



Installation and Owners manual

***For the following shower model numbers:
100S, 300S, 400S, 600S, 800S and 900S Series***

Approximate Installation Time: 2-3 Hours

Tools Required:

***#2 Phillips Screw Driver; Power Drill; 7/64" Drill Bit; 2.5" Hole Saw; Jig Saw;
Hose Cutter; Wire Crimper; Teflon Plumbers Tape; Marine Sealant; Pencil.***



HEATER CRAFT®

Improving life on the water since 1987



Operation Warning:

Carbon Monoxide (CO) is emitted from the engines' exhaust. Do not run the engine without proper ventilation. Do not run the engine in a confined space or where back drafting may occur. For more information about carbon monoxide refer to ABYC standards: A-7, T-22(1), and TH-23; or contact one of the following agencies.

American Boat and Yacht Council, Inc **410-956-1050**

United States Coast Guard **754-441-3287**
www.uscgboating.org

National Marine Manufacturers Association **313-946-6200**
www.nmma-medialink.com

Boat U.S. **703-823-9550**
www.boatus.com

Heater Craft
6672 Boekel Road
Rathdrum, ID 83858
Attn: Technical Support
(208) 687-4400
Fax (208) 687-9700
www.heatercraft.com

Heater Craft 2 Year Limited Warranty

Heater Craft warrants your shower/wash down* system to be free from defects in material and craftsmanship under normal use and service by the original consumer purchaser for a period of (2) two years from the date of purchase. This limited warranty does not apply if the system has been damaged by accident, improper installation, unreasonable use, lack of proper maintenance, unauthorized repairs or modifications, or causes not arising from defects in materials and craftsmanship.

Heater Craft's obligation under this warranty are limited to repair of the product at Heater Craft's production facility, or the replacement of the product at Heater Craft's option and at Heater Craft's expense. Any expense involved in the removal, reinstallation, or transportation of the product is not covered by this warranty. Prior to return of any product to Heater Craft customer must first call Heater Craft customer service (208) 687-4400 and request a return authorization number. This number must be marked on exterior of carton for easy identification. **Warranty product received at Heater Craft without a Return Authorization Number may be returned at expense of sender.**

Send defective product to:

Heater Craft
6672 Boekel Road
Rathdrum, ID 83858
Attn: Warranty Dept.
www.heatercraft.com

Postage must be prepaid, and the original dated proof-of-purchase must be included. Heater Craft will not be liable for any damages sustained in transport due to improper packaging or handling. The acceptance by Heater Craft of any product returned shall not be deemed as an admission that the product is defective or in any violation of any warranty.

This warranty is Heater Craft's only express warranty of this product. No implied warranty shall extend beyond (2) two years from the date of the original consumer purchase. Heater Craft will not be liable for any damages, for loss of use of this product, nor for any consequential damages, costs or expenses.

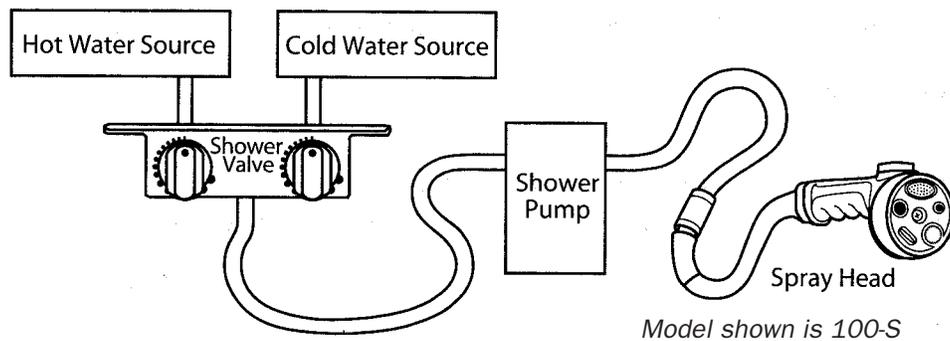
Some states do not allow limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights not mentioned here that vary from state to state.

****Any shower or wash down product subjected to direct saltwater use will have a (1) one year warranty. Direct saltwater use is defined as having saltwater circulating through the shower or wash down unit.***

Recommendations

Important Note: We recommend that the shower pump is not mounted into the bilge, or any location or in such a manner that it would be easily submerged. The warranty for the pump may be void if, upon disassembly, Heater Craft determines that the pump has been submerged in water for any length of time.

1. Review Heater Craft installation instructions and warranty information completely before beginning installation.
2. Lay out the shower system in the boat before beginning installation to be sure the mounting location for all components, as well as the routing of water hoses and wiring will be sufficient (see general diagram below)



3. Use silicone sealant or Teflon tape on the threads of all brass fittings before installing to prevent water leakage.
4. Shower water hoses and wiring should be routed away from moving parts, high heat sources such as engine exhaust manifolds, and secured to prevent penetration from sharp objects or edges. All water hoses and wiring should be as short as possible for efficiency. Water hoses should be routed to prevent any kinking or pinching that may restrict water flow.
5. Shower components should not be installed on or near high heat sources such as engine exhaust manifolds.
6. Hose clamps should be fastened near the end of the hose to prevent the hose end from "mushrooming", and to prevent leakage.
7.  The shower pump, water hoses, and all components should be winterized by draining the water to prevent damage caused by freezing.
8. Applications may vary! If you have any questions or suggestions regarding your Heater Craft product, please contact our main office.

