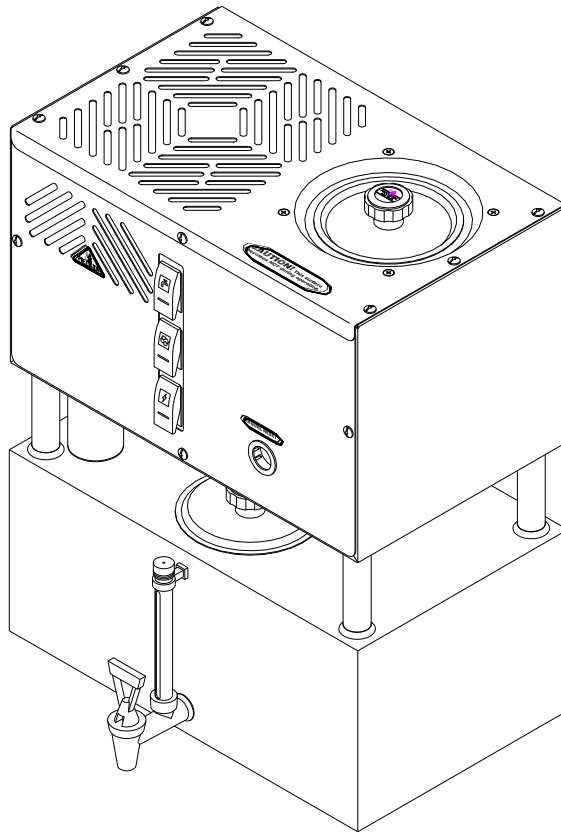




REPLACEMENT PARTS MANUAL

FOR MODEL: PWS 8-5(120VAC), PWS 8-5(240VAC), AED-1(120VAC), AED-1(240VAC), APK-2(120VAC) & APK-2(240VAC)

PART #	500002	500013	500006	500015	500008	500017
SERIES	0016	0016	0002	0002	0001	0001



MODEL PWS 8-5

PRECISION WATER SYSTEMS WATER DISTILLER

MANUFACTURED BY:
PRECISION DESIGN & MANUFACTURING INC.
10331 - 105th STREET
WESTLOCK, ALBERTA, CANADA, T7P 2H7
e-mail: info@precisioncanada.com
PHONE (780) 349-4933
FAX (780) 349-4957

TABLE of CONTENTS

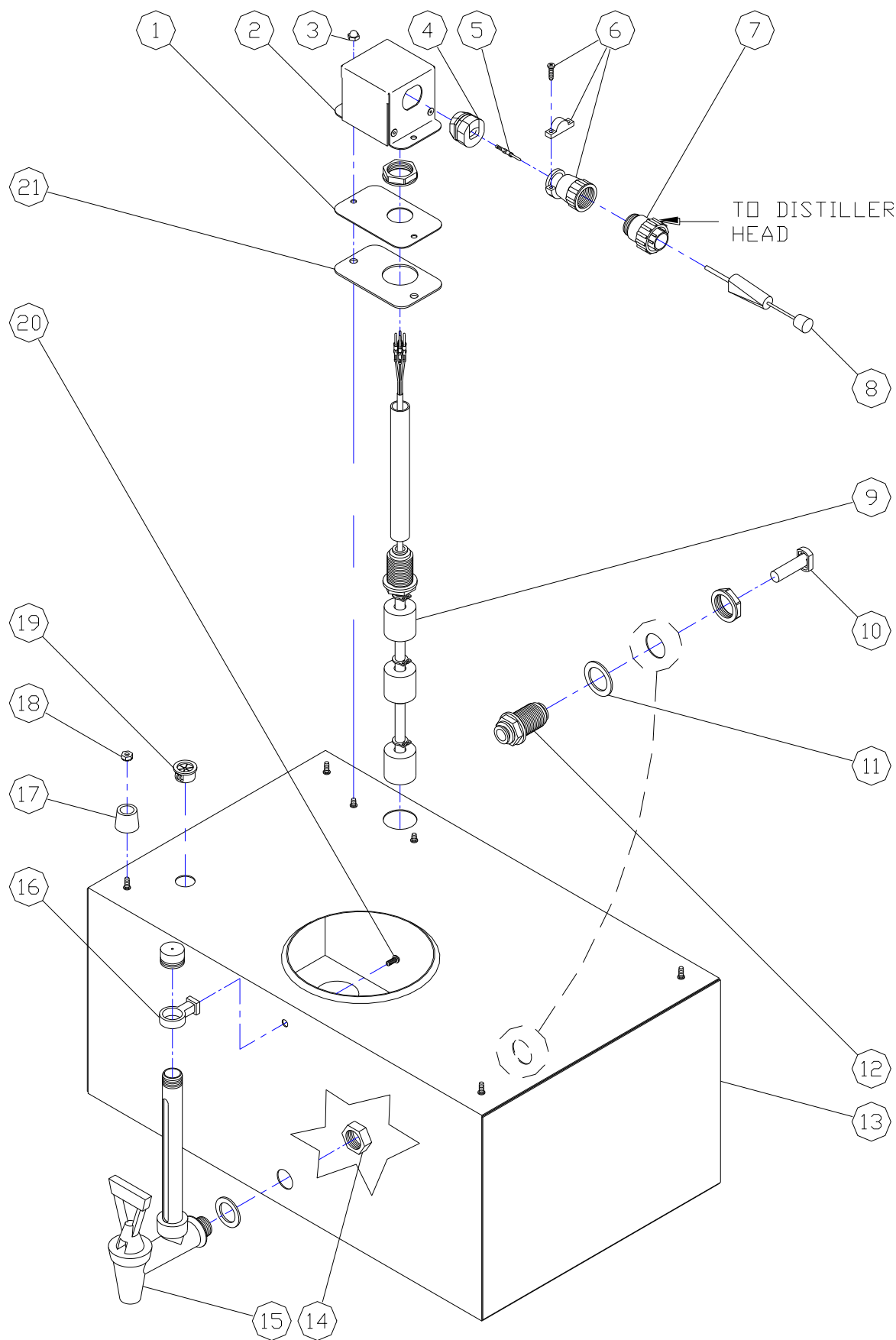
	<u>Page</u>
1. 094077 Holding Tank Assembly, 8-5 Automatic	4 & 5
2. 094110 Boiler Assembly, 8GPD Automatic	6 & 7
3. 094075 Distiller Body Assembly, 8GPD Automatic	8 & 9
4. 094070 8GPD Solenoid Valve Assembly	10 & 11
5. 094076 Distiller Head Assembly, 8GPD Automatic	12 & 13
6. 094123 Boiling Tank & Holding Tank Lids Assemblies	14 & 15
7. 094071 Automatic Electric Drain Assembly, AED-1	16 & 17
8. 094108 Automatic Pump Assembly, APK-2	18 & 19
8. 094109 Electrical Terminals	20 & 21
10. 500247 Wiring Schematic	22 & 23

