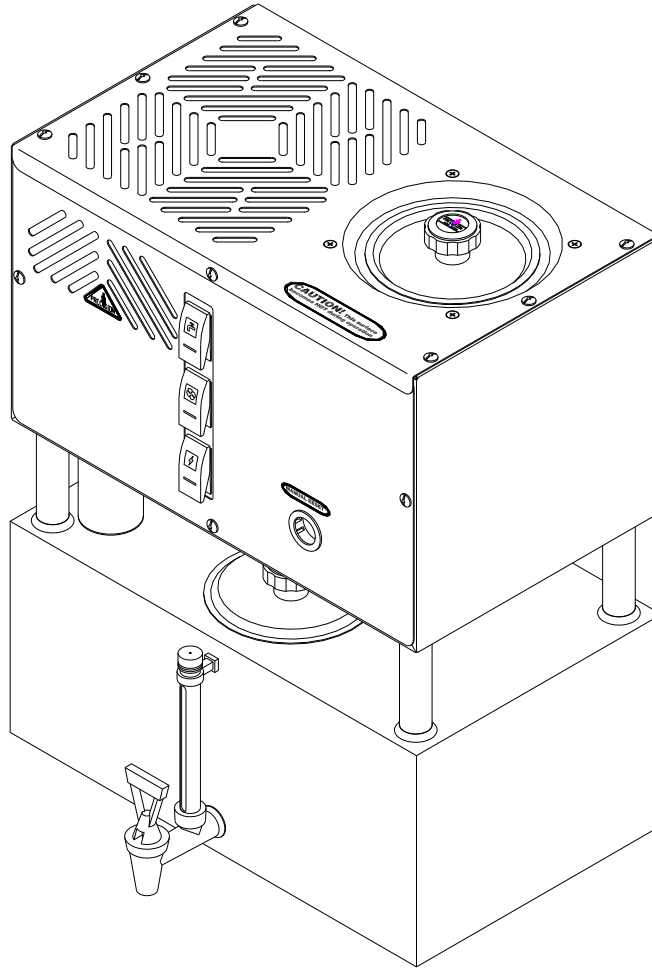




REPLACEMENT PARTS MANUAL

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 | 0008 | 0008 | 0001 | 0001 | 0001 | 0001 |



PRECISION WATER SYSTEMS WATER DISTILLER

MANUFACTURED BY:
PRECISION DESIGN & MANUFACTURING INC.
10331 - 105th STREET
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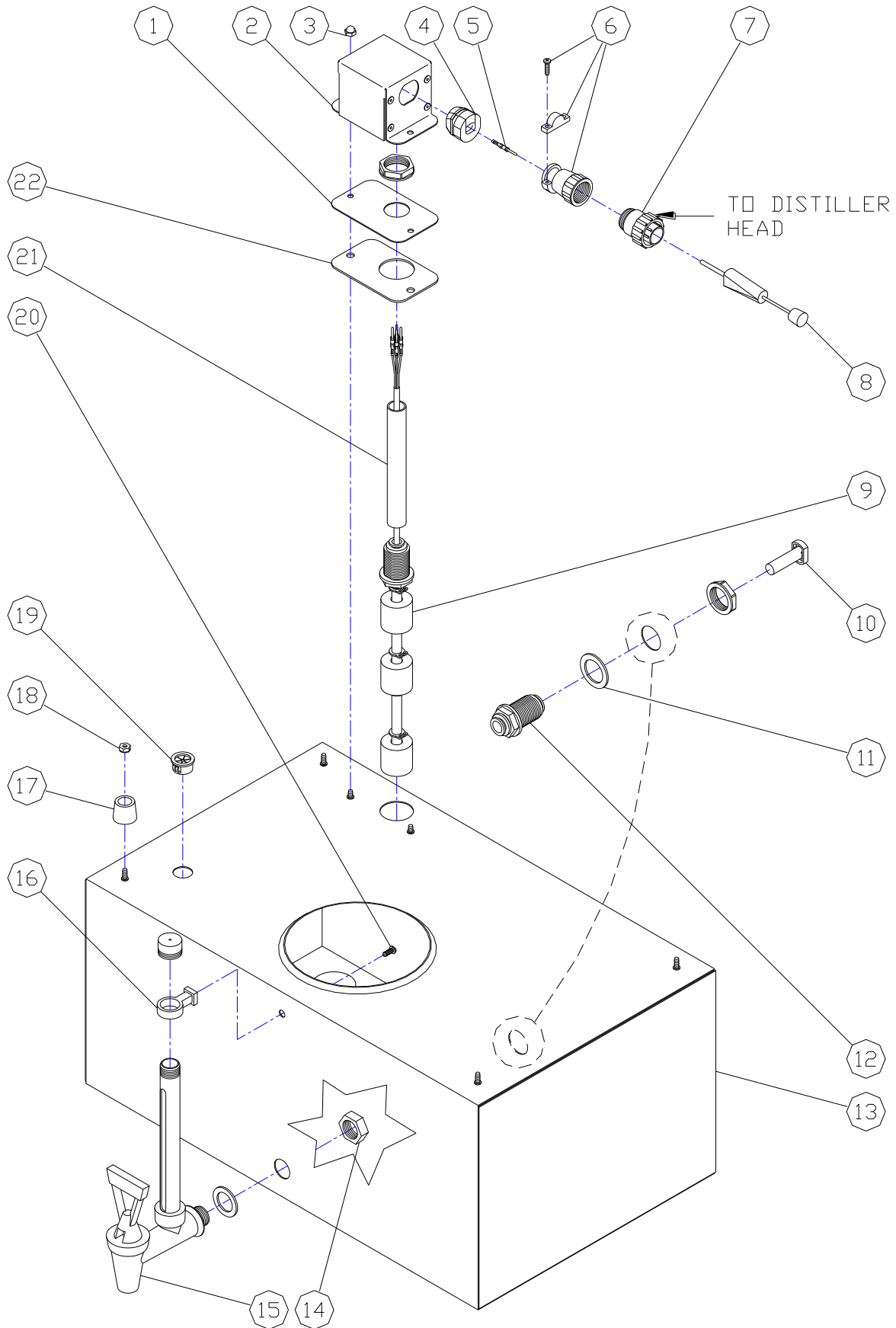
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094077, Exploded Parts List