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Shower Valve/Unit Installation

Important Note: *In most applications the spray hose will be fed back into the box, so consider the coiling of the hose when not in use. It should coil away from moving parts and high heat sources like the engine exhaust manifolds, sharp edges or objects that may kink, pinch or restrict the travel of the hose in any way.*

1. Determine the location for the shower valve/unit. Consider the routing of the water hoses and wiring.
100-S Series– The **S-102** valve should not be installed on or near high heat sources such as engine exhaust manifolds. the valve should also be accessible for adjustment.

2. Secure the valve in place.

The S-110 valve can be mounted through a bulkhead or flat surface.

The valve should also be accessible for adjustment.

– Surface Mounting of valve.

A flat surface area of 3"x8" is needed for proper installation.

2. Cut a rectangular opening 7" x 2". Mark the mounting holes and pre drill using 7/64" drill bit.

3. Mount the valve in place.

300-S and 400-S Series– A flat surface area of 6" x 10-1/2" with 5" of depth is necessary for proper installation.

2. Cut a 4-5/8" x 9-1/4" rectangular opening. Mark the mounting holes and pre drill using 7/64" drill bit.

600-S Series– A flat surface area of 4" x 4" with 10" of depth if handle is straight out from bottom of cup or 5" of depth if using 45° cup, is needed for proper installation.

2. Cut a 2.35" round opening. Mark the mounting holes and pre drill using 7/64" drill bit.

600-C Series– A flat surface area of 3-3/4" x 3-3/4" with 8" of depth is needed for proper installation.

2. Cut a 2-1/2" round opening. Mark the mounting holes and pre drill using 7/64" drill bit.

800-S Series– A flat surface area of 8" x 5" with 6" of depth is needed for proper installation.

2. Cut a oval opening using provided template. Mark the mounting holes and pre drill using 7/64" drill bit.

900-S Series– A flat surface area of 11" x 5" with 6" of depth is needed for proper installation.

2. Cut a oval opening using provided template. Mark the mounting holes and pre drill using 7/64" drill bit.

3. Apply a thin line of sealant around the unit, if necessary (3M 5200 Marine Sealant is recommended).

4 Mount the unit in place.

Questions?

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Fax (208) 687-9700

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Shower Pump Installation

If you are not installing a pump to pressurize the shower system, proceed to the **Water Source** section.

IMPORTANT NOTE: We recommend that the shower pump is not mounted into the bilge, or any location or in such a manner that it would be easily submerged. The warranty for the pump may be void if, upon disassembly, Heater Craft determines that the pump has been submerged in water for any length of time.

Mounting the Shower Pump

1. Determine the location for mounting the shower pump.

100-S Series– Consider the location where the quick-release hose fitting will be accessible (typically along the gunwale or into a storage area). The mixed water hose is one length and will be cut to install the pump in-line. This hose will be routed from the shower valve. The pump will have to be mounted so that this may be achieved with the length of hose provided. The spray hose will couple into the quick-release fitting when using the shower.

300-S, 400-S, 800-S, 900-S Series– Consider the position of the shower unit. The spray hose will attach to the pump and be routed into the shower unit. The pump should be placed so that it will allow the spray hose to coil away from moving parts, high heat sources, sharp sharp edges or objects that may kink, pinch or restrict the travel of the hose in any way.

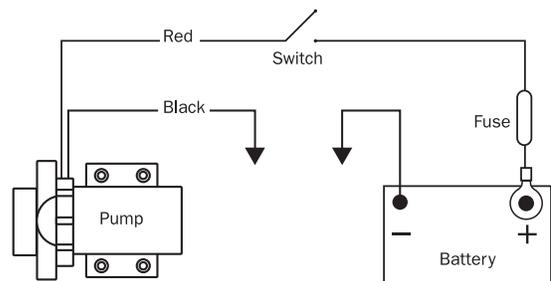
2. Install the hose barbs into the shower pump, then tighten wing-nut fittings by hand then mount the pump in place.

Wiring the Shower Pump

The pump wires should be routed with the factory wiring harness whenever possible. The wires should be routed away from moving parts, high heat sources and sharp edges or objects.

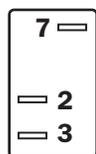
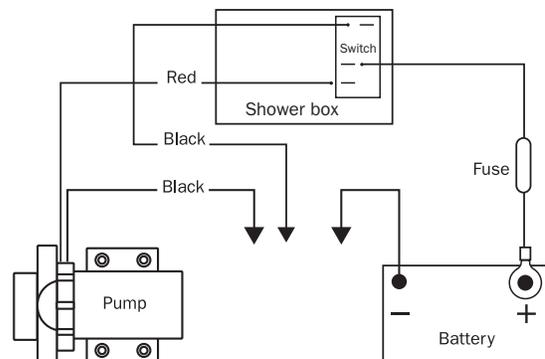
100-S, 600-S, 600-C Series– The shower pump and switch should be protected with a 10 amp in-line fuse.

