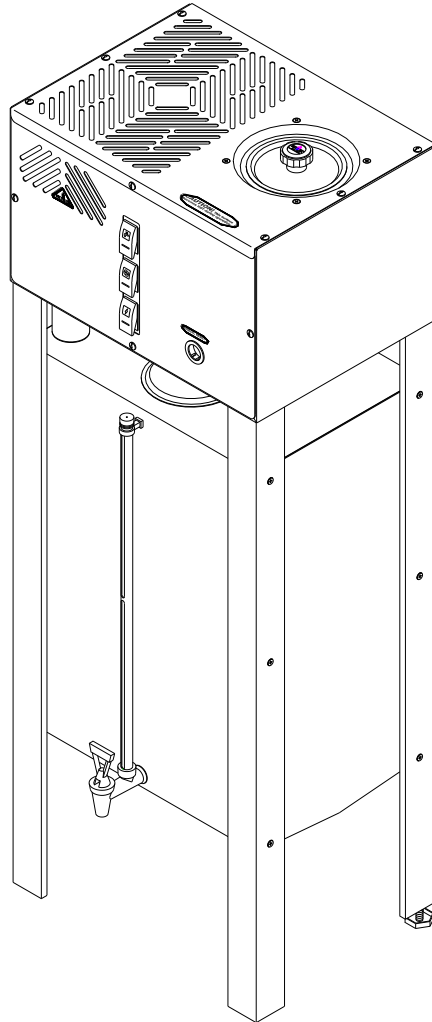




REPLACEMENT PARTS MANUAL

FOR MODEL: PWS 12-20(120VAC), PWS 12-20(240VAC), AED-1(120VAC), AED-1(240VAC), APK-1(120VAC) & APK-1(240VAC)

PART #	510001	510003	500006	500015	500007	500016
SERIES	0005	0005	0001	0001	0001	0001



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

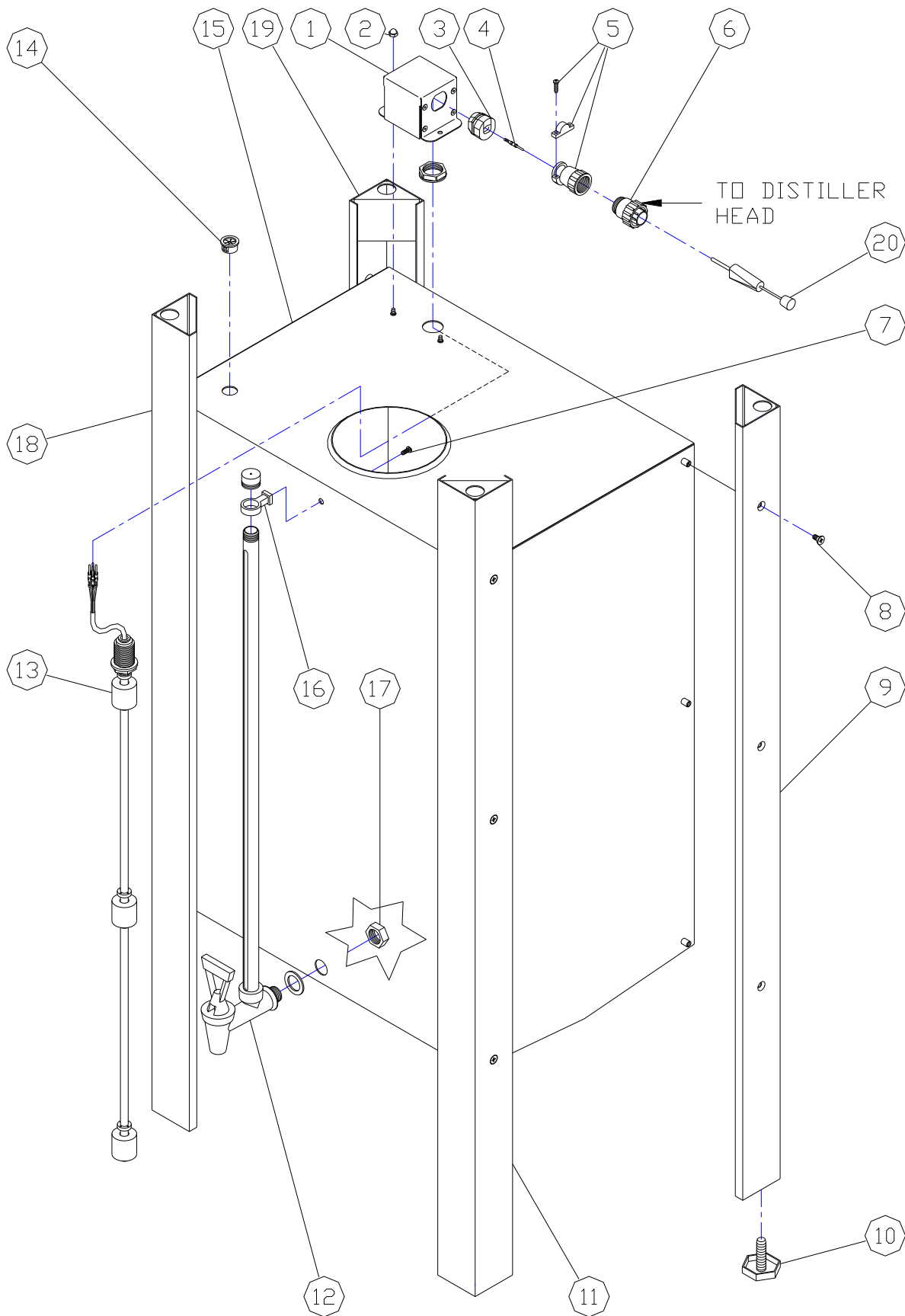
	<u>Page</u>
1. 094102- Holding Tank Assembly, 12-20 Automatic	4 & 5
2. 094112S4 Boiler Assembly, 12GPD Automatic	6 & 7
3. 094101S3 Distiller Body Assembly, 12GPD Automatic	8 & 9
4. 094099S3 12GPD Solenoid Valve Assembly	10 & 11
5. 094098S3 Distiller Head Assembly, 12GPD Automatic	12 & 13
6. 094123- Boiling Tank & Holding Tank Lids Assemblies	14 & 15
7. 094071- Automatic Electric Drain Assembly, AED-1	16 & 17
8. 094074- Automatic Pump Assembly, APK-1	18 & 19
8. 094109- Electrical Terminals	20 & 21
10. 500247S3 Wiring Schematic	22 & 23

