

# **OPERATIONS, SERVICE MANUAL & PARTS LIST**

**ADU-40CF**

**NSN: 6520-01-456-5380**



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### **SAFETY PRECAUTIONS:**

**Warning** - Improper application, adjustment or servicing can result in serious injury.  
Always disconnect power source before servicing.

**Warning** - Do not lean on the unit. Sink structure is not designed to support human weight.

**Caution** - To avoid the risk of burns do not adjust the storage tank temperature control above 120 deg. Fahrenheit.

**Caution** - Prevent from freezing. Purge system before storage to prevent damage to lines or pump.

## Introduction

### Purpose

The ADU-40CF Command Air Portable Field Sink provides a practical water source for mobile medical and dental operations. Both warm and cold water are available for washing and instrument cleansing as part of the process of disinfecting medical devices. Hands free operation makes surgical scrubs simple. The rigid stainless steel basin is durable and is easy to disinfect. And the accessory tray allows sink-side consolidation of all instruments. Light weight and compact size make the ADU-40CF easy to set-up and transport. To receive the best service and longest life from your Aseptico product, follow the instructions detailed in this manual.

### Performance characteristics

- Weight: 48 lb.
- Size: 19 x 19 x 14 in. (external)
- Sink flow rate: 0.68 gpm (2.2 lpm)
- Max. pump discharge head: 8.3 ft (2.5 meters)
- Pump self priming limit: 48 in. (1.2 meters)
- Heating capacity: 1500 Watts
- Tank capacity: 0.75 Gal. (2.9 Litre)
- Peak water temp.: 106° F,  $\pm 7^{\circ}$ F (41°C,  $\pm 4^{\circ}$ C)

### Items furnished

- Sink unit, surgical
- Aluminum legs (4).
- Intake and waste hoses.
- Cold water, manual pump.
- ON/OFF foot switch.
- 120V and 230V power cords.
- Instrument tray (6 1/2 x 10 in.).
- Grounding lug.
- Alternate source regulator.
- 2 copies Operations/Service Manual.

### Items not furnished

- Jerry cans or alternate water supply.
- Waste water Jerry can.
- 120/230, 50/60Hz, single phase electrical power supply.

### Storage and handling precautions

- Avoid freezing. To protect internal components, purge the sink's tank and lines prior to unattended periods in sub freezing conditions.

### Environmental conditions

- Operating Temperature: 1° to 45° C (34° to 113° F)
- Transport/Storage Temperature: 1° to 60° C (34° to 140° F)
- Relative Humidity: 5 to 95% non-condensing
- Altitude: 0 to 3048 meters (0 to 10,000 feet)



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WARNING: This device has been tested and found to comply with the emissions requirements of IEC 60601-1-2:2001-09. These requirements provide reasonable protection against harmful electromagnetic interference in a typical medical installation. However, high levels of radio-frequency (RF) emissions from electrical devices, such as cellular phones, may disrupt the performance of this device. To mitigate disruptive electromagnetic interference, position this device away from RF transmitters and other sources of electromagnetic energy.

## Preparations for use and installation instructions

After removal from its original packaging, the ADU-40CF will include the following items:

### Case Contents: Figs A1 & A2

- ❶ Sink assembly (1)
- ❷ MIL-Spec carry case (1)
- ❸ Operation & Service Manuals (2)
- ❹ Accessory pouches (3)
- ❺ Optional Soap Dispenser pouch (1)
- ❻ Optional Leg Support Kit pouch (1)

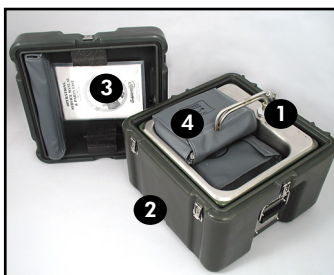


Figure A1 - Open Case with Accessories Pouches

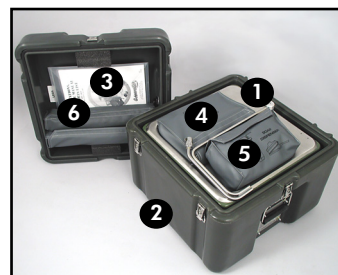


Figure A2 - Open Case with Optional Spout & Optional Accessories Pouches

### Legs Pouches (in lid): Figs 2A & 2B

- ❶ Legs (4)
- ❷ Optional AA-04CF Legs-Support Kit

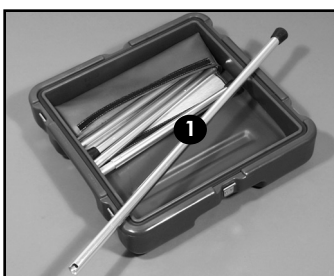


Figure B1 - Legs Pouch

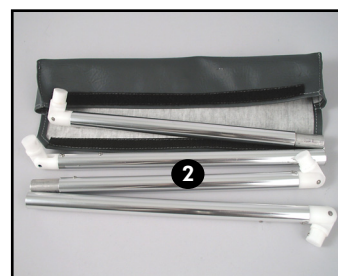


Figure B2 - Optional AA-04CF Legs Support Kit Pouch

### Electronics Pouch (in basin): Fig C

- ❶ 120V power cord
- ❷ 230V power cord
- ❸ Foot switch
- ❹ Instrument tray



Figure C - Electronics Pouch



Figure D - Optional AA-04SD Soap Dispenser Pouch

### Optional AA-04SD Soap Dispenser Pouch: Fig D

- ❶ Mounting Bracket Assembly
- ❷ Foot Pedal & Hose Assembly
- ❸ Dispenser Bottle

### Plumbing Pouch (in basin): Fig E

- ❶ Intake hose assembly
- ❷ Waste hose assembly
- ❸ Cold water pump assembly
- ❹ Alternate source regulator assembly

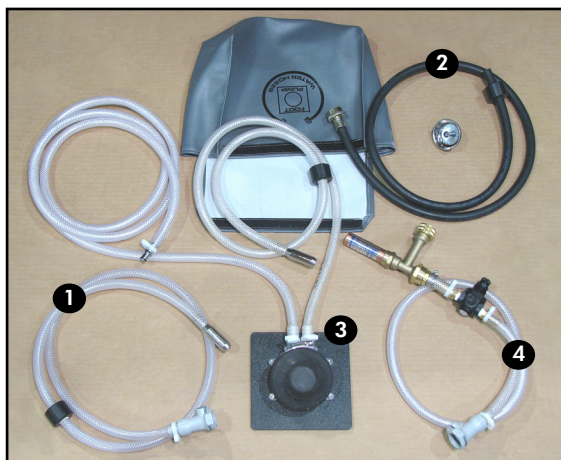


Figure E - Plumbing Pouch

## Assembly

1. After removing the ADU-40CF Command Air Field Sink from its original packaging, unfasten all perimeter latches and remove the cover. Locate the accessory pouches and lift the sink from the carry case. *Refer to Figure A*
2. Remove the four collapsible legs from the legs pouch and unfold. Make sure the locking dowel engages completely. Insert the legs into the guide tubes on the underside of the sink chassis and twist to engage the lock-pin and secure.

3. Optional Leg-Support Kit: *Refer to Figure F*

- a) Remove the black rubber feet from the existing sink legs.
- b) Unfold the optional leg support sections and join together to make two complete supports.
- c) Insert right front sink leg into white plastic knuckle on end of optional support. Insert right rear sink leg into other end of support. Repeat on left side of sink with second support. (Note: The leg supports will also function properly when installed between the two front sink legs and two back legs.)



