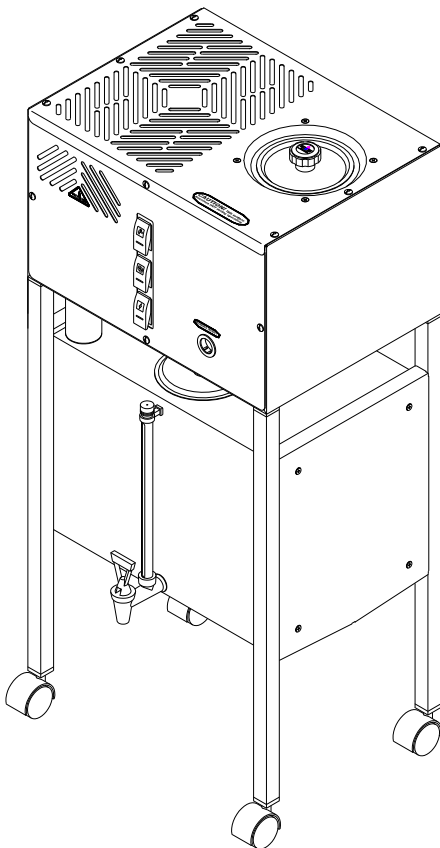




REPLACEMENT PARTS MANUAL

FOR MODEL: PWS 12-12(120VAC), PWS 12-12(240VAC), AED-1(120VAC), AED-1(240VAC), APK-1(120VAC) & APK-1(240VAC)

PART #	510000	510002	500006	500015	500007	500016
SERIES	0021	0021	0003	0003	0002	0002



MODEL PWS 12-12

PRECISION WATER SYSTEMS

WATER DISTILLER

MANUFACTURED BY:

PRECISION DESIGN & MANUFACTURING INC.

9024-100 Street

WESTLOCK, ALBERTA, CANADA, T7P 2L4

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PHONE (780) 349-4933 FAX (780)349-4957

TABLE of CONTENTS

	<u>Page</u>
1. 094097 Holding Tank Assembly, 12-12 Automatic	4 & 5
2. 094112 Boiler Assembly, 12GPD Automatic	6 & 7
3. 094101 Distiller Body Assembly, 12GPD Automatic	8 & 9
4. 094099 12GPD Solenoid Valve Assembly	10 & 11
5. 094098 Distiller Head Assembly, 12GPD Automatic	12 & 13
6. 094123 Boiling Tank & Holding Tank Lids Assemblies	14 & 15
7. 094071 Automatic Electric Drain Assembly, AED-1	16 & 17
8. 094094 Automatic Pump Assembly, APK-1	18 & 19
9. 094109 Electric Terminals	20 & 21
10. 51026 Wiring Schematic	22 & 23

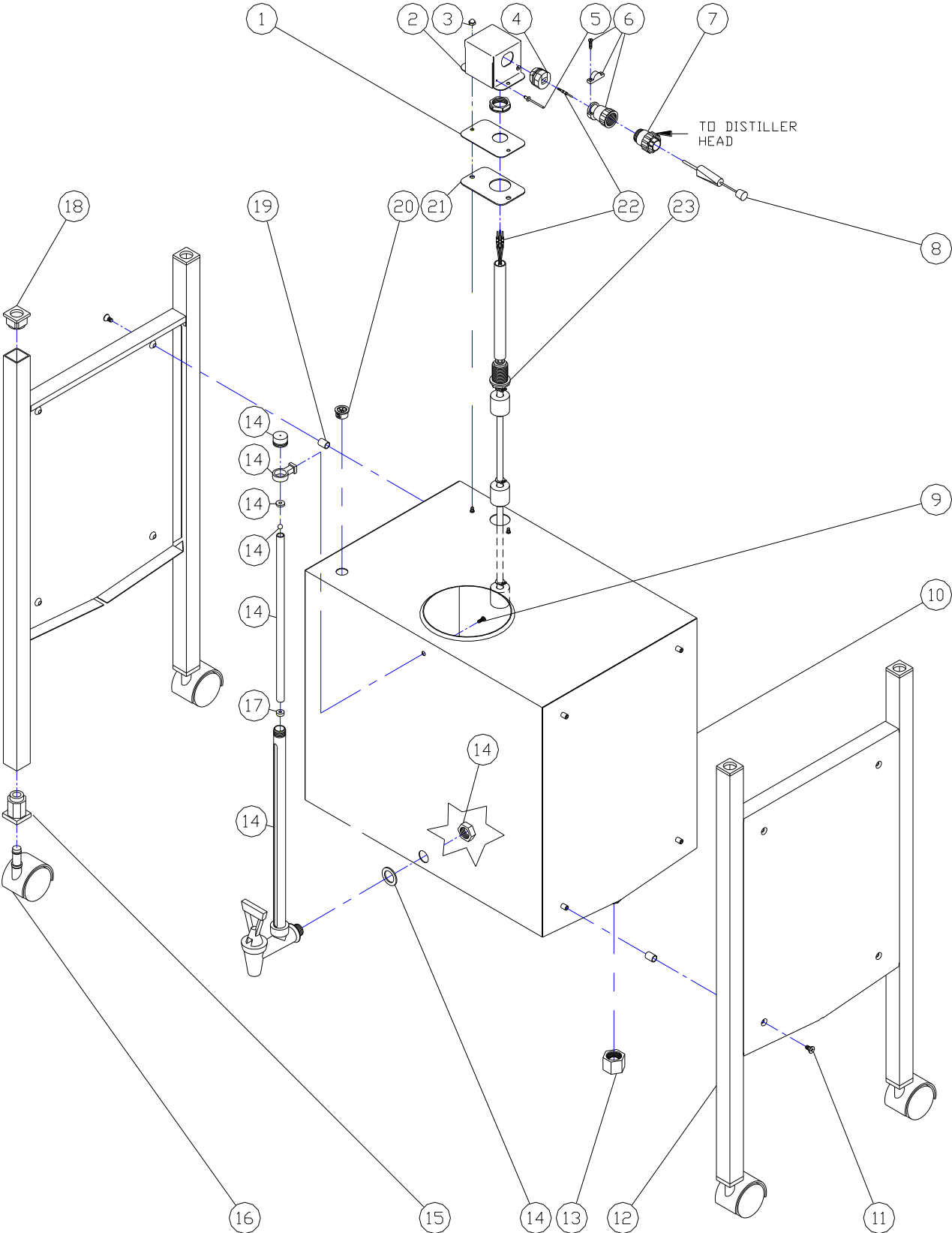
094097, Exploded Parts List

Holding Tank Assembly, 12-12 Automatic

Item #	Part #	Description	Qty
1	500325	Plate, Level Sensor	1
2	500133	Cover, Holding Tank Wires	1
3	028001	Nut, Acorn, Plated, #6-32	2
4	054002	Strain Relief, 7K-2	1
5	016004	Rivet, Alum, 1/8" x 5/16"	4
6	060045	Strain Relief, 7 pin, Circular	1
7	060043	Plug, 7 pin, Circular	1
8	080135	Circular Pin Extraction Tool	1
9	012013	Screw, Machine, SS, #10-24 X 3/8"	1
10	510161	Holding Tank WA, 12-12	1
11	012008	Screw, Machine, #10-24 X 3/8", Oval Head	8
12	510107	Leg End WA, 12-12	2
13	034023	Cap, Gray, 1/2" FPT	1
14	500517	Distiller Water Drain Valve, W/Sight Gauge, 13", SS	1
15	054014	Socket, 1" Square, Stem Mount, Castor	4
16	054013	Castor, 2" Twin Wheel, Stem Mount	4
17	080447	Washer, Upper Shield, Valve 4", 6", 13" & 23", HT	1
18	054017	Glide, Leg, 1" Square, Vinyl, Black	4
19	500274	Tube, 3/8" X 0.496"	8
20	054005	Bushing, Wire, 5/8"	1
21	500326	Gasket, Level Sensor	1
22	060016	Male Pin	4
23	500355	HT, 16", MLS Assembly, SS Stem	1