094102-, Exploded Parts List

Holding Tank Assembly, 12-20 Automatic

Item #	Part #	Description	Qty
1	500133	Cover, Holding Tank Wires	1
2	028001	Nut, Acorn, 6-32 Pltd.	2
3	054002	Strain Relief. 7K-2	1
4	060016	Male Pin	4
5	060045	Strain Relief, 7 pin, Circular	1
6	060043	Plug, 7 pin, Circular	1
7	012013	Screw, Mach, #10-24 x 3/8" SS	1
8	012008	Screw, Mach, #10-24x3/8", OvalHd	12
9	510141	Leg, Right Rear, 12-20	1
10	080126	Appliance Foot, 5/16 x 1-1/2"	2
11	510143	Leg, Right Front, 12-20	1
12	080123	Valve, HT, 23" (includes nut, washer & support)	1
13	510136	HT 25" Level Sensor Assy	1
14	054005	Bushing, Wire, 5/8'	1
15	510134	Holding Tank WA, 20 Gallon	1
16	080131	Support, SG, 3/4, Blk	1
17	080132	Nut, Jam, 3/8", Blk	1
18	510142	Leg, Left Front, 12-20	1
19	510140	Leg, Left Rear, 12-20	1
20	080134	Circular Pin Extraction Tool	1

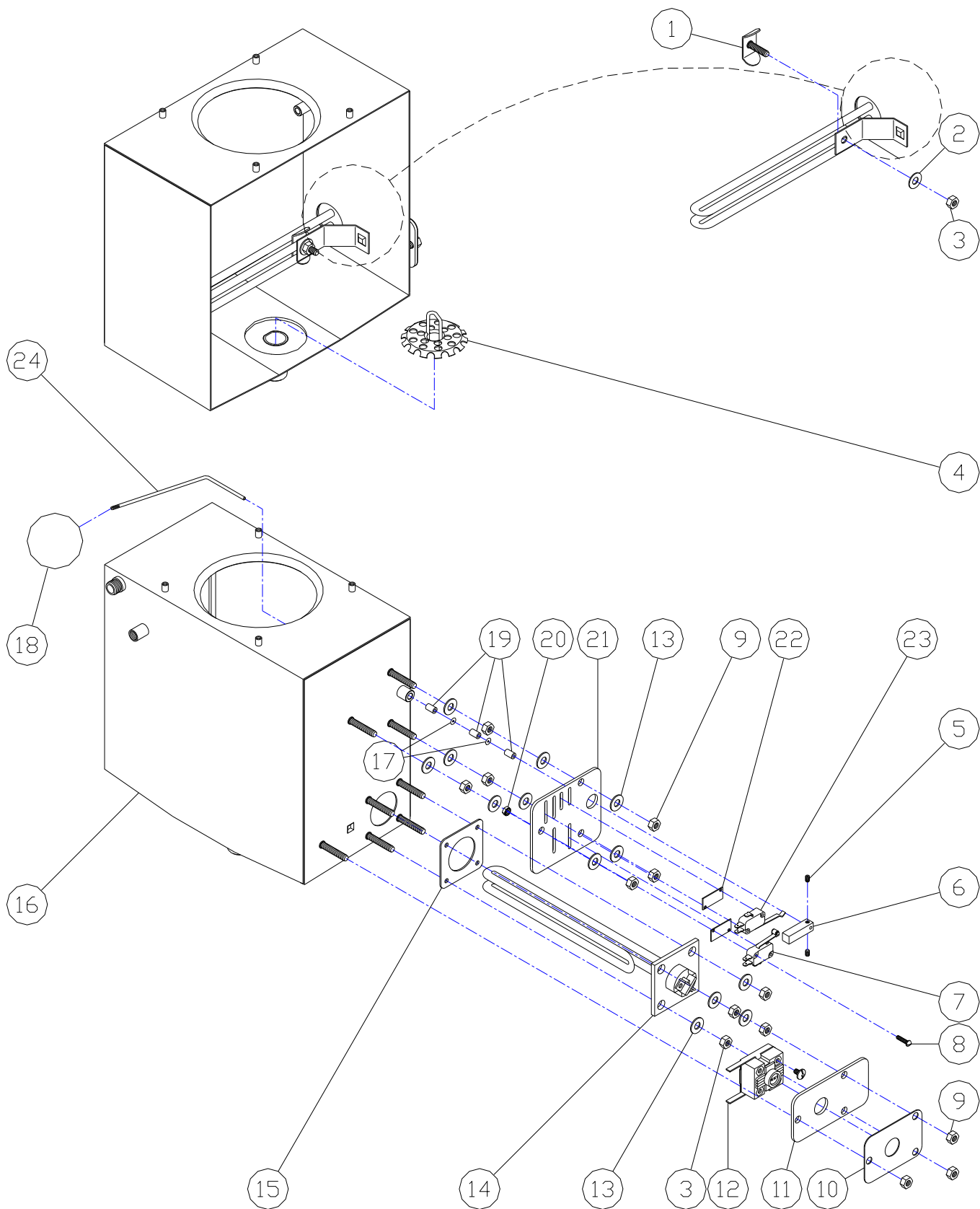
094102-, Exploded Parts List Holding Tank Assembly, 12-20 Automatic



094112S4, Exploded Parts List Boiler Assembly, 12GPD 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	016014	Set Screw, Blk, #6-32 x .25", Cup Pt.	2
6	500278	Bar Actuator, Boiler Float	1
7	060058	Microswitch, Short Roller Arm	1
8	012003	Screw, Machine, Pltd, #4-40 x 3/4"	4
9	025002	Nut, Hex, 1/4" Pltd.	9
10	500153	Cover, Reset, SS	1
11	400010	Reset Plate, Lexan	1
12	060000	Switch, Thermo-reset	1
13	018004	Washer, 5/16" x 11/16" x 20ga SS	11
14	060003	Heating Element, 125V, 1500W	1
	060004	Heating Element, 230V, 1500W	1
15	500100	Gasket, Heater	1
16	510146	Boiler WA, 12GPD Auto, Series2	1
17	080128	O-Ring, 1/16" x 1/8" x 1/4"	2
18	080162	Float Ball, SS, 2-1/4" Round, #6-32	1
19	080127	Bushing, Nylon	3
20	026003	Nut, Kep, #4-40	4
21	500266	Plate, Microswitch	1
22	500289	Shim, Microswitch	2
23	060059	Microswitch, Long Arm, Formed	1
24	500264	Rod, Boiler Float	1

