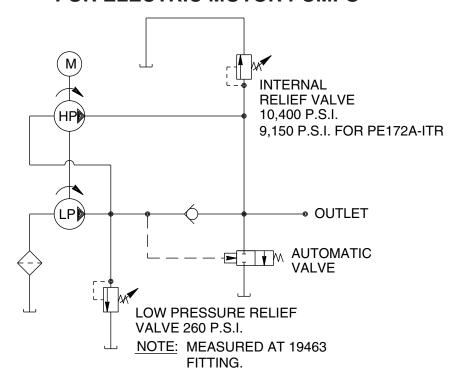


Item No.	Part No.	No. Req'd	Description	Item No.	Part No.	N Re		Description
1	209945	2	Cap Screw (5/16-18 UNC X 2-1/2 Lg.; Torque to 220/240 in. lbs.)	5	*11863	2		up Washer X 3/8 X 1/16)
2	45554	1	Manifold	6	202505	1	Coup	,
3	*304829	1	Gasket	7	200609	1		ı Line
4	*10268 †17716		O-ring (1/2 X 3/8 X 1/16) O-ring (1/2 X 3/8 X 1/16)	8	209795	1		et Ball Stop (Part of the Basic ip Ass'y)

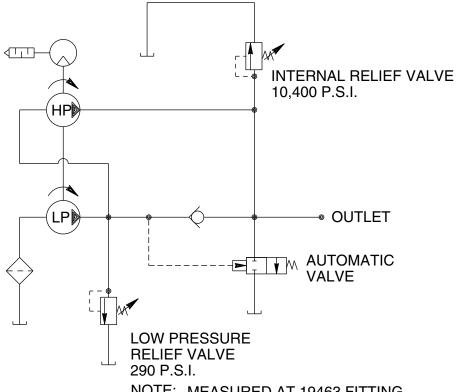
Part numbers marked with as asterisk (\*) are contained in Repair Kit No. 300430. Part numbers marked with a dagger (†) are contained in EPR Seal Kit No. 300648.

Sheet No.	4 of 7
Rev. 19	Date: 4 Nov 2009

### **HYDRAULIC SCHEMATIC** FOR ELECTRIC MOTOR PUMPS

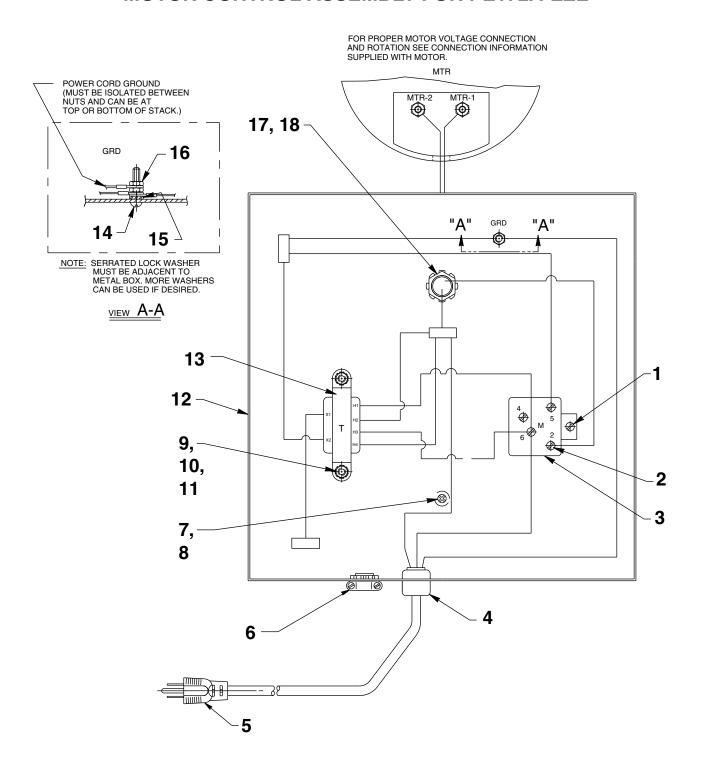


# **HYDRAULIC SCHEMATIC** FOR AIR MOTOR PUMPS



NOTE: MEASURED AT 19463 FITTING.

