

Models:

R000A

R055A

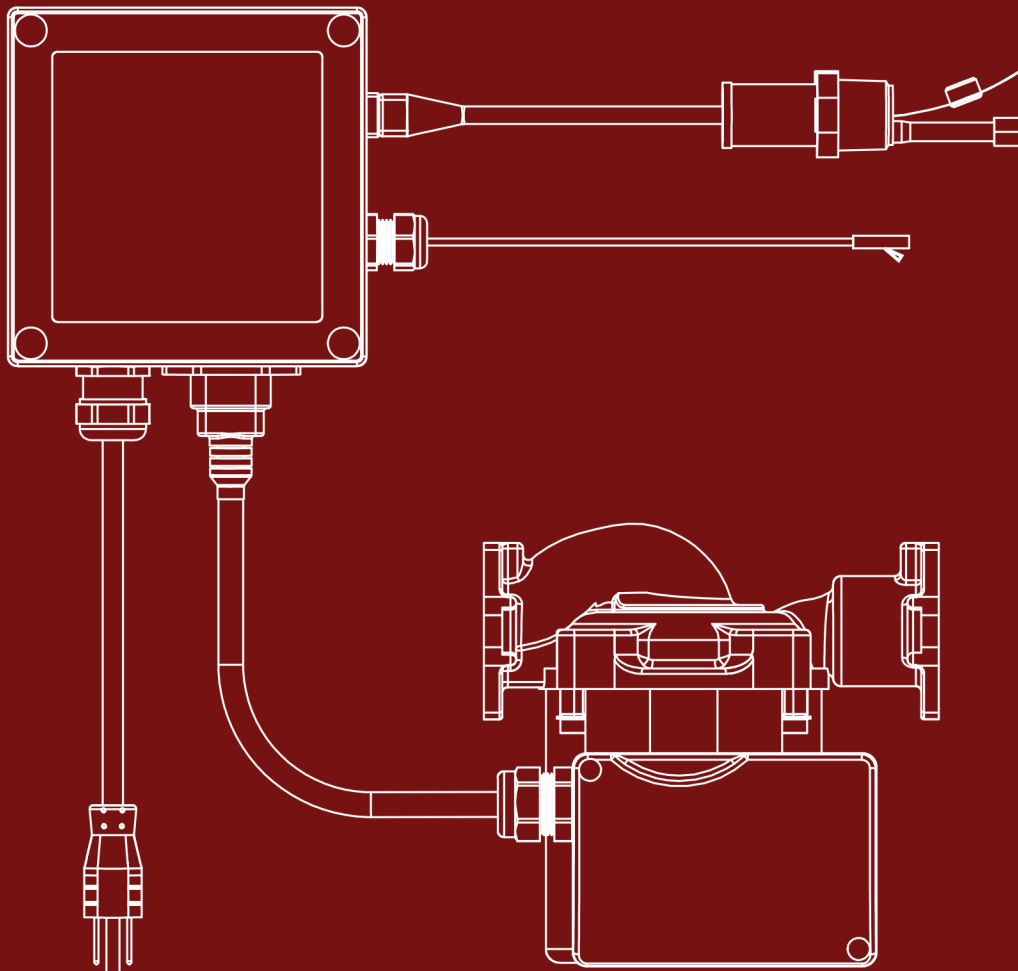
R099A

Accessories:

USK, WR-16A,
WB-S-16A, WM-S-16A

ENOVATIVE[®]
AutoHot[™]

INSTALLATION AND OPERATING INSTRUCTION



Powered By
GRUNDFOS[®]

 **ENOVATIVE**[®]

INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTION OR WARRANTY MAY BE VOIDED

IMPORTANT

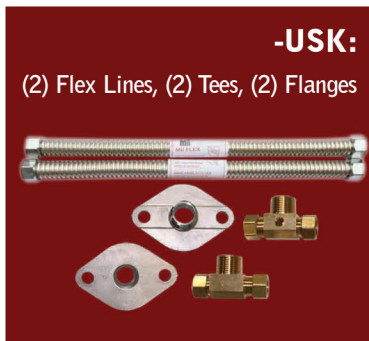
Operation of the pump without being plumbed into water lines may damage the pump and void the warranty.