Figure F - Optional Leg Supports

4. Raise the sink spout to the fully extended position. *Refer to Figures G1 & G2*



Figure G1 - Spout Position



Figure G2 - Optional AA-04EXS 15-Inch Spout Position

5. Remove the contents of the plumbing pouch. Attach the intake hose assembly to the quick connect, labeled “WATER INPUT” on the underside of the sink. Immerse the hose weight in the source jerry can (not provided) to the preset distance and secure the line using the attached push-on cap. *Refer to Figure H*
6. Attach the waste hose to the underside of the sink. Place the opposite end in a waste water jerry can (not provided). Secure the line using the push on cap. *Refer to Figure H*
7. If desired, attach the components of the cold water pump assembly (refer to Figure E) to dispense cold water.
  - a) Unpack the manual foot pump and tubing assembly.
  - b) Attach the hose adapter to the sink spigot. *Refer to Figure I*
  - c) Place the foot pump on a level section of ground and attach the other end to water source. Prime the lines by depressing the foot pump several times, until water flows into the sink. *Refer to Figure E*



Figure H - Connections



Figure I - Spout Connection

8. Remove the contents of the electronics pouch. Attach the electric ON/OFF foot switch to the foot switch connector, labeled “FOOT SWITCH”, on the underside of the sink. *Refer to Figure H*

9. Select the appropriate power cord for the power source. Connect the cord on the underside of the sink and secure it using the retaining clip connector. Plug the other end into the power source. The sink will operate on either a 120V or a 230V power supply. The green L.E.D. by the spout will light indicating power. *Refer to Figure H*

10. If desired, attach the instrument tray and/or optional soap dispenser to either side of the sink :

a) Instrument Tray : Secure the tray with the thumbscrews (*Figure I*).

b) Optional Soap Dispenser (*Refer to Figure J*):

- Position the mounting bracket against the lip of the basin as shown. Secure the bracket with the thumbscrew.
- Fill plastic dispenser bottle with medical-grade cleansing agent/soap, to within 1/2-inch from top.
- Guide the mouth of the plastic bottle over the lower end of the soap spout and carefully screw bottle upwards into the cap.
- Attach opposite end of 1/4-inch clear air hose (mounted to top of bottle cap) to the quick disconnect located on the end of the foot pedal air-supply hose.



*Figure J - Optional AA-04SD Soap Dispenser*

11. The ADU-40CF is constructed with full electrical protection; however, provisions have been made to attach an external ground rod (not provided) to a grounding stud on the underside of the sink. Refer to *Figure H*

### **Water Source Information**

The ADU-40CF is designed to operate from jerry cans and from a variety of alternate water sources. If the ADU-40CF is to be used with an alternate water supply, the source will determine the required intake configuration. For operation from either a jerry can or a bladder water supply having a pressure between -2 psi and 10 psi (a supply height ranging from 4 ft. below to 23 ft. above the sink basin) appropriate flow rates can be generated by the sink's internal pump. Connection to this type of source can be made using the existing intake tube. For connection to an established water source with an operating pressure above 5 psi, the regulator assembly is recommended. Attachment is performed by disconnecting the intake hose and replacing it with the regulator assembly. Refer to *Figure K*. A line from the water supply having male garden hose threads can then be attached to the Y-connector on the regulator assembly. **Note:** The cold water foot pump should be used in conjunction with a jerry can for cold water.



*Figure K - Regulator Assembly*

## **Principles Of Operation**

### **Water Delivery System**

The water delivery system consists of the main pump, the solenoid valve, the cold water foot pump and the alternate source regulator assembly. When the ON/OFF foot switch is depressed, the internal electric pump moves water through the tank where it is warmed. The solenoid valve serves as the flow control mechanism when the sink is operated from a pressurized water source. The solenoid valve is normally closed and is actuated by depressing the foot switch. The cold water foot pump manually delivers water from the source to the basin without warming. If required, the manual pump may be used to partially prime the intake line. To use a pressurized water supply the regulator assembly should be connected between the sink and the source. The regulator will reduce the water's flow to match the sink's heating capacity and will dampen the effects of system pressure fluctuation.

### **Heating System**

The Heating System is composed of the tank, the extendible spout, the tank level sensor, the tilt shutoff sensor, the control circuitry and the heating element. The tank is the reservoir for the water to be heated. The spout position determines the volume of water stored in the tank. The tank level switch, located at the top of the tank, activates the heating element. To allow the level switch to actuate and begin the water warming process, the spout must be in the extended position and the sink must be standing in its intended upright position. Tilting the sink at an extreme angle will actuate the automatic shutoff sensor, which prevents damage to the sink's heating element. The orange L.E.D. by the spout will light to indicate that the tank is full and the warming processes is active. The control circuitry will stop the heating process when the water temperature reaches 106 deg. Fahrenheit,  $\pm 7^{\circ}\text{F}$  (41 deg. Centigrade,  $\pm 4^{\circ}\text{C}$ ). Heating will resume when the water temperature falls below 97 deg. Fahrenheit (36 deg. Centigrade).

## **Operating instructions**

### **Start-up procedure**

Once the Set-Up is complete, prime the system by depressing the foot switch. Allow one and a half minutes for the internal tank to fill. Release the foot switch when water begins to flow from the spout. The orange L.E.D. by the spout will light when the tank has filled indicating that the heating element is active. The orange L.E.D. will go out when the tank water is warmed. If desired, prime the cold water line by depressing the foot pump several times until water flows into the sink.

To operate the sink depress the ON/OFF foot switch for warm water or the foot pump for cold water. Water will automatically be warmed as it flows through the internal water tank. The outlet temperature will vary with consumption and source temperature. As a general rule, a full tank of room temperature water will take two and a half to three minutes to warm to the shut off temperature of 106 deg. Fahrenheit (41 deg. Centigrade).

### **Optional Soap Dispenser**

Position the optional soap dispenser foot pedal at a convenient location directly underneath sink. Press foot pedal to dispense soap. Note: The foot pedal may require repeated pumping initially, to create proper siphon pressure.

### **Waste Water Management**

Fluid level in the waste container should be managed in such a way as to avoid overflow. This risk is minimal when operating from a jerry can. When operating from a source greater than the waste jerry can, care should be taken to monitor waste water level carefully.

### **Shut down procedures**

1. Drain all water from the sink basin and clean the drain catch. Dry components before storage.
2. Drain and disconnect the cold water supply line and the drain hose. Use the manual pump to assist in draining the cold water supply line.
3. Disconnect the intake hose from the quick connect labeled "WATER INPUT" and reattach it to the quick connect labeled "PURGE". If the water in the reservoir is to be reclaimed, leave the weighted end of the intake hose in the source jerry can. Otherwise, purge the water in the tank to a waste water jerry can or the ground. **NOTE:** To avoid contamination, minimize intake hose contact with waste water.
4. When water stops flowing from the tank, depress the foot switch briefly while intermittently pressing upward on the nub of the "WATER INPUT" quick disconnect. This process will purge the pump and the internal supply lines. Release the foot switch when water ceases to flow from the intake hose.
5. Disconnect all electrical power

6. Drain and disconnect the intake hose. Disinfect all hoses which have come into contact with waste water using a dilute bleach solution.
7. Store the intake, cold water and drain hoses along with the alternate source regulator in the plumbing pouch. Be sure to coil tubing carefully to avoid kinking. Dry components as thoroughly as possible before storage.
8. Disconnect the ON/OFF foot switch, power cord, and instrument tray. Store these items in the electronics accessories pouch. Disconnect optional soap dispenser if used and flush out the soap spout. Pack and store dispenser components in pouch.
9. Twist loose and remove the four sink legs, or optional leg supports if used. Fold and store components in their appropriate pouches.
10. Place the sink into the case with the sink sides aligned with the case handles. Store the plumbing and electrical pouches, and optional soap dispenser pouch if used, in the sink basin. Lower the sink spout, or slide the Locking Cap up the tube and pivot the optional 15-inch spout forward until it lies flat with top surface of basin.
11. Store the leg and optional leg-support pouches in the lid. Place the lid and secure all perimeter latches. *Reference figure A*

#### **Daily cleaning**

All hoses which have come in contact with waste water during operation must be disinfected with a dilute bleach or equivalent solution, prior to storage. Disinfect exposed sink parts in accordance with conventional medical/dental practice.