#### **MOTOR CONTROL ASSEMBLY FOR PE172A-EZE**



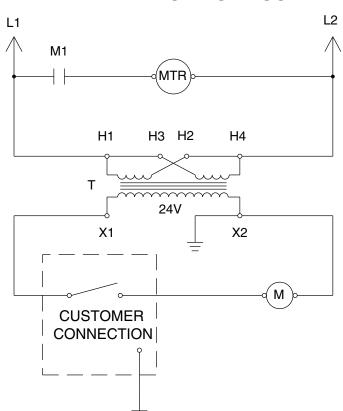
Sheet No. 5 of 7

Rev. 19 Date: 4 Nov 2009

Item No.	Part No.	No. Req'd	Description	Item No.	Part No.
1	17370	1	Screw (6-20 X 1/4 Lg.)	10	10196
2	10975	4	Screw (8-32 UNC X 5/16 Lg.)	11	11388
3	14667	1	Starter Electrical Relay	12	42575WH2
4	15993	2	Strain Relief Bushing	13	305665
5	24733	1	Cord (8 ft.; For 115 V. pumps)	14	10167
	12293	7'	Electrical Cable (For 220 V. pumps)	15	11108
6	11203	1	Conduit Connector	16	10197
7	252253	1	Screw (8-32 x 3/8 Lg.)	17	11202
8	12355	2	Washer (For #8 bolt)	18	11362
9	10962	2	Screw (8-32 UNC X 1/2 Lg.)		

Item No.	Part No.	No. Req'd	Description
10	10196	2	Nut (#8-32 UNC)
11	11388	2	Washer (#8 External Tooth)
12	42575WH2	1	Electrical Control Box
13	305665	1	Transformer
14	10167	1	Screw (#10-24 UNC X 3/4 Lg.)
15	11108	1	Washer (#10 External Tooth)
16	10197	2	Nut (#10-24 UNC)
17	11202	1	Nipple
18	11362	1	Conduit Locknut

#### **ELECTRICAL SCHEMATIC FOR PE172A-EZE**



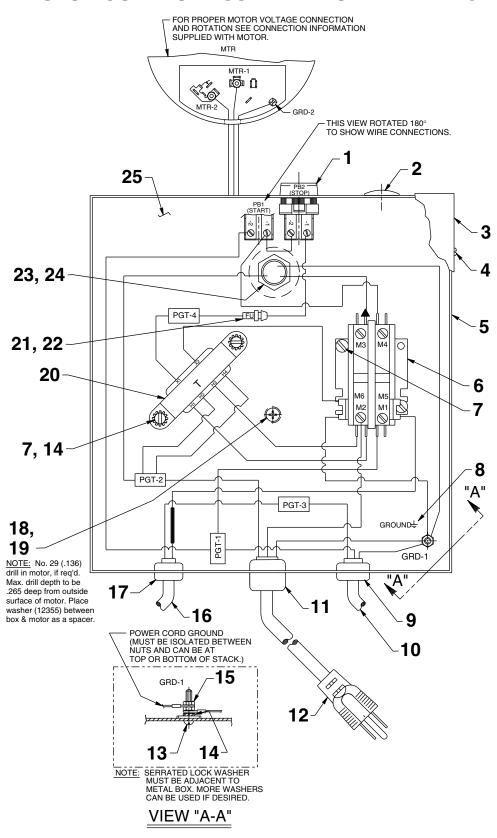


Note: Transformer connections are as shown for 115 v., 50/60 Hz.

For 220 v., 50/60 Hz. units, transformer connections to be as follows:

