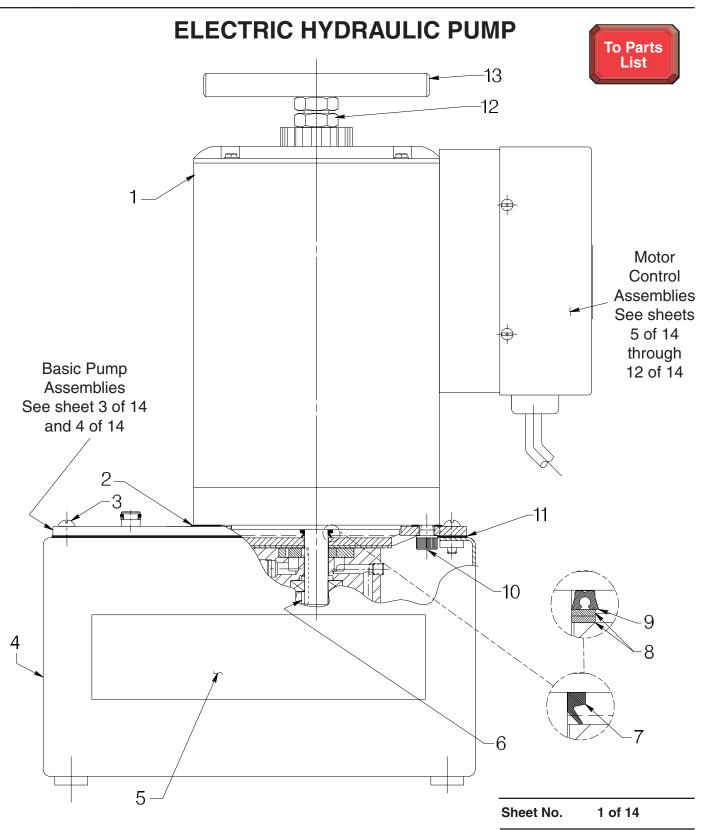


Hydraulic Technologies 5885 11th Street Rockford, IL 61109-3699 USA Tech. Services: (800) 477-8326 Fax: (800) 765-8326 Order Entry: (800) 541-1418 Fax: (800) 288-7031

Internet Address: http://www.powerteam.com

Parts List for:

PE46 Series

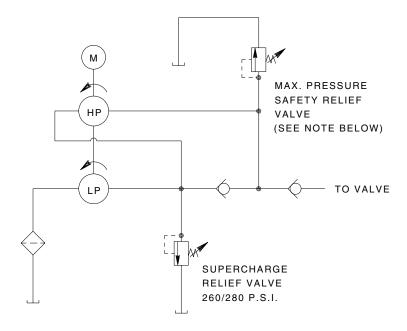


Issue Date:

Rev. 1-30-96

Item No.	Part No.	No. Reg'd	Description
1	58053WH2	1	Electric Motor (115/230 V., 60 Hz.)
•	53104WH2	1	Electric Motor (110/220 V., 50 Hz.)
2	307425	1	Motor Base Gasket
3	10177	10	Machine Screw (#10-24 x 3/4 Lg.; Metal Reservoir)
	209799	14	Self-tapping Washer Hd. Screw
			(1/4-10 x 7/8 Lg.; Plastic Reservoir)
4	40063OR9	1	Metal Reservoir
	61165	1	Plastic Reservoir
5	309219	2	Trade Name Decal
6	214097	1	Key
7	213674	1	V-ring Seal (Nitrile)
	215438	1	V-ring Seal (Viton)
8	251498	2	Backup Washer (For use with EPR U-cup [Item#9] only)
9	251291	1	U-cup (EPR)
10	10050	4	Soc. Hd. Screw (3/8-16 x 1" Lg.; Torque to 90/100 in. lbs.)
11	40164	1	Reservoir Gasket
12	10394	1	Nut
13	203146	1	T-handle
	PARTS INC 203972 213695	CLUDED E 1 1	BUT NOT SHOWN Decal (CSA) Decal (Intermittent Duty)

HYDRAULIC SCHEMATIC



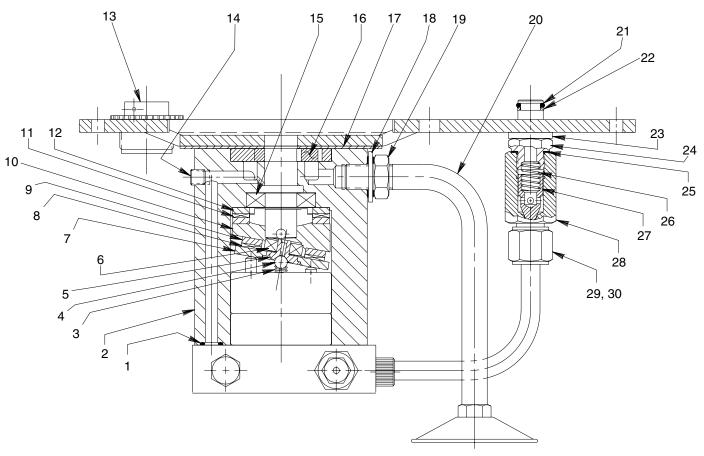
NOTE

Standard relief valves are set at 10,100/10,700 PSI.

Relief valves pre-set at special settings are available.

Refer to your pump model number or contact Power Team Technical Services.