094077, Exploded Parts List

Holding Tank Assembly, PWS, 8-5 Automatic

Item #	Part #	Description	Qty
1	500325	Plate, Level Sensor	1
2	500382	Cover, Holding Tank Wires	1
3	028001	Nut, Acorn, #6-32 Plated	2
4	054002	Strain Relief. 7K-2	1
5	060016	Male Pin	4
6	060045	Strain Relief, 7 pin, Circular	1
7	060043	Plug, 7 pin, Circular	1
8	080135	Circular Pin Extraction Tool	1
9	500354	HT, 7", MLS Assembly, SS Stem	1
10	034014	Stem, Plug, 3/8" JG	1
11	080148	Gasket Washer, 1/16" Silicone	1
12	034011	Bulkhead, 3/8", JG	1
13	500324	Holding Tank WA, 8-5	1
14	080132	Nut, Jam 3/8 Black	1
15	080043	Valve, HT, 6" (includes nut, washer & support)	1
16	080130	Support, SG, 5/8 Black	1
17	054012	Foot, Black, Vinyl, 0.875" X 0.625"	4
18	026002	Nut, Kep, #6-32	4
19	054005	Bushing, Wire, 5/8"	1
20	012013	Screw, Machine, #10-24 X 3/8" SS	1
21	500326	Gasket, Level Sensor	1

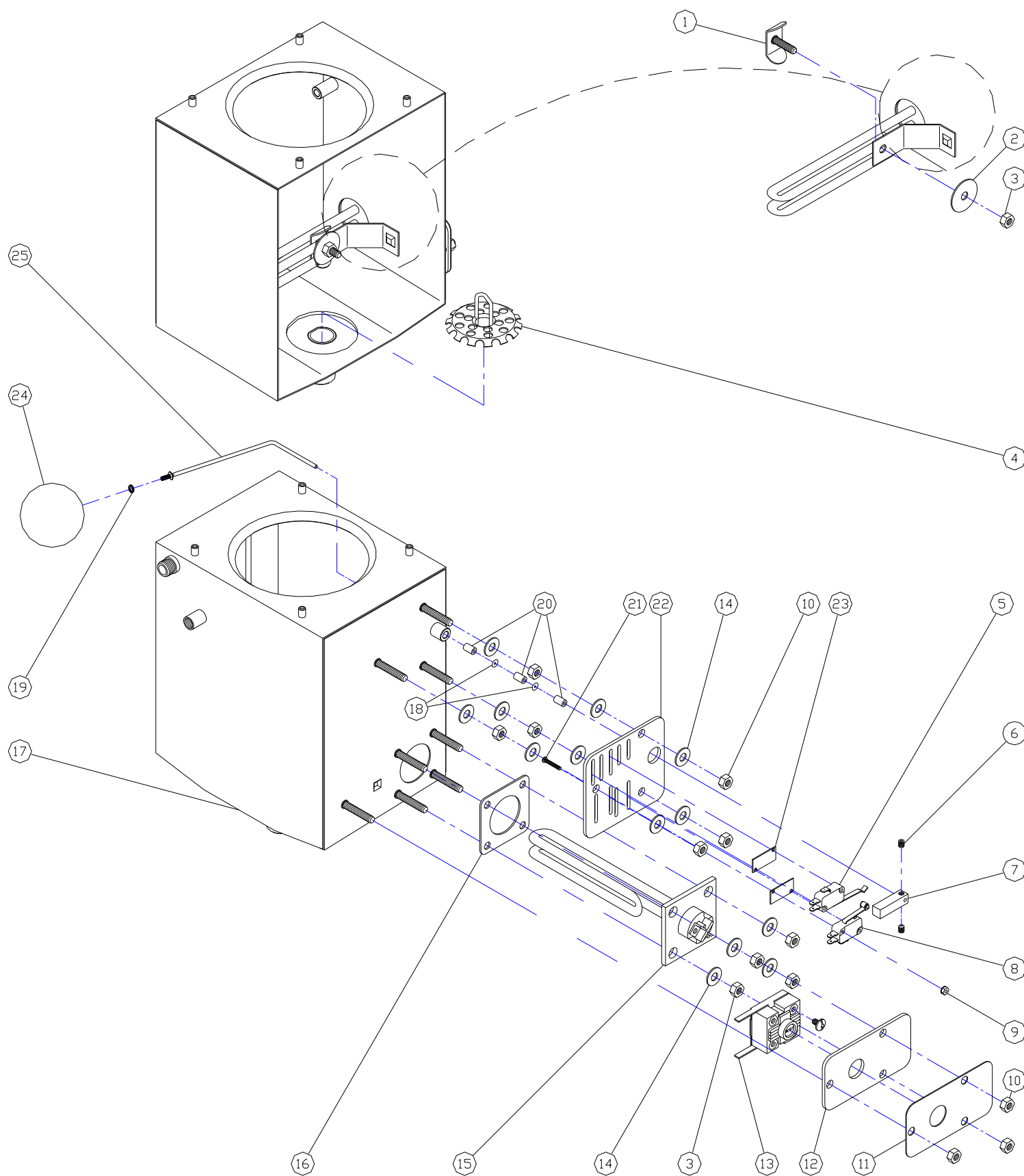
094077, Exploded Parts List **Holding Tank Assembly, PWS, 8-5 Automatic**



094110, Exploded Parts List Boiler Assembly, 8GPD Automatic

Item #	Part #	Description	Qty
1	500182	Clip, Heater, Studded	1
2	018009	Washer, 5/16" X 1-1/4" X 18ga SS	1
3	025000	Nut, Hex, 1/4" SS	5
4	500208	Drain Strainer WA	1
5	060059	Micro Switch, 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, #4-40	4
10	025002	Nut, Hex, 1/4" Plated	9
11	500153	Cover, Reset, SS	1
12	400010	Reset Plate, Lexan	1
13	060000	Switch, Thermo-Reset	1
14	018004	Washer, 5/16" X 11/16" X 20ga SS	13
15	060001	Heating Element, 120V, 1100W	1
	060002	Heating Element, 240V, 1100W	1
16	500100	Gasket, Heater	1
17	500269	Boiler WA, 8GPD 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	500289	Shim, Micro Switch	2
24	080162	Float Ball, SS, 2-1/4" Round, #6-32	1
25	500398	Rod WA, Boiler Float, Auto	1