Holding Tank Assembly, PWS, 8-5 Automatic

| Item # | Part # | Description | Qty |
|---------------|---------------|---|------------|
| 1 | 500325 | Plate, Level Sensor | 1 |
| 2 | 500133 | 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 | 500331 | HT 7" Level Sensor Assembly, SS | 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, Mach, #10-24 x 3/8" SS | 1 |
| 21 | 080108 | Sleeve, Fiberglass, 1/2" | 4.5" |
| 22 | 500326 | Gasket, Level Sensor | 1 |

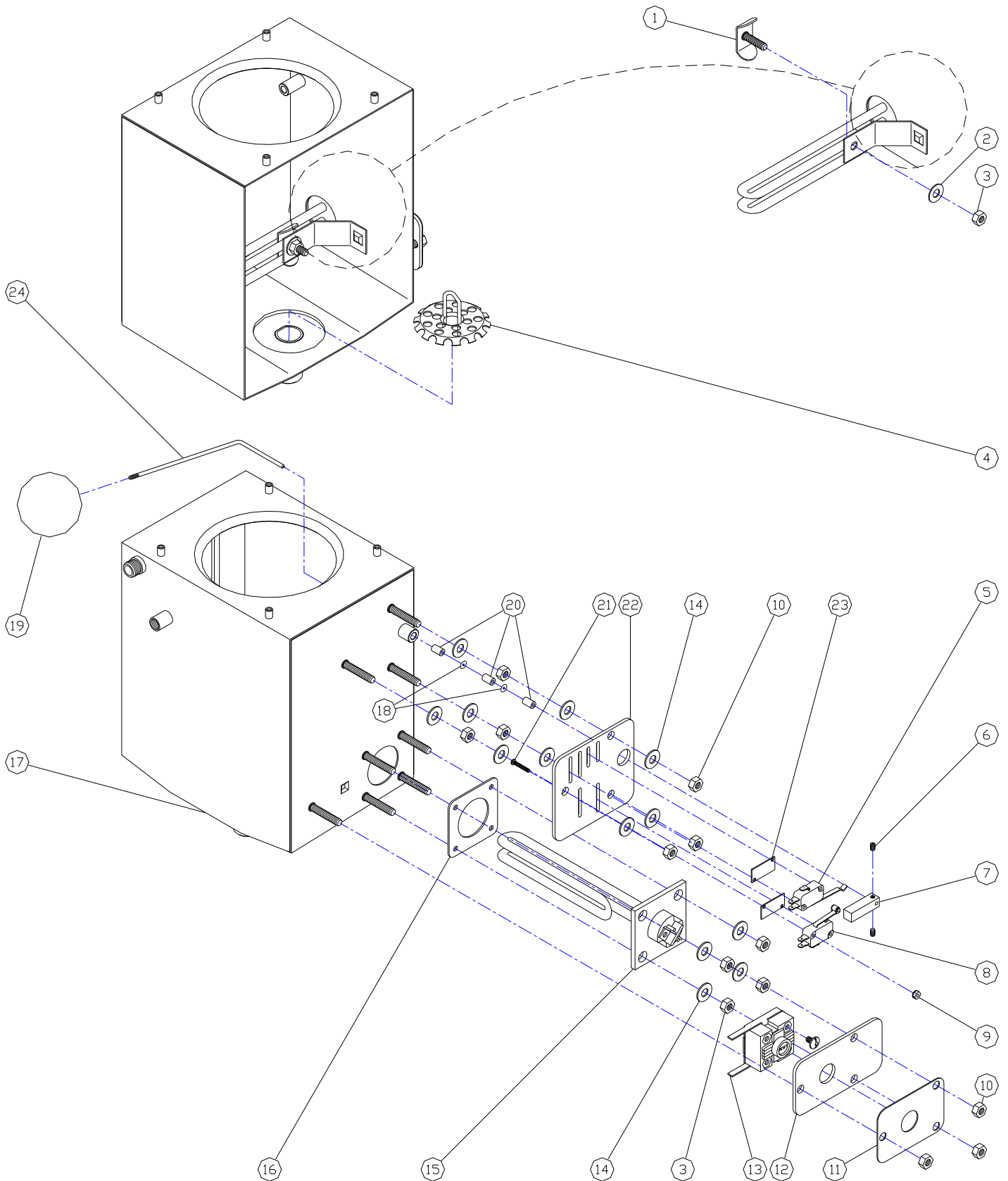
094077, Exploded Parts List Holding Tank Assembly, PWS, 8-5 Automatic



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 | 016014 | Set Screw, Blk, #6-32 x .25", Cup Pt. | 2 |
| 7 | 500278 | 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" Pltd. | 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 | 11 |
| 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 | 080162 | Float Ball, SS, 2-1/4" Round, #6-32 | 1 |
| 20 | 080127 | Bushing, Nylon | 3 |
| 21 | 012003 | Screw, Machine, Pltd, #4-40 x 3/4" | 4 |
| 22 | 500266 | Plate, Microswitch | 1 |
| 23 | 500289 | Shim, Micro Switch | 2 |
| 24 | 500264 | Rod, Boiler Float | 1 |