H1 to L1 H2 to H3 H4 to L2

#### **MOTOR CONTROL ASSEMBLY FOR PE172-ABC**

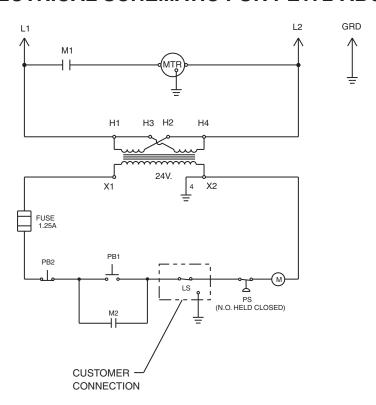


Sheet No. 6 of 7

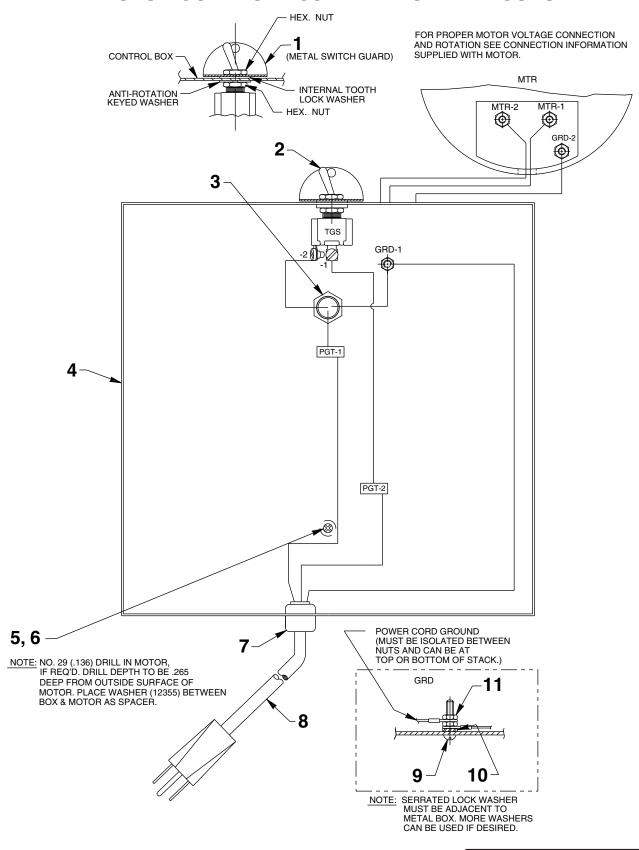
Rev. 19 Date: 4 Nov 2009

Item No.	Part No.	No. Req'd	Description	Item No.	Part No.	No. Req'd	Description
1	309019	1	Push Button Switch	14	11108	3	Ext. Tooth Washer (.40 x .20)
2	17782	1	Snap Plug	15	10197	2	Hex Nut (10-24)
3	43126WH2	1	Control Box Cover	16	52203	1	Pressure Switch
4	14812	4	Pan Hd. Screw (8-18 x 3/8)				(See Form No. 100589)
5	51218WH2	1	Electrical Control Box	17	215857	1	Strain Relief Bushing
6	420718-4	1	Contactor (2 pole)	18	13532	1	Pan Hd. Screw (8-32 x 1/2)
7	11539	4	Rnd. Hd. Screw (10-24 x 1/4)	19	206857	1	Special Washer (.53 x .21)
8	205189	1	Ground Decal	20	305665	1	Transformer
9	15993	1	Strain Relief Bushing	21	250442	1	Fuse (1.25 AMP 250 V.)
10	12908	3'	Cable (18/3 SJTO)	22	16887	1	Fuse Holder
11	210112	1	Strain Relief Bushing	23	11202	1	Nipple
12	307440	1	Cord (8' Lg.; 115 V. 12/3 SJTO)	24	212434	1	Plain Washer (1.76 x .95)
13	11856	1	Rnd. Hd. Screw (10-24 x 1)	25	250440	1	Warning Decal

# **ELECTRICAL SCHEMATIC FOR PE172-ABC**



#### **MOTOR CONTROL ASSEMBLY FOR PE17-SOLO**



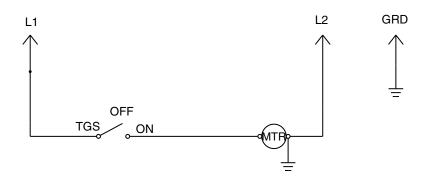
Sheet No. 7 of 7

Rev. 19 Date: 4 Nov 2009

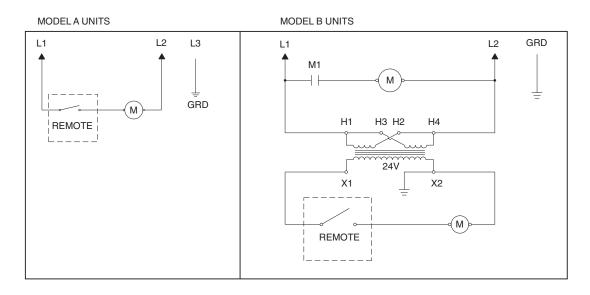
# Parts List, Form No. 100577, Back sheet 7 of 7

tem No.	Part No.	No. Req'd	Description	Item No.	Part No.	No. Req'd	Description
1	352061	1	Switch Guard	8	24733	1	Cord (8' Lg.; 115 V. 16/3 SJTO)
2	12301	1	Toggle Switch	9	10167	1	Rnd. Hd. Screw (10-24 x 3/4)
3	11202	1	Nipple	10	11108	1	Ext. Tooth Washer (.40 x .20)
4	42575WH2	1	Electrical Control Box	11	10197	2	Hex Nut (10-24)
5	252253	1	Pan Hd. Screw (8-32 x 3/8)				
6	12355	1	Plain Washer (.44 x .19)				
7	15993	1	Strain Relief Bushing				

#### **ELECTRICAL SCHEMATIC FOR PE17-SOLO**



# **ELECTRICAL SCHEMATIC FOR PUMPS WITH REMOTE CONTROLS**



### **ELECTRICAL SCHEMATIC FOR PE172A-BOC**