BASIC PUMP ASSEMBLY SIDE VIEW

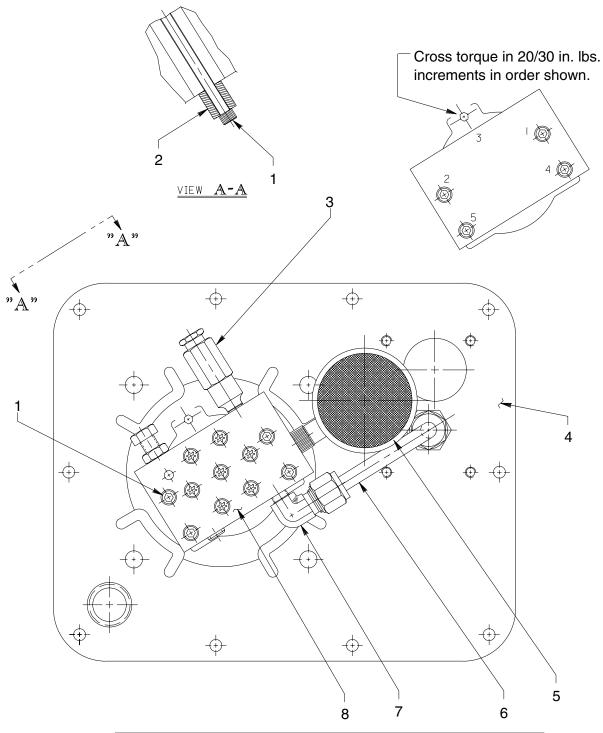


Item No.	Part No.	No. Req'd	Description	Item No.	Part No.	No. Req'd	Description
1	10267	1	O-ring (7/16 x 5/16 x 1/16, -011; Nitrile)	18	213709	1	Washer Seal (Nitrile)
	18974	1	O-ring (7/16 x 5/16 x 1/16, -011;		215633	- 1	Washer Seal (Viton)
	10314	'	Viton)	10	215634	1	Washer Seal (EPR)
	13472	1	O-ring (7/16 x 5/16 x 1/16, -011;	19	10390	l a	Nut (1/2-20 UNF)
	10172	•	EPR)	20	213686	1	Intake Tube
2	52883		Pump Body	21	10268	1	O-ring (1/2 x 3/8 x 1/16, -012; Nitrile)
3	16320		Compression Spring (1/4 O.D. x 3/4 Lg.)		19775	1	O-ring (1/2 x 3/8 x 1/16, -012; Viton)
4	10375	-	Steel Ball (1/4 dia.)		17716	1	O-ring (1/2 x 3/8 x 1/16, -012;
5	23547	-	Top Plate Bearing				EPR)
6	11814		Ball Bearing	22	11863	1	Backup Washer
7	23548	1	Top Plate				(1/2 x 3/8 x 1/16, -012)
8	15431	1	Needle Thrust Bearing	23	21484	1	Washer
9	15432	1	Needle Thrust Bearing Race	24	214762	1	Valve Connector
10	35271	1	Angle Plate				(Torque to 20/30 ft. lbs.)
11	11228	1	Needle Thrust Bearing	25	10261	1	Copper Washer
12	11227		Needle Thrust Bearing Race				(3/4 x 19/32 x 1/32)
13	213706	1	Filler Cap	26	10425	1	Compression Spring
14	11084		Pipe Plug (1/16 NPTF; Torque to				(3/8 O.D. x 3/4 Lg.)
17	11004	'	35/45 in. lbs. oiled)	27	20771	1	Poppet
15	15695	1	Ball Bearing	28	201879	1	Check Valve Body
16	15693		Gerotor Set	29	10430	1	Tube Sleeve
17	307296		Wear Plate	30	10431	1	Tube Nut (Torque to 40/50 ft. lbs. while holding Valve Connector item #24)
						She	et No. 2 of 14

Rev. 1-30-96

Issue Date:

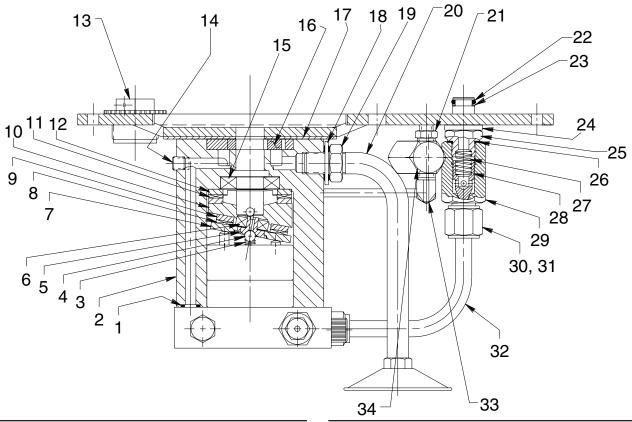
BASIC PUMP ASSEMBLY BOTTOM VIEW



Item No.	Part No.	No. Req'd	Description
1	15642	5	Cap Screw (1/4-20 x 5" Lg.; Torque to 55/65 in. lbs.)
2	214720	1	Spacer
3	21278	1	Relief Valve (Set at 10,100/10,700 PSI)
4	61566BK2	1	Cover
5	29682	1	Strainer
6	307459	1	Oil Line
7	10475	1	Elbow
8	36922	1	High Pressure Pump Assembly (See sheet 4 of

BASIC PUMP ASSEMBLY WITH ACCUMULATOR SIDE VIEW

(For units with an accumulator)



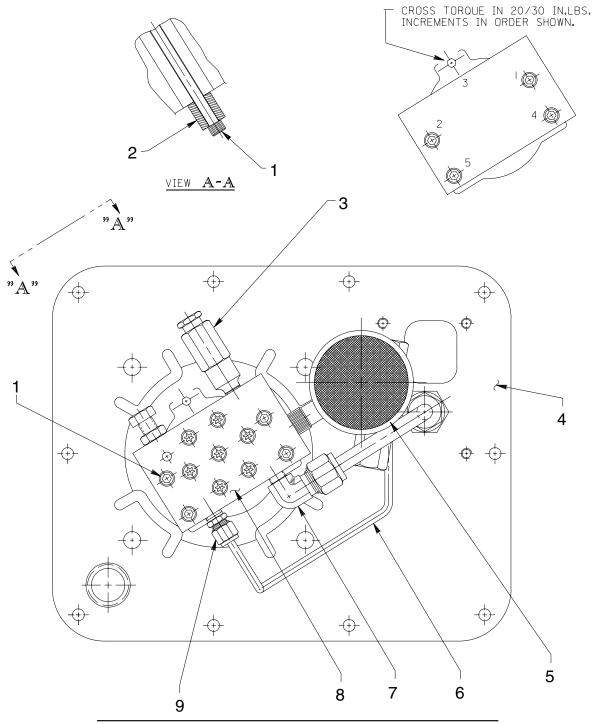
Item	Part	No.		Item	Part	No.	
No.	No.	Req'd	Description	No.	No.	Req'd	Description
1	10267	1	O-ring (7/16 x 5/16 x 1/16, -011;	19	10390	1	Nut (1/2-20 UNF)
			Nitrile)	20	213686	1	Intake Tube
	18974	1	O-ring (7/16 x 5/16 x 1/16, -011;	21	215373	1	Straight Fitting
	13472	1	Viton) O-ring (7/16 x 5/16 x 1/16, -011; EPR)	22	10268	1	O-ring (1/2 x 3/8 x 1/16, -012; Nitrile)
2	52883	1	Pump Body		19775	1	O-ring (1/2 x 3/8 x 1/16, -012; Viton)
3	16320	1	Compression Spring (1/4 O.D. x 3/4 Lg.)		17716	1	O-ring (1/2 x 3/8 x 1/16, -012; EPR)
4	10375	1	Steel Ball (1/4 dia.)	23	11863	1	Backup Washer
5	23547	1	Top Plate Bearing				(1/2 x 3/8 x 1/16, -012)
6	11814	1	Ball Bearing	24	21484	1	Washer
7	23548	1	Top Plate	25	214762	1	Valve Connector
8	15431	1	Needle Thrust Bearing				(Torque to 20/30 ft. lbs.)
9	15432	1	Needle Thrust Bearing Race	26	10261	1	Copper Washer
10	35271	1	Angle Plate				(3/4 x 19/32 x 1/32)
11	11228	1	Needle Thrust Bearing	27	10425	1	Compression Spring
12	11227	2	Needle Thrust Bearing Race				(3/8 O.D. x 3/4 Lg.)
13	213706	1	Filler Cap	28	20771	1	Poppet
14	11084	1	Pipe Plug (1/16 NPTF; Torque to	29	201879	1	Check Valve Body
			35/45 in. lbs. oiled)	30	10430	1	Tube Sleeve
15	15695	1	Ball Bearing	31	10431	1	Tube Nut (Torque to 40/50 ft. lbs.
16	15693	1	Gerotor Set				while holding Valve Connector
17	307296	1	Wear Plate				item #24)
18	213709	1	Washer Seal (Nitrile)	32	307459	1	Oil Line Tube
	215633	1	Washer Seal (Viton)	33	11278	1	90° Fitting
	215634	1	Washer Seal (EPR)	34	21943	1	Accumulator Assembly

