

To Protect Your Warranty, Use Only ENERPAC Hydraulic Oil.

Enerpac recommends that all kit components be installed to insure optimum performance of the repaired unit.

Pump Model	Valve Type	Reservoir	Motor	Switch Type
PEM-2021	3 Way Manual, VM-2	1 gallon	115/230V, 1HP, 1 Phase, 60 Cycle	Run-Jog
PEM-2021E	3 Way Manual, VM-2	1 gallon	115/230V, 1HP, 1 Phase, 50 Cycle	Run-Jog
PEM-2031	3 Way Manual, VM-3	1 gallon	115/230V, 1HP, 1 Phase, 60 Cycle	Run-Jog
PEM-2031E	3 Way Manual, VM-3	1 gallon	115/230V, 1HP, 1 Phase, 50 Cycle	Run-Jog
PEM-2041	4 Way Manual, VM-4	1 gallon	115/230V, 1HP, 1 Phase, 60 Cycle	Run-Jog
PEM-2041E	4 Way Manual, VM-4	1 gallon	115/230V, 1HP, 1 Phase, 50 Cycle	Run-Jog
PER-2031	3 Way Electric, VS-3	1 gallon	115/230V, 1HP, 1 Phase, 60 Cycle	Run-Off
PER-2031E	3 Way Electric, VS-3	1 gallon	115/230V, 1HP, 1 Phase, 50 Cycle	Run-Off
PER-2041	4 Way Electric, VS-4	1 gallon	115/230V, 1HP, 1 Phase, 60 Cycle	Run-Off
PER-2041E	4 Way Electric, VS-4	1 gallon	115/230V, 1HP, 1 Phase, 50 Cycle	Run-Off

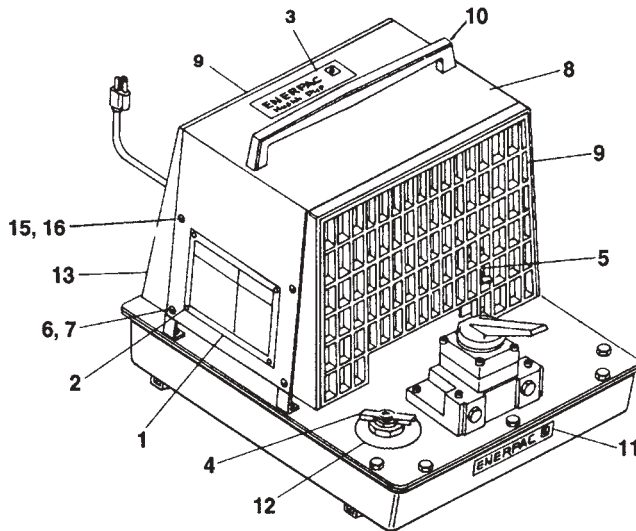


Figure 1, Exterior View

Repair Parts List for Figure 1

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
1	Contact ENERPAC	1	Nameplate	8	CA232950-114	1	Cover
2	Y697003	4	Pop Rivet	9	CA225024SR	1	Grill
3	Y661026	1	Decal	10	Y175950W	1	Handle
4	CA563024SR	1	Draincock (includes item 12)	11	G424026	2	Decal
5	Y565026	1	Nameplate (Run-Jog)	12	CN721026	1	Decal, Filler Plug
	CA380026	1	Nameplate (Off-Run)	13	M495017	2	Clip, Cord
6	F866028	4	#10-24-UNC x.50 Lg.	14	Y661026	1	Decal
7	M783055	4	Nut	15	F866028	4	Machine Screw
				16	M748055	4	Speed Nut

Note: Grill and Cover Assembly (CA228950W) includes items 6, 8, 9, and 10.