#### **Daily functional checklist**

**Observation of the following conditions will ensure that the ADU-40CF is functioning normally.**

1. The green L.E.D. by the spout lights when the unit is connected to a power source.
2. The pump can be heard running when the ON/OFF footswitch is depressed.
3. The spout is fully extended.
4. When the tank is filled the orange L.E.D. lights indicating the heating element is operating.
5. Once primed, the intake lines retain their water level when the pump is not operating.

# Maintenance and Servicing Instructions

## **Cleaning and lubrication**

The external surfaces of the ADU-40CF's chassis, spout, basin and accessory tray can be cleaned with a commercial dental disinfectant. Sink hoses contacting waste water must be disinfected after each session. To minimize the risk of corrosion, chlorine based cleaners should not be used to clean the interior of the water storage tank or the sink's legs. After a time, the lines used in the plumbing may develop a milky mineral deposit. This scale can be reduced by flushing the lines with a dilute bleach or ammonium solution. External components will be sufficiently maintained by a cleaning regiment consistent with standard medical and dental practice. Internal components do not require lubrication or have special cleaning instructions.

## **Performance verification and Inspection**

No specific inspection schedule needs to be maintained for this unit. Components have been selected for their maintenance free service life. The drain catch should be cleaned after each use. Verifying that the following conditions are satisfied during operation will ensure proper function. These conditions should be verified as the final step of any major repair.

1. The green L.E.D. by the spout lights when the unit is connected to a power source.
2. The pump can be heard running when the ON/OFF footswitch is depressed.
3. The tank fills when the footswitch has been depressed for two minutes and the orange L.E.D. lights to indicate the heating element is operational.
4. The orange L.E.D. goes out when the peak water temperature of 106 degrees Fahrenheit (41 degrees Centigrade) is reached.
5. The orange L.E.D. relights and heating resumes when the heated water falls below a temperature of 97 degrees Fahrenheit (36 degrees Centigrade).
6. Once primed the intake lines retain their water level when the pump is not operating.

## Troubleshooting

Problem	Cause	Action
Not drawing water, pump operating	No water source/intake tube above water line.	Add water to source/adjust intake hose
	Solenoid valve closed	Replace
	Pump seals	Replace pump
Not drawing water, pump not operating	Fuse blown	Inspect pump, replace if required
	Diode	Inspect control board, replace components or board as required
Not heating water, orange LED lit	Heating element fuse blown	Inspect control board and heating element, replace components as necessary
	Heating element damaged	Replace element
Not heating water, orange LED not lit	Spout not raised	Raise spout
	Tilt switch shut off	Ensure sink is standing upright
	Circuit board, thermal sensor	Inspect control board and components, replace as required
	Level sensor	Replace level sensor
Not heating water, green L.E.D. not lit	No system power	Check electrical source and connections.
Leak at spout	Seal failure	Replace seal
Water leak from sink bottom	Internal leak	Remove basin and search for leak Tighten or replace clamps or tubing
	Tank	Tighten fittings

## Disassembly, Repair & Replacement

**Note:** The unit should only be powered when it is in the upright position. Operation with the tank tilted at an extreme angle can cause the tilt shutoff sensor to actuate, shutting off the heater.

**Note:** Before beginning any repair, be sure to disconnect the sink from the power source.

Access to internal components is gained by removing the spout guide and the sink chassis.

### **Spout guide removal (Figures L1 & L2)**

**Tools:** Channel lock pliers and 8 in. crescent wrench.

1. Loosen the 1.75 in. hex nut at the base of the spout guide.
2. Remove the spout guide from the heating tank by wrenching on the hex fitting at the top of the guide. Note: If using the optional 15-inch spout, wrench on the flats on the sides of the pivotal spout guide.
3. Lift the spout assembly out of the tank.
4. Replace by reversing steps.



Figure L1 - Spout Removal

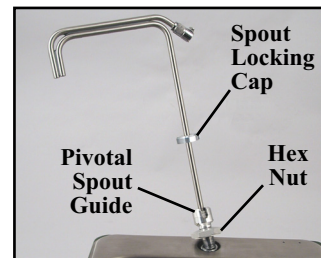


Figure L2 - Optional AA-04EXS 15-Inch Spout Removal

### **Chassis removal (Figure M)** **Tools:** 1/8 hex drive or Allen wrench and a 5/16 open-face wrench or crescent wrench

5. Loosen the eight screws located around the perimeter of the sink chassis.
6. Lift the sink chassis and locate the chassis ground lead and L.E.D. wiring. Remove L.E.D. wiring connector from the control board. If necessary, remove the ground lead from the sink chassis.
7. Reassemble by reversing steps.

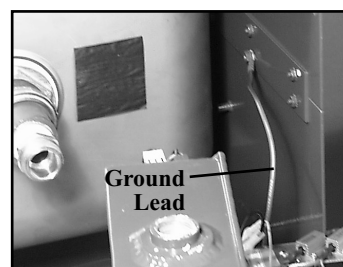


Figure M - Ground

Once the interior of the sink has been accessed the following services can be performed:

### **Replacing fuses**

The control board and heating element are protected by the 15A fuse and the pump is protected by the 2A fuse. Both these fuses are located on a bracket atop the solenoid valve. The fuses are not intended to be operator replaceable. A blown fuse is a symptom of a more serious problem with one of the parent components. Inspect the appropriate system elements before replacing fuses.



Figure N - Fuses

### **Replacing the heating element**

**Tools:** Phillips screwdriver, 8 in. crescent wrench, and 1/8 hex drive or Allen wrench

1. Disconnect the heater ground and power leads at the heating element.
2. Loosen the hardware securing the heating element to the tank.
3. Pull the heating element from the tank.
4. If additional clearance is required, loosen the 4 screws on the underside of the chassis which secure the pump bracket. Apply a 1/4-inch bead of RTV sealant around the heater slot, removing old sealant if necessary. Replace heater by reversing the disassembly steps. **Note:** The attachment of the power leads to the heating element does not require a specific wire orientation.

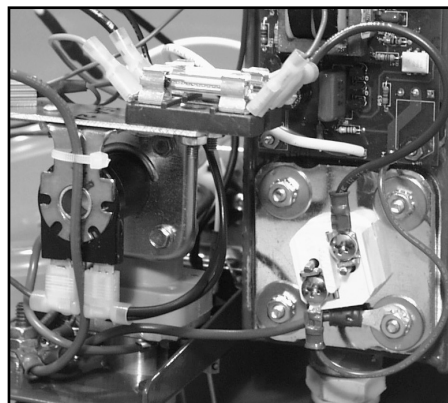
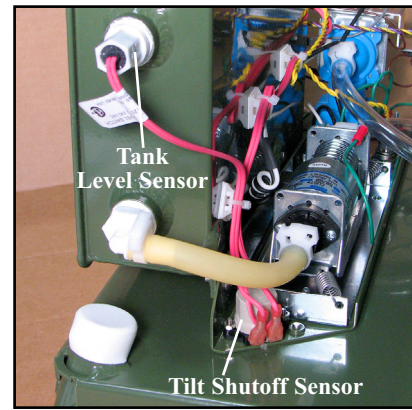


Figure O - Heating Element

### **Replacing the level sensors**

**Tools:** 8 in. crescent wrench

1. Trace the electrical leads from the tank level sensor and the tilt shutoff sensor to the control board and remove the sensors' connectors. Note the wiring configuration from the sensors to their connectors. Note the mating connector located on board.
2. Note the orientation, then unscrew the level sensor from the tank. Remove the mounting hardware from the tilt sensor.
3. Install the new sensors as required. On the tank sensor, make sure the peaked portion of the exposed fitting labeled N.O. (normally open) is positioned upward. Rewire and attach the new electrical connector at the original board location.