Sheet No.	3 of 14
Issue Date:	Rev. 1-30-96

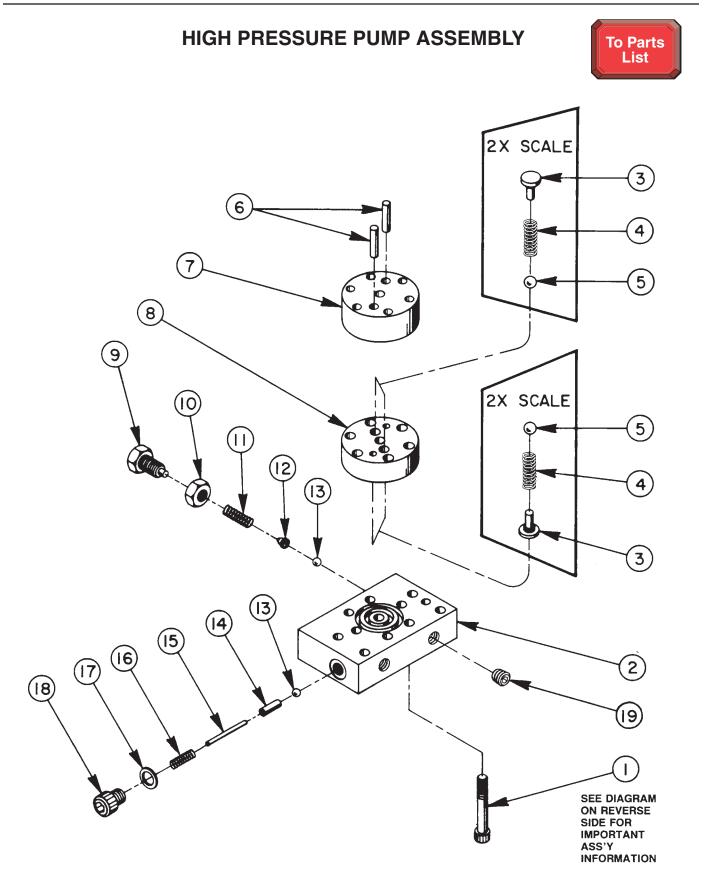
BASIC PUMP ASSEMBLY

BOTTOM VIEW

(For units with an accumulator)



Item No.	Part No.	No. Req'd	Description
1	15642	5	Cap Screw (1/4-20 x 5" Lg.; Torque to 55/65 in. lbs.)
2	214720	1	Spacer
3	21278	1	Relief Valve (Set at 10,100/10,700 PSI)
4	47606	1	Reservoir Cover
5	29682	1	Strainer
6	47607	1	Oil Line (Pilot)
7	10475	1	90° Elbow
8	36922	1	High Pressure Pump Assembly (See sheet 4 of 14)
9	11173	1	Straight Fitting



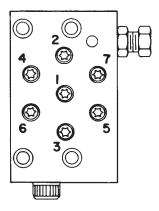
Sheet No.	4 of 14
Issue Date:	Rev. 1-30-96

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 (5/32 O.D. x 3/4 Lg.)	
5	*12223	4	Steel Ball (3/16 dia.)	
6	*20775	2	Piston	
7	*41006	1	Pump Barrel	
8	*41007	1	Valve Head	
9	200797	1	Adjusting Screw	
10	10386	1	Jam Nut (3/8-24)	
11	15691	1	Compression Spring (1/4 O.D. x 5/8 Lg.)	
12	200796	1	Adapter, Spring & Ball	
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 (.197 O.D. x 3/4 Lg.)	
17	12042	1	Copper Washer (9/16 x 3/8 x 1/32 thk.)	
18	29690	1	Cap Screw (Torque to 180 in. lbs.)	T
19	10427	1	Pipe Plug (1/8 NPTF)	Drav



Consult factory when replacing items marked with an asterisk (*).

BOLT TIGHTENING SEQUENCE



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

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 Departments.

ELECTRICAL CONTROL ASSEMBLY-110/115V

110/115 Volt, 50/60 Hz., Single Phase

(For units with manifold/manual valves)

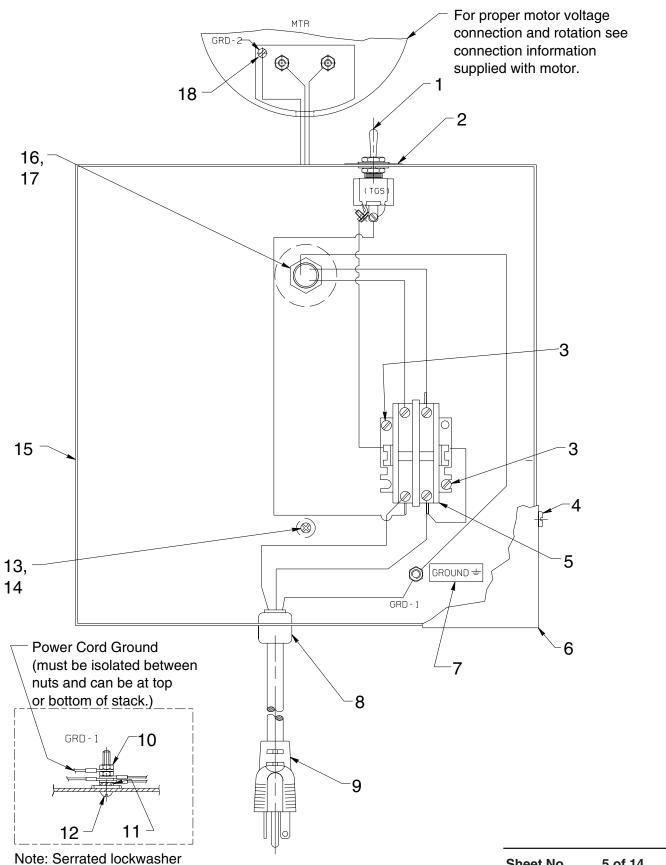


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Rev. 1-30-96

Sheet No.

Issue Date:



must be adjacent to metal box. More washers

can be used if desired.

Item	Part	No.		
No.	No.	Req'd	Description	
1	12301	1	Toggle Switch	
2	13890	1	Indicator Plate	
3	10166	2	Machine Screw (#10-24 UNC X 1/2 Lg.)	
4	14812	4	Tap Screw (#8-18 X 3/8 Lg.)	
5	420718-1	1	Contactor	
6	43126WH2	1	Control Box Cover	
7	205189	1	Ground Decal	
8	210112	1	Strain Relief Bushing	
9	350155	1	Cord Set (12/3 SJTO)	
10	10197	2	Nut (#10-24 UNC)	
11	11108	1	Lockwasher (#10 External Tooth)	
12	11856	1	Machine Screw (#10-24 X 1" Lg.)	
13	13532	1	Screw (#8-32 X 3/8 Lg.)	
14	206857	1	Washer (For #10 Bolt)	
15	51218WH2	1	Electrical Control Box	
16	11202	1	Nipple	
17	212434	1	Washer (For 7/8 bolt)	
18	15468	1	Screw (#6-32 X 3/8 Lg.) To Draw	
	PARTS INC	LUDED E	BUT NOT SHOWN	

200188 1 Warning Decal

ELECTRICAL SCHEMATIC (For units with manifold/manual valves)

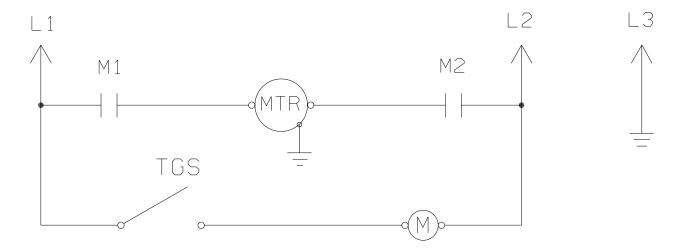
110/115 Volt, 50/60 Hz., Single Phase

WARNING

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

North American & International Color Codes

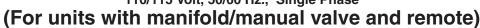
Conductors	North American	International
Line	Black	Brown
Neutral	White	Blue
Ground	Green	Green/Yellow