Included Parts Depend on the Model:

Base Models Include:



Accessory Packages Include:



Tools you need:



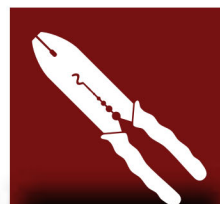
Crescent Wrench



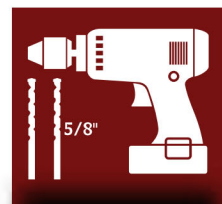
Phillips and flathead screwdrivers



Plier



Wire Strippers



Drill and 5/8 inch drill bit

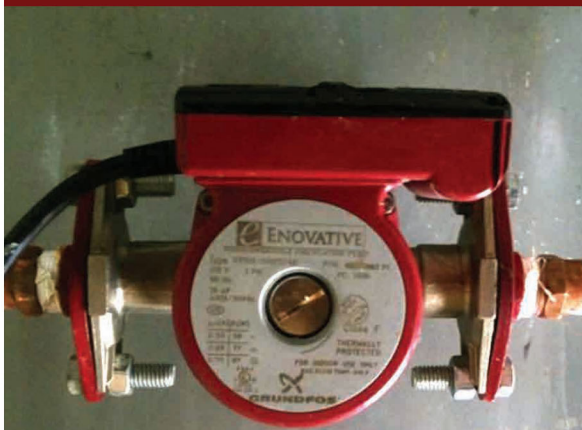
Best Location for the Enovative®



For those using standard plumbing without a return line, typically, this would be at the fixture farthest away from the water heater, generally the kitchen or master bath room. If your hot water supply runs in two different directions from the water heater, you may need more than one **AutoHot™**

For those with a return line (see figure 1), the pump and controller will be installed near the water heater. Please see page 7 for instructions on where and how to install, and disregard the steps 3 through 7 that involve installing the tees and flex lines under the furthest sink.

Figure 1: Pump on a return line



For return line installations, all pumps are flanged (where they mount onto the pipe), please order flanges if you don't already have them.

Pump Position:

Pump should always be installed in a horizontal position (as shown in figure 1 and 2) with capacitor box facing up toward the sink. Be sure arrow on pump casing is pointing from left to right (hot water to cold water side) prior to connecting the flex lines.

Note: T's and flex lines supplied by Enovative® provide maximum flow and performance. Alternative plumbing parts may restrict flow and delay hot water to fixtures.

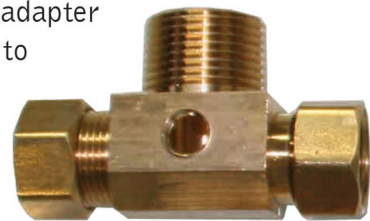
Electrical Supply:

A 110V electrical supply outlet is required to power the unit. If an outlet is not available, install a 110V outlet in accordance with all local electrical codes.

Caution: Do not plug in **AutoHot™** until all plumbing and wiring connections are completed and water supply is turned on. Running the circulating pump without water may damage internal components and void warranty.

Note about tees supplied in models that use the –USK accessories to install under the sink.

The two custom adapter "T" are designed to simplify your installation to 1/2" copper hot and cold supply lines.



If you have plumbing other than as shown in these instructions, additional fittings may be required.



Consult a plumbing professional or call us.