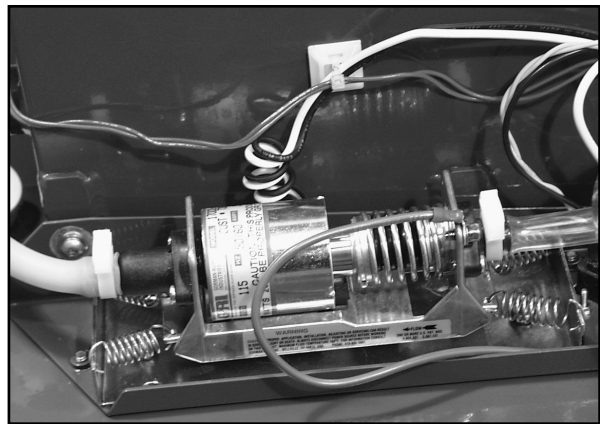


*Figure P - Level Sensors*

### **Replacing the electric intake pump (Figure Q)**

**Tools:** Pliers, 5/16 deep well socket or driver, and a flat blade screwdriver

1. Remove the snapper type clamp from each end of the pump by pushing its tabs in opposite directions. Use pliers to improve clamp manipulation. Work the tubing off each end of the pump.
2. Loosen the green retaining screw and remove the grounding wire from the pump.
3. Remove the two nuts which mount the pump to the bracket.
4. Trace and disconnect the pump wiring from the control board and the solenoid valve. Connect the new wires at the old locations.
5. Replace the pump and reassemble by reversing steps. Make sure that the flow direction arrow on the new pump points away from the solenoid valve.

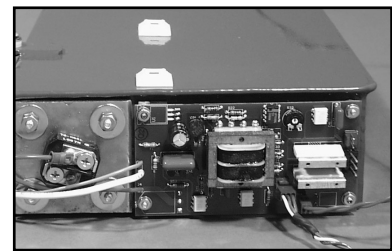


*Figure Q - Intake Pump*

### **Replacing the electronics board (Figure R)**

**Tools:** 1/4 open face wrench or crescent wrench, Phillips screwdriver, and pliers

1. Remove the board mounting hardware from each of the four corners of the control board.
2. Wire the new board by tracing the leads from the old board or by following the wiring schematic, *Refer to Figure S.*
3. Secure the new control board in each corner with the mounting hardware.



*Figure R - Electronics Board*

### **Replacing the solenoid valve**

**Tools:** Pliers, 1/4 socket, 5/64 hex drive or Allen wrench, and 8 in. crescent wrench

1. Remove the snapper type clamp from the end of the solenoid valve by pushing its tabs in opposite directions. Use pliers to improve clamp manipulation. Work the tubing off the end of the valve.
2. Loosen the solenoid ground lead.
3. Remove the fuse/resistor plate from the solenoid bracket. It is not necessary to disconnect the wiring.
4. Disconnect the two flag terminals. **Note:** When reattaching, the flag terminals do not require specific valve tab orientation.
5. Remove the “WATER IN” quick disconnect from the underside of the chassis base.
6. Remove the four screws holding the solenoid valve to the solenoid adapter.
7. Replace the solenoid valve and reassemble by reversing steps.

### **Replacing spout guide seals** *Refer to Figure L1*

**Tools:** Needle-nose pliers, small screw driver or dental instrument

1. Remove the spout from the tank as per Spout Guide Removal.
2. Push out the roll pin at the base of the spout
3. Remove the spout from the spout guide.
4. Using a small screwdriver, lift the o-ring from its groove in the interior of the spout guide.
5. Replace the o-ring and reassemble by reversing steps. Be careful not to deform the spout tube when reinstalling the roll pin.

### **Replacing seal in optional 15-inch Spout** *Refer to Figure L2*

**Tools:** Needle-nose pliers, small screw driver or dental instrument

1. Remove spout from the tank as per Spout Guide Removal.
2. Remove three capscrews from bottom of spout base with Allen wrench.
3. Remove cap and tube assembly.
3. Using a small screwdriver, lift the o-ring from its groove in the bottom of the spout base.
5. Replace the o-ring and reassemble by reversing steps.

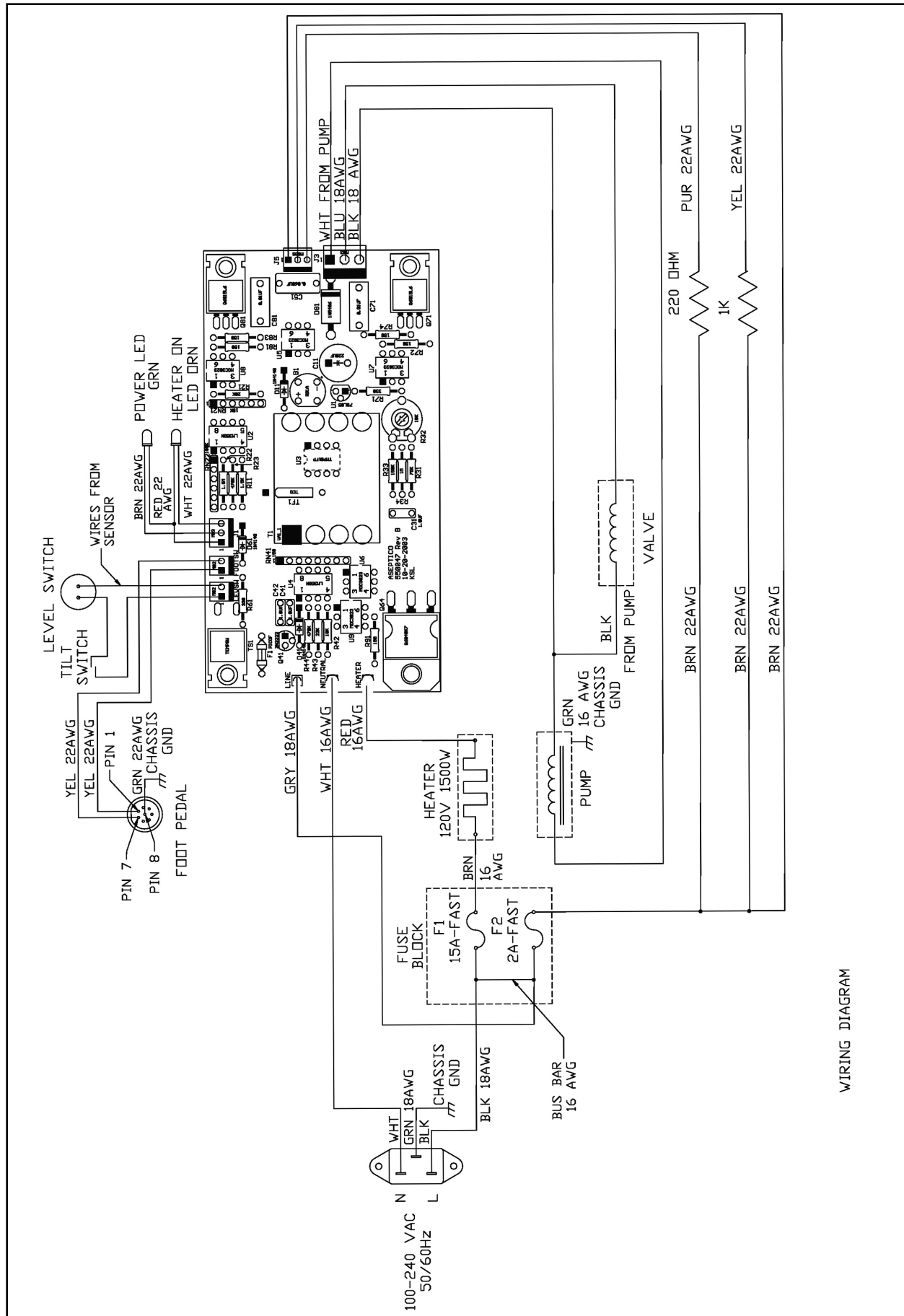
## **Preparation for shipment and long term storage**

No special preparations are required for shipment or long term storage. However, proper completion of all steps of the Shut-Down Section is important. The sink's polypropylene case is internally gasketed to be water tight. Moisture trapped in the case may promote bacteria growth in hot storage conditions and residual water may damage plumbing components in freezing conditions. Be sure to purge the system completely. Disinfect and dry all hoses and external surfaces thoroughly.