094097, Exploded Parts List

Holding Tank Assembly, 12-12 Automatic

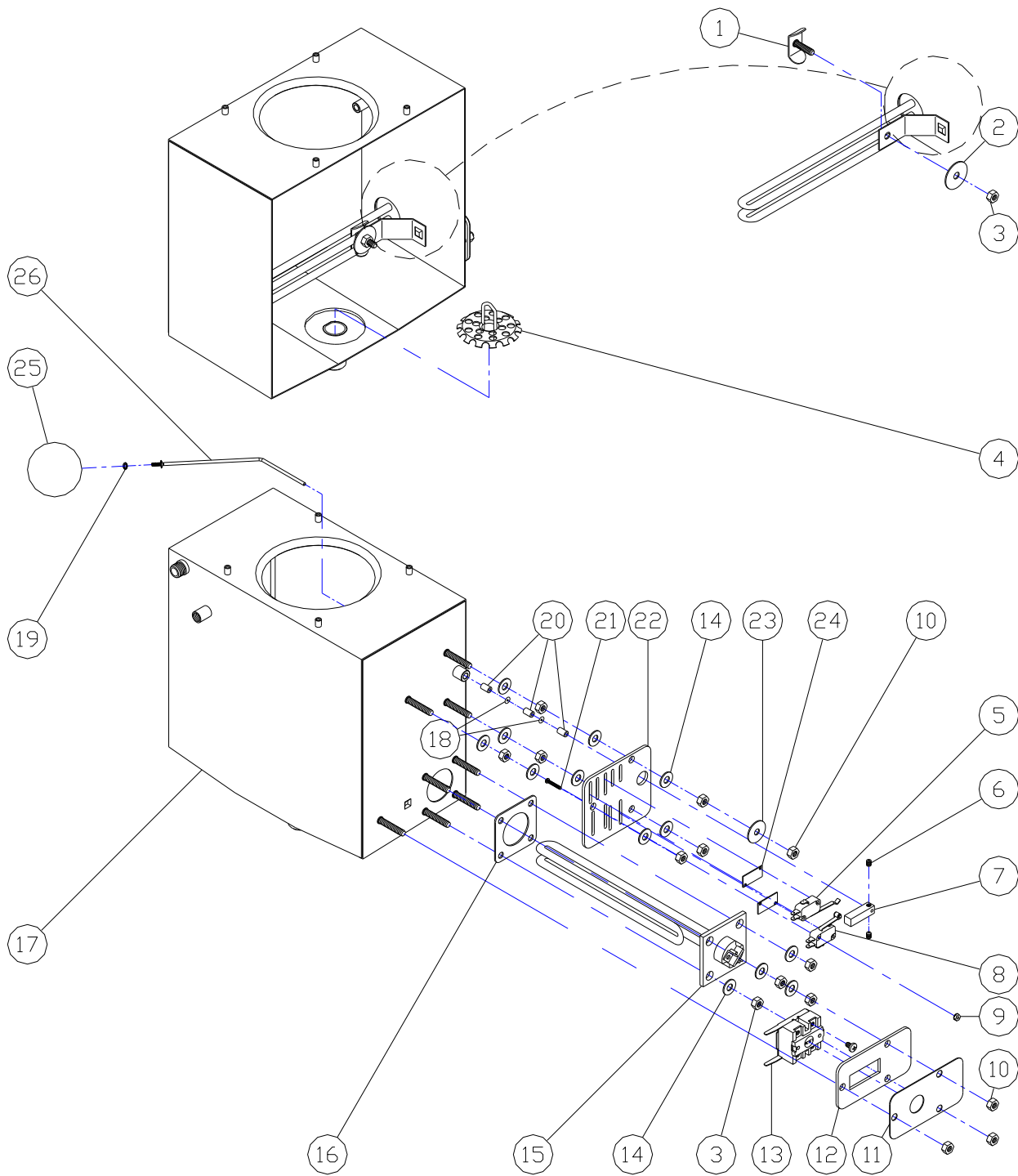


094112, Exploded Parts List Boiler Assembly, 12GPD Automatic

Item #	Part #	Description	Qty
1	500182	Clip, Heater, Studded	1
2	018009	Washer, Flat, 5/16" X 1-1/4" X 18ga, SS	1
3	025000	Nut, Hex, SS, 1/4"-20	5
4	500208	Drain Strainer WA	1
5	060059	Microswitch, Long Arm, Formed	1
6	016035	Set Screw, SS, #10-32 x .25", Cup Point	2
7	530333	Bar Actuator, Boiler Float	1
8	060058	Microswitch, Short Roller Arm	1
9	026003	Nut, Kep, Plated, #4-40	4
10	025002	Nut, Hex, Plated, 1/4"-20	10
11	500153	Cover, Reset, SS	1
12	500408	Plate, Reset Switch, 66TM, Lexan	1
13	060104	Switch, Thermo, Manual Reset, DPST, RT	1
14	018004	Washer, Flat, 5/16" X 11/16" X 20ga, SS	13
15	060003	Heating Element, 125V, 1500W	1
	060004	Heating Element, 230V, 1500W	1
16	500100	Gasket, Heater	1
17	510146	Boiler WA, 12GPD Auto	1
18	080128	O-Ring, 1/16" X 1/8" X 1/4"	2
19	020002	Washer, Lock, SS, M3.5, External Tooth	1
20	080127	Bushing, Teflon, 1/4" X 1/8"	3
21	012003	Screw, Machine, Plated, #4-40 X 3/4"	4
22	500266	Plate, Microswitch	1
23	018028	Washer, Flat, SS, 0.281"ID X 1"OD X 18ga.	1
24	500289	Shim, Microswitch	2
25	080162	Float Ball, SS, 2-1/4" Round, #6-32	1
26	500487	Rod WA, Boiler Float, Auto	1