094110, Exploded Parts List Boiler Assembly, 8GPD Automatic



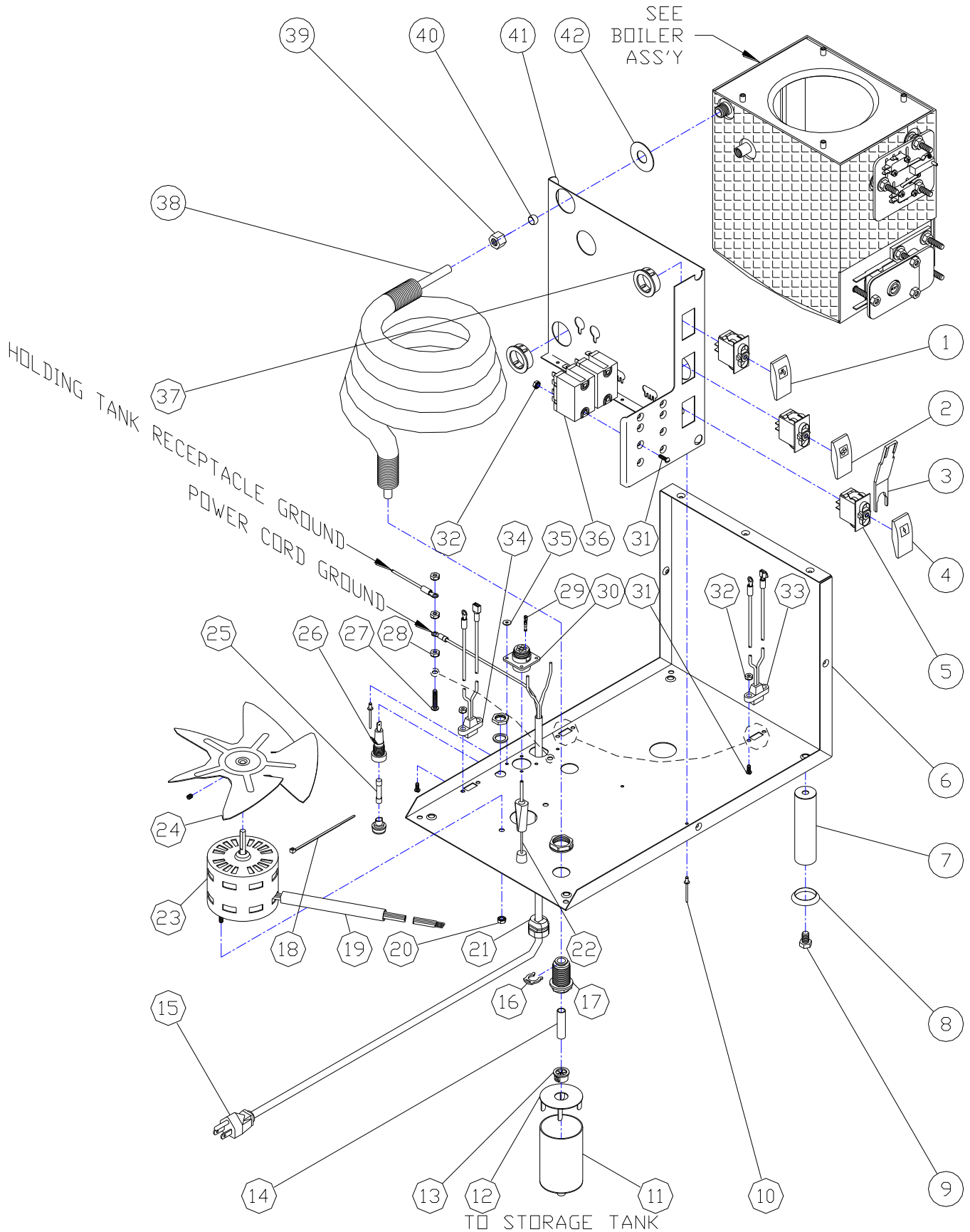
094075, Exploded Parts List

Distiller Body Assembly, PWS, 8GPD 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 | 500126 | Body, 8GPD, Auto | 1 |
| 7 | 500187 | Leg, WA, 8-5 | 4 |
| 8 | 080105 | Ring, SS, 1" Rounded | 4 |
| 9 | 014005 | Capscrew, Plated, 5/16"-18 x 1/2" | 4 |
| 10 | 016004 | Rivet, Aluminum, 1/8" x 5/16" | 6 |
| 11 | 500300 | Filter, Housing, WA, Auto | 1 |
| 12 | 500260 | Filter Cap WA, | 1 |
| 13 | 054005 | Bushing, Wire, Plastic, 5/8" Hole | 1 |
| 14 | 500202 | Tube, SS, 3/8" Diameter X 1.5" | 1 |
| 15 | 500232 | Power Cord Assembly, 16-3 NA, 8GPD Automatic | 1 |
| 16 | 034021 | Locking Clip, 3/8" JG | 1 |
| 17 | 034011 | Bulkhead, 3/8" JG | 1 |
| 18 | 054011 | Wire Tie, Plastic, 4" | 1 |
| 19 | 080108 | Sleeve, Fiberglass, 1/2" | 5" |
| 20 | 026001 | Nut, Kep, Plated, #8-32 | 2 |
| 21 | 054002 | Strain Relief, 7K-2 | 1 |
| 22 | 080135 | Circular Pin Extraction Too | 1 |
| 23 | 060049 | Motor, 120/240 Dual Voltage | 1 |
| 24 | 080045 | Fan Blade, 7" | 1 |
| 25 | 060022 | Fuse, 1 Amp, Slow Blow | 1 |
| 26 | 060036 | Fuse Holder, Chassis, 15Amp (includes nut & gasket) | 1 |
| 27 | 012000 | Screw, Machine, Plated, #10-24 x 1" | 1 |
| 28 | 026000 | Nut, Kep, Plated, #10-24 | 3 |
| 29 | 060017 | Female Pin | 4 |
| 30 | 060044 | Receptacle, 7 pin Receptacle | 1 |
| 31 | 012009 | Screw, Machine, Plated, #6-32 X 1/2" | 8 |
| 32 | 026002 | Nut, Kep, Plated, #6-32 | 8 |
| 33 | 500237 | Drain Receptacle Assembly, 8GPD, Auto | 1 |
| 34 | 500236 | Pump Receptacle Assembly, 8GPD, Auto | 1 |
| 35 | 018001 | Washer, Flat, 1/8" x 3/8" Aluminum | 2 |
| 36 | 060018 | Relay, Aromat, Black, 120V | 2 |
| | 060019 | Relay, Aromat, Black, 240V | 2 |
| 37 | 054004 | Bushing, Snap, 1-1/4" | 2 |
| 38 | 500239 | Cooling Coil Assembly, 8GPD, Auto | 1 |
| 39 | 030013 | Nut, Plated, 3/8" Compression | 1 |
| 40 | 030012 | Ferrule, 3/8" | 1 |
| 41 | 500114 | Divider, 8GPD, Auto | 1 |
| 42 | 018023 | Washer, Flat, 5/8" X 1-1/2", 20qa. SS | 1 |