094110, Exploded Parts List Boiler Assembly, 8GPD Automatic

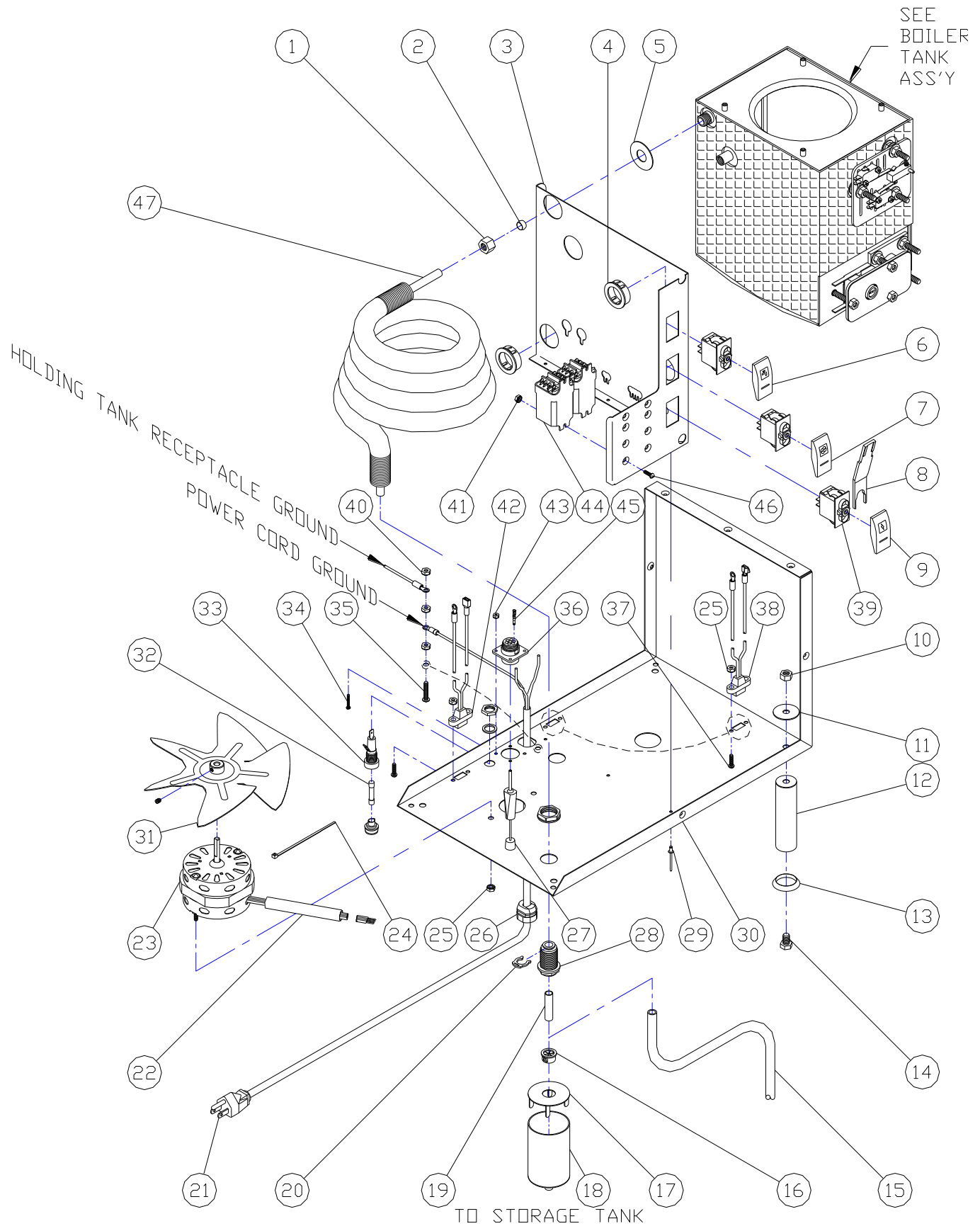


094075, Exploded Parts List

Distiller Body Assembly, PWS, 8GPD Automatic

Item #	Part #	Description	Qty
1	030013	Nut, Plated, 3/8" Compression	1
2	030012	Ferrule, 3/8"	1
3	500114	Divider, 8GPD, Auto	1
4	054004	Bushing, Snap, 1-1/4"	2
5	018023	Washer, Flat, 5/8" X 1-1/2", 20ga, SS	1
6	060031	Actuator, Grey, White-Water	1
7	060030	Actuator, Grey, Amber-Fan	1
8	080134	Tool, Actuator Removal	1
9	060029	Actuator, Grey, Red-Power	1
10	025001	Nut, Hex, SS, 5/16"-18	4
11	018009	Washer, Flat, SS, 18ga, 5/16" X 1.25"	4
12	500187	Leg, WA, 8-5	4
13	080105	Ring, SS, 1" Rounded	4
14	014005	Capscrew, Plated, 5/16"-18 X 1/2"	4
15	052002	Tubing, PVC, 5/16" X 7/16"	2'
16	054005	Bushing, Wire, Plastic, 5/8" Hole	1
17	500260	Filter Cap WA,	1
18	500300	Filter, Housing, WA, Auto	1
19	500202	Tube, SS, 3/8" Diameter X 1.5"	1
20	034021	Locking Clip, 3/8" JG	1
21	500232	Power Cord Assembly, 16-3 NA, 8GPD Automatic	1
22	080108	Sleeve, Fiberglass, 1/2"	0.313'
23	500233	Motor Assembly, 120V, 8GPD, Auto	1
24	054011	Wire Tie, Plastic, 4"	Ref.
25	026001	Nut, Kep, Plated, #8-32	6
26	054002	Strain Relief, 7K-2	1
27	080135	Circular Pin Extraction Too	1
28	034011	Bulkhead, 3/8" JG	1
29	016004	Rivet, Aluminum, 1/8" X 5/16"	4
30	500126	Body, 8GPD, Auto	1
31	080045	Fan Blade, 7"	1
32	060022	Fuse, 1 Amp, Slow Blow	1
33	060036	Fuse Holder, Chassis, 15Amp (includes nut & gasket)	1
34	012003	Screw, Machine, Plated, #4-40 X 3/4", Round/Socket	2
35	012000	Screw, Machine, Plated, #10-24 X 1"	1
36	060044	Receptacle, 7 pin Receptacle	1
37	012012	Screw, Machine, Plated, #8-32 X 5/8"	4
38	500237	Drain Receptacle Assembly, 8GPD, Auto	1
39	060028	Switch Base, 120/240V SPST	3
40	026000	Nut, Kep, Plated, #10-24	3
41	026002	Nut, Kep, Plated, #6-32	4
42	500236	Pump Receptacle Assembly, 8GPD, Auto	1
43	026003	Nut, Kep, Plated, #4-40	2
44	060020	Relay, Shrack, DPDT, 120V	2
	060021	Relay, Shrack, DPDT, 240V	2
45	060017	Female Pin	4
46	012009	Screw, Machine, Plated, #6-32 X 1/2"	4
47	500239	Cooling Coil Assembly, 8GPD, Auto	1