094112, Exploded Parts List

Boiler Assembly, 12GPD Automatic



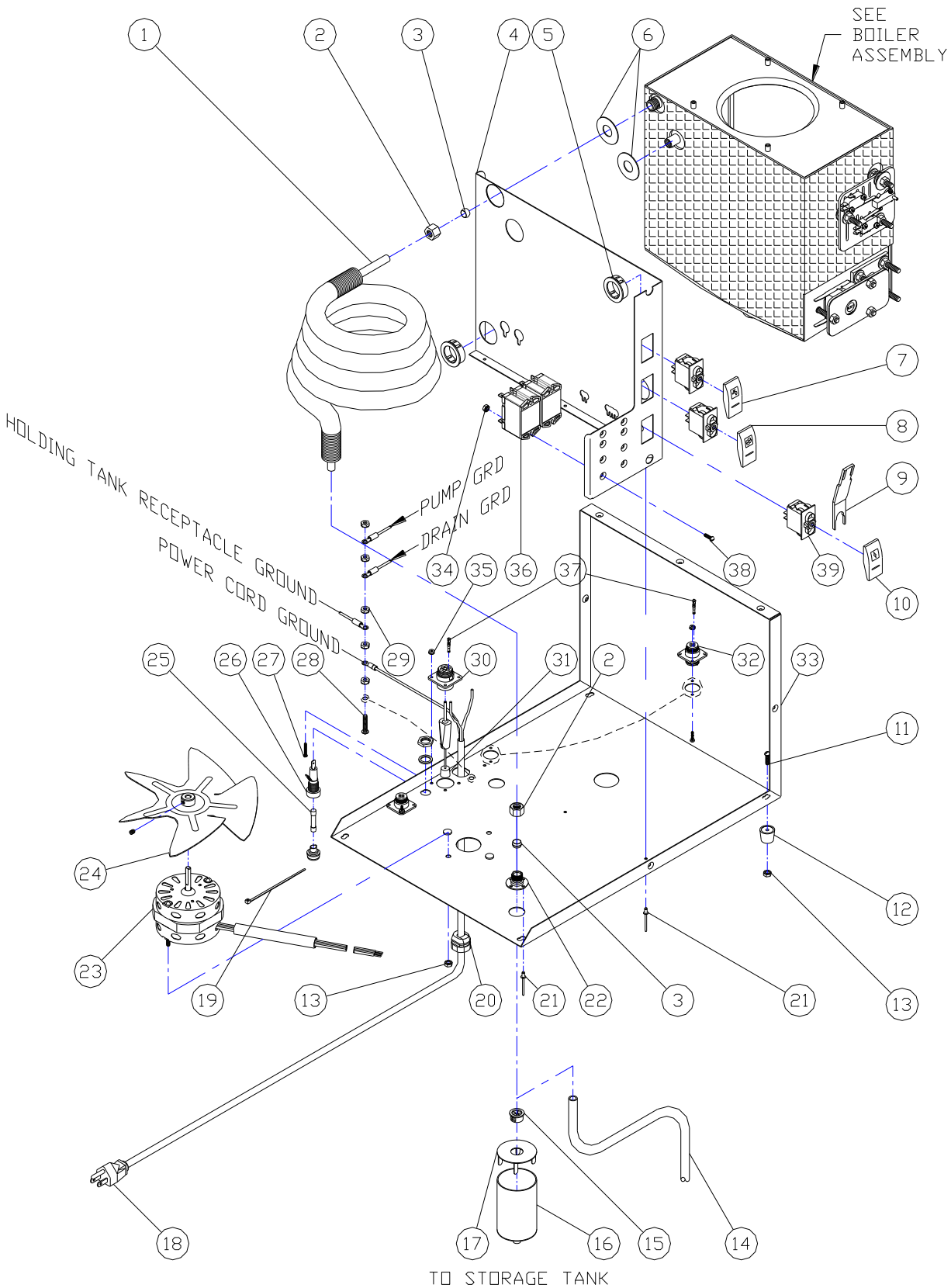
094101, Exploded Parts List

Distiller Body Assembly, 12GPD Automatic

Item #	Part #	Description	Qty
1	510135	Cooling Coil Assembly, 12GPD, Auto	1
2	030013	Nut, Plated, 3/8" Compression	2
3	030012	Ferrule, 3/8"	2
4	510101	Divider, 12GPD, Auto	1
5	054004	Bushing, Snap, 1-1/4"	2
6	018023	Washer, Flat, 5/8" X 1-1/2" X 20ga, SS	2
7	060031	Actuator, Grey, White-Water	1
8	060030	Actuator, Grey, Amber-Fan	1
9	080134	Tool, Actuator Removal	1
10	060029	Actuator, Grey, Red-Power	1
11	012012	Screw, Machine, Plated, #8-32 X 5/8"	4
12	054010	Leg, 3/4" OD X 5/8" High	4
13	026001	Nut, Kep, Plated, #8-32	6
14	052002	Tubing, PVC, 5/16" X 7/16"	2'
15	054005	Busing, Wire, Plastic, 5/8" Hole	1
16	500300	Filter Housing WA, Auto	1
17	500260	Filter Cap WA	1
18	510121	Power Cord Assembly, 14-3 NA, 12 GPD Automatic	1
19	054011	Wire Tie, Plastic, 4"	Ref.
20	054002	Strain Relief, 7K-2	1
21	016004	Rivet, Aluminum, 1/8" X 5/16"	8
22	530344	MOUNT, WA, CC COMPRESSION	1
23	510122	Motor Assembly, 120V, 12GPD, Auto	1
24	080046	Fan Blade, 8"	1
25	060022	Fuse, 1 Amp, Slow Blow	1
26	060036	Fuse Holder, Chassis, 15Amp (includes nut & gasket)	1
27	012003	Screw, Machine, Plated, #4-40 X 3/4", Round/Socket	6
28	012000	Screw, Machine, Plated, #10-24 X 1"	1
29	026000	Nut, Kep, Plated, #10-24	5
30	060044	Receptacle, 7 pin Circular	1
31	080135	Circular Pin Extraction Tool	1
32	060130	Receptacle, 4 Pin, Circular	2
33	510100	Body, 12GPD Auto	1
34	026002	Nut, Kep, Plated, #6-32	4
35	026003	Nut, Kep, Plated, #4-40	6
36	060018	Relay, Aromat, Black, 120V	2
	060019	Relay, Aromat, Black, 240V	2
37	060017	Female Pin	10
38	012009	Screw, Machine, Plated, #6-32 X 1/2"	4
39	060028	Switch Base, 120/240V SPST	3