Storage of sink components in their proper pouches and locations will best protect them from damage caused by shifting in transport.

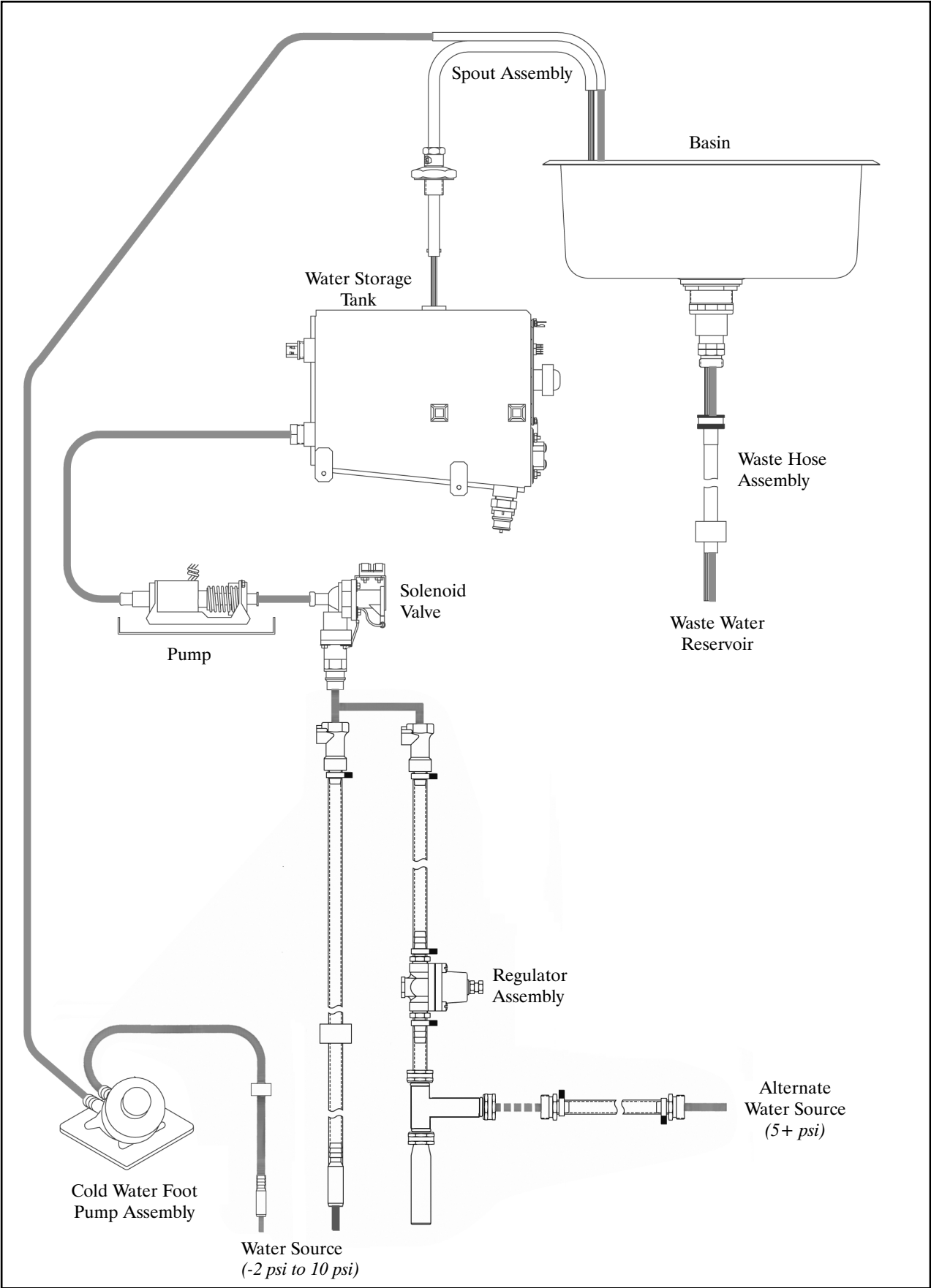
After periods of extended storage, cleanse as per the instruction in Cleaning and Lubrication Section.

Figure S - Wiring Schematic



WIRING DIAGRAM

Figure T - Plumbing Schematic



# Itemized Parts List

Reference Figure 1 - Sink

Figure and Index Number	Part Number	Quantity	Part Name (or Description )
1-1	330280	1	Basin
1-2	730291	1	Sink drain assembly
1-3	330290	1	Drain adapter
1-4	460862	1	Gasket, drain adapter
1-5	330247-08	1	Sink chassis
1-6	510019	8	Washer, nylon, .196ID x .437OD x .062
1-7	Commercial	4	Washer, flat, #10, Stnl
1-8	Commercial	4	Nut, Nyloc, 10-24, Stnl
1-9	850061	2	LED Lens Diffuser
1-10	520076	2	O-Ring, .231 x .07w LED mount
1-11	510594	2	Washer, nylon, .281ID x .500OD x .031

Reference Figures 2A & 2B - Pump & Connections

Figure and Index Number	Part Number	Quantity	Part Name (or Description )
2-1	330279	1	Chassis base
2-2	Commercial	12	Screw, buttonhead socket, 10-32x3/8, Stnl
2-3	Commercial	3	Washer, star, internal, #10, Stnl
2-4	460822-08	1	Pump bracket
2-5	875017	1	Pump w/ wiring assembly
2-6	510428	4	Nut, hex, 8-32, Stnl
2-7	510429	2	Washer, split, #8, Stnl
2-8	875020	1	Pump ground wire
2-9	875021	1	Chassis ground wire
2-10	730391	0.35 ft	Tubing, latex, 3/8IDx1/2OD
2-11	730288	1.2 ft	Tubing, PVC, 3/8IDx1/2OD
2-12	510446	2	Clamp, hose, snapper type, .453/.546
2-13	460845	1	Solenoid valve
2-14	460846	1	Solenoid valve adapter
2-15	730275	1	Quick disconnect, male x 1/2 NPT(M)
2-16	510452	1	Nut, stnl, wing, 10-32
2-17	460860	1	Resistor/fuse plate
2-18	510426	2	Clamp, hose, snapper type, .513/.586
2-19	875015	1	Power receptacle w/ wiring
2-20	860121	1	Clip, connector retaining
2-21	875016	1	Footswitch connector w/ wiring
2-22	830064-08	1	Fuse holder, double
2-23	Commercial	4	Nut, keps, 6-32, Stnl
2-24	830065	1	Fuse, pump, 2A-250V,1/4- 1 1/4, FAS
2-25	830062	1	Fuse, heater, 15A-250V,1/4- 1 1/4, FAS
2-26	330294	1	Resistor assembly
2-27	Commercial	2	Nut, 6-32, Stnl
2-28	Commercial	1	Nut, Jam, 10-32, Brass
2-29	830139	1	Switch Sealed Tilt Vibration Detector