094112S4, Exploded Parts List Boiler Assembly, 12GPD Automatic

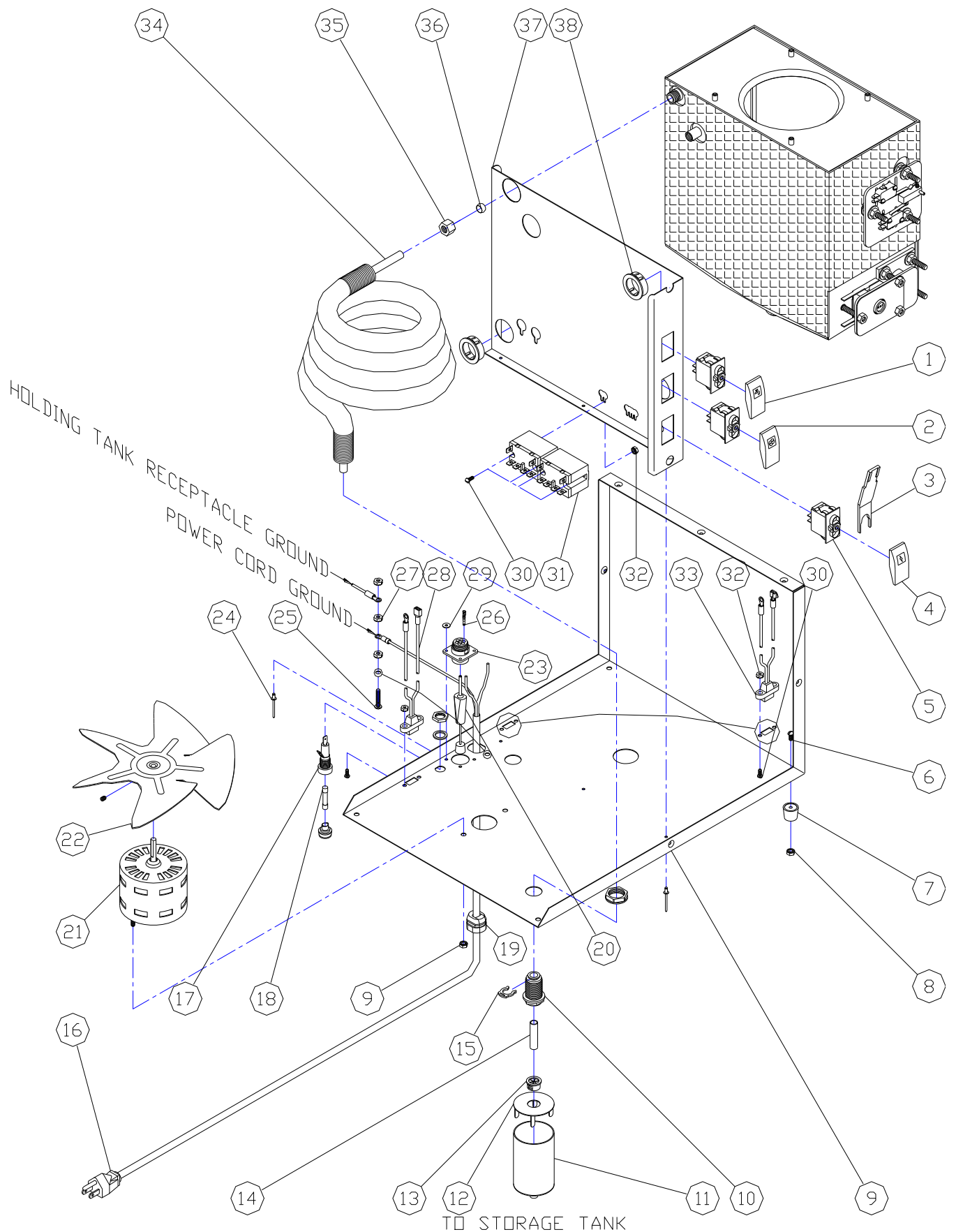


094101S5, Exploded Parts List

Distiller Body Assembly, 12GPD Automatic

Item #	Part #	Description	Qty
1	060031	Actuator, Grey, White-Water	1
2	060030	Actuator, Grey, Amber-Fan	1
3	080134	Tool, Actuator Removal	1
4	060029	Actuator, Grey, Red-Power	1
5	060028	Switch Base, 120/240V SPST	3
6	012012	Screw, Mach, Pltd. #8-32 x 5/8"	4
7	054010	Leg, 3/4"OD x 5/8" high	4
8	026001	Nut, Kep, Pltd. #8-32	6
9	510100	Body, 12GPD Auto	1
10	034011	Bulkhead, 3/8" JG	1
11	500300	Filter Housing W.A., Auto	1
12	500260	Filter Cap W.A.	1
13	054005	Busing, Wire, Plastic, 5/8" Hole	1
14	500202	Tube, SS, 3/8" Diameter X 1.5"	1
15	034021	Locking Clip, 3/8" JG	1
16	510121	Power Cord Assembly, 14-3 NA, 12 GPD Automatic	1
17	060036	Fuse Holder, Chassis, 15Amp (includes nut & gasket)	1
18	060022	Fuse, 1 Amp, Slow Blow	1
19	054002	Strain Relief, 7K-2	1
20	080135	Circular Pin Extraction Tool	1
21	060049	Motor, 120/240 Dual Voltage	1
22	080046	Fan Blade, 8"	1
23	060044	Receptacle, 7 pin Circular	1
24	016004	Rivet, Aluminum, 1/8" x 5/16"	6
25	012000	Screw, Machine, Pltd, #10-24 x 1"	1
26	060017	Female Pin	4
27	026000	Nut, Kep, Pltd., #10-24	3
28	510123	Pump Receptacle Assy, 12GPD Auto	1
29	018001	Washer, Flat, 1/8" x 3/8" x 20ga Alum	2
30	012009	Screw, Mach, Pltd, #6-32x1/2"	8
31	060018	Relay, Blk, 120V	2
	060019	Relay, Blk, 240V	2
32	026002	Nut, Kep, Pltd., #6-32	8
33	510124	Drain Receptacle Assy, 12GPD Auto	1
34	510135	Cooling Coil Assy, 12GPD Auto	1
35	030013	Nut, Pltd, 3/8" Comp.	1
36	030012	Ferrule, 3/8"	1
37	510101	Divider, 12GPD Auto	1
38	054004	Bushing, Snap, 1-1/4"	2