094101, Exploded Parts List

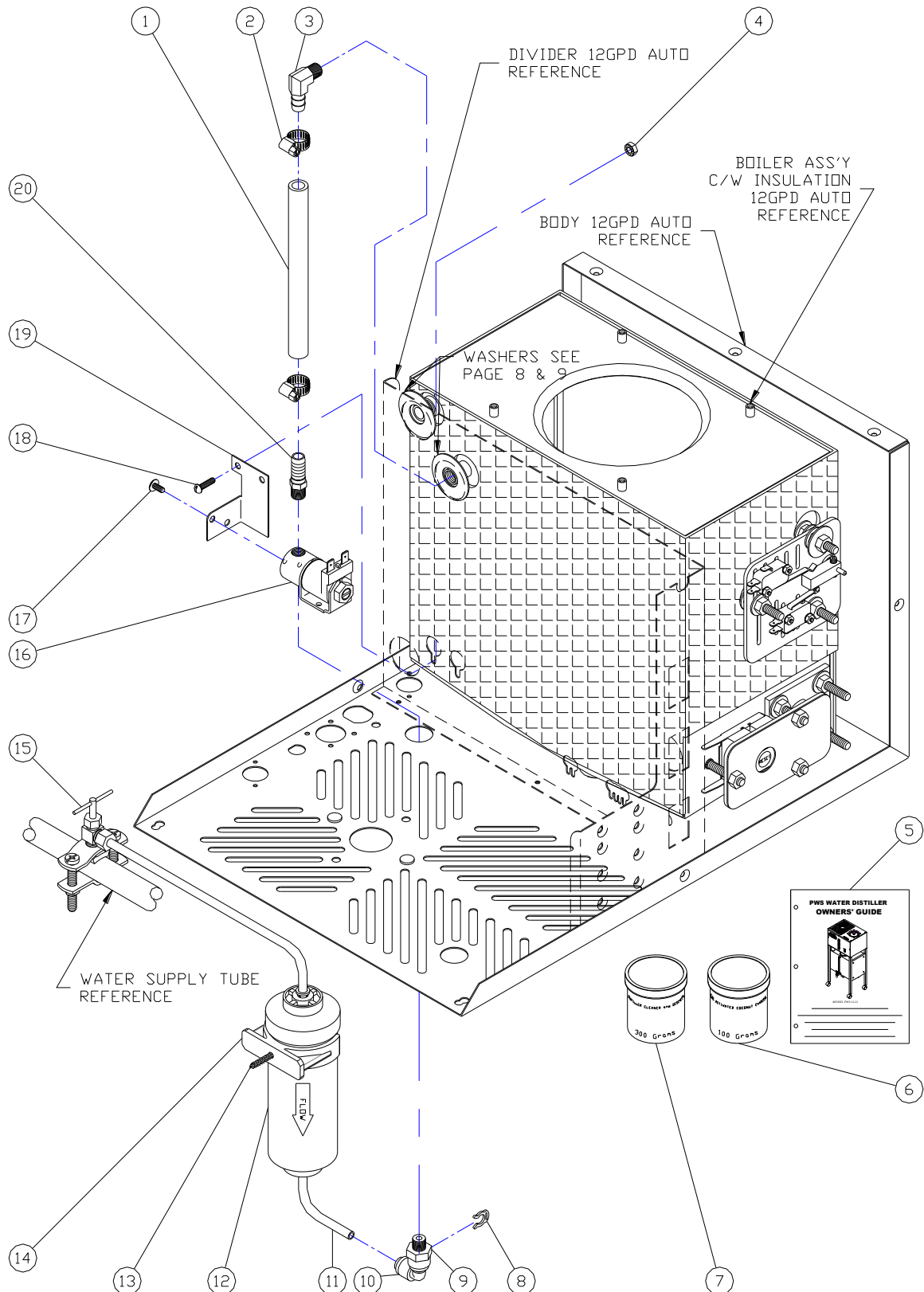
Distiller Body Assembly, 12GPD Automatic



094099, Exploded Parts List 8GPD Solenoid Valve Assembly

Item #	Part #	Description	Qty
1	052032	Peristaltic Tubing, 9.6mmID X 14.6mmOD	0.563'
2	080056	Gear Clamp, SS, 1/4"	2
3	030003	Elbow, 90 Degree, 1/8"MPT X 3/8"HB	1
4	026001	Nut, Kep, Plated, #8-32UNC	2
5	097123	Owners Guide, PWS 12-12	1
6	080116	Charcoal, Sample, 100 Gram Jar	1
7	080115	Descaler, Sample, 300 Gram Jar	1
8	034009	Locking Clip, 1/4"JG	1
9	034054	Gray Acetal Male Connector 1/4 X 1/8 NPTF, JG	1
10	034057	Gray Acetal Plug in Elbow, 1/4 Stem - 1/4Tube, JG	1
11	052000	Tubing, 1/4" Feed-line	16'
12	080054	Filter, Sediment, CL6-RO, Red	1
13	010008	Screw, SM, Plated, #10-12 X 1", Pan Socket	1
14	054073	Nylon Mounting Clip, Single, 2" Diameter	1
15	036005	Valve, Self Piercing Kit	1
16	060026	Solenoid Valve, 1/8"FPT BE, 120V	1
	060027	Solenoid Valve, 1/8"FPT BE, 240V	1
17	012017	Screw, Machine, SS, #8-32UNC X 3/8"	2
18	012012	Screw, Machine, Plated, #8-32 X 5/8"	2
19	500469	Bracket, Brass Solenoid Valve	1
20	034024	Coupler, Nylon, 1/8"MPT X 3/8"HB	1