Figure 2: Pump installed under the sink with the Under Sink Kit



For homes without a return line

Figure 3: Shutoff Water and Remove Angles Stops



Figure 4: Install T's and Re-attach Angle Stops



Figure 5: Tighten Flange to Pump with Bolts



Figure 6: Install Flex Line to T



Figure 7: Install Flex Line to Flange

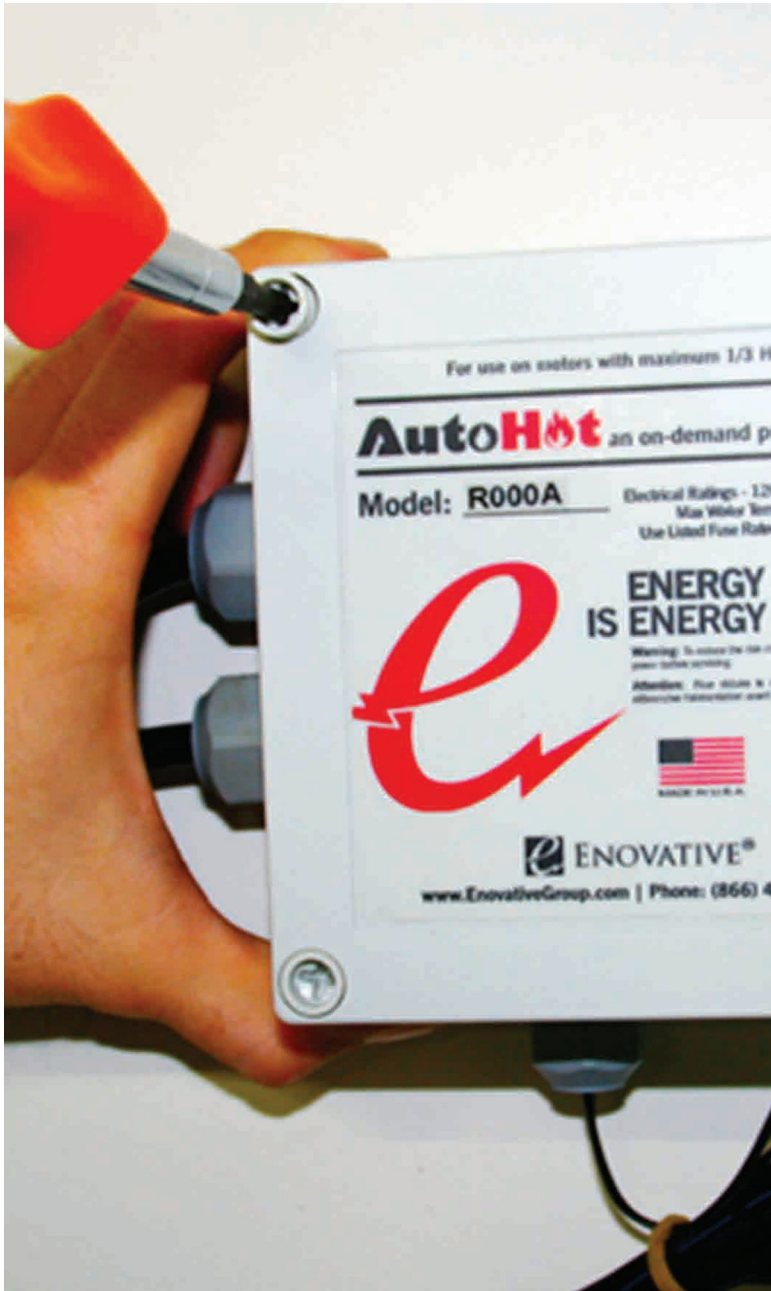


Installation

1. Turn off the house water supply at the main shut-off valve.
2. Open hot and cold faucets at the fixture chosen for installation. This will relieve water pressure from the hot and cold water lines.
3. Remove the hot and cold shut-off valve angle stops from the 1/2" copper pipes located below the sink (see figure 3). Be sure to use a catch basin to drain water from hot and cold lines.
Warning: To prevent scalding, use caution when removing valve on hot water line. For ease of installation, leave the existing compression ring and nut from the angle stops on the hot and cold water lines.
4. The T with the wire coming out of it has a temperature sensor, this T should generally be installed on the hot side which is normally on the left. Remove the compression ring and nut from the adapter tees provided and slide on to opposite straight copper end. Attach the existing nut and ring to the threaded end of the tee and tighten firmly (see figure 4).
5. Connect the shut-off valves to the new compression ring and nut and tighten firmly, but be careful not to over tighten.
6. Assemble shut-off flanges to pump as shown in Figure 5 and tighten firmly.
7. Attach the stainless steel flex lines to the 3/4" threaded connection on the tees and the 3/4" threaded connections on the pump shut-off flanges (see figure 6 and 7).