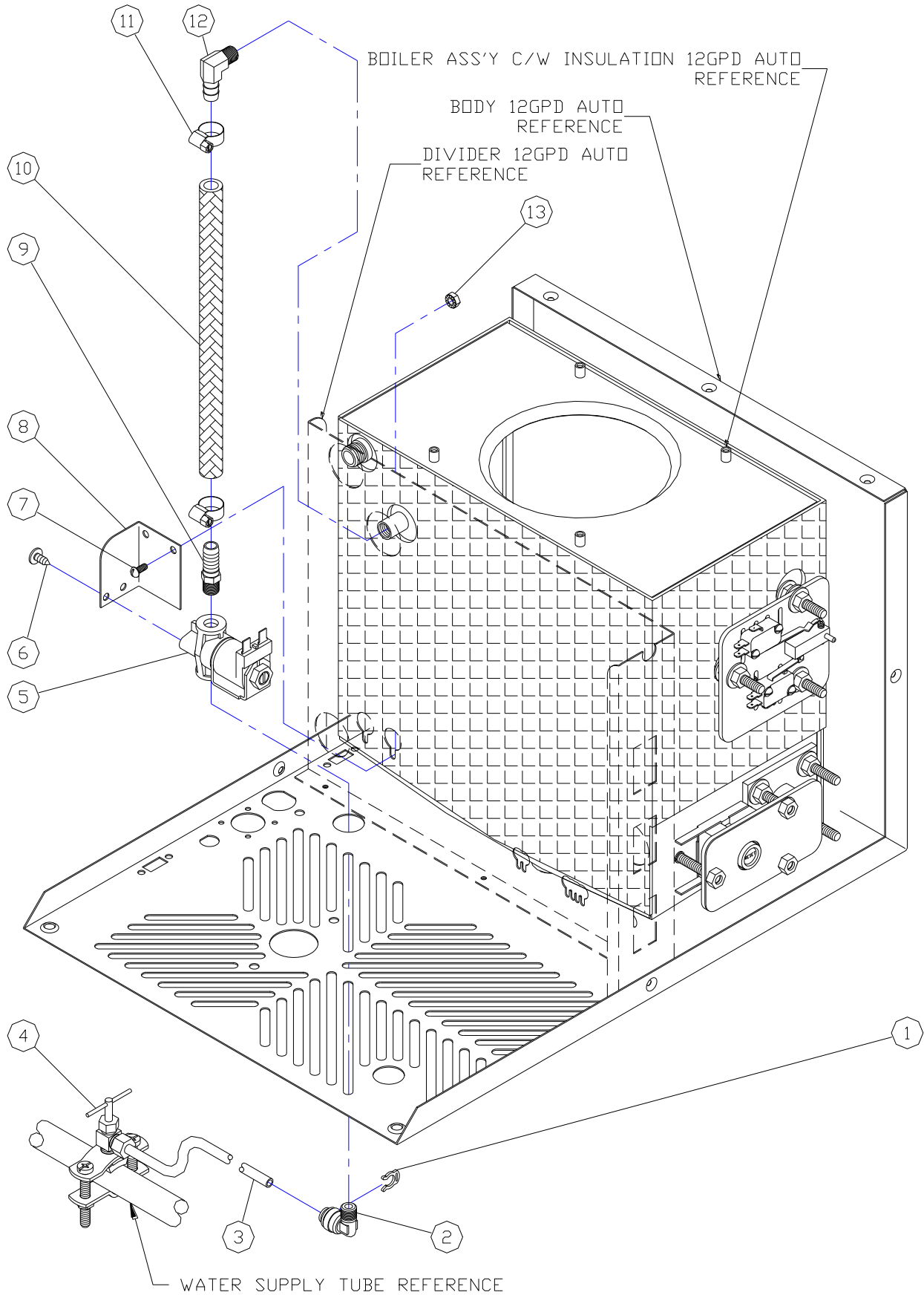
094101S5, Exploded Parts List Distiller Body Assembly, 12GPD Automatic



094099S3, Exploded Parts List 12GPD Solenoid Valve Assembly

Item #	Part #	Description	Qty
1	034009	Locking Clip, 1/4" JG	1
2	034006	Elbow, 90, 1/8MPTx1/4" JG	1
3	052000	Tubing, 1/4" Feed-line	16
4	036005	Valve, Self Piercing Kit	1
5	060026	Solenoid Valve, 1/8FPT BE, 120V	1
	060027	Solenoid Valve, 1/8FPT BE, 240V	1
6	010000	Screw, ShtMtl #10-12x1/2", SS	2
7	012012	Screw, Mach, #8-32x5/8", Pltd.	2
8	500166	Bracket, Solenoid Valve	1
9	034024	Coupler, Nylon, 1/8"MPTx3/8"HB	1
10	052004	Tubing, 3/8x0.6 Braided	1
11	080056	Gear Clamp, SS, 1/4"	2
12	030003	Elbow, 90, 1/8"MPTx3/8"HB	1
13	026001	Nut, Kep,#8-32	2