094099, Exploded Parts List 12GPD Solenoid Valve Assembly



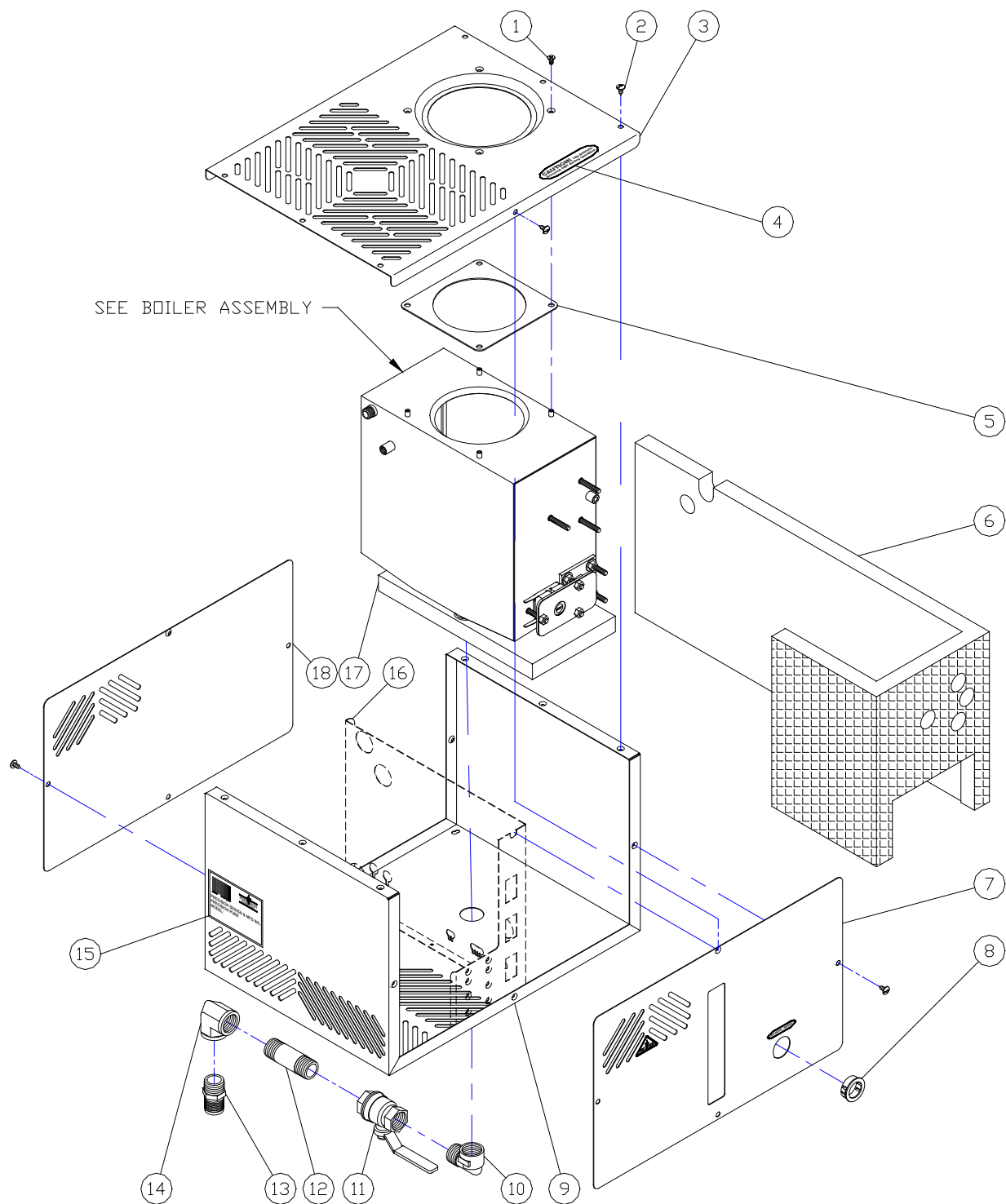
094098, Exploded Parts List

Distiller Head Assembly, 12GPD Automatic

Item #	Part #	Description	Qty
1	012008	Screw, Machine, #10-24 X 3/8", Oval Head	4
2	010000	Screw, Sheet Metal, SS, #10-12 X 1/2"	14
3	510102	Cover, Top, 12GPD, Auto	1
4	080119	Sheet,Imprintable Poly,Silver 8.5 x 11	1
5	500111	Gasket, Lid	1
6	510118	Insulation, 12GPD Boiler Sides	1
7	510103	Cover, Front, 12GPD	1
8	054004	Bushing, Snap, 1.25"	1
9	510100	Body, 12GPD	1
10	030016	Elbow, 90 Degree, 3/4"MPT X 3/4"FPT	1
11	030009	Valve, Ball, 3/4"FPT, Both Ends	1
12	030021	Nipple, 3/4"MPT X 3"	1
13	030015	Coupler, 3/4"MPT X 1"HB	1
14	030018	Elbow, 90 Degree, 3/4"FPT, Both Ends	1
15	080120	Decal, Sht, PWS, Distillers	1
16	510101	Divider, 12GPD	1
17	510119	Insulation, 12GPD Boiler Bottom	1
18	510104	Cover, Rear, 12GPD	1