BE CAREFUL NOT TO OVER TIGHTEN THE T TO THE SHUT OFF VALVE

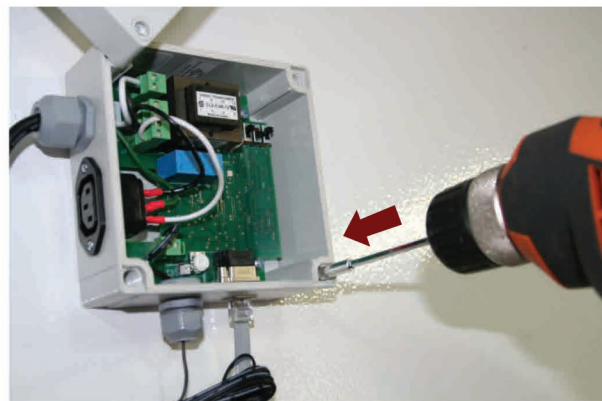
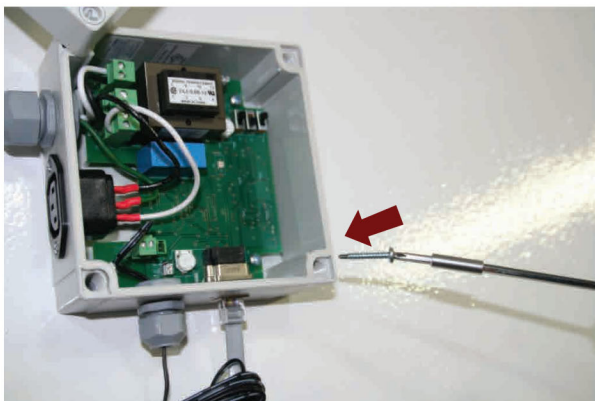
Mounting Controller Box

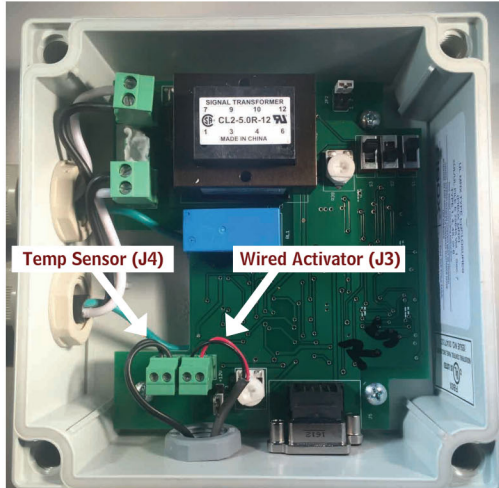


1 Unscrew Lid
(do not use power drill because it may strip the plastic lid screws)

2 Use the same holes as the lid screws to mount the box
(make sure the wall screw head fits in the hole, and make sure you have a drill bit that is long and skinny enough to go all the way in)

3 Drill into wall
you may need to install wall anchors depending on the surface





Connecting Sensor Wires to Controller

Wired temperature and demand activation sensors will connect to the control board on two adjacent green colored connectors, marked **J3** and **J4**.

Fish the wires through the cord grip located at the bottom of the controller enclosure and connect the wires to the green connectors.

Make sure that the temperature sensor is plugged into **J4** and that demand sensor is plugged into **J3**.

Installing the Hardwired Pushbutton (starter button)

The manual starter button is a unique feature to **AutoHot™**. The on-demand start to the circulation pump maximizes energy savings and controls operation only when there is a demand for hot water as compared to automatic timer controlled systems.