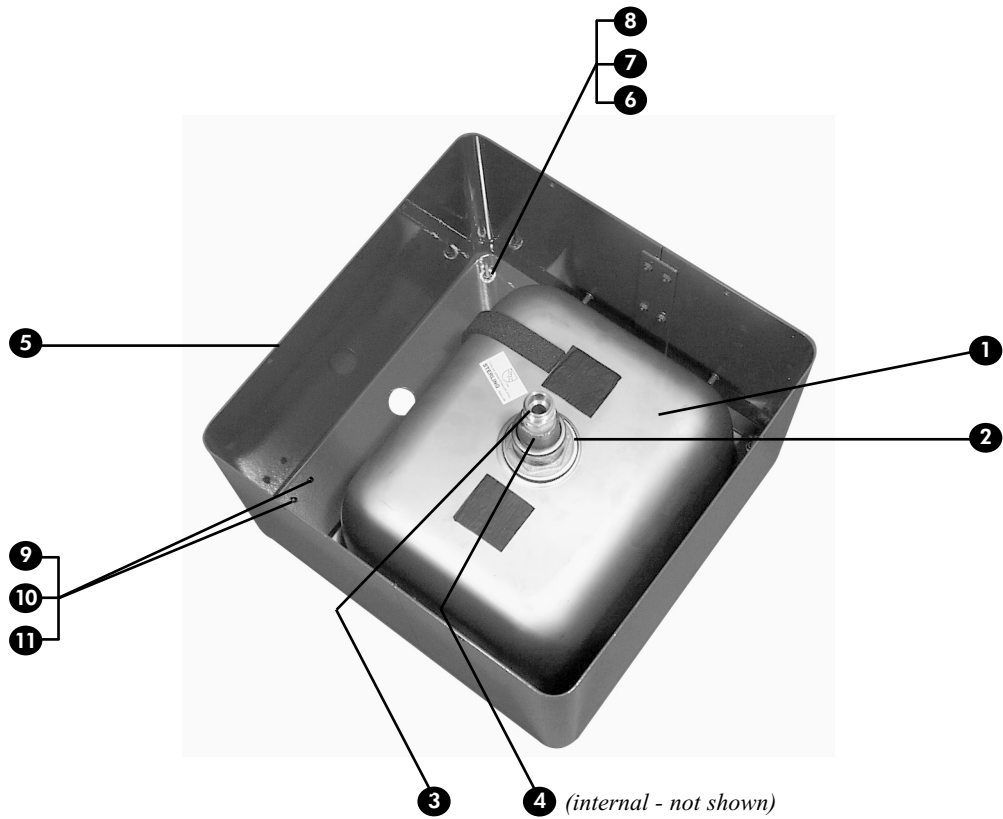


Figure 1 - Sink

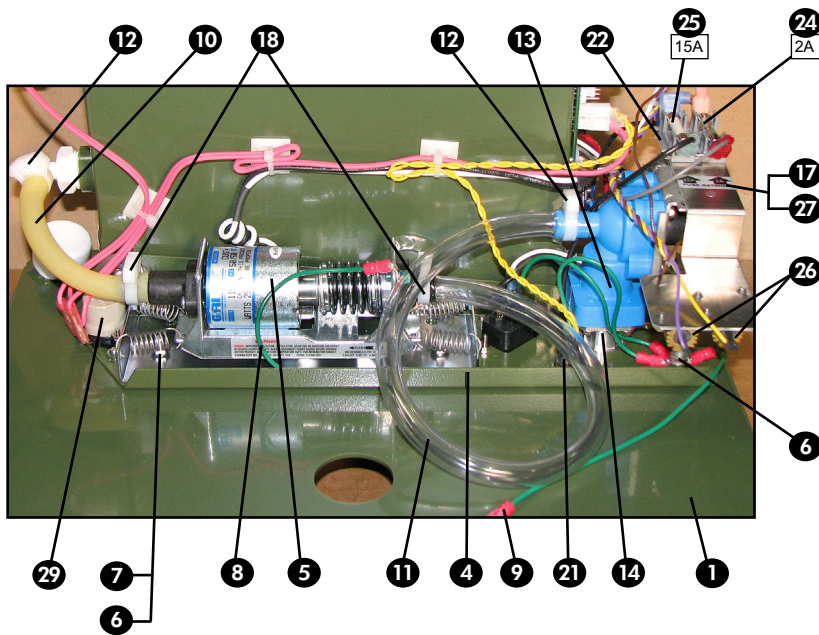


Figure 2A - Pump



Figure 2B - Connections

Reference Figure 3 - Tank

Figure and Index Number	Part Number	Quantity	Part Name (or Description )
3-1	330293-08	1	Water heater tank
3-2	510019	4	Washer, nylon, .196IDx.437ODx.062
3-3	Commercial	2	Screw, buttonhead socket, 10-32x1/2, Stnl
3-4	Commercial	2	Washer, star, int., #10, Stnl
3-5	510447	2	Washer, flat, #10, Stnl
3-6	330243	1	PC board assembly
3-7	Commercial	4	Washer, flat, #4, Stnl
3-8	Commercial	4	Nut, hex, 4-40, Stnl
3-9	Commercial	4	Washer, split, #4, Stnl
3-10	875018	1	Level sensor w/ wiring
3-11	730392	1	Heating element
3-12	875019	1	Heater power wire assembly
3-13	Commercial	4	Washer, flat, #10, Stnl
3-14	Commercial	4	Washer, star, int., #10, Stnl
3-15	Commercial	4	Nut, hex, 10-32, Stnl
3-16	730275	1	Quick disconnect, male x 1/2 NPT(M)
3-17	730393	1	Elbow, 90 deg., 3/8 barb x 1/2 NPT, polypro
3-18	510206	2	Mount, tie wrap
3-19	Commercial	4	Tie wrap, 4 in.
3-20	875014	1	LED assembly
3-21	875022	1	Heater ground assembly

Reference Figure 4A - Spout

Figure and Index Number	Part Number	Quantity	Part Name (or Description )
4A-1	330459	1	Spout, Hot / Cold
4A-2	510443	1	Pin, spring, 1/8ODx5/8, Stnl
4A-3	520052	2	O-ring,
4A-4	460726-08	1	Spout guide
4A-5	460823-08	1	Spout guide nut

Reference Figure 4B - Optional AA-04EXS 15-Inch Spout (NSN: 6520-01-534-7852)

Figure and Index Number	Part Number	Quantity	Part Name (or Description )
4B-1	460823-08	1	Nut, ADU-40CF spout guide cmpl
4B-2	461469-08	1	Cap, hot/cold spout cmpl
4B-3	510610	3	Screw, socket head, 4-40x5/8, stnl
4B-4	510433	1	Washer, split , #4, stnl
4B-5	520079	1	O-ring, 0.487 ID x 0.103 wide
4B-6	461468-08	1	Tank fitting, hot/cold spout cmpl
4B-7	330446	1	Tube assembly, hot/cold
4B-8	461464	1	Ball, spout cmpl
4B-9	510608	1	Spring, compression
4B-10	461470	1	Plunger, hot/cold spout
4B-11	461537-08	1	Cap, locking hot/cold cmpl
4B-12	730553-08	1	Fitting, Qd 5/16 Inch ID Mod