094098, Exploded Parts List

Distiller Head Assembly, 12GPD Automatic



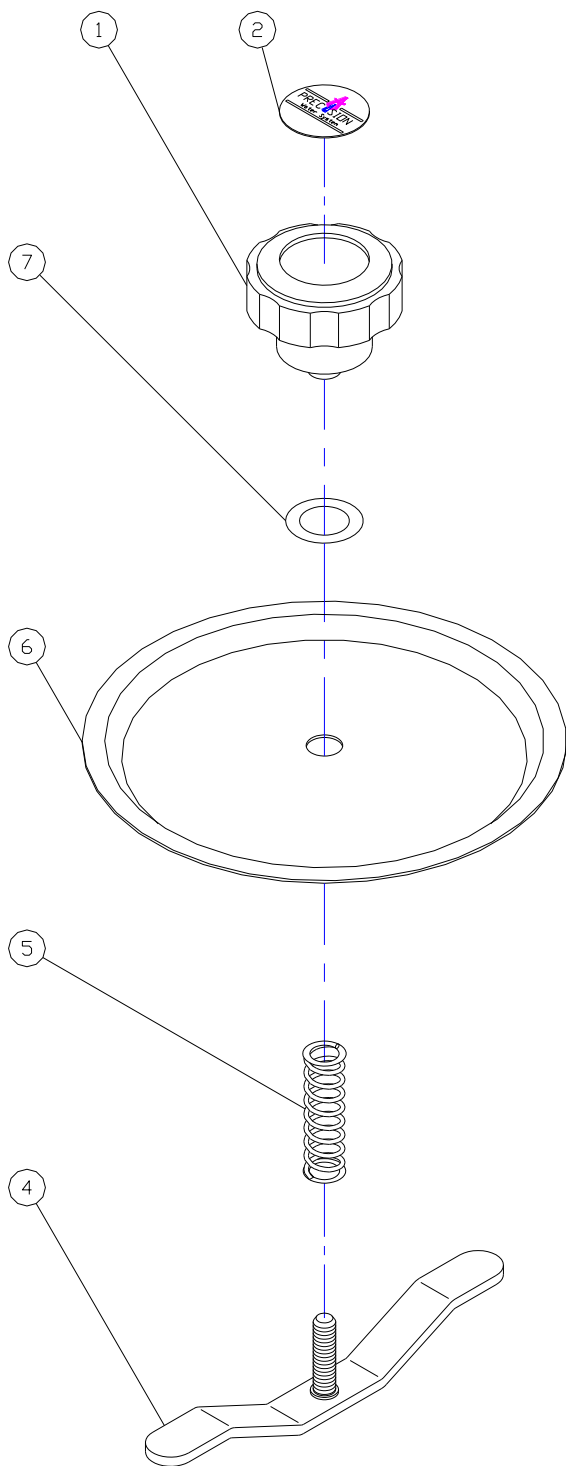
094074, Exploded Parts List

Boiling Tank & Holding Tank Lids Assemblies

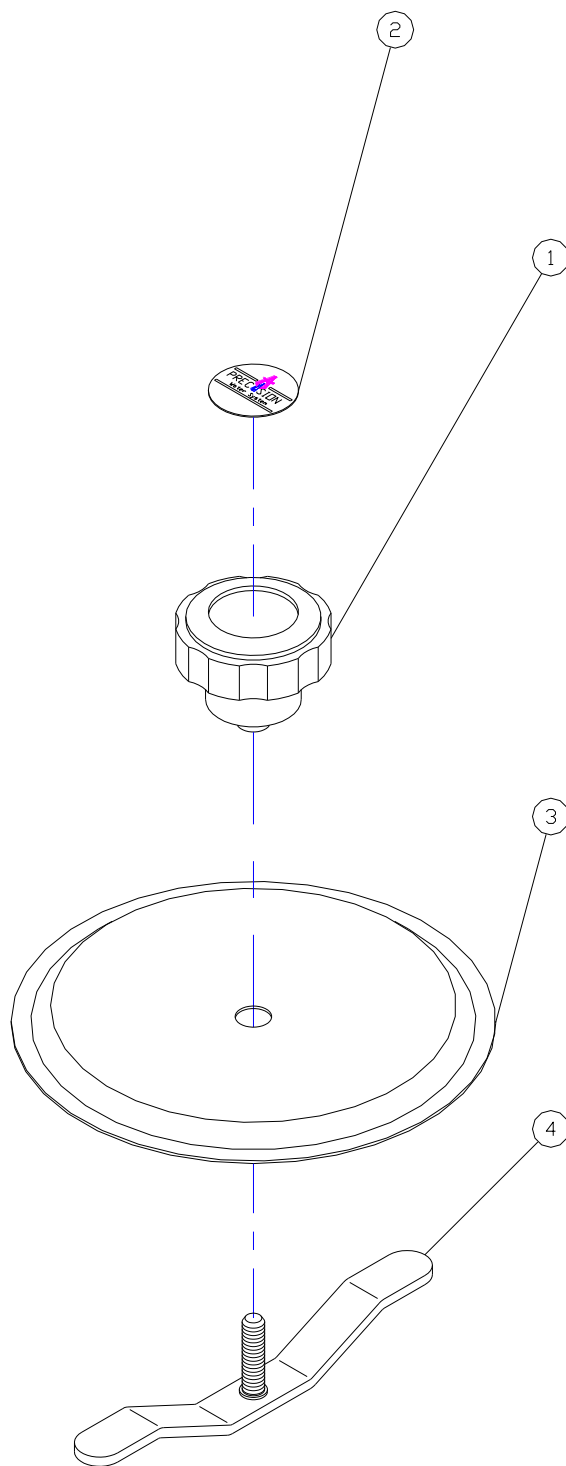
Item #	Part #	Description	Qty
1	080053	Knob, Black Phenolic, 1/4"-20	2
2	080106	Inlay, Knob, PWS	2
3	500119	Lid, Holding Tank, Disc, SS, 5.5"	1
4	500115	Tee Bar, Studded, 5.5"	2
5	080058	Spring, Boiling Tank, Lid, SS	1
6	500118	Lid, Boiling Tank, Disc, SS, 5.5"	1
7	080064	O-Ring, Lid Knob, Buna 112	1

094074, Exploded Parts List

Boiling & Holding Tank Lids Assemblies, PWS



BOILING TANK
LID ASSEMBLY
(PART # 500184)



HOLDING TANK
LID ASSEMBLY
(PART # 500248)

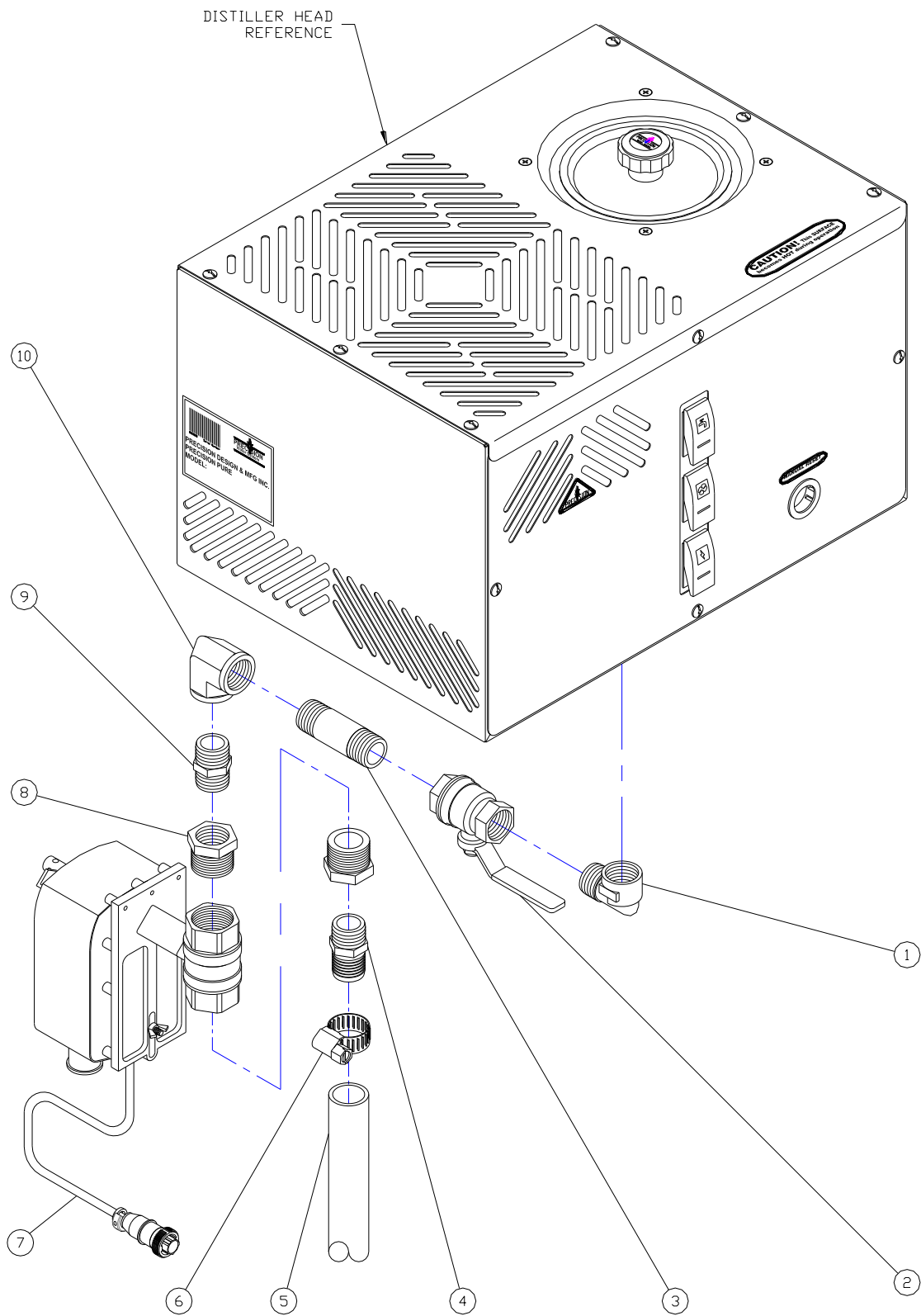
094096, Exploded Parts List

Automatic Electric Drain Assembly, AED-1

Item #	Part #	Description	Qty
1	030016	Elbow, 90 Degree, ¾"FPT X ¾"MPT	1
2	030009	Valve, Ball, ¾"FPT, Both Ends	1
3	030021	Nipple, ¾"MPT X 3"	1
4	030015	Coupler, ¾"MPT X 1"HB	1
5	052005	Tubing, 1" X 1-1/4"	4'
6	080121	Clamp, Gear, 1-1/4"	1
7	500448	Motorized Ball Valve, w/Cord, 115V	1
	500452	Motorized Ball Valve, w/Cord, 230V	1
8	030031	Reducer, 1"MPT X ¾"FPT	2
9	030017	Nipple, Close, ¾"MPT	1
10	030018	Elbow, 90 Degree, ¾"FPT	1