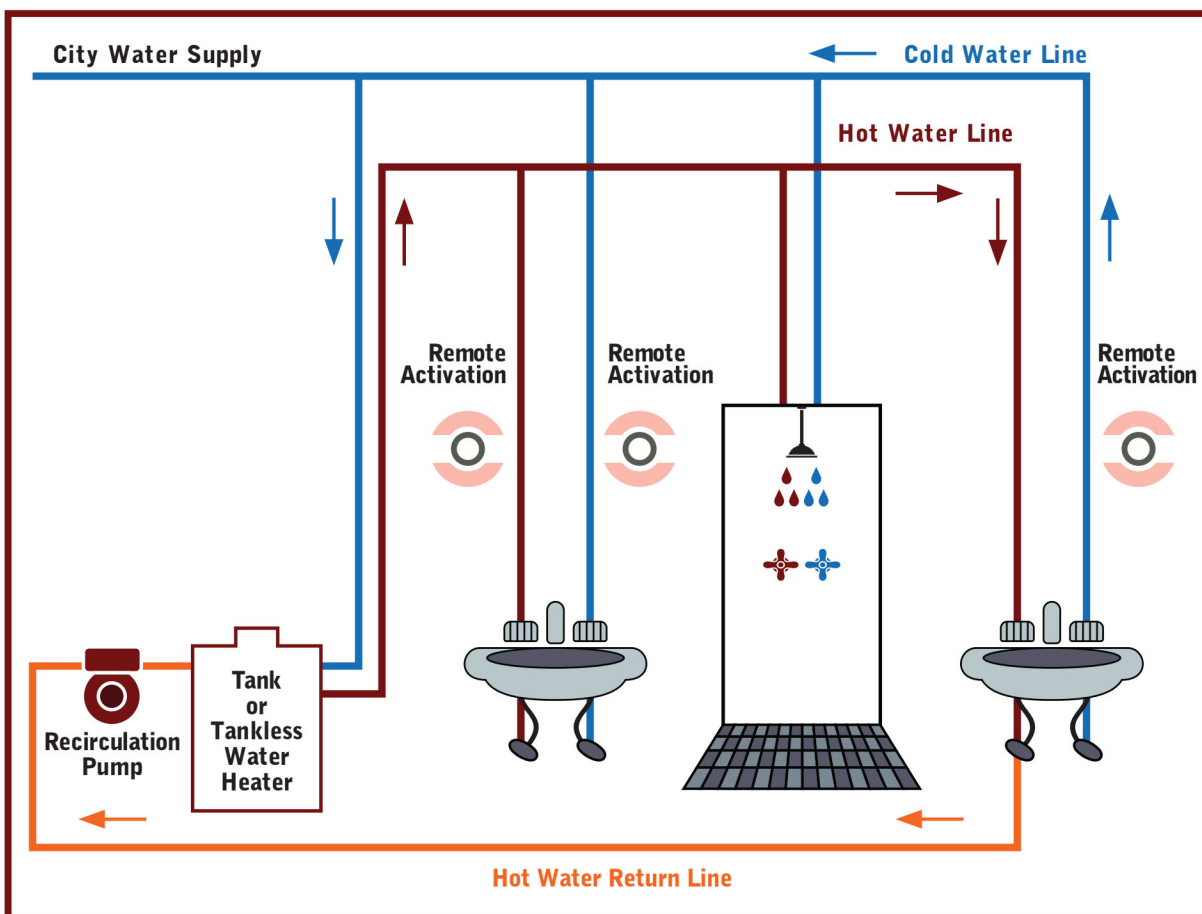


- 1** Drill a 5/8" hole into the desired location, typically the side or front of a vanity cabinet.
- 2** Insert the gray wire from the controller through the back side of the hole and connect it to the starter
- 3** Firmly insert the button into the drilled hole.

COMPLETING YOUR INSTALLATION

- 1** Turn on the water supply at the main. Check the system carefully for possible leaks. If occur, check all compression and threaded connections and tighten firmly. Open hot and cold fixtures for one to two minutes to flush system completely.
- 2** Plug in the unit to the 110V electrical outlet. The pump will start automatically the first time only and run for a short time until a rise in temperature is detected by the thermal sensor. Pump will automatically shut off.
- 3** To test manual starter button, wait for hot water temperature to cool below 100°F approximately 20-30 minutes. Press starter button to operate the pump. The pump should run for a short time and shut off automatically as in step 2.
- 4** Check hot water at the fixture for desired temperature. If hot water temperature is not satisfactory, refer to Trouble Shooting checklist section.

Dedicated Return Line Info



When installing on a dedicated return line (see figure 1 for an example), you won't need the -USK undersink kit. This assumes your house has a return pipe, which usually means you already have a recirculation pump.

In this case you are installing the pump near the water heater between flanges. If you already have a pump, it is possible that flanges are already there, otherwise you may need to order flanges and some plumbing parts that are readily available at any local plumbing supplier.

Installation is very simple, if the flanges are in place, all you have to do is bolt the pump in between the flanges, and make sure you have inserted the O-rings or gaskets in between the pump and the flanges to create a watertight seal.