094075, Exploded Parts List

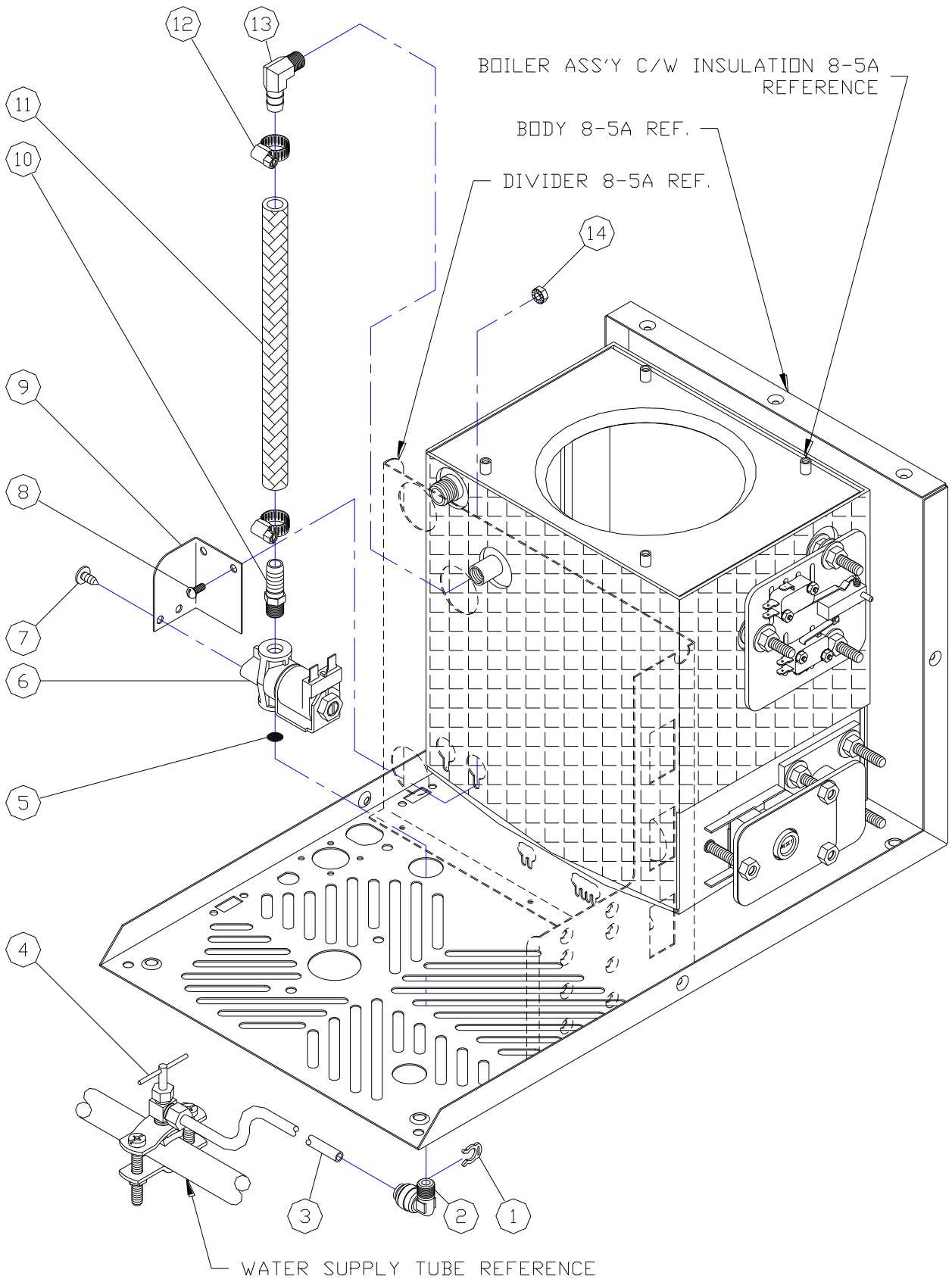
Distiller Body Assembly, PWS, 8GPD Automatic



094070, Exploded Parts List 8GPD 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 | 1 |
| 4 | 036005 | Valve, Self Piercing Kit | 1 |
| 5 | 080197 | Screen, 50 Mesh, Solenoid Valve | 1 |
| 6 | 060026 | Solenoid Valve, 1/8FPT BE, 120V | 1 |
| | 060027 | Solenoid Valve, 1/8FPT BE, 240V | 1 |
| 7 | 010000 | Screw, ShtMtl #10-12x1/2", SS | 2 |
| 8 | 012012 | Screw, Mach, #8-32x5/8", Pltd. | 2 |
| 9 | 500166 | Bracket, Solenoid Valve | 1 |
| 10 | 034024 | Coupler, Nylon, 1/8"MPTx3/8"HB | 1 |
| 11 | 052004 | Tubing, 3/8x0.6 Braided | 1 |
| 12 | 080056 | Gear Clamp, SS, 1/4" | 2 |
| 13 | 030003 | Elbow, 90, 1/8"MPTx3/8"HB | 1 |
| 14 | 026001 | Nut, Kep,#8-32 | 2 |