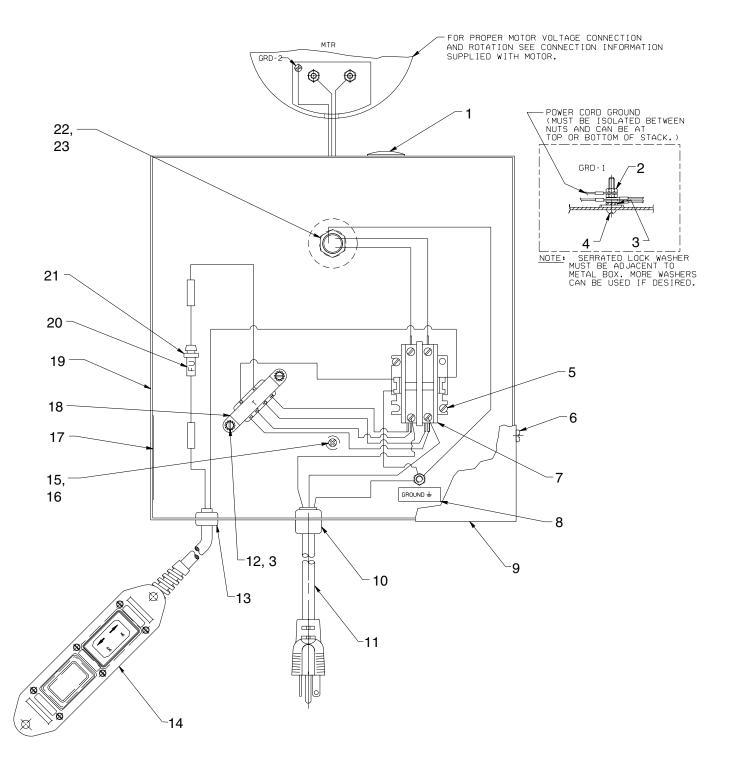
Note: Motor is not wired for dual cycle. It is for either 50 or 60 cycle use. Refer to motor nameplate for proper cycle.

ELECTRICAL CONTROL ASSEMBLY

110/115 Volt, 50/60 Hz., Single Phase







Sheet No.	6 of 14	

Issue Date: Rev. 1-30-96

Parts List, Form No. 101355, Back sheet 6 of 14

Item		No.	Description
No.	No.	Req'd	Description
1	17782	1	Snap Button
2	10197	2	Hex Nut (#10-24)
3	11108	3	Lockwasher (#10)
4	11856	1	Screw (#10-24 x 1" Lg.)
5	10166	2	Screw (#10-24 UNC X 1/2 Lg.)
6	14812	4	Screw
7	420718-4	1	Contactor
8	250189	1	Decal (Ground)
9	43126WH2	1	Control Box Cover
10	210112	1	Strain Relief Bushing
11	350155	1	Cord Set (12/3 SJT0; 115 V.)
12	11539	2	Screw (#10-24 X 1/4 Lg.)
13	15993	1	Strain Relief Bushing
14	25017	1	Remote Hand Switch Ass'y
			(See sheet 13 of 14)

Item No.	Part No.	No. Req'd	Description
15	13532	1	Pan Hd. Self-tapping Screw
16	206857	1	Washer
17	250150	1	Decal
18	305665	1	Transformer
19	51218WH2	1	Control Box
20	206962	1	Fuse (3A)
21	16887	1	Fuse Holder
22	11202	1	Connector
23	212434	1	Conduit Lockwasher
	PARTS	INCLU	DED BUT NOT SHOWN
	200188	1	Warning Decal To Drawing

ELECTRICAL SCHEMATIC

(For units with manifold/manual valve and remote)

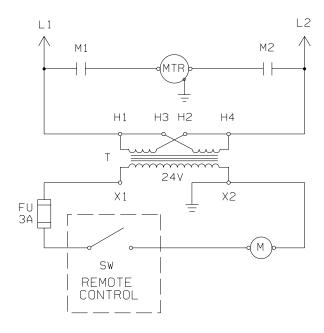
110/115 Volt, 50/60 Hz., Single Phase

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 110/115., 50/60 Hz. (CCW rotation from lead end)

Transformer connections are as shown for 110/115 V., 50/60 Hz.

For 220/230 V., 50/60 Hz. units, transformer connections are to be as follows:

H₁ to L₁

H₂ to H₃

H4 to L2

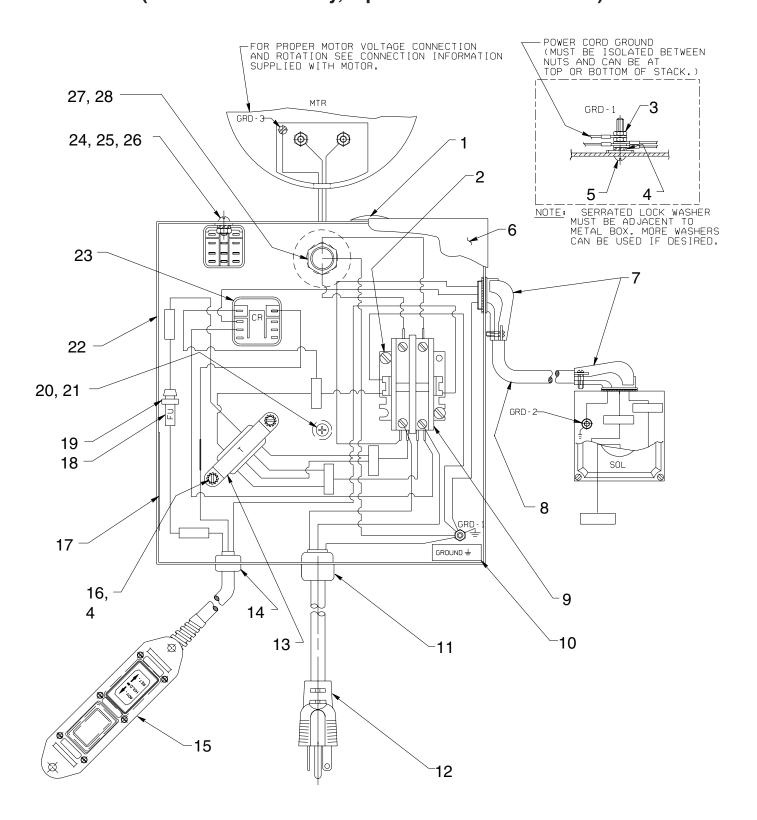
Motor is not wired for dual cycle. It is for either 50 or 60 cycle use. Refer to motor nameplate for proper cycle.

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

ELECTRICAL CONTROL ASSEMBLY

110/115 Volt, 50/60 Hz., Single Phase (For units with 3-way, 2 position solenoid valves)





Sheet No.	7 of 14
Issue Date:	Rev. 1-30-96

Item No.	Part No.	No. Req'd	Description	Item No.	Part No.	No. Req'd	Description
1	17782	1	Snap Button	<u> 17</u>	250150	1	Decal
2	10166	2	Screw (#10-24 UNC X 1/2 Lg.)	18	206962	1	Fuse (3A)
3	10197	2	Hex Nut (#10-24)	19	16887	1	Fuse Holder
4	11108	3	Lockwasher (#10)	20	13532	1	Pan Hd. Self-tapping Screw (#8)
5	11856	1	Screw (#10-24 x 1" Lg.)	21	206857	1	Washer
6	43126WH2	1	Control Box Cover (115 V.)	22	51218WH2	1	Control Box (115 V.)
7	11144	2	Electrical 90° Connector	23	39092	1	Relay
8	12293	2.54 ft.	Electrical Cable (16/3 SJT0)	24	10159	2	Screw (#6-32 x 5/16 Lg.)
9	420718-4	1	Contactor	25	10195	2	Hex Nut (#6-32)
10	205189	1	Decal (Ground)	26	15906	2	Lockwasher (#6)
11	210112	1	Strain Relief Bushing	27	11202	. 1	Electrical Connector
12	350155	1	Cord Set (12/3 SJT0; 115 V.)	28	11362	. 1	Conduit Lockwasher
13	305665	1	Transformer				
14	15993	1	Strain Relief Bushing		PARTS	INCLU	DED BUT NOT SHOWN
15	307491	1	Remote Hand Switch Ass'y		200188	1	Warning Decal
			(See back sheet 13 of 14)	То	14812	4	Screw (Use to mount control box
16	11539	4	Screw (#10-24 X 1/4 Lg.)	Drawing			cover to box body.)