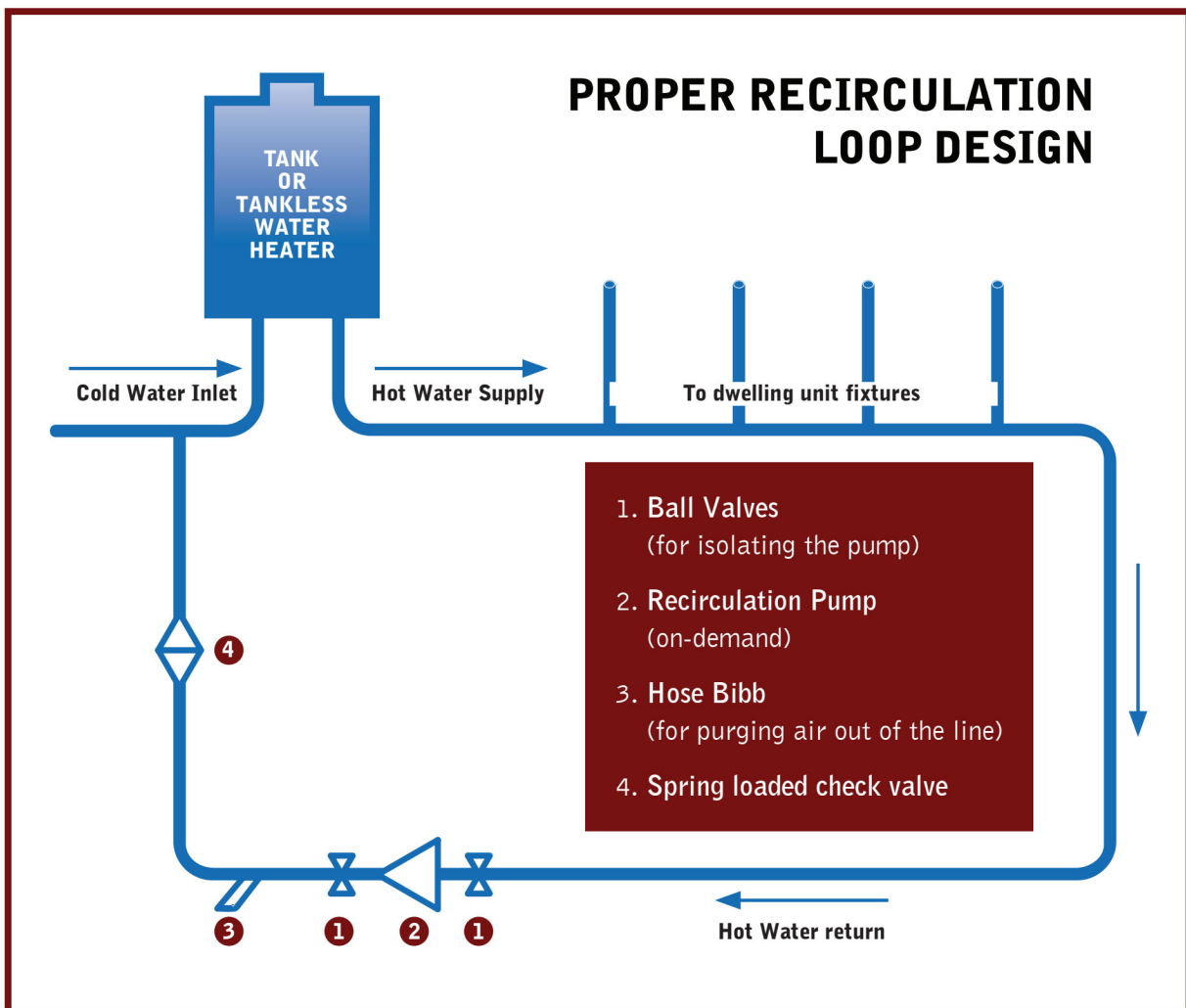
Make sure you relieve any air from your system and so that the pump is able to move water properly and avoid pump damage. Damage from air is not covered under warranty.

Finally, since in this situation the system is not near your sink, you generally want to order wireless pushbuttons and motion sensors that would be placed in each bathroom in order to remotely activate the pump.

If you have any questions don't hesitate to call us.

IMPORTANT RECIRCULATION LOOP DESIGN CONSIDERATIONS

1. Always insulate hot water pipes when possible. This will significantly slow the cool down time of the pipes and therefore reduce the operation time of the pump.
2. Keep branch lines from the recirculation loop to the fixture as short as possible.
3. Avoid using 90° elbows in your plumbing. Instead, try using a sweeping radius to minimize friction loss and increase pump flow rate.
4. Upon start up of the system, make sure that all air has been purged from the return line piping. This can be done easily when the return line is designed as recommended in the illustration.

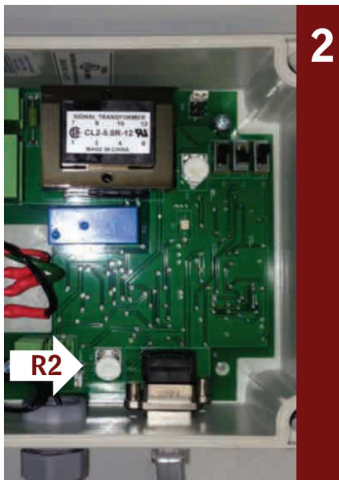


AutoHot™ OPERATING INSTRUCTION



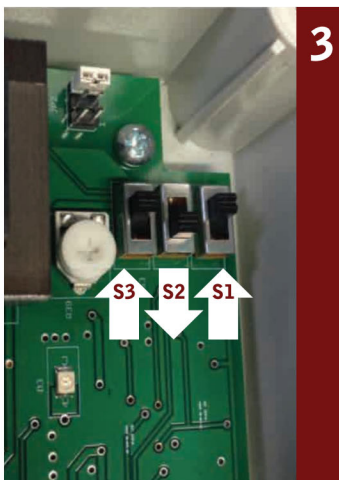
1 Remove the controller lid

To access and toggle the control's settings, use a Philips screwdriver to remove the four cover screws and lid from the controller.