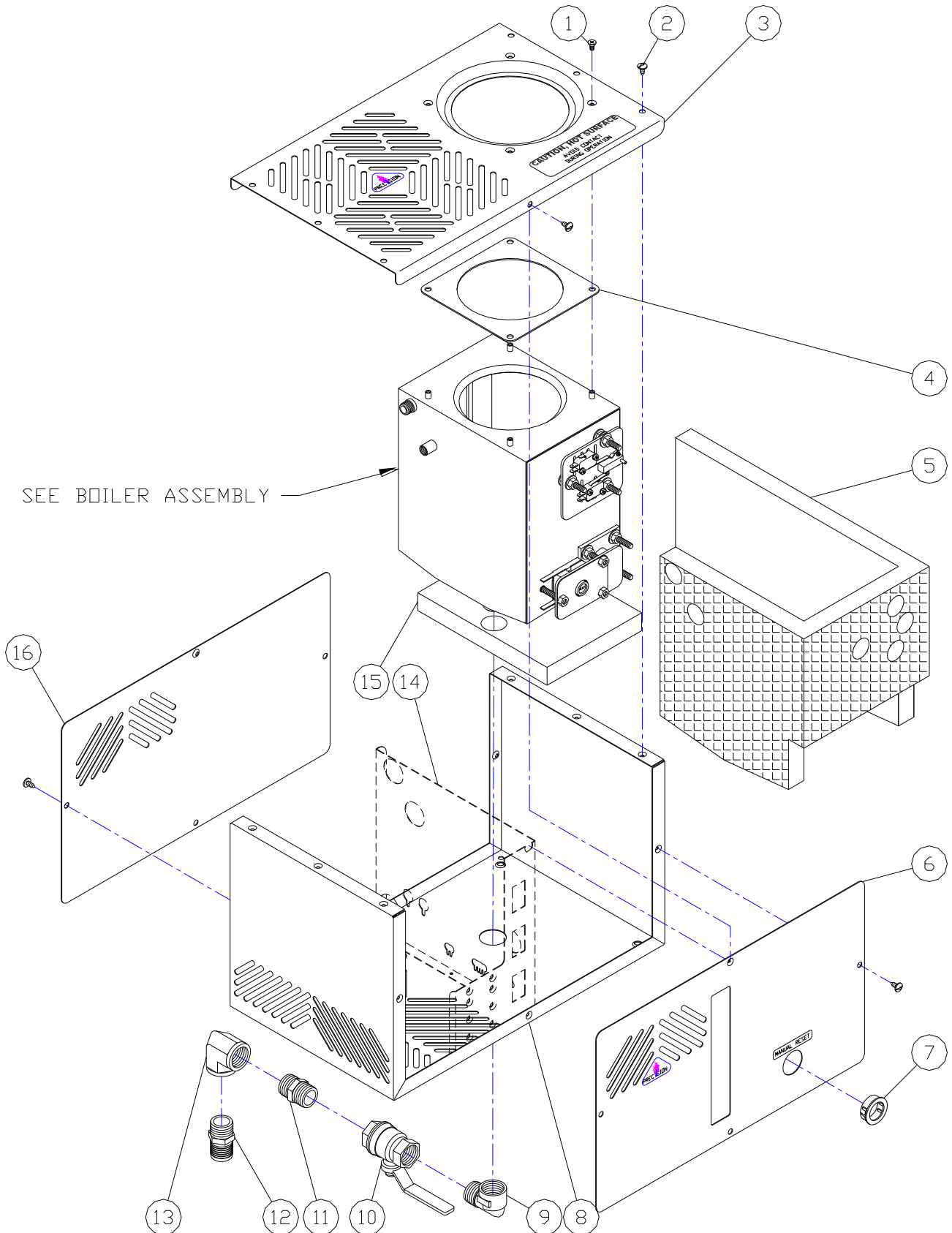
094070, Exploded Parts List 8GPD Solenoid Valve Assembly



094076, Exploded Parts List
Distiller Head Assembly, PWS, 8GPD Automatic

| Item # | Part # | Description | Qty |
|---------------|---------------|------------------------------------|------------|
| 1 | 012008 | Screw, Mach, #10-24x3/8",Oval Hd 4 | |
| 2 | 010000 | Screw, Sht Mtl, #10-12 x 1/2", SS | 14 |
| 3 | 500127 | Cover, Top, 8GPD, Auto | 1 |
| 4 | 500111 | Gasket, Lid | 1 |
| 5 | 500240 | Insulation, 8GPD Auto Boil. 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, 3/4 MPT x 3/4 FPT | 1 |
| 10 | 030009 | Valve, Ball, 3/4 FPT BE, FF | 1 |
| 11 | 030017 | Nipple, Close, 3/4 MPT | 1 |
| 12 | 030015 | Coupler, 3/4 MPT x 1"HB | 1 |
| 13 | 030018 | Elbow,90, 3/4FPT BE | 1 |
| 14 | 500114 | Divider, 8GPD Auto | 1 |
| 15 | 500241 | Insulation, 8GPD Auto Boil. Bot. | 1 |
| 16 | 500129 | Cover, Rear, 8GPD Auto | 1 |

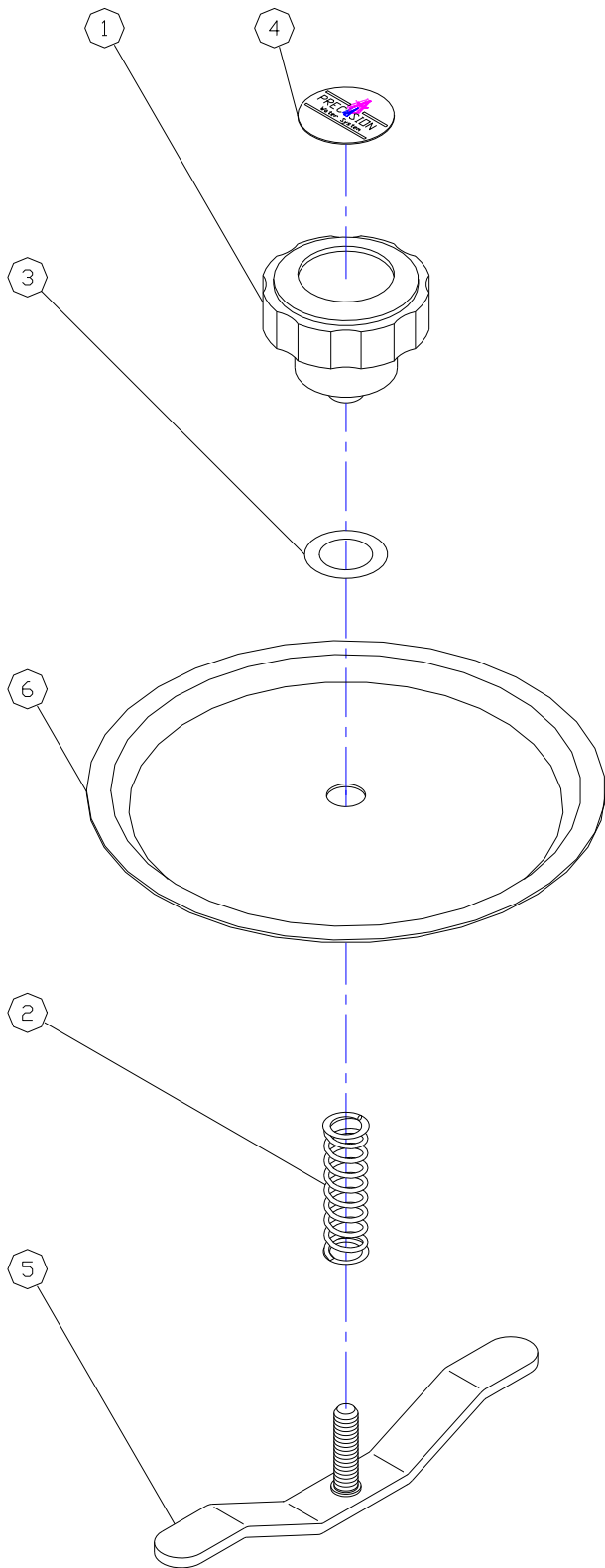
094076, Exploded Parts List Distiller Head Assembly, PWS, 8GPD Automatic