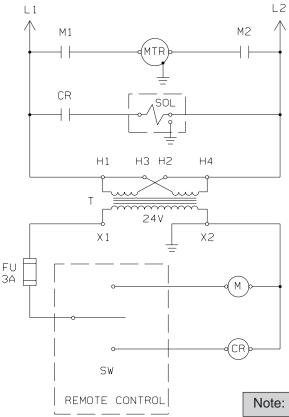
ELECTRICAL SCHEMATIC

(For units with 3-way, 2 position solenoid valves)

110/115 Volt, 50/60 Hz., Single Phase

M 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:

L3

Unless otherwise specified, all units are to be wired for 110/115 V., 50/60 Hz. (CCW rotation from lead end)

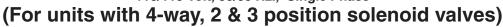
Transformer connections are as shown for 110/115 V., 50/60 Hz.

Motor is not wired for dual cycle. It is for either 50 or 60 cycle use. Refer to motor nameplate for proper cycle.

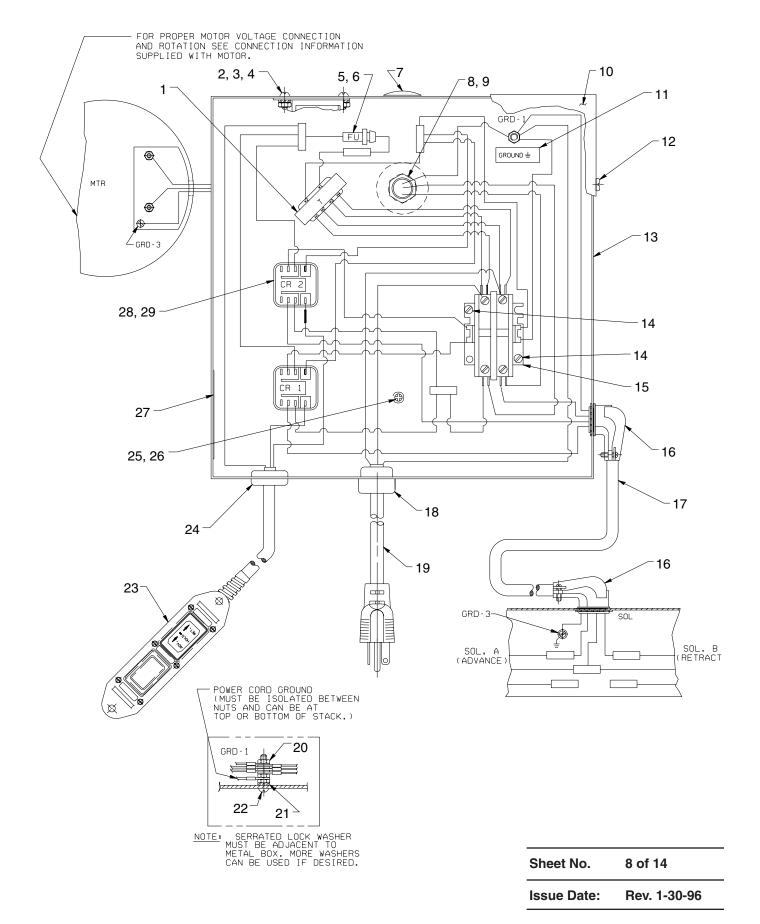
Note: Shaded areas reflect last revision(s) made to this form.

ELECTRICAL CONTROL ASSEMBLY

110/115 Volt, 50/60 Hz., Single Phase







Item No.	Part No.	No. Req'd	Description		Item No.	Part No.	No. Req'd	Description
1	305665	1	Transformer		17	15565	27.5"	Electric Cord (16/4 SO)
2	10159	2	Machine Screw (#6-32	x 5/16 Lg.)	18	210112	1	Strain Relief Bushing
3	15906	2	Washer (For #6 bolt)		19	350155	1	Cord Set (12/3 SJT0; 115 V.)
4	10195	2	Nut (#6-32)		20	10197	3	Nut (#10-24)
5	206962	1	Fuse (3A)	То	21	11108	1	Lockwasher (#10)
6	16887	1	Fuse Holder	Drawing	22	11856	1	Machine Screw (#10-24 x 1" Lg.)
7	17782	1	Snap Button		23	202778	1	Remote Hand Switch Ass'y
8	11202	1	Conduit Connector					(See sheet 14 of 14)
9	212434	1	Conduit Locknut		24	15993	1	Strain Relief Bushing
10	43126WH2	1	Control Box Cover		25	13532	1	Self-tapping Screw
11	205189	1	Decal (Ground)					(#8-32 x 3/8 Lg.)
12	14812	4	Self-tapping Screw		26	206857	1	Washer (For #8 bolt)
			(#8-18 x 3/8 Lg.)		27	250150	1	Decal
13	51218WH2	1	Control Box		28	39092	2	Relay
14	10166	2	Machine Screw		29	11539	4	Screw (#10-24 X 1/4 Lg.)
			(#10-24 UNC X 1/2 Lg.)					
15	420718-4	1	Contactor PARTS INCLUDED BUT NOT SHOWN		DED BUT NOT SHOWN			
16	11144	2	Conduit Connector			200188	1	Warning Decal

ELECTRICAL SCHEMATIC

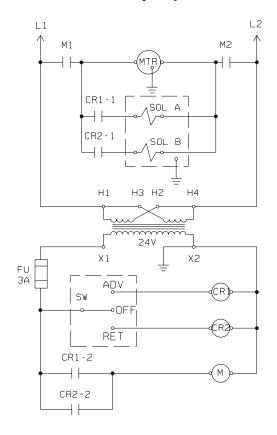
(For units with 4-way, 2 & 3 position solenoid valves)

110/115 Volt, 50/60 Hz., Single Phase

L3

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 110/115 V., 50/60 Hz. (CCW rotation for lead end)

Transformer connections are as shown for 110/115 V., 50/60 Hz.

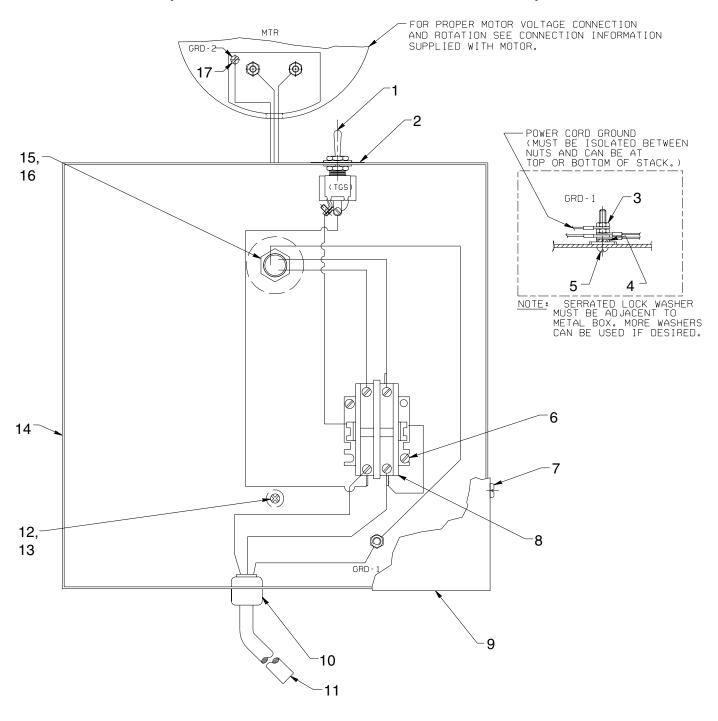
Motor is not wired for dual cycle. It is for either 50 or 60 cycle use. Refer to motor nameplate for proper cycle.