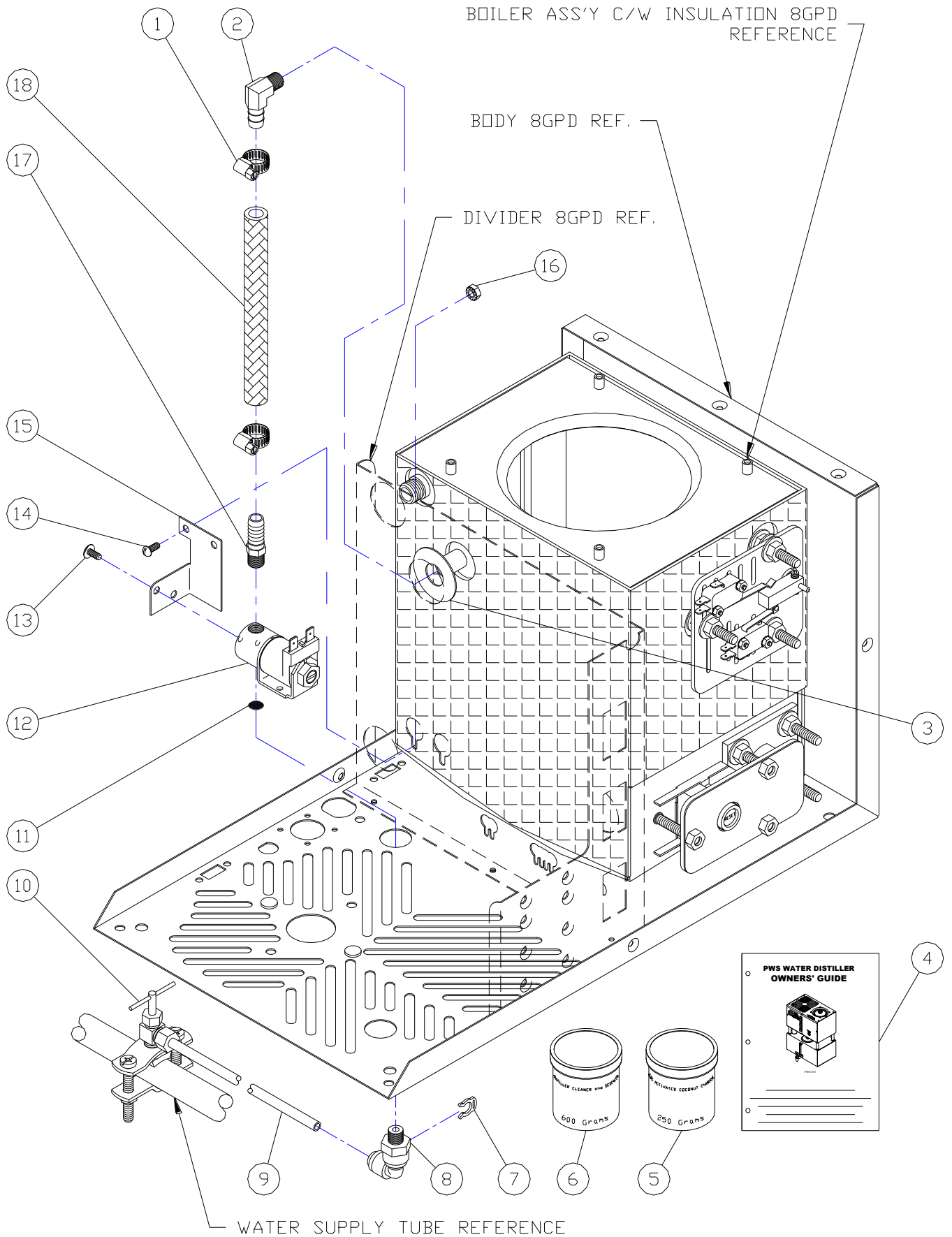
094075, Exploded Parts List Distiller Body Assembly, PWS, 8GPD Automatic



094070, Exploded Parts List 8GPD Solenoid Valve Assembly

Item #	Part #	Description	Qty
1	080056	Gear Clamp, SS, 1/4"	2
2	030003	Elbow, 90 Degree, 1/8"MPT X 3/8"HB	1
3	018023	Washer, Flat, 5/8" X 1-1/2" X 20ga, SS	1
4	097121	Owners Guide, PWS 8-5	1
5	500106	Charcoal, PWS, 250g Jar Of	1
	500107	Charcoal, PWS, 600g Jar Of	Ref.
6	500102	Descaler, PWS, 600g Jar Of	1
	500103	Descaler, PWS, 1.6Kg Jar Of	Ref.
7	034009	Locking Clip, 1/4"JG	1
8	034054	Elbow, 90, 1/8"MPT X 1/4"QC Swivel	1
9	052000	Tubing, 1/4" Feed-line	16'
10	036005	Valve, Self Piercing Kit	1
11	080197	Screen, 50 Mesh, Solenoid Valve	1
12	060026	Solenoid Valve, 1/8"FPT BE, 120V	1
	060027	Solenoid Valve, 1/8"FPT BE, 240V	1
13	012017	Screw, Machine, SS, #8-32UNC X 3/8"	2
14	012012	Screw, Machine, Plated, #8-32 X 5/8"	2
15	500469	Bracket, Brass Solenoid Valve	1
16	026001	Nut, Kep, Plated, #8-32UNC	2
17	034024	Coupler, Nylon, 1/8"MPT X 3/8"HB	1
18	052004	Tubing, 3/8" X 0.6" Braided	0.479'