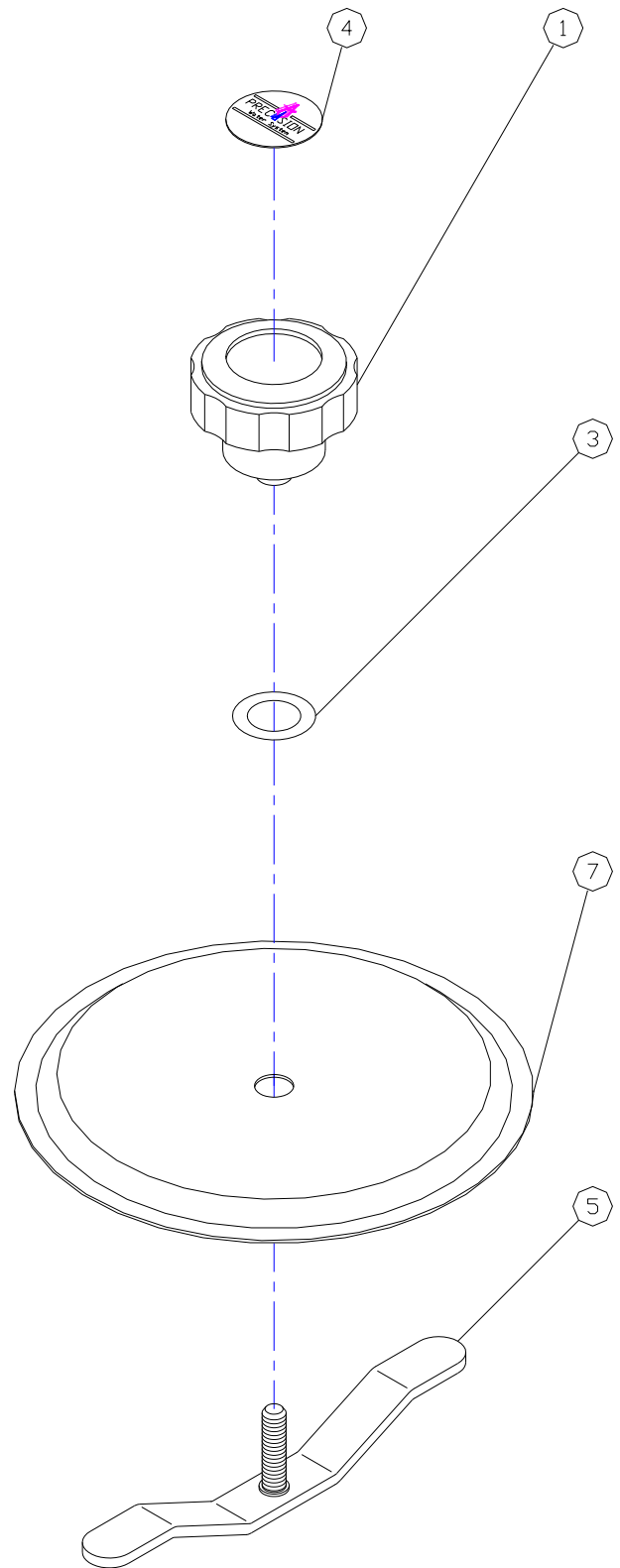
094074, Exploded Parts List Boiling Tank & Holding Tank Lids Assemblies

| Item # | Part # | Description | Qty |
|--------|--------|----------------------------|-----|
| 1 | 080053 | Knob, Black Phenolic, ¼-20 | 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 |

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



BOILING TANK
LID ASSEMBLY
(PART # 500184)