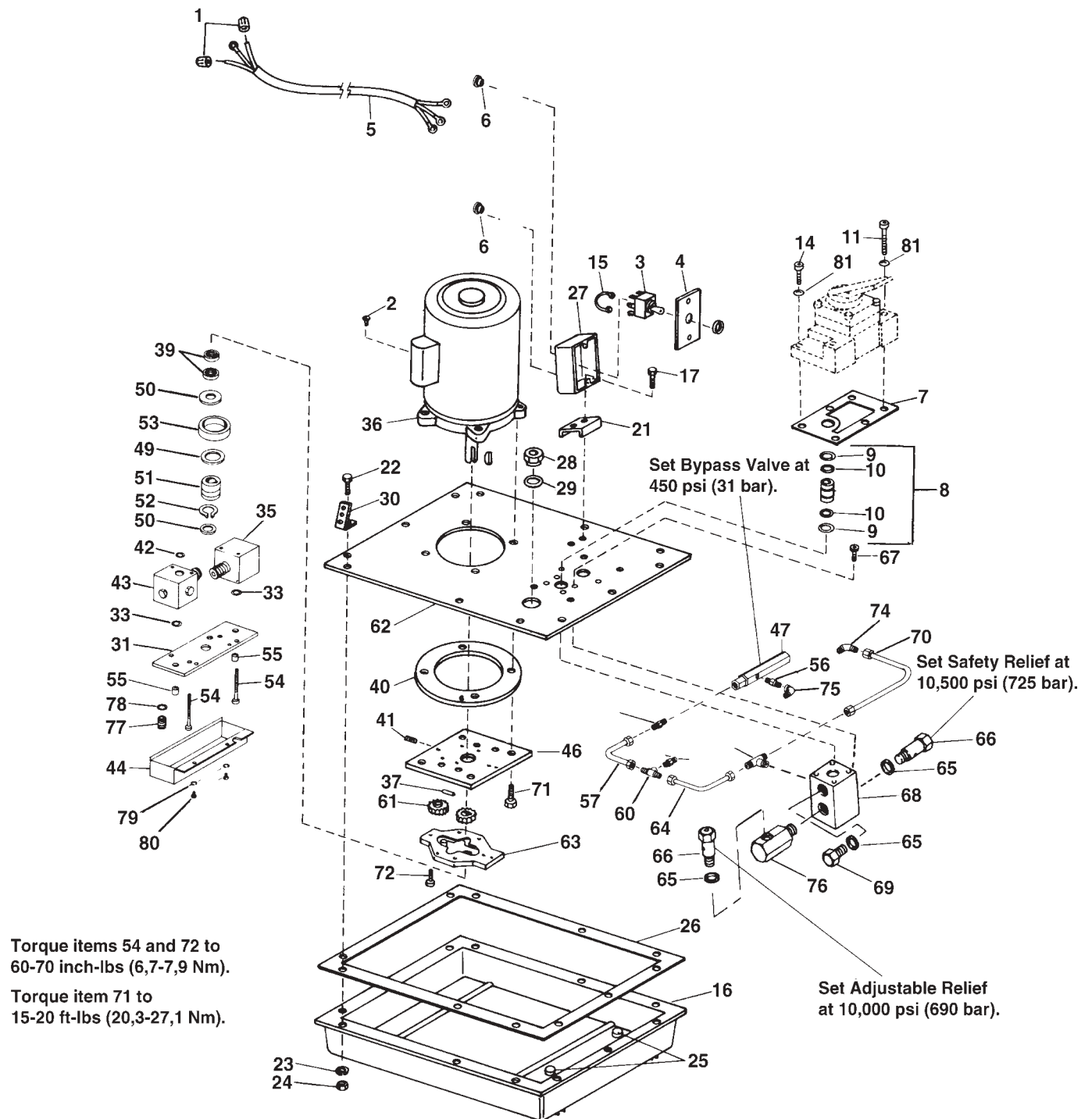


Figure 2 - Pump Assembly

Repair Parts List for Figure 2

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
1	G536055	2	Connector	43	CA241900SR	1	Piston and Block Assy. (See figure 3)
2	C302128	2	#10-24 UNC x.375 Lg.	44	Y810018	1	Screen
3	DA4030372	1	Switch, Toggle (PER only)	46	★CL396950SR	1	Gear Housing
	DA5688372	1	Switch, Toggle (PEM only)	47	C620900SR	1	Bypass Valve (See figure 4)
4	Y560098W	1	Handy Box Cover	49	Y552108	1	Thrust Washer
5	DA5736900	1	Motor Cord	50	M886108	2	Thrust Washer
6	DA5752007	2	Cord Bushing	51	Y5200350	1	Eccentric
7	★F786167	1	Gasket	52	A8063049	1	Retaining Ring
8	CN529950K	1	Connector Assy. Includes #7	53	CA193900SR	1	Bearing and Race
9	★B1012564	2	Backup Washer	54	B1338028	1	#10-32 UNF x 2.00 Lg.
10	★B1007503	2	O-ring	55	M70268	2	Tube
11	B1357028	2	5/18 - 18 UNC x 2.00 Lg.	56	A8013094	1	Connector
14	B1349028	3	5/18 - 18 UNC x 1.00 Lg.	57	Y86268	1	Tube Assembly
15	CA287900SR	1	Jump Wire	58	SN125	2	Nipple
16	CB523025	1	Reservoir	60	Y709096	1	Tee
17	B1336028	2	#10-32 UNF x 1.75 Lg.	61	Y734900SR	2	Gear and Bushing Assy.
21	CA223111	1	Bracket	62	★CM409098	1	Cover