094070, Exploded Parts List 8GPD Solenoid Valve Assembly



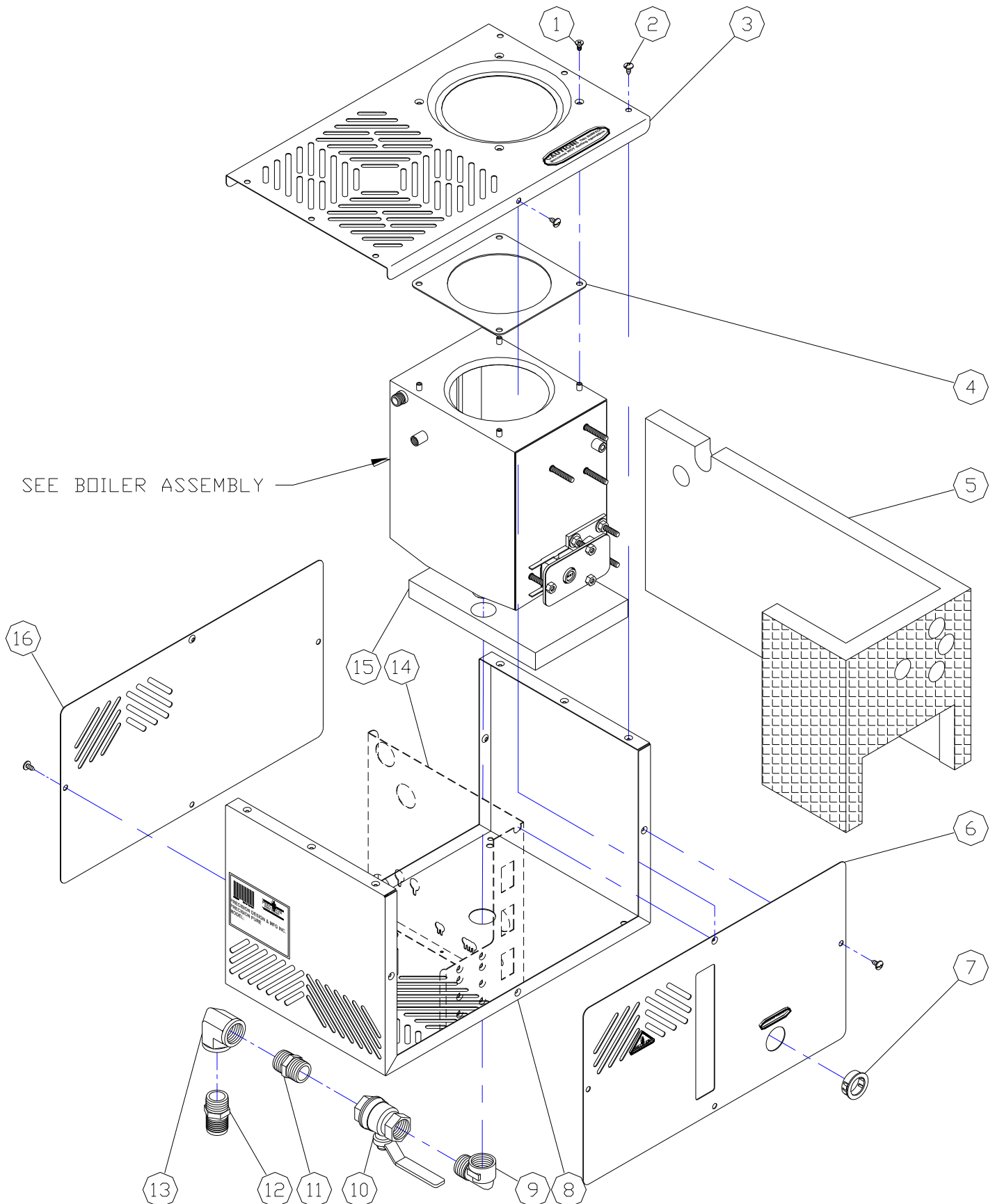
094076, Exploded Parts List

Distiller Head Assembly, PWS, 8GPD Automatic

Item #	Part #	Description	Qty
1	012008	Screw, Machine, #10-24 X 3/8", Oval Head	4
2	010000	Screw, Sheet Metal, #10-12 X 1/2", SS	14
3	500127	Cover, Top, 8GPD, Auto	1
4	500111	Gasket, Lid	1
5	500240	Insulation, 8GPD Auto Boiler Sides	1
6	500128	Cover, Front, 8GPD Auto	1
7	054004	Bushing, Snap, 1.25"	1
8	500126	Body, 8GPD Automatic	1
9	030016	Elbow, 90 Degree, 3/4"MPT X 3/4"FPT	1
10	030009	Valve, Ball, 3/4"FPT, Both Ends	1
11	030017	Nipple, Close, 3/4"MPT	1
12	030015	Coupler, 3/4"MPT X 1"HB	1
13	030018	Elbow, 90 Degree, 3/4"FPT, Both Ends	1
14	500114	Divider, 8GPD Auto	1
15	500241	Insulation, 8GPD Auto Boiler Bottom	1
16	500129	Cover, Rear, 8GPD Auto	1