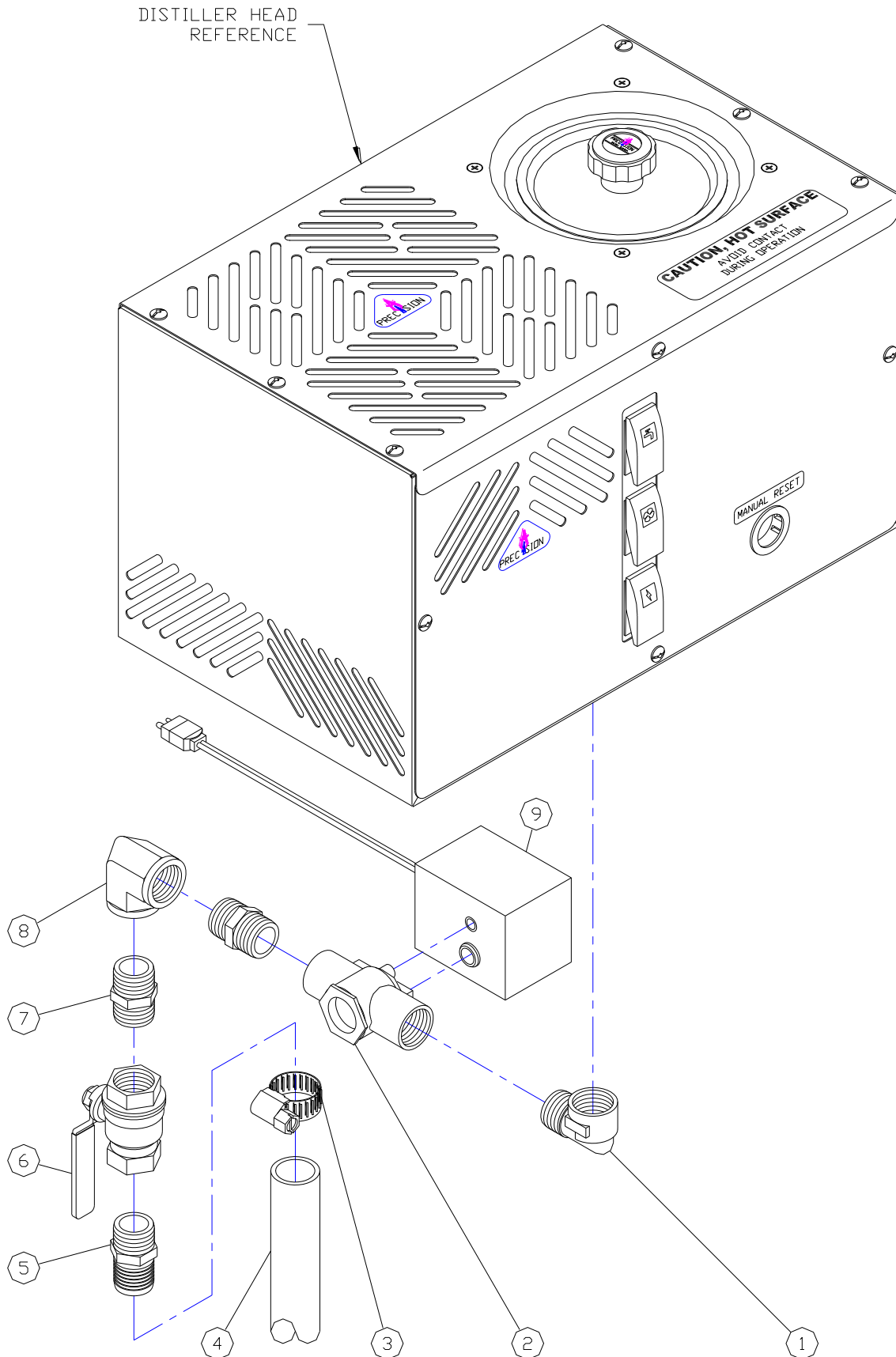


HOLDING TANK
LID ASSEMBLY
(PART # 500248)

094071, Exploded Parts List Automatic Electric Drain Assembly, AED-1

| Item # | Part # | Description | Qty |
|---------------|---------------|---------------------------------|------------|
| 1 | 030016 | Elbow,90, 3/4 "FPT x 3/4" MPT | 1 |
| 2 | 080077 | Valve, Drain, 3/4FPT, NO | 1 |
| 3 | 080121 | Clamp, Gear, 1-1/4" | 1 |
| 4 | 052005 | Tubing, 1x1-1/4" | 1 |
| 5 | 030015 | Coupler, 3/4MPTx1"HB | 1 |
| 6 | 030009 | Valve, Ball, 3/4FPT BE, FF | 1 |
| 7 | 030017 | Nipple, Close, 3/4MPT | 2 |
| 8 | 030018 | Elbow, 90, 3/4FPT | 1 |
| 9 | 500310 | PWS AED Motor Ass'y,W/Cord,120V | 1 |
| | 500311 | PWS AED Motor Ass'y,W/Cord,240V | 1 |

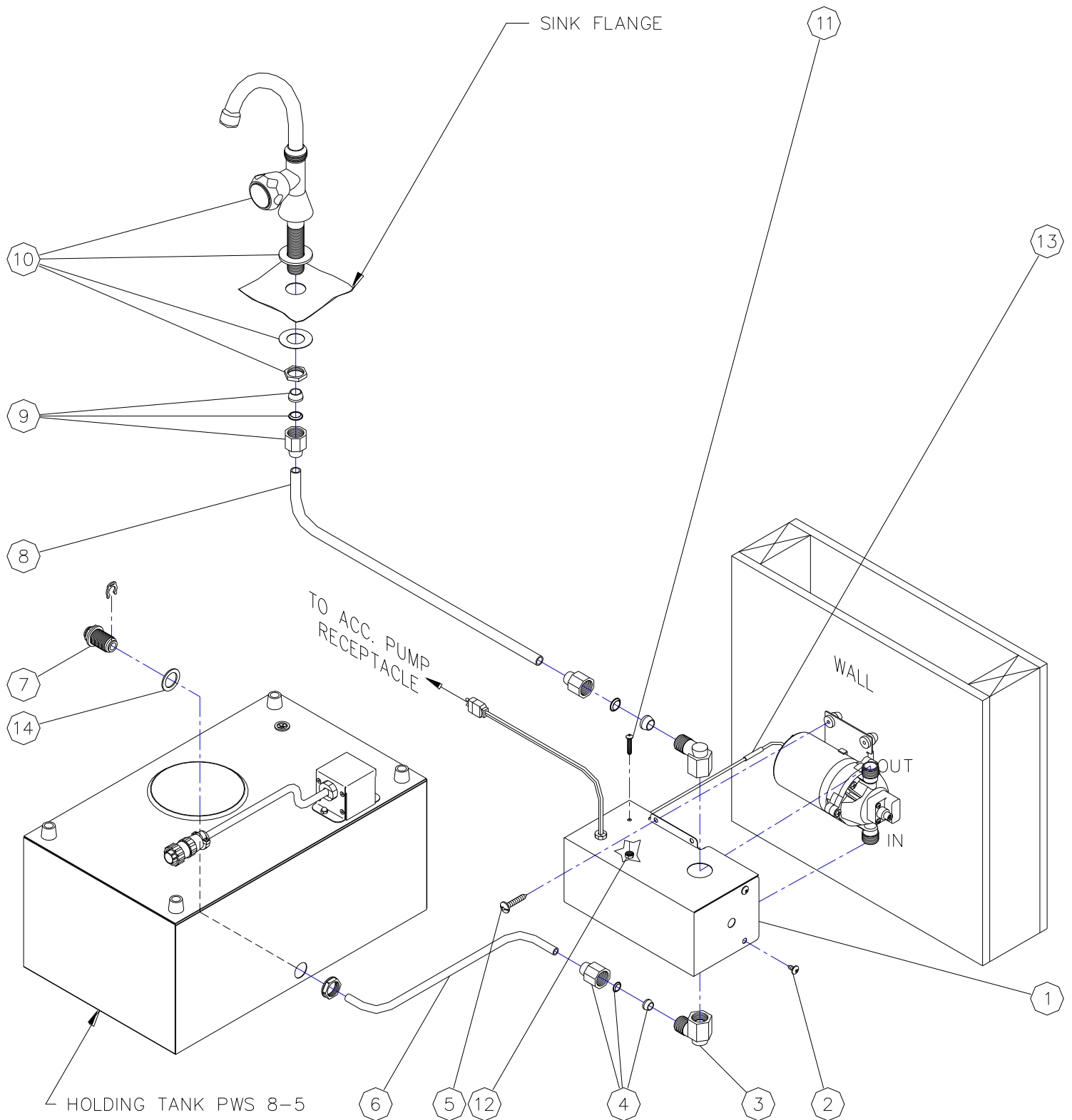
094071, Exploded Parts List Automatic Electric Drain Assembly, AED-1