094096, Exploded Parts List

Automatic Electric Drain Assembly, AED-1

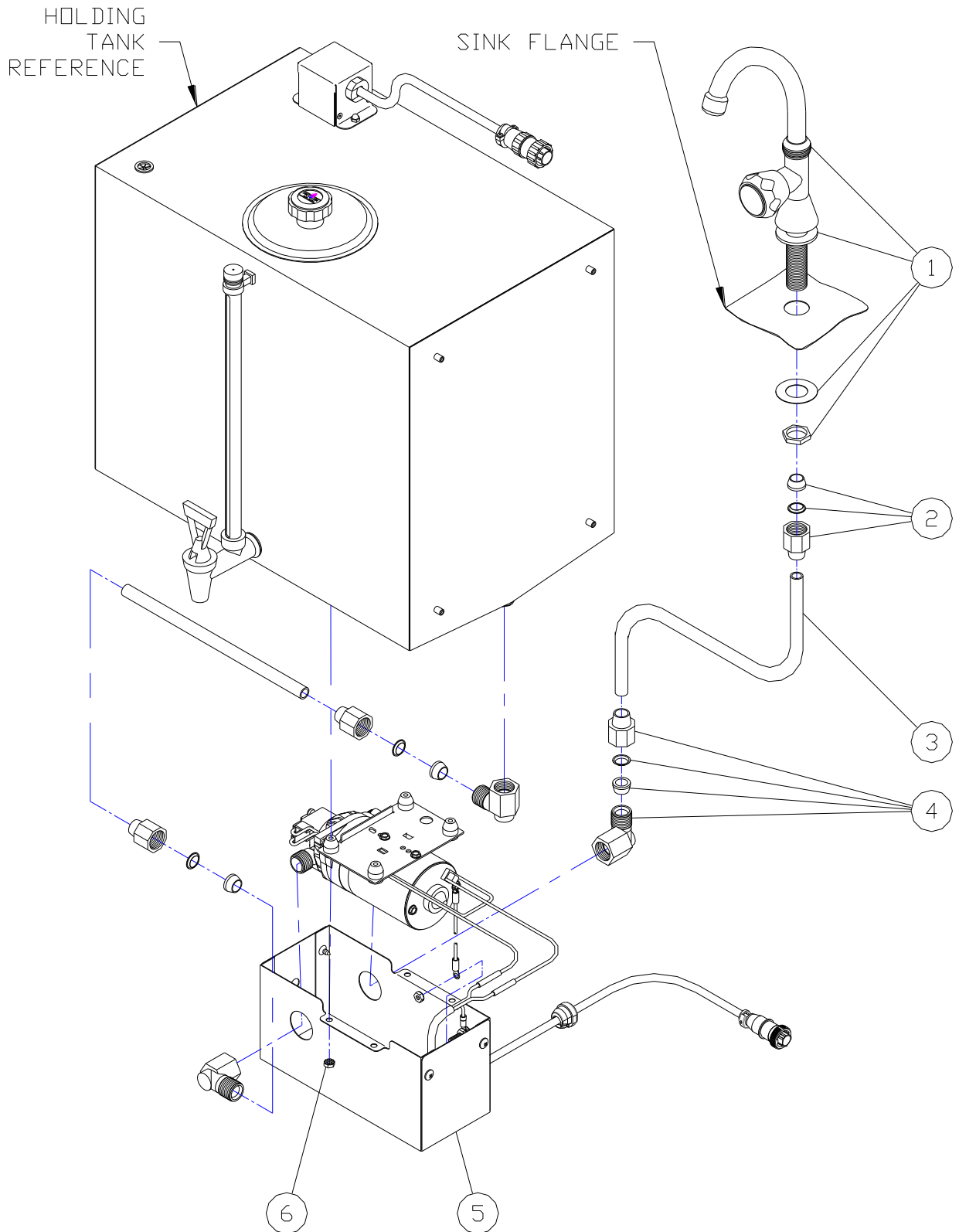


094094, Exploded Parts List Automatic Pump Assembly, APK-1

Item #	Part #	Description	Qty
1	080052	Faucet, Chrome	1
2	034003	Nut/Cone/Ring Set, ½" OD	1
3	052001	Tubing, LDPE, 3/8" X ½"	25'
4	034002	Elbow, 90 Degree, ½"FPT X ½"OD Tube	3
5	500358	Pump Ass'y, W/Cord, 1.4GPM, 120V, CP	1
	510182	Pump Ass'y, W/Cord, 1.2GPM, 240V, CP	1
6	026000	Nut, Kep, Plated, #10-24	4