094099S3, Exploded Parts List 12GPD Solenoid Valve Assembly



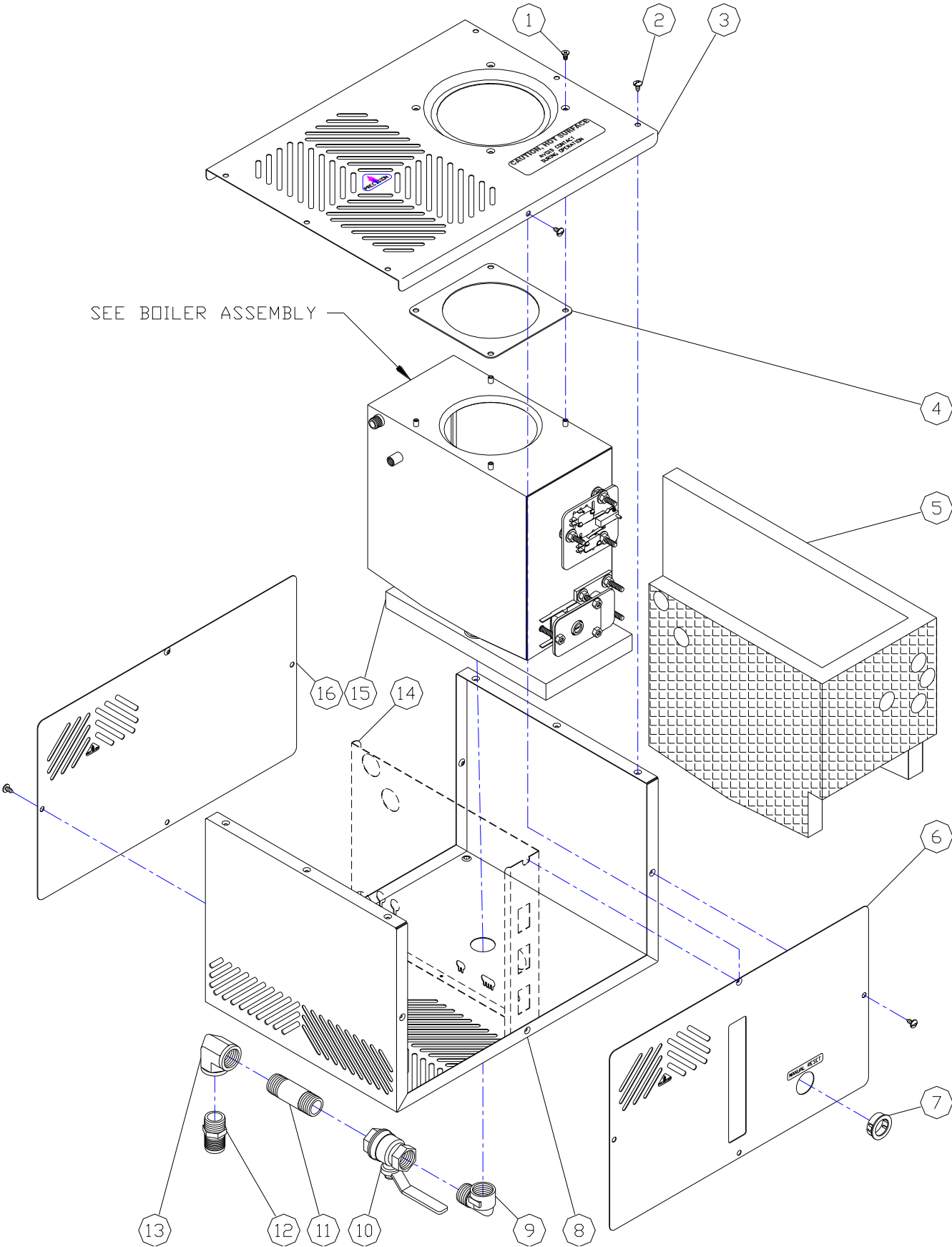
094098S3, Exploded Parts List

Distiller Head Assembly, 12GPD Automatic

Item #	Part #	Description	Qty
1	012008	Screw, Mach, #10-24x3/8", Oval Hd 4	
2	010000	Screw, Sht Mtl, #10-12 x 1/2", SS	14
3	510102	Cover, Top, 12GPD, Auto	1
4	500111	Gasket, Lid	1
5	510118	Insulation, 12GPD Boiler Sides	1
6	510103	Cover, Front, 12GPD	1
7	054005	Bushing, Snap, 1.25"	1
8	510100	Body, 12GPD	1
9	030018	Elbow, 90, 3/4 FPT BE	1
10	030009	Valve, Ball, 3/4 FPT BE, FF	1
11	030021	Nipple, 3/4 MPT x 3"	1
12	030015	Coupler, 3/4 MPT x 1" HB	1
13	030016	Elbow, 90, 3/4 MPT x 3/4 FPT	1
14	510101	Divider, 12GPD	1
15	510119	Insulation, 12GPD Boiler Bot.	1
16	510104	Cover, Rear, 12GPD	1