- **Red positive lead**– Wire to an on/off switch with a 12V DC power source.
- **Black negative lead**– Wire to ground source.



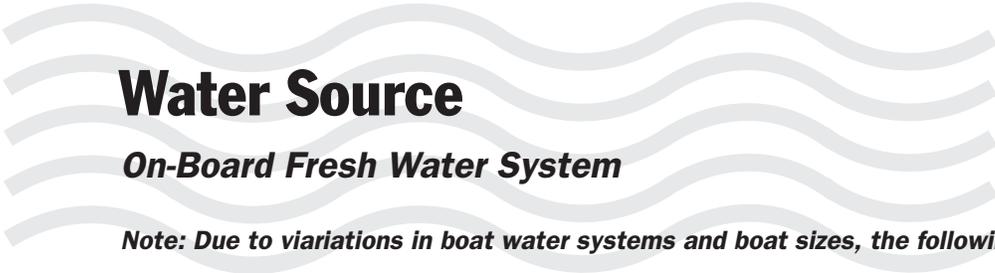
300-S, 400-S, 900-S Series with switch–The shower pump and switch should be protected with a 10 amp in-line fuse. The switch terminals in the shower unit correspond to the diagram shown (looking from the back of the shower unit).

- **3**–Red power wire from shower pump.
- **2**–Wire to a 12V DC power source.
- **7**–Wire to a ground source.
- **Black negative lead (from shower pump)**– Wire to a ground source.



Switch detail

Questions?
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Water Source

On-Board Fresh Water System

Note: Due to variations in boat water systems and boat sizes, the following are only general instructions.

If you are installing the shower/ wash down system to work in conjunction with the existing on-board water system, please consult the boat manufacturer before beginning installation. If you are not installing an additional pump for the shower system, hose connections must be made after the hot and cold lines are pressurized.

1. **Hot Water Outlet**– The hot water connection should be in the water line exiting the hot water heater or hot water source.
2. **Cold Water Outlet**– The cold water connection should be in the water line exiting the potable water tank.
3. Cut the water lines and install the proper size and type of hose tee for your application. The hose tee connections should be installed in the straightest part of the hose. A section of hose may have to be removed to prevent any kinking.

Questions?

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Testing Shower Installation

IMPORTANT NOTE: With the 100-S Series, the spray hose should be disconnected after using to prevent water leakage. With the 300-S, 400-S 800-S, 900-S, 6-C, 6-S Series, the hot and cold valves need to be closed or turned to off position after using to prevent water leakage.

1. The shower pump should operate with the on/off switch. The shower pump will automatically shut off once it has built up approximately 40 psi in the outlet hose. If the shower pump does not operate, be sure hot and cold valves and the spray head are in the open position.
2. Check all hose and fitting connections to be sure there are no water leaks. Check the routing of all hoses to make sure they are away from moving parts and high heat sources, and secured from sharp objects or edges and are not kinked or pinched in any way.
3. Adjust the water temperature by turning the corresponding valve for the desired water temperature.

Troubleshooting Shower System

Poor Water Pressure

1. Make sure water source has water.
2. Check on/off switch and condition of fuse to pump.
3. Check the routing of all hoses to be sure they are not kinked or pinched in any way.
4. The shower valve is equipped with screens that may become clogged. To check screens, remove the hoses from the back side of the valve and inspect for debris. **IMPORTANT:** Do not remove screens. In many cases the debris can simply be scraped off or the valve can be back-flushed with water pressure. This can be accomplished by connecting a garden hose into the center valve with the hot and cold valves in open position. Once connected securely turn on water pressure and run 'til debris is gone.
5. Remove spray head and check for debris.
6. Remove the hot and cold hoses from their water sources and check for debris.
7. Pump pressure can be tested using an auxiliary hose from input side of the pump into a bucket of water.

Notice: 300S and 400S Series shower units comply with the U.S. Government's test procedure 7.4.4 ASME A112.18.1M-1996 That states "THE SHOWER HEAD VOLUME CONTROLS, WHETHER INTEGRAL OR SEPARATE, SHALL BE DESIGNED SO THAT THEY CANNOT COMPLETELY SHUT OFF THE WATER TO THE SHOWER HEAD". In short, the slide button on the side of the wand is designed to be a volume control, not a positive shut off. The only positive shut off is at the valve assembly itself.



Winterizing Shower System

NOTE: If anti-freeze has been drawn into the system, be sure to flush the system completely before using.

1. The shower pump and all hoses should be completely drained of water to prevent damage.
2. RV/MARINE anti-freeze can be drawn into the shower system by removing the hot and cold hoses from their water sources and then inserting them into a container of anti-freeze. Turn on the shower pump until anti-freeze sprays out of the shower head.

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