094094, Exploded Parts List

Automatic Pump Assembly, APK-1



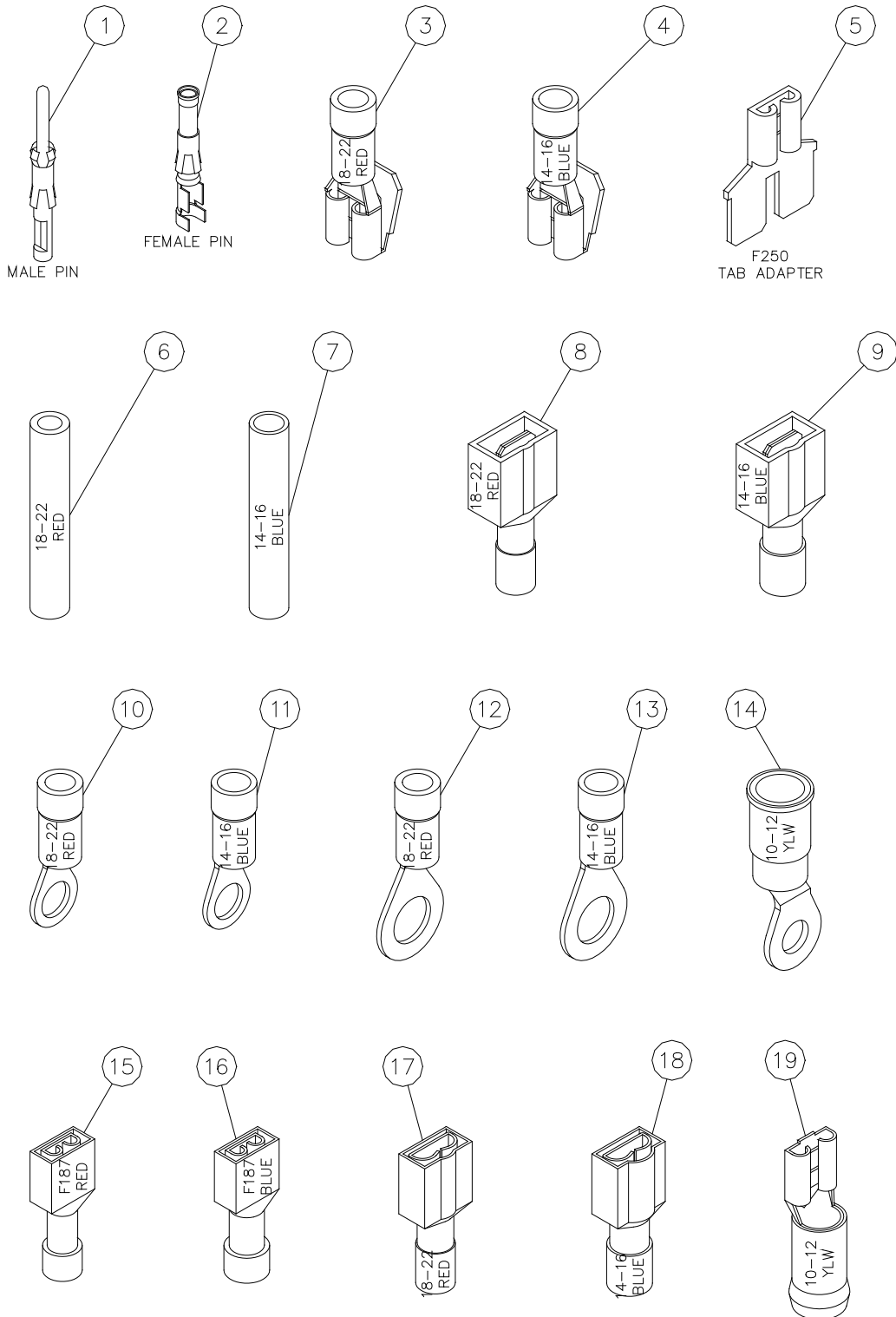
094109, Exploded Parts List

Electrical Terminals

Item #	Part #	Description
1	060016	Pin, Male, Circular
2	060017	Pin, Female, Circular
3	066014	Receptacle, Pigg, F250, #18-22 AWG, Red
4	066004	Receptacle, Pigg, F250, #14-16 AWG, Blue
5	066013	Tab Adapter, F250
6	066006	Butt Splice, #18-22 AWG, Red
7	066005	Butt Splice, #14-16 AWG, Blue
8	066012	Tab, 250, #18-22 AWG, Red
9	066011	Tab, 250, #14-16 AWG, Blue
10	066008	Ring, #10, #18-22 AWG, Red
11	066007	Ring, #10, #14-16 AWG, Blue
12	066010	Ring, ¼", #18-22 AWG, Red
13	066009	Ring, ¼", #14-16 AWG, Blue
14	066016	Ring, #10, #10-12 AWG, Yellow
15	066003	Receptacle, F187, #18-22 AWG, Red
16	066001	Receptacle, F187, #14-16 AWG, Blue
17	066002	Receptacle, F250, #18-22 AWG, Red
18	066000	Receptacle, F250, #14-16 AWG, Blue
19	066015	Receptacle, F250, #10-12 AWG, Yellow

094109, Exploded Parts List

Electrical Terminals



Wiring List - PRECISION PURE 12-12/12-20 (12GPD AUTO) PART # 510126-S19B

					SERIES 19		
No.	Part#	Color	Ga.	Length	From Conn.	To Conn.	To Location
1	510121	GRN	14	3"	#10RING #14-#16	POWER CORD	GROUND
2	510121	BLK	14	17.5"	F250 #14-#16	POWER CORD	POWER SWITCH #2
3	510121	WHT	14	18.5"	#10RING #14-#16	POWER CORD	RESET SWITCH #4
4	510122	BLK	18	12"	PIGG#18-#22	FAN MOTOR	HEATER RELAY #1
5	510122	BLK	18	13"	F250 #18-#22	FAN MOTOR	FAN SWITCH #2
6	095182	GRN	16	6"	FPIN	#10RING #14-#16	4 PIN RECEPTACLE #4 PUMP
7	095182	GRN	16	6"	FPIN	#10RING #14-#16	4 PIN RECEPTACLE #4 AUTO DRAIN
8							
9	095192	BLK	14	7"	#10RING #14-#16	F187 #14-#16	RESET SWITCH #1
10	095193	GRN	14	23"	PIGG #14-#16	F250 #14-#16	HEATER RELAY #5
11	095194	BLK	14	28"	F187 #14-#16	F250 #14-#16	Upper Microswitch COM
12	095183	BLK	16	4.5"	FPIN	F250 #14-#16	4 PIN RECEPTACLE #2 PUMP
13	095187	WHT	16	25"	FPIN	#10RING #14-#16	4 PIN RECEPTACLE #3 PUMP
14	095035	ORG	16	20"	#10RING #14-#16	FPIN	RESET SWITCH #3
15	095036	BLU	16	19"	F250 #14-#16	FPIN	HEATER RELAY #3
16	095004	YLW	16	7"	PIGG #14-#16	FPIN	SOLENOID VALVE A
17	095037	RED	16	22"	F250 #14-#16	FPIN	PUMP RELAY #5
18	095201	RED	14	8"	F250 #14-#16	#10RING #14-#16	POWER SWITCH #3
19	095188	BLK	16	21"	FPIN	PIGG #14-#16	4 PIN RECEPTACLE #2 AUTO DRAIN
20	095184	WHT	16	21"	FPIN	#10RING #14-#16	4 PIN RECEPTACLE #3 AUTO DRAIN
21	095204	WHT	14	4"	#10RING #14-#16	#10RING #14-#16	RESET SWITCH #1
22	095205	YLW	14	13"	F250 #14-#16	#10RING #14-#16	HEATER RELAY #1
23	095206	BRN	14	7"	F250 #14-#16	PIGG#14-#16	PUMP RELAY #6
24	095207	WHT	14	3"	F250 #14-#16	PIGG#14-#16	PUMP RELAY #3
25	095208	GRN	14	22"	F250 #14-#16	F250 #14-#16	PUMP RELAY #4
26	095207	WHT	14	3"	PIGG #14-#16	F250 #14-#16	HEATER RELAY #4
27	095209	BRN	14	13"	F250 #14-#16	#10RING #14-#16	HEATER RELAY #2
28	095210	ORG	14	9"	F250 #14-#16	#10RING #14-#16	FAN SWITCH #3
29	095211	RED	14	12"	#10RING #14-#16	F250 #14-#16	HEATING ELEMENT "B"
30	095207	WHT	14	3"	F250 #14-#16	PIGG #14-#16	FAN SWITCH #6
31	095207	WHT	14	3"	F250 #14-#16	PIGG #14-#16	FAN SWITCH #7
32	095212	BRN	14	12"	F250 #14-#16	#10RING #14-#16	FAN SWITCH #8
33	095213	BLU	14	11"	F250 #14-#16	#10RING #14-#16	POWER SWITCH #8
34	095207	WHT	14	3"	F250 #14-#16	PIGG#14-#16	POWER SWITCH #6
35	095214	BLU	14	10"	F250 #14-#16	F250 #14-#16	HEATER RELAY #4
36	095215	GRN	14	14"	F250 #14-#16	#10RING #14-#16	WATER SWITCH #8
37	095216	BRN	14	24"	F250 #14-#16	PIGG #14-#16	WATER SWITCH #6
38	095217	YLW	14	5"	F250 #14-#16	PIGG #14-#16	WATER SWITCH #2
39	095218	GRN	14	13"	F187 #14-#16	F250 #14-#16	Lower Microswitch NC
40	095219	ORG	14	14"	F187 #14-#16	F250 #14-#16	Upper Microswitch NC

510126, Exploded Parts List

Wiring Diagram, PWS 12GPD Auto