094076, Exploded Parts List

Distiller Head Assembly, PWS, 8GPD Automatic

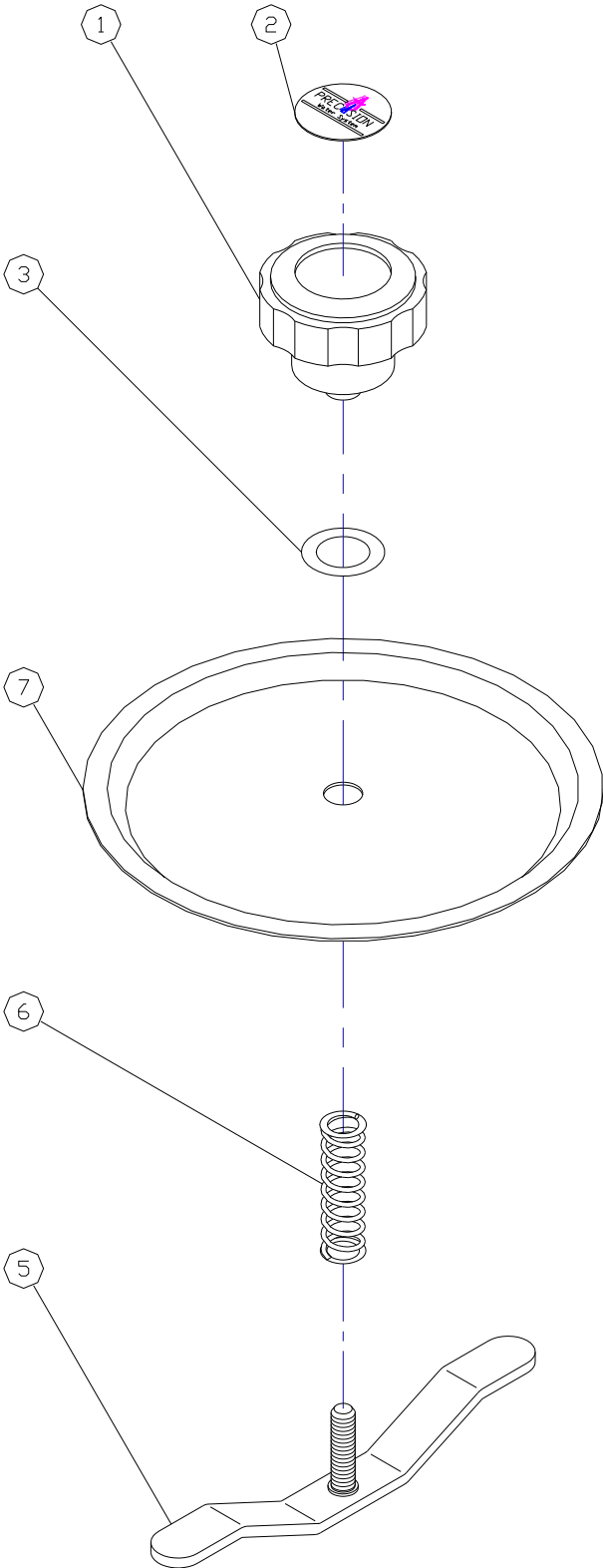


094074, Exploded Parts List

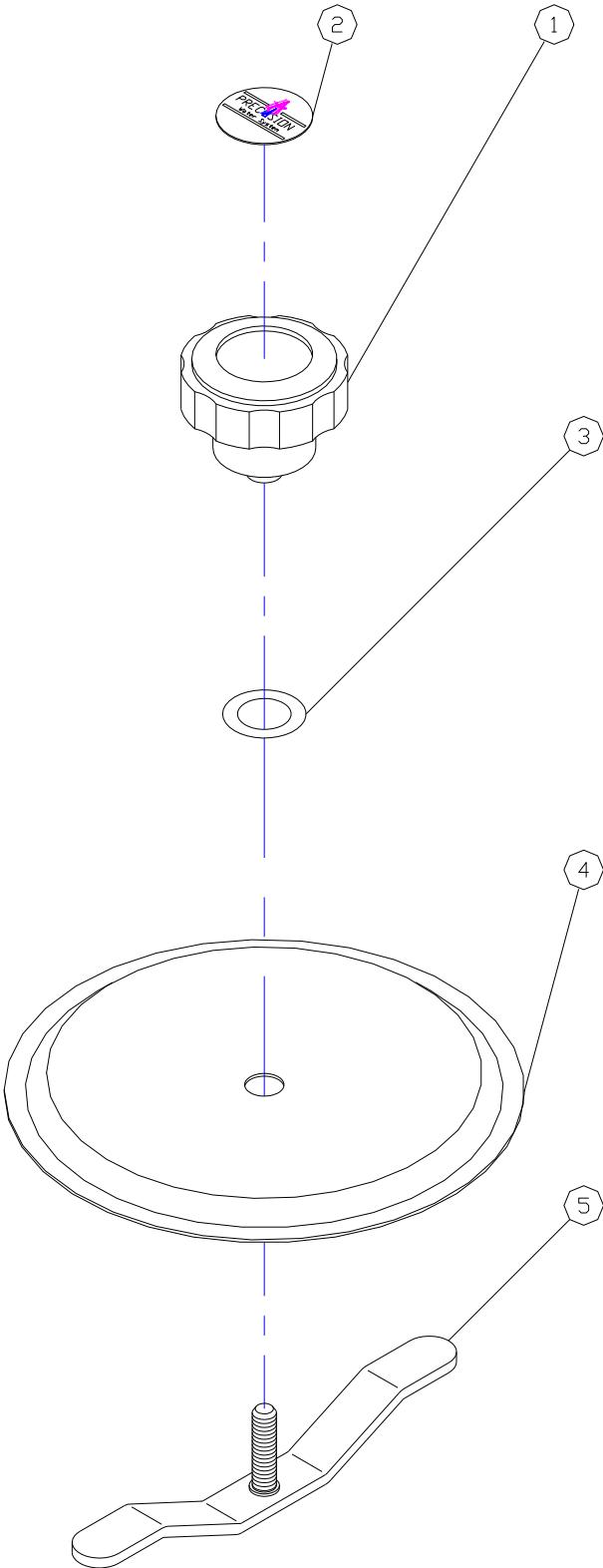
Boiling Tank & Holding Tank Lids Assemblies

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

094074, Exploded Parts List
Boiling & Holding Tank Lids Assemblies, PWS



BOILING TANK
LID ASSEMBLY
(PART # 500184)



HOLDING TANK
LID ASSEMBLY
(PART # 500248)

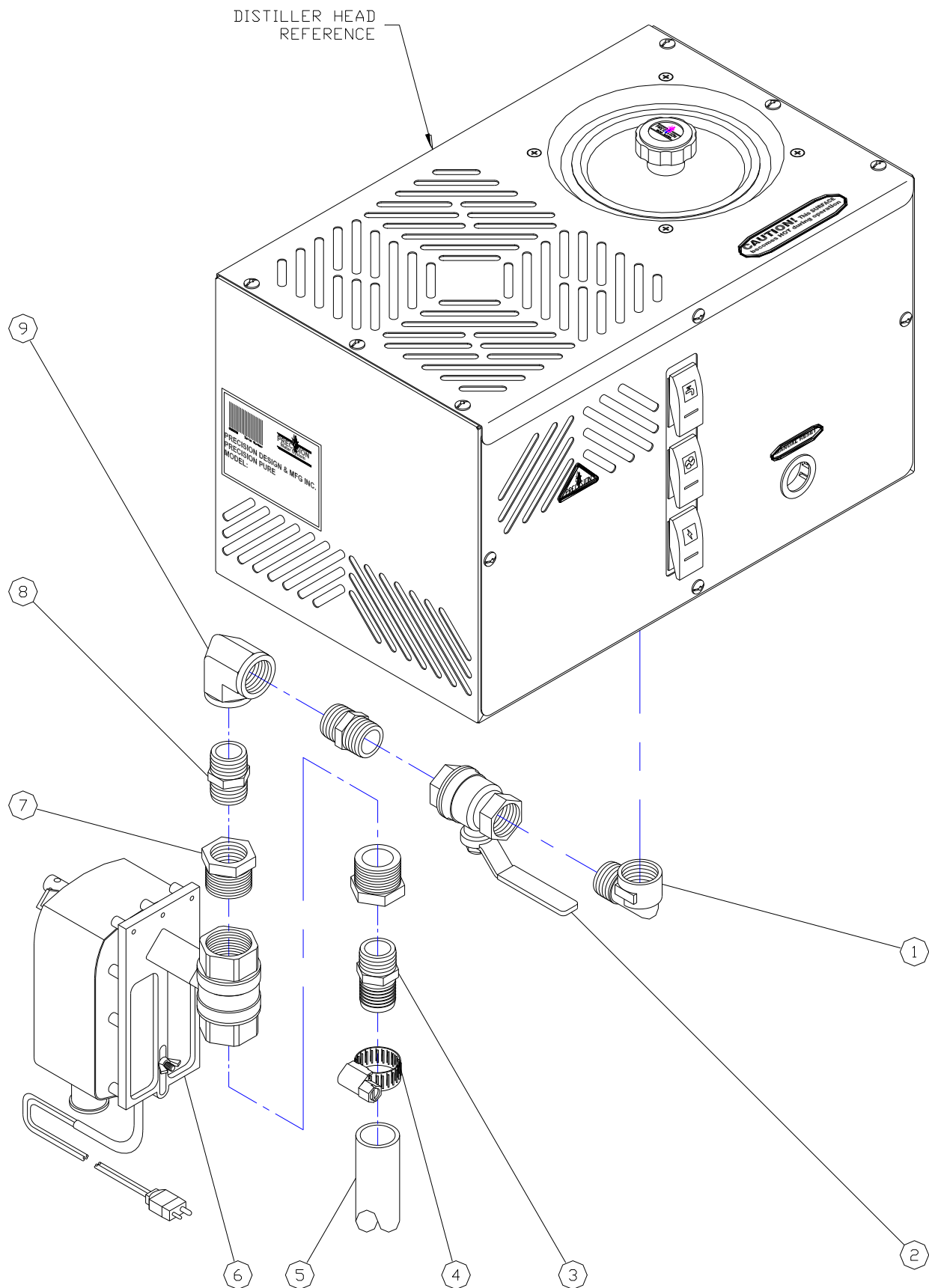
094071, Exploded Parts List

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	030015	Coupler, ¾"MPT X 1"HB	1
4	080121	Clamp, Gear, 1-1/4"	1
5	052005	Tubing, 1" X 1-1/4"	4'
6	500448	Motorized Ball Valve, w/Cord, 115V	1
	500452	Motorized Ball Valve, w/Cord, 230V	1
7	030031	Reducer, 1"MPT X ¾"FPT	2
8	030017	Nipple, Close, ¾"MPT	2
9	030018	Elbow, 90 Degree, ¾FPT	1