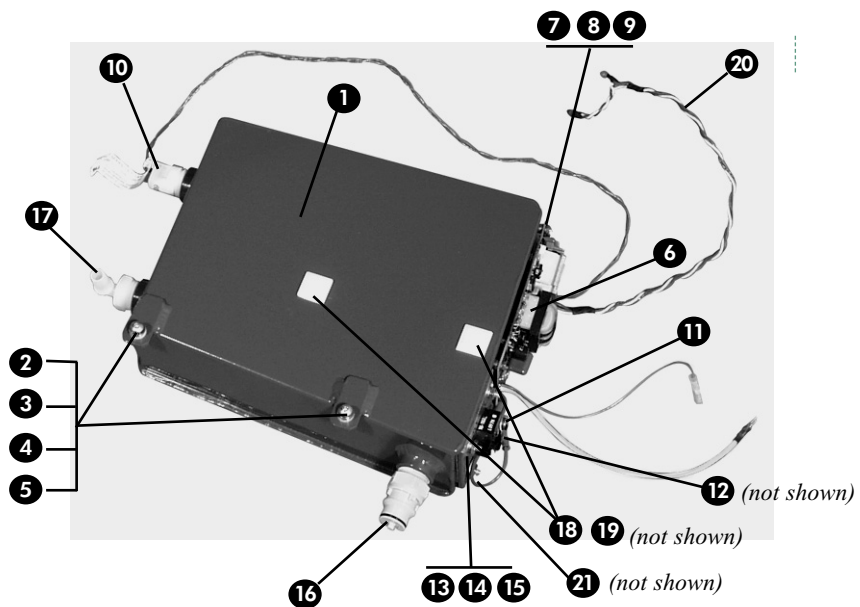


Figure 3 - Tank

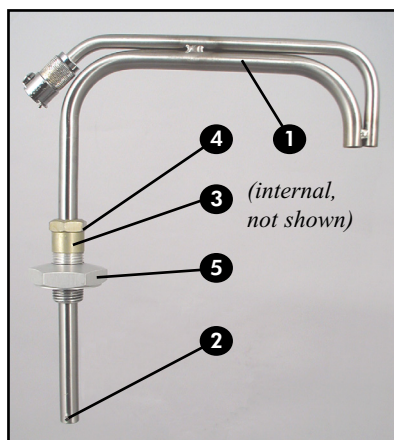


Figure 4A - Spout

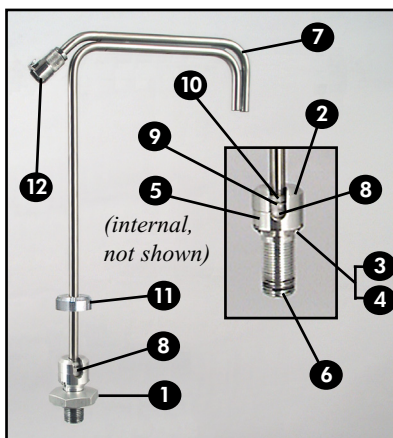


Figure 4B - Optional AA-04EXS 15-inch Spout  
(NSN: 6520-01-534-7852)

Reference Figures 5A, 5B, and 6 - Legs Pouch, Optional AA-04CF Legs Support Pouch (NSN: 6520-01-537-4224), and Electronics Pouch

Figure and Index Number	Part Number	Quantity	Part Name (or Description )
5A-1	330250	4	Sink leg
5A-2	410127	1	Leg pouch
5A-3	730290	0	Leg tip, rubber, 7/8 ID
5B-1	120300	2	Leg-support assembly, sink
5B-2	410158-08	1	Leg-support pouch
6-1	330246	1	Accessory tray
6-2	510325	0	Thumbscrew, accessory tray
6-3	AE-7P	1	Footswitch
6-4	840049	1	120V Power cord (NSN: 6530-01-537-7354)
6-5	840007	1	230V power cord
6-6	410130	1	Electrical components pouch

Reference Figure 7 - Optional AA-04SD Soap Dispenser Pouch (NSN: 6530-01-537-7355)

Figure and Index Number	Part Number	Quantity	Part Name (or Description )
7-1	730427	1	Bottle, 16 oz, Pet
7-2	730055	1	Fitting, F-Leur x 1/8 barb, knurled
7-3	730042	1	Fitting, 1/4 clear sleeve
7-4	730073	1	Fitting, barb, 10-32 x 1/8, brt/nkl
7-5	730074	1	Gasket, #10, nylon
7-6	AA-95C	1	Tubing, poly, 1/4 OD, clr
7-7	461451	1	Tube, soap dispenser
7-8	461449	1	Cap, soap dispenser
7-9	730473	1	Gasket, water bottle
7-10	510404	2	Screw, Btnsoc, 8-32 x 3/8, stnls
7-11	510420	4	Washer, Int star #8, s/s
7-12	510165	1	Thumbscrew, #10, knob knurl, blk
7-13	460847	1	Screw, socket head, 10-32 x 1/2, stnls
7-14	510019	1	Washer, nylon, 0.196ID x 0.437OD x 0.62T
7-15	461453	1	Pad, soap bracket A
7-16	461454	1	Pad, soap bracket B
7-17	461450-08	1	Bracket, soap dispenser, cmpl
7-18	730051	1	Fitting, M-Leur x 1/8 barb, knurled
7-19	AA-86G	5 ft	Tubing, saliva eject, 3/8 OD, gry
7-20	730488	1	Fitting, tube to hose, 5/16 OD-1/4 ID
7-21	730552	1	Muffler/filter, exhaust, 1/8 NPT
7-22	510424	1	Clamp, 2-13/16 to 3-3/4 worm drive, marine
7-23	730280	1	Foot pump, baby, GP4618B
7-24	510177	1	Screw, FlaPhl, 6-32 x 1/2, stnls
7-25	510293	1	Nut, hex, 6-32 ,stnl
7-26	461452	1	Pad, base, soap dispenser
7-27	461448	1	Base, soap dispenser
7-28	410170-08	1	Pouch, storage, soap dispenser

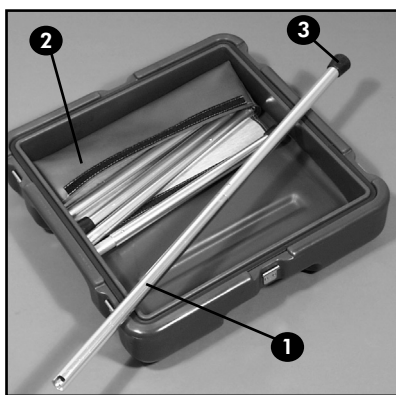
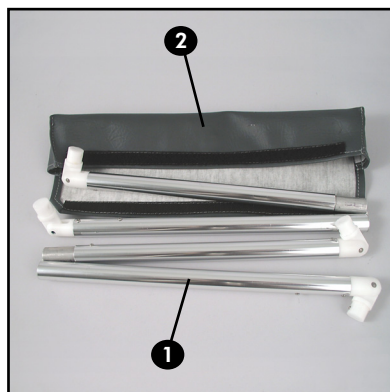
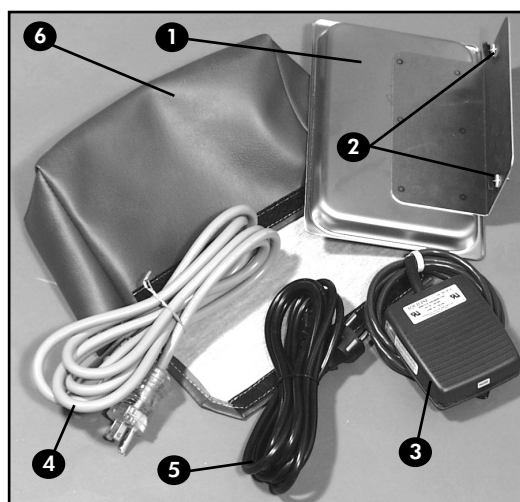