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

ELECTRICAL CONTROL ASSEMBLY-220/230V



220/230 Volt, 50/60 Hz., Single Phase (For units with manifold/manual valves)



Sheet No.	9 of 14
Issue Date:	Rev. 1-30-96

Item	Part	No.	
No.	No.	Req'd	Description
1	12301	1	Toggle Switch
2	13890	1	Flat Washer
3	10197	3	Nut (#10-24)
4	11108	1	Lockwasher (#10)
5	11856	1	Machine Screw (#10-24 x 1" Lg.)
6	10166	2	Screw (#10-24 UNC X 1/2 Lg.)
7	14812	4	Screw (#8-18 X 3/8 Lg.)
8	420718-2	1	Contactor
9	43126WH2	1	Control Box Cover
10	210112	1	Conduit Bushing
11	308752	1	Electrical Cable (14/3 SJTO)
12	13532	1	Screw (#8-32 X 3/8 Lg.)
13	206857	1	Special Washer
14	51218WH2	1	Control Box
15	11202	1	Nipple
16	212434	1	Washer
17	15468	1	Screw (#6-32 X 3/8 Lg.)

PARTS INCLUDED BUT NOT SHOWN

200188 1 Warning Decal
 11209 1 Electrical Plug (For 230 V. units only)



ELECTRICAL SCHEMATIC

(For units with manifold/manual valves)

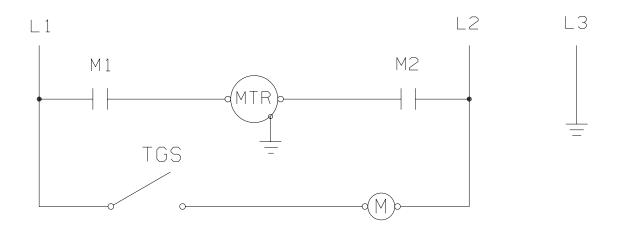
220/230 Volt, 50/60 Hz., Single Phase

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



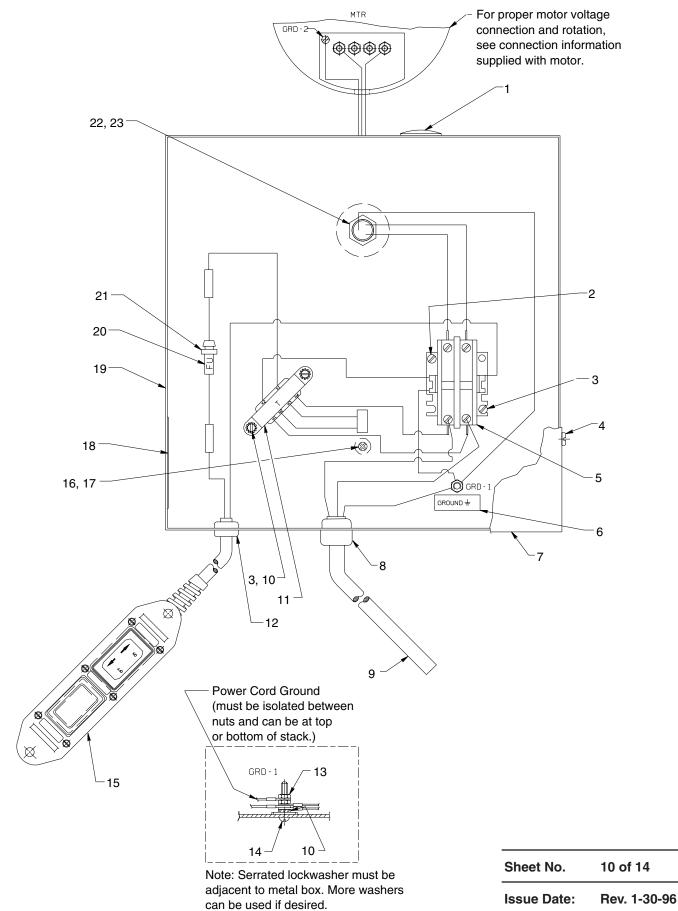
Note: Motor is not wired for dual cycle. It is for either 50 or 60 cycle use. Refer to motor nameplate for proper cycle.

ELECTRICAL CONTROL ASSEMBLY

220/230 Volt, 50/60 Hz., Single Phase







Item No.		No. Req'd	Description	Iten No.		No. Req'd	Description	
1	17782	1	Snap Plug	15	25017	1	Remote Hand Switch	n Ass'y
2	10166	2	Machine Screw				(See sheet 13 of 14)	
			(#10-24 UNC X 1/2 Lg.)	16	13532	1	Screw (#8-32 X 3/8 Lg.)	
3	14812	4	Tap Screw (#8-18 X 3/8 Lg.)	17	206857	1	Washer (For #10 Bolt)	
4	420718-4	1	Contactor	18	250150	1	Decal	
5	205189	1	Ground Decal	19	51218WH2	1	Electrical Control Bo	X
6	43126WH2	1	Control Box Cover	20	206962	1	Fuse (3 amp)	
7	210112	1	Strain Relief Bushing	21	16887	1	Fuse Holder	То
8	308752	8.5 ft.	<u> </u>	22	11202	1	Nipple	Drawing
9	11539	2	Machine Screw (#10-24 X 1/4 Lg.)	23	212434	1	Washer (For 7/8 bolt)	
10	11108	3	Lockwasher (#10 External Tooth)					
11	305665	1	Transformer	PARTS INCLUDED BUT NOT SHOWN				
12	15993	1	Strain Relief Bushing		200188	1	Warning Decal	
13	10197	2	Nut (#10-24 UNC)		11209	1	Electrical Plug (For 23	0 v. units only)
14	11856	1	Machine Screw (#10-24 X 1" Lg.)				_	

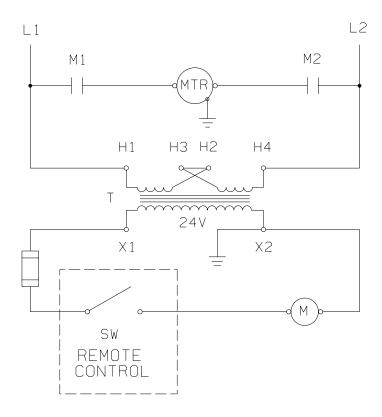
ELECTRICAL SCHEMATIC

(For units with manifold/manual valve and remote)

220/230 Volt, 50/60 Hz., Single Phase

MARNING

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



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

North American & International Color Codes

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



NOTE:

Unless other specified, all units are to be wired for 220/230 V., 50/60 Hz. (CCW rotation from lead end)

Transformer connections are as shown for 220/230 V., 50/60 Hz.