094071, Exploded Parts List

Automatic Electric Drain Assembly, AED-1

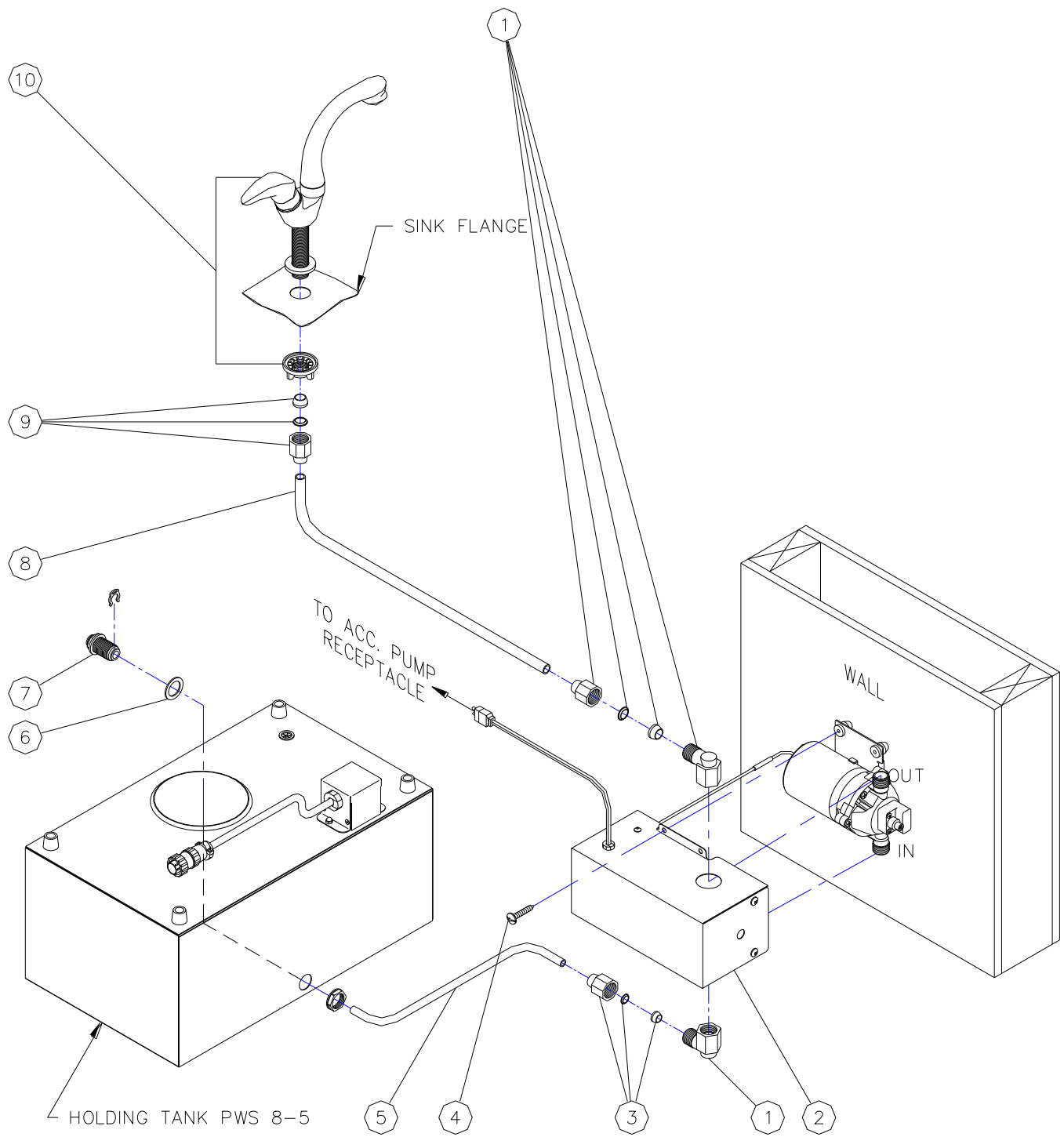


094108, Exploded Parts List

Automatic Pump Assembly, APK-2

Item #	Part #	Description	Qty
1	034002	Elbow, 90 Degree, 1/2" FPT X 1/2" OD Tube	2
2	500358	Pump Assembly, W/Cord, 1.4GPM, 120V, 2P	1
3	034004	Nut/Cone/Ring Set, 3/8" OD	1
4	010008	Screw, Sheet Metal, Plated, #10-12 X 1"	4
5	052007	Tubing, LDPE, 3/8" X 1/4"	4'
6	080148	Gasket Washer, 1/16" Silicone	1
7	034011	Bulkhead, 3/8" JG	1
8	052001	Tubing, LDPE, 3/8" X 1/2"	25'
9	034003	Nut/Cone/Ring Set, 1/2" OD	Ref.
10	080052	Faucet, Chrome	1