22	B1005046	12	1/4"-20 UNC x .75 Lg.	63	Y456101	1	End Plate
23	B1015066	12	1/4" Bolt (Med.)	64	Y648268	1	Tube Assembly
24	B1001120	1	1/4"-20 UNC	65	★B159167	3	Gasket
25	C187018	2	Magnet	66	P181190W	2	Relief Valve
26	★Y252167	1	Gasket	67	Y971028	1	1/4-28 UNC x .62 Lg.
27	CA221980	1	Handy Box	68	Y927038	1	Block Adaptor
28	CA563024SR	1	Filler Plug	69	AJ100061	1	Plug, Valve, Hex Head
29	★B1021503	1	O-Ring	70	Y524268	1	Tube Assembly
30	CL397111	4	Bracket	71	B1077046	4	3/8-16 UNC x 1.00 Lg.
31	Y533101	1	Plate	72	B1324029	6	#10-32 UNF x .62 Lg.
33	★B1220503	2	O-Ring	73	Y530096	1	Tee
35	CA235900SR	1	Piston and Block Assy. (See figure 3)	74	B202291	1	Elbow
36	CM392259	1	Motor Assembly 115 V version (PEM / PER 2021, 2031, 2041)	75	Y714291	1	Elbow (90°)
	CM575259	1	Motor Assembly 230 V version (PEM / PER 2021E, 2031E, 2041E)	76	CB461038	1	Adaptor
37	Y710061	1	Pin	77	Y716096	1	Pipe Adaptor
39	★Y546044	2	Oil Seal	78	★B1008503	1	O-Ring
40	★C550357	1	Gasket	79	SJ100169	2	Washer
41	R385300	1	Set Screw	80	C302128	2	Screw
42	B1005503	1	O-Ring	81	★C846037	6	Gasket Valve

★Indicates items included in Repair Kit PEM-2000K.