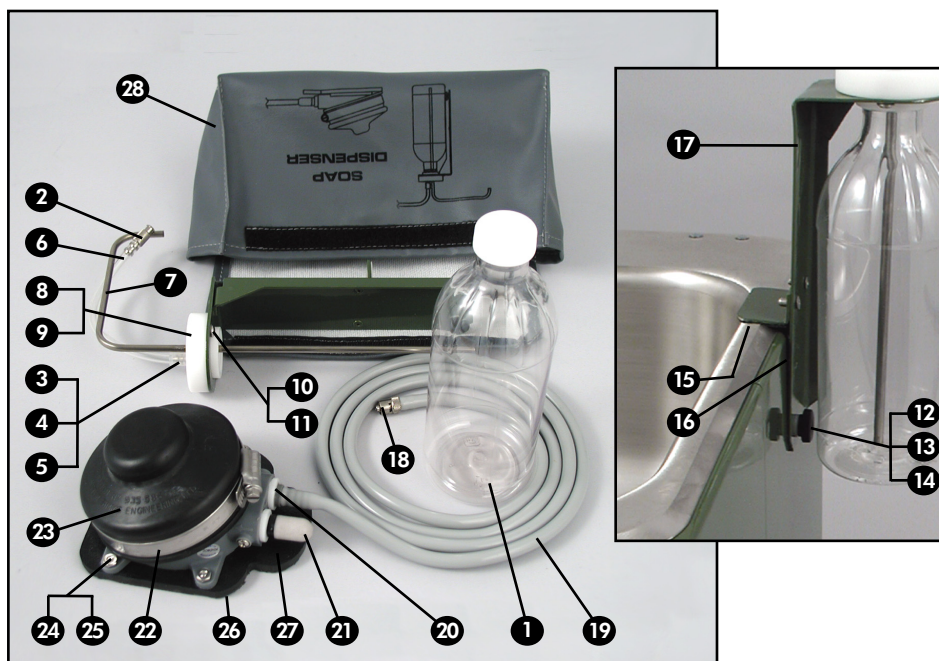
Figure 5A - Legs



*Figure 5B - Optional AA-04CF  
Legs Support Pouch  
(NSN: 6520-01-537-4224)*



*Figure 6 - Electronics Pouch*



*Figure 7 - Optional AA-04SD Soap-Dispenser Pouch  
(NSN: 6530-01-537-7355)*

Reference Figure 8

Figure and Index Number	Part Number	Quantity	Part Name (or Description )
8-1	730274	1	Quick Disconnect, female x 1/2 barb
8-2	730404	5 ft	Tubing, vinyl, 0.594 ODx3/8 ID, braided
8-3	510449	3	Clamp, hose, snapper style, .702/.801
8-4	460843-08	1	Intake hose weight
8-5	460849	2	Adapter, ADU-40CF hose to can
8-6	730295	1	Waste hose
8-7	410131	1	Plumbing Components Pouch

Reference Figure 9

9-1	460710	1	Foot pump, base
9-2	460182	1	Mat foot ramp ADU-40CF
9-3	730280	1	Foot pump
9-4	510733	4	M/S, Stnls FlaPhl, 6-32x9/16
9-5	510395	4	Nut, Nyloc, 6-32 Stnls Hex
9-6	730554	1	Fitting, QD, Straight 3/8" barb
9-7	510448	2	Clamp, hose, snapper style, .569/.650
9-8	460843-08	1	Intake hose weight
9-9	460849	1	Adapter, ADU-40CF hose to can
9-10	510449	2	Clamp, hose, snapper style, .702/.801
9-11	730404	13 ft	Tubing, vinyl, 0.594 ODx3/8 ID, braided

Reference Figure 10

10-1	730409	1	Arrester assembly
10-2	730539	1	FTN 3/4 garden hose x 1/4 NPT Swivel
10-3	730628	1	Pressure Regulator
10-4	730415	1	Fitting, 3/8 Hose Barb x 1/4 NPTb
10-5	510448	1	Clamp, hose snapper, .569/.650
10-6	730274	1	Quick Disconnect, female x 1/2 barb
10-7	510449	1	Clamp, hose snapper, .702/.801
10-8	730404	3 ft.	Tubing, vinyl, .594OD x 3/8 ID, braided
11-1	410124-08	1	ADU-40CF Case (NSN: 6530-01-537-7351)
11-2	420203	2	ADU-40CF Manual

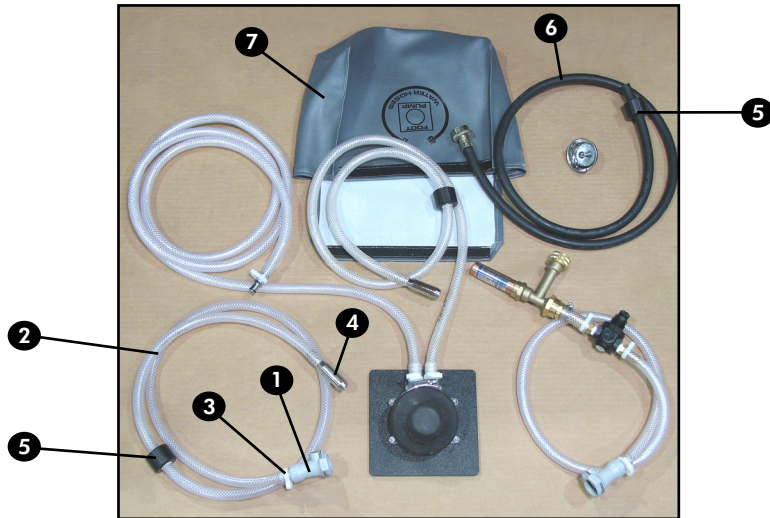


Figure 8 - Plumbing Pouch

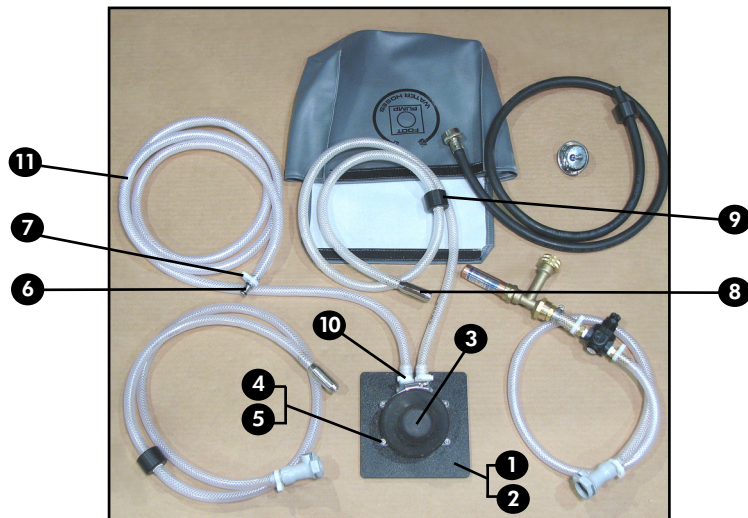


Figure 9 - Plumbing Pouch

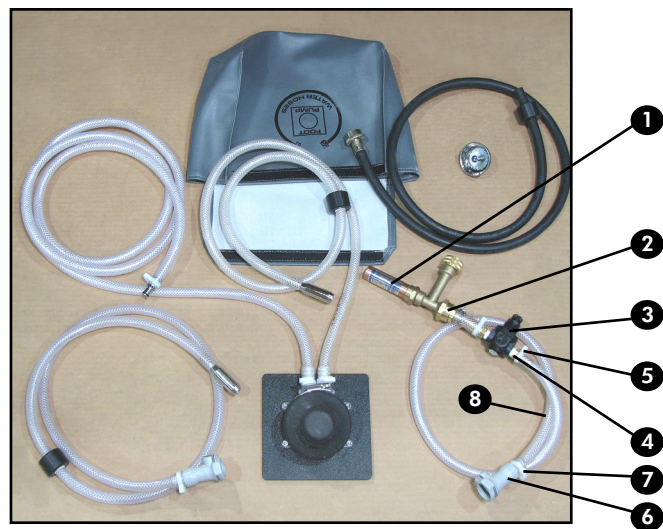


Figure 10 - Plumbing Pouch



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