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

| Item # | Part # | Description | Qty |
|---------------|---------------|------------------------------------|------------|
| 1 | 500191 | Pump Box | 1 |
| 2 | 010002 | Screw, Shtmtl, Pltd, #10-12 x 1/2" | 4 |
| 3 | 034022 | Elbow, 90, 1/2FPT x 1/2OD Tube | 3 |
| 4 | 034004 | Nut/Cone/Ring Set, 3/8" OD | 1 |
| 5 | 010008 | Screw, Shtmtl, Pltd, #10-12 X 1" | 4 |
| 6 | 052007 | Tubing, LDPE, 3/8" x 1/4" | 1 |
| 7 | 034011 | Bulkhead, 3/8" JG | 1 |
| | 052001 | Tubing, LDPE, 3/8" x 1/2" | 1 |
| 9 | 034003 | Nut/Cone/Ring Set, 1/2" OD | 1 |
| 10 | 080052 | Faucet, Chrome | 1 |
| 11 | 012000 | Screw, Mach, Pltd, #10-24 x1 | 1 |
| 12 | 026000 | Nut, Kep, #10-24 | 4 |
| 13 | 066006 | Butt Splice, 18-22AWG, Red | 2 |
| 14 | 080148 | Gasket Washer, 1/16" Silicone | 1 |

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

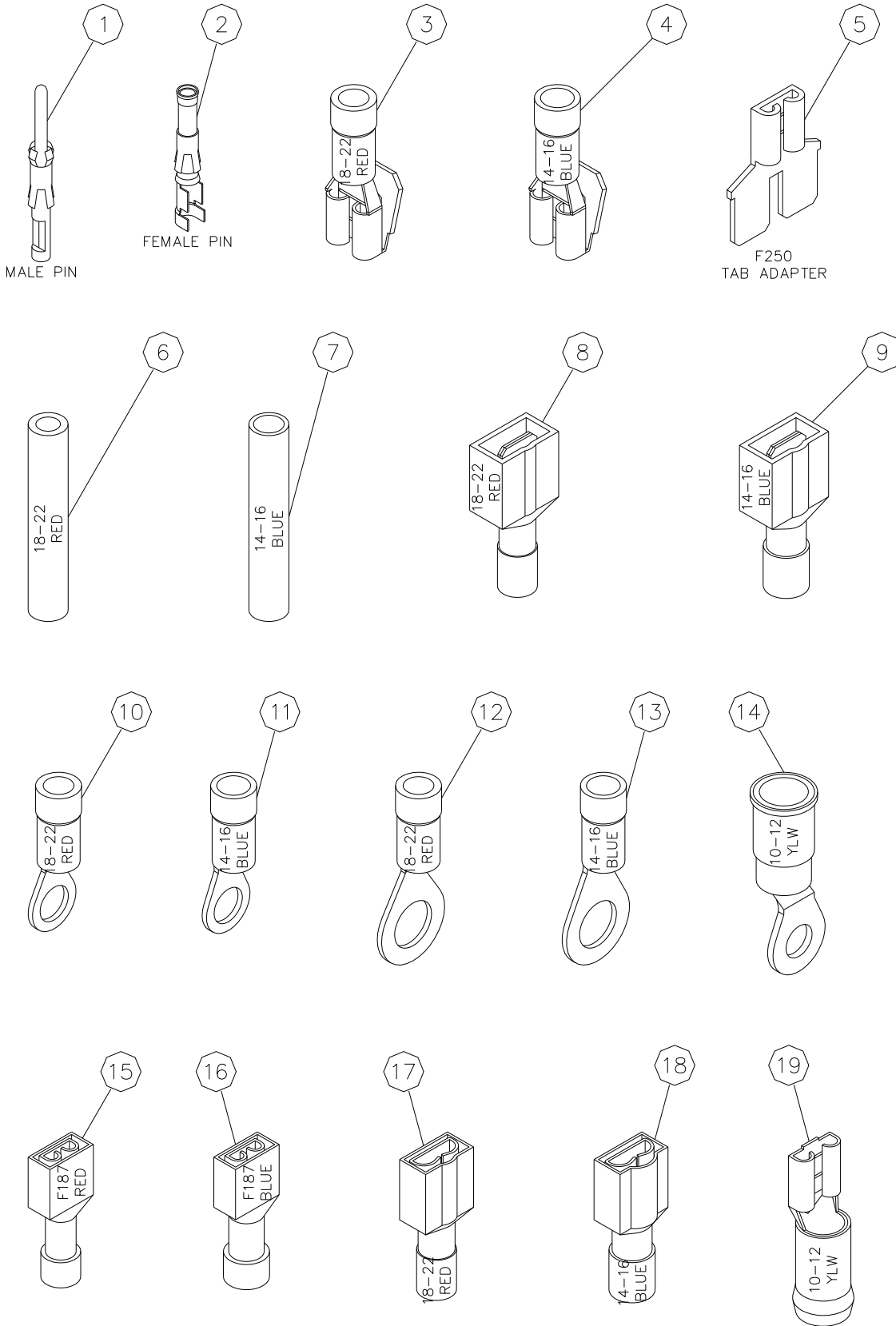


094109, Exploded Parts List Electrical Terminals

| 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 | 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, 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 | Ga | Length | From Conn. | ToConn. | 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" | PIGG#18-#22&PIGG#18-#22 | FAN MOTOR (ORG/BLU) | HEATER RELAY #1 | FAN MOTOR |
| 5 | 500233 | BLKor | 18 | 11" | F250#18-#22&PIGG#18-#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 #5 | 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 |
| 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 #3 | 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 #5 | 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 |
| 20 | 500237 | BLK | 18 | 16" | #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#14-#16 | PUMP RELAY #6 | POWER SWITCH #2 |
| 24 | 095010 | WHT | 16 | 3" | PIGG#14-#16 | F250 #14-#16 | PUMP RELAY #3 | PUMP RELAY #6 |
| 25 | 095011 | GRN | 16 | 19" | F250 #14-#16 | F250 #14-#16 | PUMP RELAY #4 | FUSE END |
| 26 | 095010 | WHT | 16 | 3" | PIGG#14-#16 | F250 #14-#16 | HEATER RELAY #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#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 #4 | 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 #6 |
| 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