094098S3, Exploded Parts List

Distiller Head Assembly, 12GPD Automatic

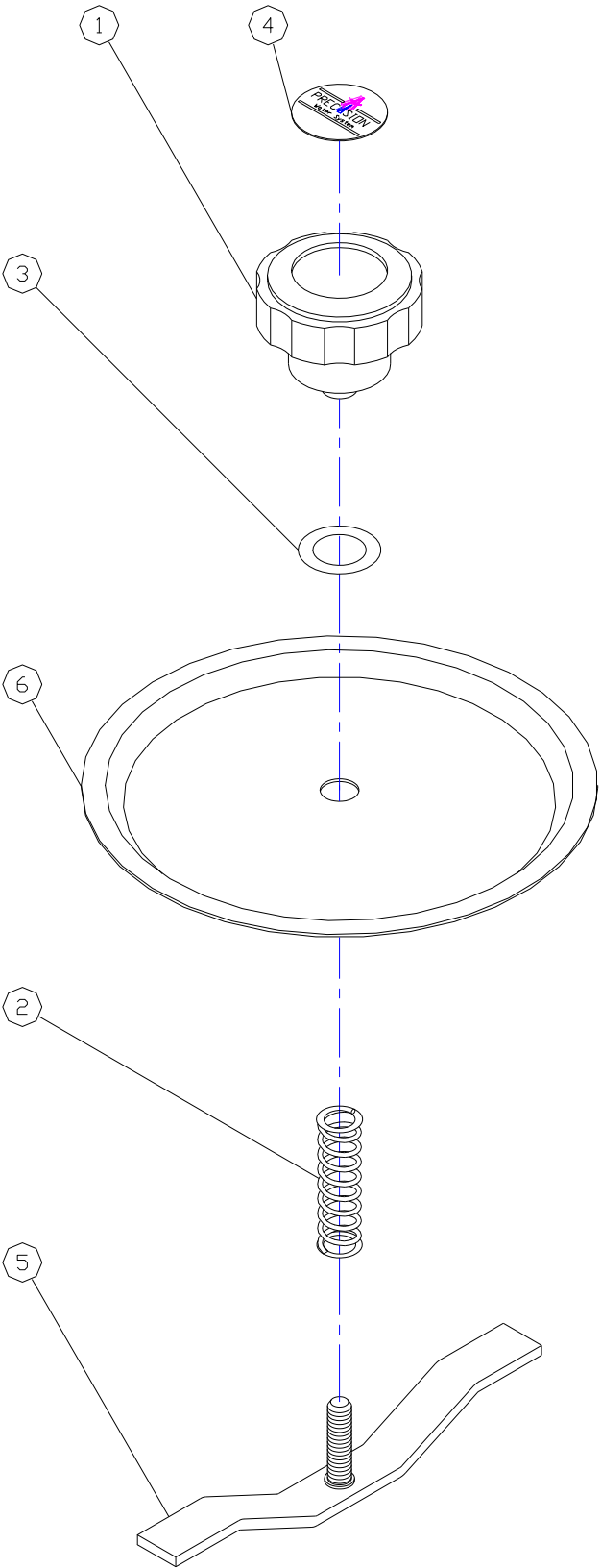


094074A, Exploded Parts List

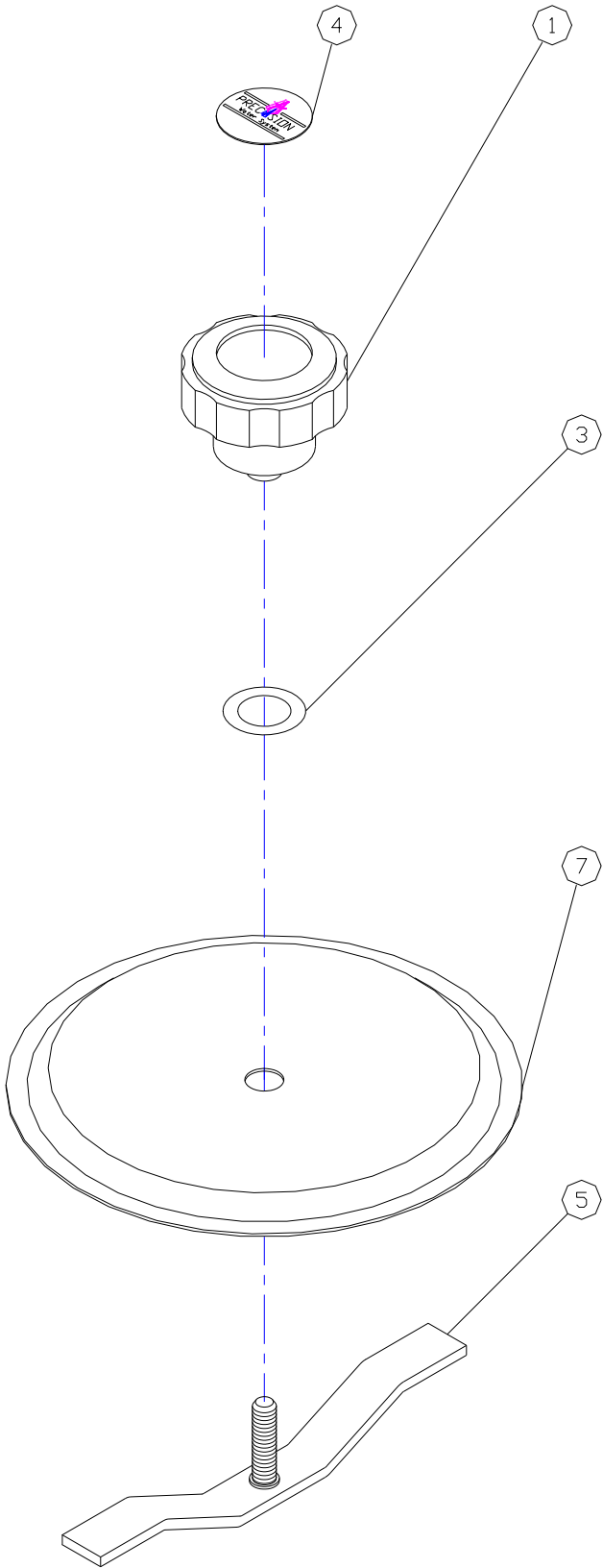
Boiling Tank & Holding Tank Lids Assemblies

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

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



BOILING TANK
LID ASSEMBLY
(PART # 500184)



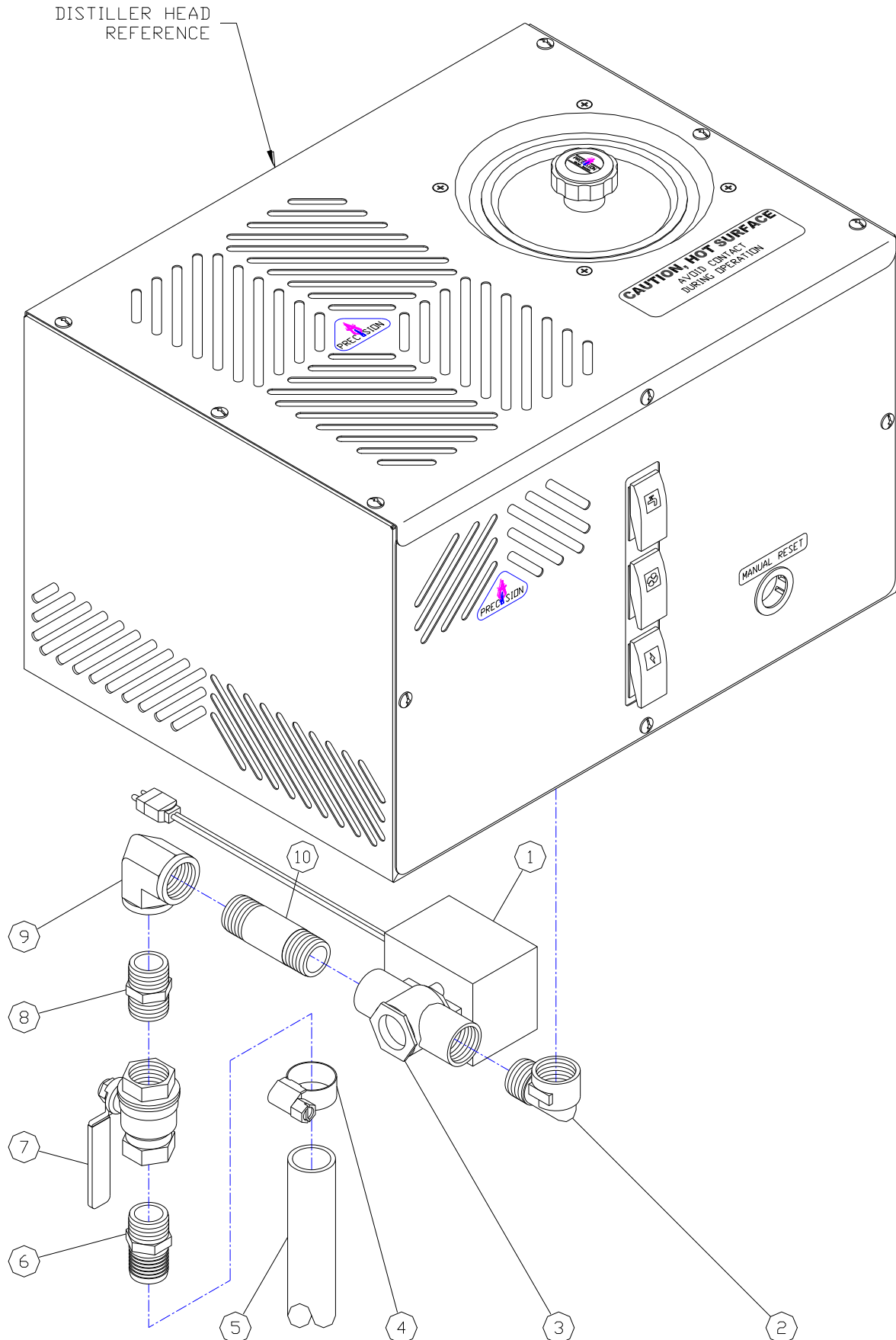
HOLDING TANK
LID ASSEMBLY
(PART # 500248)