For 110/115 V., 50/60 Hz. units, transformer connections to be as follows:

H1 & H3 to L1 H2 & H4 to L2

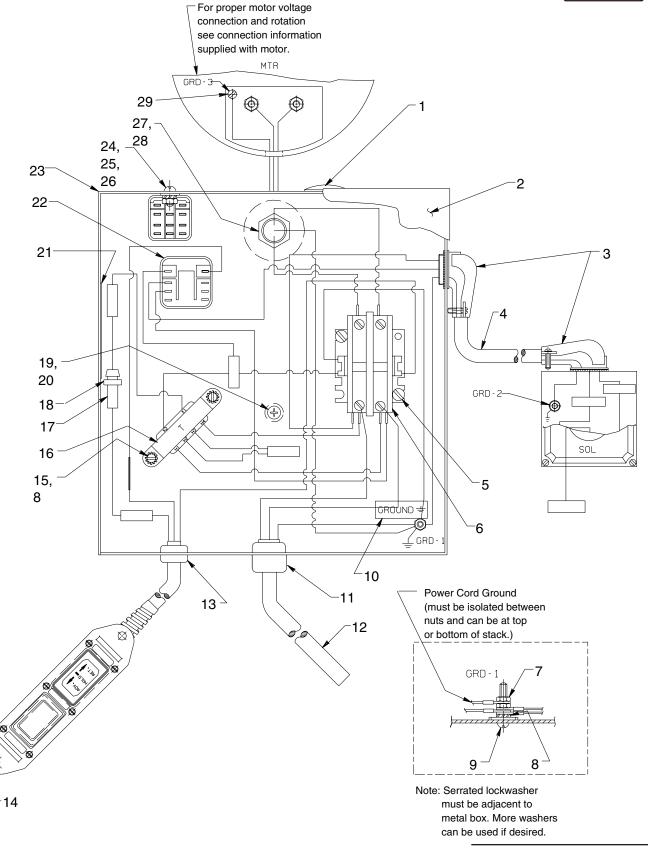
Motor is not wired for dual cycle. It is for either 50 or 60 cycle use. Refer to motor nameplate for proper cycle.

ELECTRICAL CONTROL ASSEMBLY

220/230 Volt, 50/60 Hz., Single Phase

(For units with 3-way, 2 position solenoid valve)





Sheet No. 11 of 14

Issue Date: Rev. 1-30-96

Parts List, Form No. 101355, Back sheet 11 of 14

Item No.		No. Req;d	Description	Item No.	Part No.	No. Req'd	Description
1	17782	1	Snap Plug	17	206962	1	Fuse (3 AMP, 250 V.)
2	43126WH2	1	Control Box Cover	18	16887	1	Fuse Holder
3	11144	2	90° Elbow Connector	19	13532	1	Screw (#8-32 X 3/8 Lg.)
4	12293	2-1/2 ft.	Cable (16/3 SJTO)	20	206857	1	Special Washer
5	10166	2	Machine Screw	21	250150	1	Decal
			(#10-24 UNC X 1/2 Lg.)	22	39092	1	Relay
6	420718-4	1	Contactor	23	51218WH2	1	Electrical Control Box
7	10197	2	Nut (#10-24 UNC)	24	10159	2	Machine Screw
8	11108	3	Lockwasher (#10 External Tooth)			(#6-32 UNC X 5/16 Lg.)
9	11856	1	Machine Screw	25	10195	2	Nut (#6-32 UNC)
			(#10-24 X 1" Lg.)	26	15906	2	Lockwasher (#6 External Tooth)
10	205189	1	Ground Decal	27	11202	1	Nipple
11	210112	1	Strain Relief Bushing	28	212434	1	Washer
12	308752	8 ft.	Cable (14/3 SJTO)	29	15468	1	Screw (#6-32 X 3/8 Lg.)
13	15993	1	Strain Relief Bushing		DADTO	INCL UD	ED BUT NOT CHOWN
14	307491	1	Remote Hand Switch Ass'y		200188	INCLUD 1	ED BUT NOT SHOWN Warning Decal
		_	(See back sheet 13 of 14)		11209	1	Electrical Plug
15	11539	2	Machine Screw	То	11209	1	(For 230 V. uits only)
			(#10-24 X 1/4 Lg.)	Drawing			(1 of 200 v. uits offiy)
16	305665	1	Transformer	Brawing			

ELECTRICAL SCHEMATIC

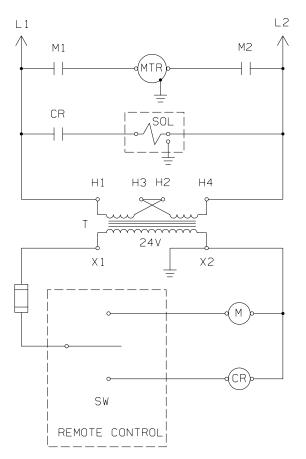
(For units with 3-way, 2 position solenoid valves)

220/230 Volt, 50/60 Hz., Single Phase

L3

WARNING

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



North American & International Color Codes

	North AmericanBlack	
	White	-
Ground	Green	Green/Yellow

Note:

Unless otherwise specified, all units are to be wired for 220/230 V., 50/60 Hz. (CCW rotation for lead end)

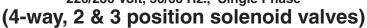
Transformer connections are as shown for 220/230 V., 50/60 Hz.

Motor is not wired for dual cycle. It is for either 50 or 60 cycle use. Refer to motor nameplate for proper cycle.

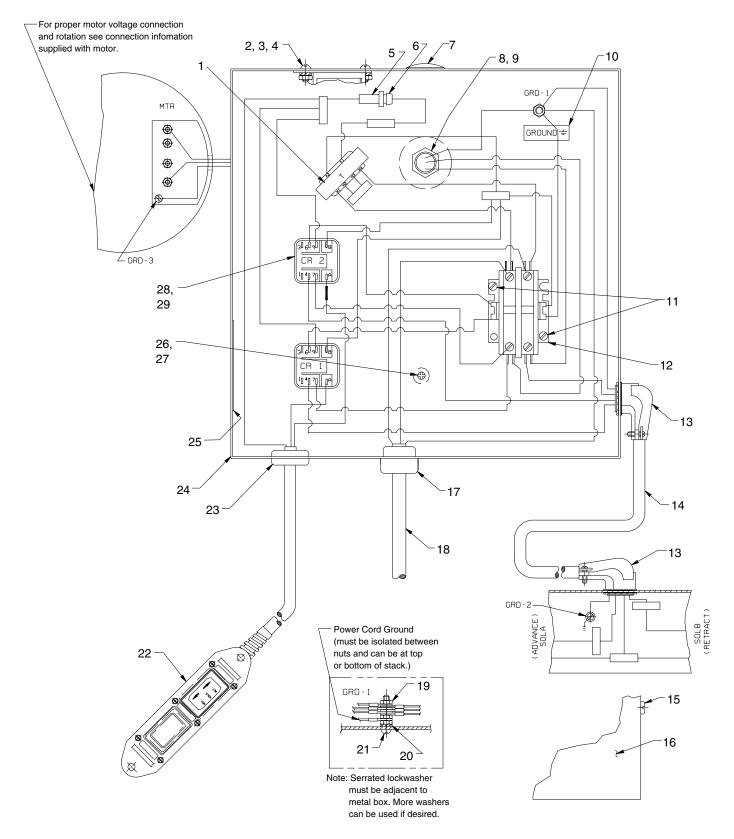
Note: Shaded areas reflect last revision(s) made to this form.