094108, Exploded Parts List **Automatic Pump Assembly, APK-2**



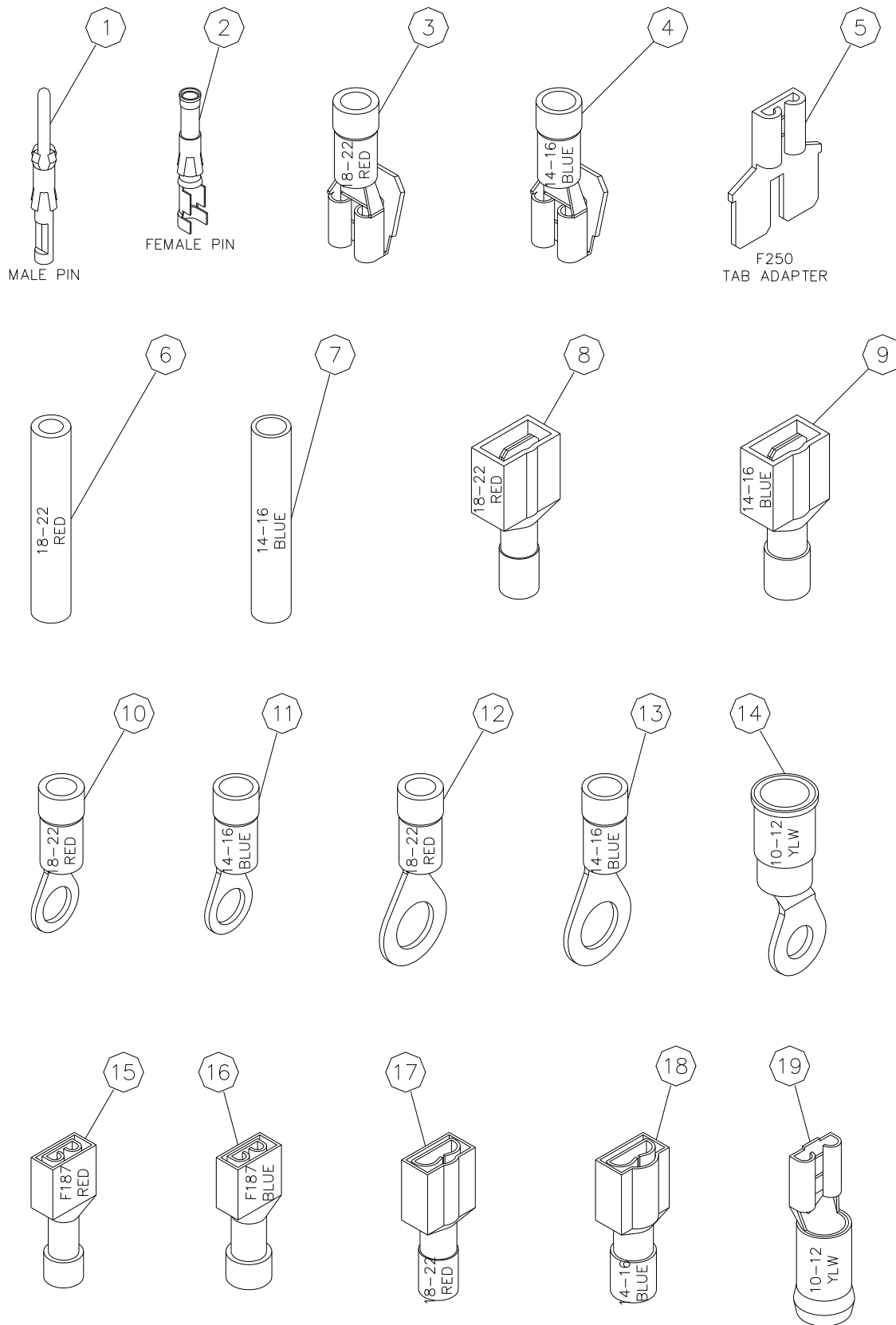
094109, Exploded Parts List

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, 1/4", #18-22 AWG, Red
13	066009	Ring, 1/4", #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 8-5 (8GPD Auto), Part # 500247

No	Part#	Color	Gauge	Length	From Conn.	To Conn.	From Location	To Location
1	500232	GRN	16	3"	#10RING#14-#16	POWER CORD	GROUND	POWER CORD
2	500232	BLK	16	14.5"	F250 #14-#16	POWER CORD	POWER SWITCH #2	POWER CORD
3	500232	WHT	16	14.5"	#10RING#14-#16	POWER CORD	RESET SWITCH #4	POWER CORD
4	500233	BLKor	18	10"	PIGG18-22&F25018-22	FAN MOTOR (ORG/BLU)	HEATER RELAY #4	FAN MOTOR
5	500233	BLKor	18	11"	F25018-22&PIGG18-22	FAN MOTOR (YLW/WHT)	FAN SWITCH #2	FAN MOTOR
6								
7								
8								
9	095001	BLK	16	7"	#10RING#14-#16	F187 #14-#16	RESET SWITCH #1	Lower Microswitch COM
10	095000	GRN	16	20"	PIGG#14-#16	F250 #14-#16	HEATER RELAY "B"	SOLENOID VALVE A
11	095030	BLK	16	19"	F187 #14-#16	F250 #14-#16	Upper Microswitch COM	SOLENOID VALVE B
12	500236	BLK	18	3.5"	F250 #18-#22	PUMP RECEPTACLE	FUSE SIDE	PUMP RECEPTACLE (SMOOTH)
13	500236	BLK	18	20"	#10RING#18-#22	PUMP RECEPTACLE	RESET SWITCH #3	PUMP RECEPTACLE (RIBBED)
14	095002	ORG	16	16"	#10RING#14-#16	FPIN	RESET SWITCH #3	HOLDING TANK RECEPTACLE #1
15	095003	BLU	16	16"	F250 #14-#16	FPIN	HEATER RELAY #6	HOLDING TANK RECEPTACLE #2
16	095004	YLW	16	7"	PIGG#14-#16	FPIN	SOLENOID VALVE A	HOLDING TANK RECEPTACLE #3
17	095005	RED	16	19"	F250 #14-#16	FPIN	PUMP RELAY "B"	HOLDING TANK RECEPTACLE #4
18	095006	RED	16	8"	F250 #14-#16	#10 RING #14-#16	POWER SWITCH #3	RESET SWITCH #2
19	500237	BLK	18	16"	PIGG#18-#22	DRAIN RECEPTACLE	WATER SWITCH #7	DRAIN RECEPTACLE (RIBBED)
20	500237	BLK	18	16"	#10RING#18-#22	DRAIN RECEPTACLE	RESET SWITCH #1	DRAIN RECEPTACLE (SMOOTH)
21	095007	WHT	16	4"	#10RING#14-#16	#10 RING #14-#16	RESET SWITCH #1	HEATING ELEMENT "A"
22	095008	YLW	16	13"	F250 #14-#16	#10 RING #14-#16	HEATER RELAY #4	HEATING ELEMENT "B"
23	095009	BRN	16	7"	F250 #14-#16	PIGG#14-#16	PUMP RELAY "A"	POWER SWITCH #2
24	095010	WHT	16	3"	PIGG#14-#16	F250 #14-#16	PUMP RELAY #6	PUMP RELAY "A"
25	095011	GRN	16	19"	F250 #14-#16	F250 #14-#16	PUMP RELAY #9	FUSE END
26	095010	WHT	16	3"	PIGG#14-#16	F250 #14-#16	HEATER RELAY "B"	HEATER RELAY #9
27	095012	BRN	16	12"	F250 #14-#16	#10 RING #14-#16	HEATER RELAY #7	RESET SWITCH #3
28	095013	ORG	16	9"	F250 #14-#16	#10 RING #14-#16	FAN SWITCH #3	RESET SWITCH #1
29	095014	RED	16	11"	#10 RING #14-#16	F250 #14-#16	HEATING ELEMENT "B"	POWER SWITCH #7
30	095010	WHT	16	3"	F250 #14-#16	PIGG#14-#16	FAN SWITCH #6	POWER SWITCH #7
31	095010	WHT	16	3"	F250 #14-#16	PIGG#14-#16	FAN SWITCH #7	FAN SWITCH #2
32	095015	BRN	16	12"	F250 #14-#16	#10 RING #14-#16	FAN SWITCH #8	RESET SWITCH #4
33	095016	BLU	16	11"	F250 #14-#16	#10 RING #14-#16	POWER SWITCH #8	RESET SWITCH #4
34	095010	WHT	16	3"	F250 #14-#16	PIGG#14-#16	POWER SWITCH #6	POWER SWITCH #3
35	095017	BLU	16	10"	F250 #14-#16	F250 #14-#16	HEATER RELAY #9	WATER SWITCH #7
36	095018	GRN	16	14"	F250 #14-#16	#10 RING #14-#16	WATER SWITCH #8	RESET SWITCH #4
37	095019	BRN	16	21"	F250 #14-#16	PIGG#14-#16	WATER SWITCH #6	SOLENOID VALVE B
38	095020	YLW	16	5"	F250 #14-#16	PIGG#14-#16	WATER SWITCH #2	FAN SWITCH #3
39	095021	GRN	16	13"	F187 #14-#16	F250 #14-#16	Lower Microswitch NC	HEATER RELAY "A"
40	095022	ORG	16	14"	F187 #14-#16	F250 #14-#16	Upper Microswitch NC	WATER SWITCH #3

500247, Exploded Parts List Wiring Diagram, PWS 8GPD Auto