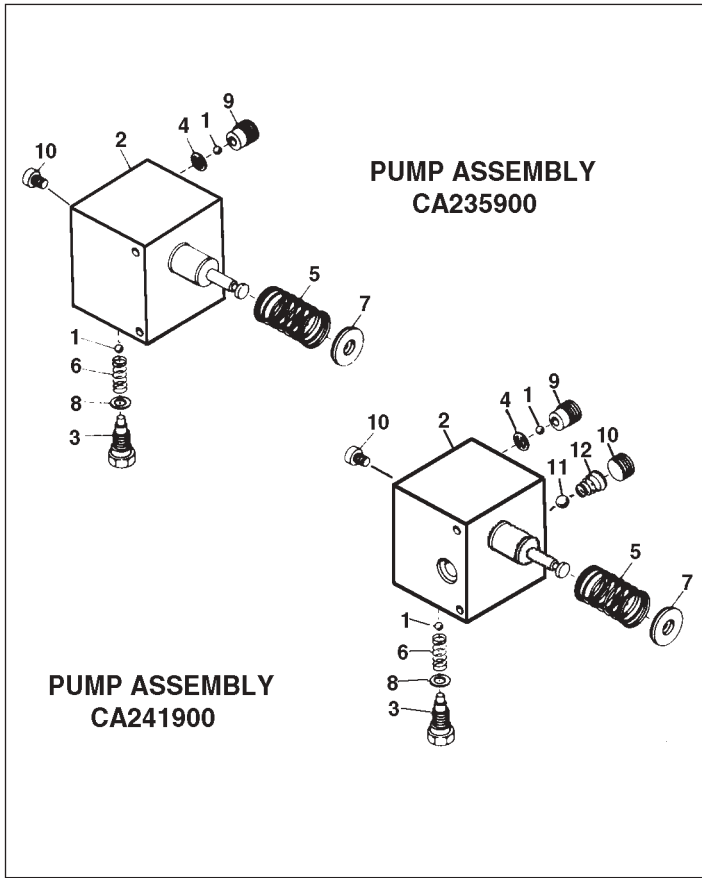


Figure 3, Pump Assemblies CA235900SR and CA241900SR

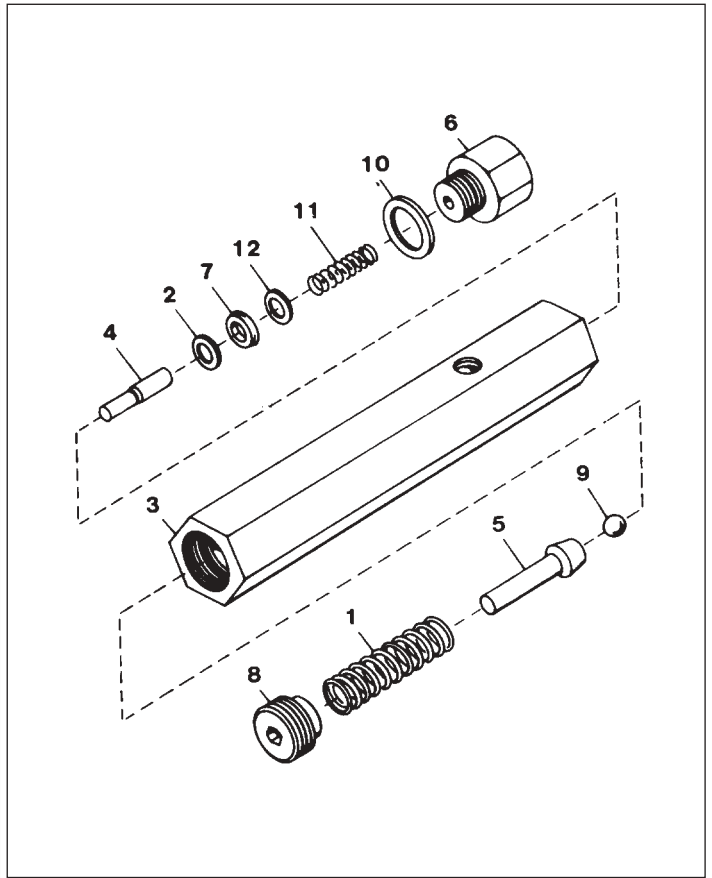
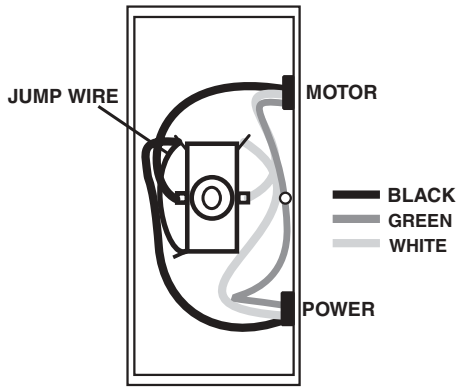


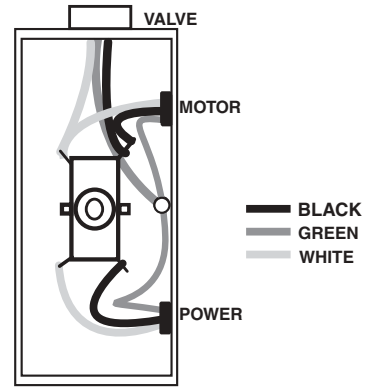
Figure 4, Bypass Valve C620900SR

Repair Parts List for Figure 3			
Item	Part Number	Qty.	Description
1	★B1003106	2	Ball
2	CA235900SR	1	Body
	CA241900SR	1	Body
3	M80006	1	Plug
4	★P181167	1	Gasket
5	★P181170	1	Spring
6	★P181183	1	Spring
7	Y866418	1	Spring Plate
8	★S3037	1	Gasket
9	★P18115	1	Intake Seat
10	A1007245	3	Pipe Plug
11	*B1008016	1	Ball
12	*CA978110	1	Spring
★ Indicates items included in Repair Kit CA235900K and Repair Kit CA241900K.			
* Indicates items included in Repair Kit CA241900K.			