ELECTRICAL CONTROL ASSEMBLY









Sheet No. 12 of 14

Issue Date: Rev. 1-30-96

Parts List, Form No. 101355, Back sheet 12 of 14

Iten No		No. Req'd	Description	Item No.	Part No.	No. Req'd	Description
1	305665	1	Transformer	18	308752	12 ft.	Cable (14/3 SJTO)
2	10159	2	Machine Screw	19	10197	3	Nut (#10-24 UNC)
			(#6-32 UNC X 5/16 Lg.)	20	11108	1	Lockwasher (#10 External Tooth)
3	15906	2	Lockwasher (#6 External Tooth	n) 21	11856	1	Machine Screw (#10-24 X 1" Lg.)
4	10195	2	Nut (#6-32 UNC)	22	202778	1	Remote Hand Switch Ass'y
5	206962	1	Fuse (3 AMP, 250 V.)				(See sheet 14 of 14)
6	16887	1	Fuse Holder	23	15993	1	Strain Relief Bushing
7	17782	1	Snap Plug	24	51218WH2	1	Electrical Control Box
8	11202	1	Nipple	25	250150	1	Decal
9	212434	1	Washer (For 7/8 bolt)	26	13532	1	Screw (#8-32 X 3/8 Lg.)
10	205189	1	Ground Decal	27	206857	1	Special Washer
11	10166	2	Machine Screw	28	39092	1	Relay
			(#10-24 UNC X 1/2 Lg.)	29	11539	4	Machine Screw (#10-24 X 1/4 Lg.)
12	420718-4	1	Contactor				
13	11144	2	90° Elbow Connector		PARTS	INCLU	DED BUT NOT SHOWN
14	15565	2.3 ft.	Electrical Cable		200188	1	Decal
15	14812	4	Tap Screw (#8-18 X 3/8 Lg.)	То	11209	1	Electrical Plug
16	43126WH2	1	Control Box Cover	Drawing			(For 230 V. units only)
17	210112	1	Strain Relief Bushing				

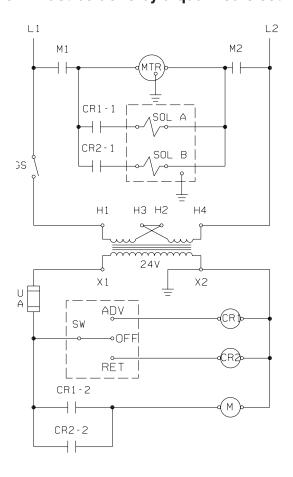
ELECTRICAL SCHEMATIC

(For units with 4-way, 2 & 3 position solenoid valves)

220/230 Volt, 50/60 Hz., Single Phase

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
	Black	
Neutral	White	Blue
Ground	Green	Green/Yellow

Note:

L3

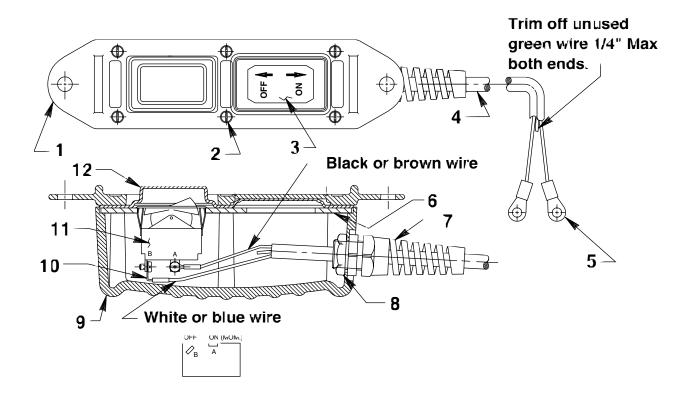
Unless otherwise specified, all units are to be wired for 220/230 V., 50/60 Hz. (CCW rotation for lead end)

Transformer connections are as shown for 220/230 V., 50/60 Hz.

Motor is not wired for dual cycle. It is for either 50 or 60 cycle use. Refer to motor nameplate for proper cycle.

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

REMOTE HAND SWITCH ASSEMBLY No. 25017

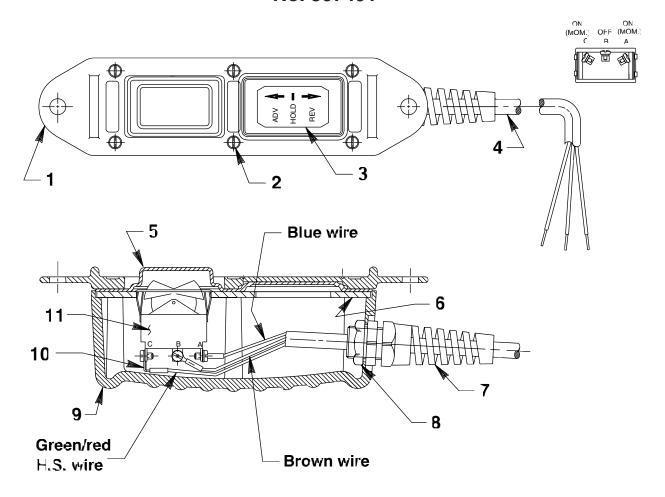


Item No.	Part No.	No. Req'd	Description
1	420050-1	1	Cover
2	250248	6	Screw (4-24 x 3/4 Lg.)
3	202763	1	Decal
4	12908	11 ft.	Cable (18/3 SJTO)
5	10458	2	Ring Terminal
6	420050-3	1	Switch Mounting Plate
7	251818	1	Strain Relief Connector
8	251802	1	Locknut (3/4-16 UNF; Torque to 30/35 in. lbs.)
9	420050-4	1	Switch Housing
10	10525	2	Ring Terminal
11	16772	1	Rocker Switch
12	420050-2	1	Gasket

Note: This page was added to this form.

Sheet No.	13 of 14
Issue Date:	Rev. 1-30-96

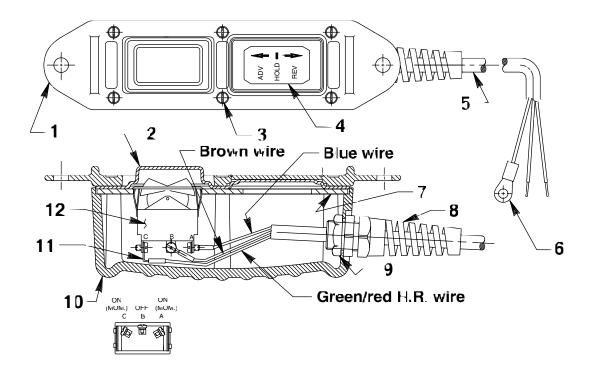
REMOTE HAND SWITCH ASSEMBLY No. 307491



Item No.	Part No.	No. Req'd	Description
1	420050-1	1	Cover
2	250248	6	Screw (4-24 x 3/4 Lg.)
3	202776	1	Decal
4	12293	25 ft.	Cable (16/3 SJTO)
5	420050-2	1	Gasket
6	420050-3	1	Switch Mounting Plate
7	251818	1	Strain Relief Connector
8	251802	1	Locknut (3/4-16 UNF; Torque to 30/35 in. lbs.)
9	420050-4	1	Switch Housing
10	12311	3	Ring Tongue Terminal
11	16773	1	Rocker Switch

Note: This page was added to this form.

REMOTE HAND SWITCH ASSEMBLY No. 202778



Item No.	Part No.	No. Req'd	Description
1	420050-1	1	Cover
2	420050-2	1	Gasket
3	250248	6	Screw (4-24 x 3/4 Lg.)
4	202776	1	Decal
5	12908	10 ft.	Cable (18/3 SJTO)
6	10458	2	Ring Terminal
7	420050-3	1	Switch Mounting Plate
8	251818	1	Strain Relief Connector
9	251802	1	Locknut (3/4-16 UNF; Torque to 30/35 in. lbs.)
10	420050-4	1	Switch Housing
11	10525	3	Ring Terminal
12	16773	1	Rocker Switch

Note: This page was added to this form.

Sheet No.	14 of 14		
Issue Date:	Rev. 1-30-96		