094096-, Exploded Parts List
Automatic Electric Drain Assembly, AED-1

Item #	Part #	Description	Qty
1	080076	Motor, Drain Valve, 120V	1
	080082	Motor, Drain Valve, 240V	1
2	030016	Elbow, 90, 3/4 "FPT x 3/4" MPT	1
3	080077	Valve, Drain, 3/4FPT, NO	1
4	080121	Clamp, Gear, 1-1/4"	1
5	052005	Tubing, 1x1-1/4"	1
6	030015	Coupler, 3/4MPTx1"HB	1
7	030009	Valve, Ball, 3/4FPT BE, FF	1
8	030017	Nipple, Close, 3/4MPT	1
9	030018	Elbow, 90, 3/4FPT	1
10	030021	Nipple, 3/4MPT x 3"	1

094096-, Exploded Parts List

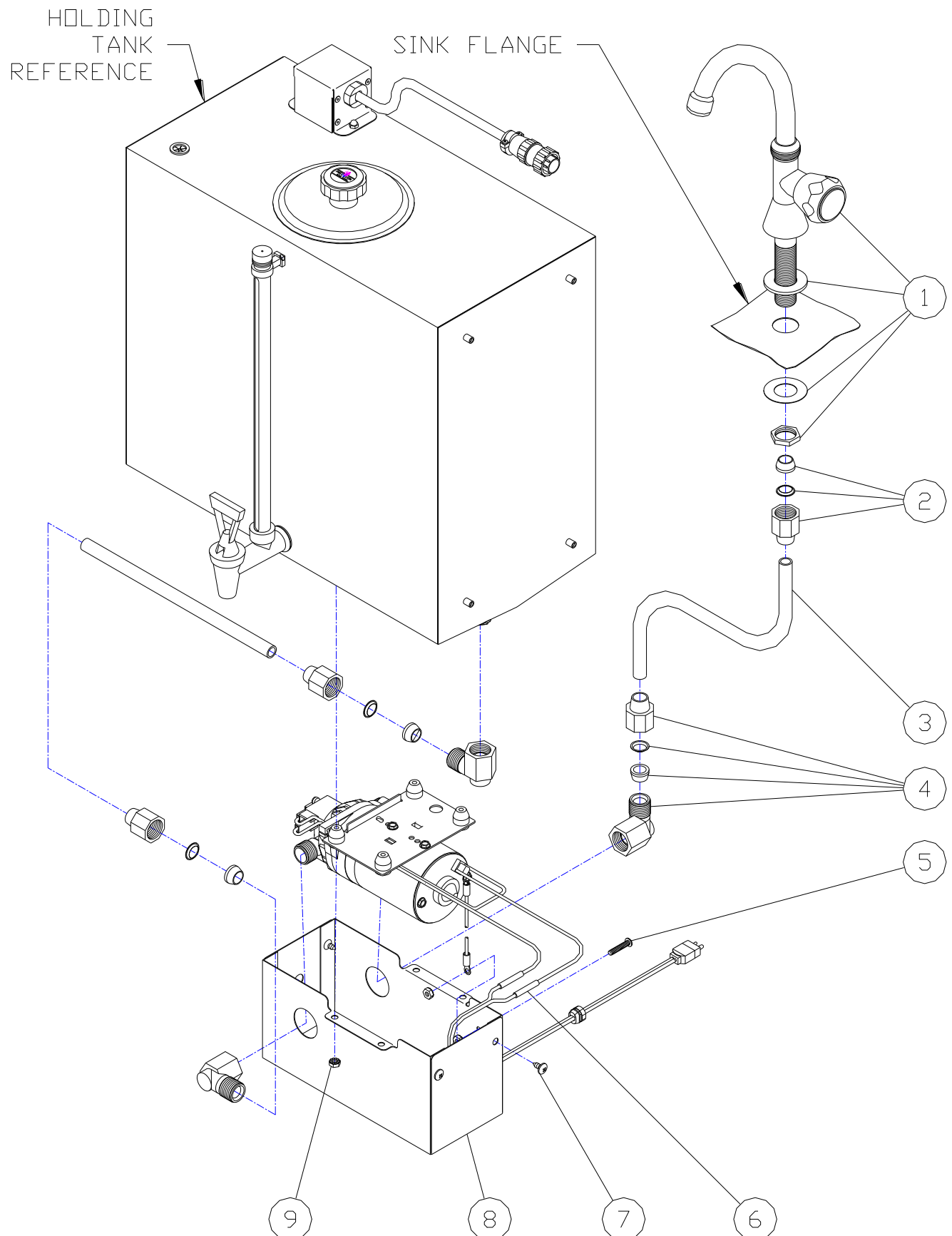
Automatic Electric Drain Assembly, AED-1



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

Item #	Part #	Description	Qty
14	080052	Faucet, Chrome	1
15	034003	Nut/Cone/Ring Set, ½" OD	1
3	052001	Tubing, LDPE, 3/8" x ½"	1
4	034022	Elbow, 90, 1/2FPT x 1/2OD Tube	3
5	012000	Screw, Mach, Pltd, #10-24 x1	1
6	066006	Butt Splice, 18-22AWG, Red	2
7	010002	Screw, Shtmtl, Pltd, #10-12 x ½"	4
8	500191	Pump Box	1
9	026000	Nut, Kep, #10-24	6