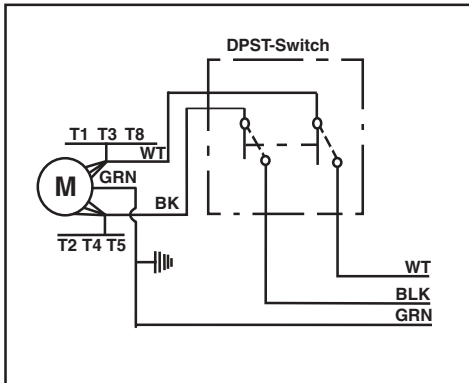
Repair Parts for Figure 4			
Item	Part Number	Qty.	Description
1	A109164	1	Spring
2	★SJ100016	4	Backup Washer
3	C620900SR	1	Valve Body
4	C622339	1	Plunger
5	C623160	1	Retainer Ball
6	C624038	1	Adapter
7	★C639053	1	U-Cup
8	★C641087	1	Adjusting Screw
9	★B1009016	1	Ball
10	★S15167	1	Gasket
11	S4375	1	Spring
12	★B1024562	1	Backup
★ Indicates items included in Repair Kit C620900K.			



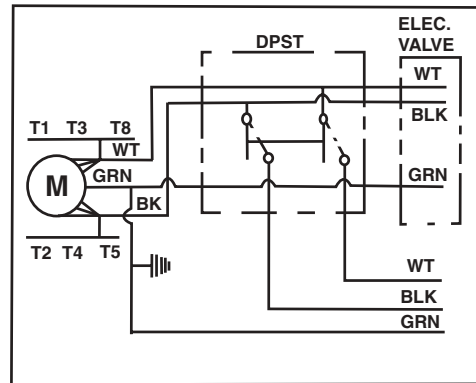
Handy Box Wiring - PEM Series



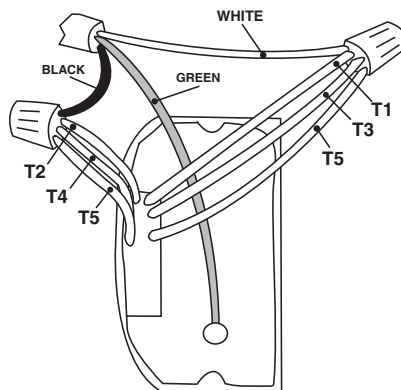
Handy Box Wiring - PER SERIES



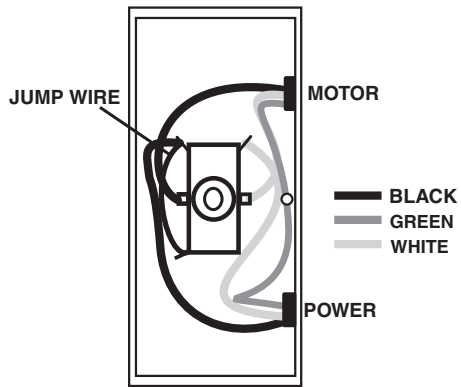
Wiring Schematic - 115 Volt PEM Series



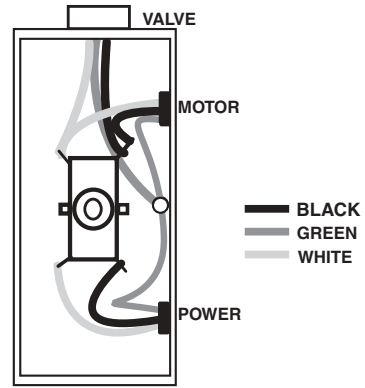
Wiring Schematic - 115 Volt PER Series



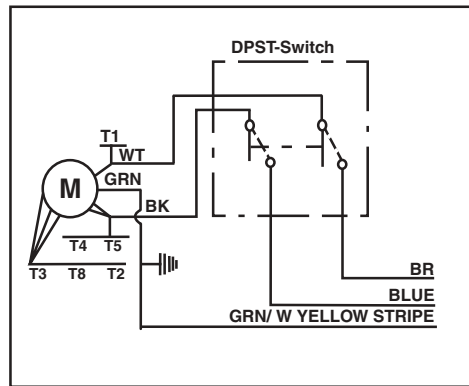
Motor Wiring - 115 Volt PEM & PER Series



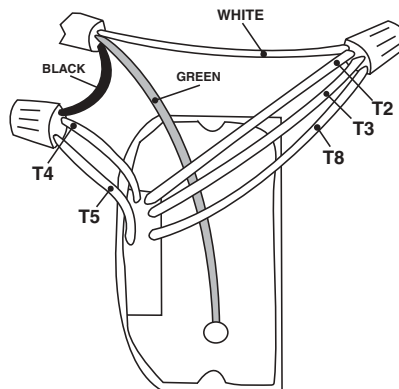
Handy Box Wiring - PEM Series



Handy Box Wiring - PER Series



Wiring Schematic - 230 Volt PEM "E" & PER "E" Series



Motor Wiring - 230 Volt PEM "E" & PER "E" Series

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