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

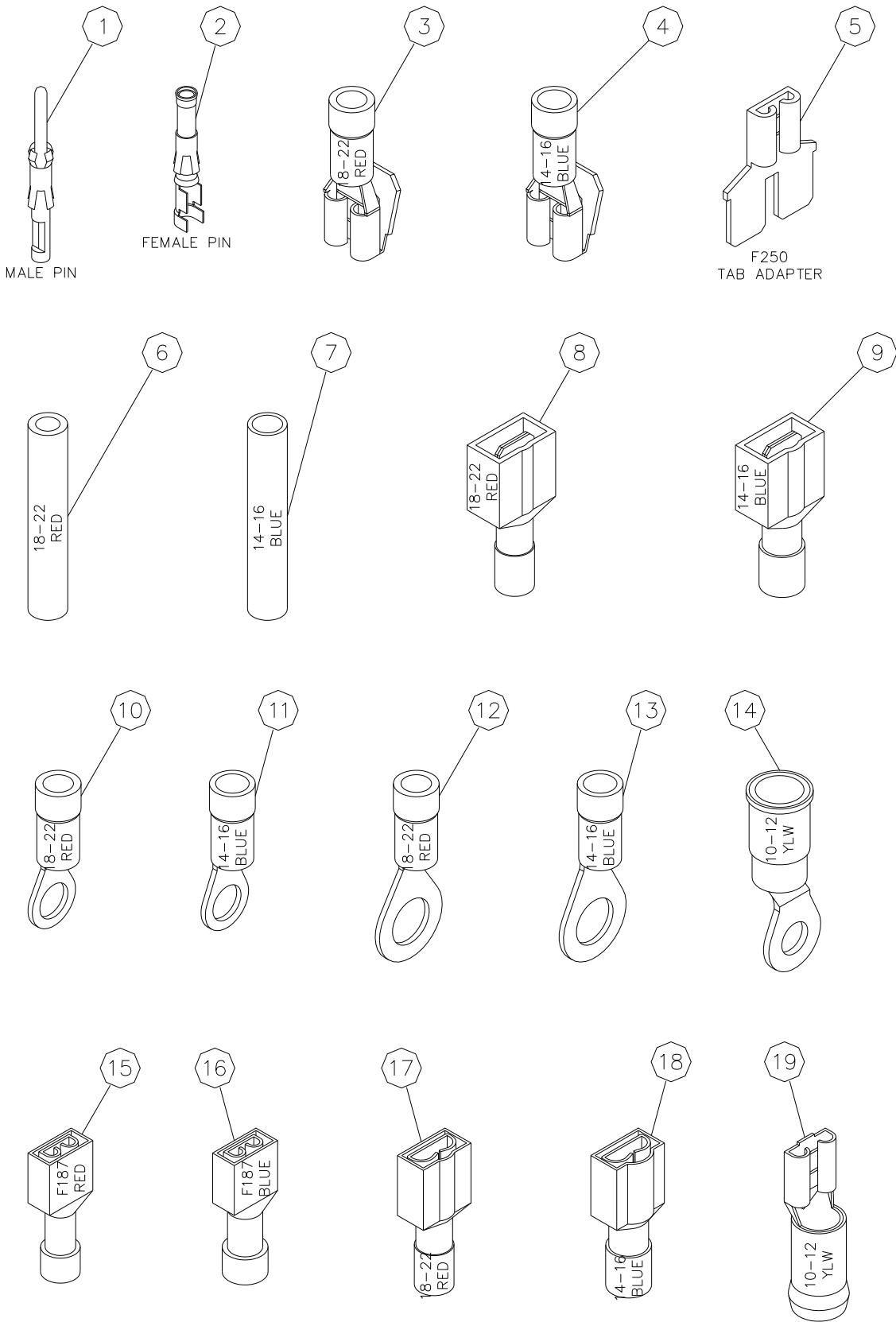


094109-, Exploded Parts List

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	060012	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 (12GPD Auto) PART # 510126-Series 3

No.	Part#	Color	Ga	Length	From Conn.	SERIES 3	From Location	To Location
						ToConn.		
1	510121	GRN	16	3"	#10RING#14-#16	POWER CORD	GROUND	POWER CORD
2	510121	BLK	16	17.5"	F250 #14-#16	POWER CORD	POWER SWITCH #2	POWER CORD
3	510121	WHT	16	18.5"	#10RING#14-#16	POWER CORD	RESET SWITCH #4	POWER CORD
4	510122	BLKor	18	12"	PIGG	FAN MOTOR (ORG/BLU)	HEATER RELAY #1	FAN MOTOR
5	510122	BLKor	18	12"	F250 #18-#22	FAN MOTOR (YLW/WHT)	FAN SWITCH #2	FAN MOTOR
6								
7								
8								
9	095001	BLK	18	7"	#10RING#18-#22	F187 #18-#22	RESET SWITCH #1	Lower Microswitch COM
10	095033	GRN	16	23"	PIGG	F250 #14- #16	HEATER RELAY "B" (5)	SOLENOID VALVE A
11	095034	BLK	16	26"	F187 #14-#16	F250 #14- #16	Upper Microswitch COM	SOLENOID VALVE B
12	510123	BLK	18	3.5"	F250 #18-#22	PUMP RECEPTACLE	FUSE SIDE	PUMP RECEPTACLE (SMOOTH)
13	510123	BLK	18	24"	#10RING#18-#22	PUMP RECEPTACLE	RESET SWITCH #3	PUMP RECEPTACLE
14	095035	ORG	16	20"	#10RING#14-#16	FPIN	RESET SWITCH #3	HOLDING TANK RECEPTACLE #1
15	095036	BLU	16	19"	F250 #14-#16	FPIN	HEATER RELAY #3	HOLDING TANK RECEPTACLE #2
16	095004	YLW	16	7"	PIGG	FPIN	SOLENOID VALVE A	HOLDING TANK RECEPTACLE #3
17	095037	RED	16	22"	F250 #14-#16	FPIN	PUMP RELAY "B" (5)	HOLDING TANK RECEPTACLE #4
18	095006	RED	16	8"	F250 #14-#16	#10 RING #14-#16	POWER SWITCH #3	RESET SWITCH #2
19	510124	BLK	18	20" ???	PIGG	DRAIN RECEPTACLE	HEATER RELAY #4	DRAIN RECEPTACLE
20	510124	BLK	18	20"	#10RING#18-#22	DRAIN RECEPTACLE	RESET SWITCH #1	DRAIN RECEPTACLE
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 #1	HEATING ELEMENT "B"
23	095009	BRN	16	7"	F250 #14-#16	PIGG	PUMP RELAY "A" (6)	POWER SWITCH #2
24	095010	WHT	16	3"	F250 #14-#16	PIGG	PUMP RELAY #3	PUMP RELAY "A" (6)
25	095038	GRN	16	22"	F250 #14-#16	F250 #14-#16	PUMP RELAY #4	FUSE END
26	095010	WHT	16	3"	PIGG	F250 #14-#16	HEATER RELAY "B" (5)	HEATER RELAY #4
27	095012	BRN	16	12"	F250 #14-#16	#10 RING #14-#16	HEATER RELAY #2	RESET SWITCH #3
28	095013	ORG	16	8"	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	FAN SWITCH #6	POWER SWITCH #7
31	095010	WHT	16	3"	F250 #14-#16	PIGG	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	POWER SWITCH #6	POWER SWITCH #3
35	095017	BLU	16	10"	F250 #14-#16	F250 #14-#16	HEATER RELAY B (6)	WATER SWITCH #7
36	095018	GRN	16	14"	F250 #14-#16	#10 RING #14-#16	WATER SWITCH #8	RESET SWITCH #4
37	095039	BRN	16	24"	F250 #14-#16	PIGG	WATER SWITCH #6	SOLENOID VALVE B
38	095020	YLW	16	5"	F250 #14-#16	PIGG	WATER SWITCH #2	FAN SWITCH #3
39	095021	GRN	16	13"	F187 #14-#16	F250 #14-#16	Lower Microswitch NC	HEATER RELAY "A" (6)
40	095022	ORG	16	14"	F187 #14-#16	F250 #14-#16	Upper Microswitch NC	WATER SWITCH #3

510126S3, Exploded Parts List

Wiring Diagram, PWS, 12GPD Auto, Series 3