2 Adjust the Shut-Off Temperature

If the water needs to be hotter you can turn up the pump shut-off temperature by rotating the white pot labeled "R2" counterclockwise. Turning the pot completely up will result in a shut-off temperature increase from 90°F to 108°F.



3 Controller Setting

Depending on what adjustment you want to make, these switches (S3, S2, S1) should be toggled for the following modes:

| | |
|--|--|
| Demand Mode (energy saving) | |
| Temperature Mode | |
| Continuous Mode (bypass controller) (See reverse for simple bypass) | |
| 4 Minute Demand | |



IMPORTANT:

For your safety, always unplug the controller from the power outlet before opening the enclosure or making any adjustments

If you decide to run the pump in any mode other than Demand Mode, please call us at (866) 495-2734 so that we can record the problem you are experiencing. It is likely that our technical support team will quickly be able to troubleshoot the problem and provide you with a solution to get back on Demand Mode so that you can continue to save energy

TROUBLESHOOTING - DIAGNOSING SPECIFIC PROBLEMS

| PROBLEM | POSSIBLE CAUSE | REMEDY |
|---|--|---|
| 1. The pump does not run when push button is pressed. | A. No Power at electrical outlet B. You've plugged the controller into an electrical outlet controlled by a wall switch, (such as the outlet under many kitchen sinks that controls the garbage disposal) | <ul style="list-style-type: none"> • Plug the controller into a "hot" outlet |
| | C. Power cord is not secured to pump D. Wire to push button is not connected well | <ul style="list-style-type: none"> • Shut off power, then make sure wires have good contact |
| | E. The temperature setting is already sensing "hot" water so the pump is not being activated | <ul style="list-style-type: none"> • Call 1-866-495-2734 to reset sensitivity setting |
| 2. The water is not hot enough | A. Pump was installed with water flow going in the wrong direction B. There is something in the piping that has blocked the flow of water | <ul style="list-style-type: none"> • Check the arrows on the pump casing to make sure they point in the correct direction • Check the piping for obstruction |
| | A. The water temperature sensor is loose or dislodged B. The temperature sensitivity setting now in place is too low, so the pump is not shutting down soon enough | <ul style="list-style-type: none"> • Check the connection of the water temperature sensor to make sure it is firmly attached to the plug and casing • Call 1-866-495-2734 to reset sensitivity setting |
| 4. Water is not hot enough when pump shuts down | A. The temperature sensitivity setting now in place is too high, and the pump is turning itself off too soon | <ul style="list-style-type: none"> • Call 1-866-495-2734 to reset sensitivity setting |
| 5. There is hot water in the cold water lines only | A. The pump is installed backwards | <ul style="list-style-type: none"> • Reinstall the pump correctly |

Limited Warranty

Enovative Group, Inc. will replace without charge, at the company's option, any AutoHot™ system, or component which is proven defective under normal use within five years from date of purchase. Labor is not included with Enovative, Inc. Limited warranty.

In order to obtain services under this warranty, it is the responsibility of the purchaser to promptly notify the Company in writing and promptly deliver the item in question to Enovative Group, Inc., 11823 Slauson Ave. Ste: 30 Santa Fe Springs CA 90670. If product or part in question contains no defect as covered in this warranty, the purchaser will be billed for the parts and labor charges in effect at the time of factory examination and repair.

Any product or part not installed or operated in conformity with instructions or which has been subject to misuse, misapplication, the addition of petroleum based fluids or certain chemical additives to the system, or other abuse, will not be covered by this warranty. Enovative Group, Inc. is not responsible for any pre-existing condition of the components or system which the AutoHot™ system installed or attached to.

Enovative Group, Inc. OFFERS THIS WARRANTY IN LIEU OF ALL OTHER WARRANTIES. ANY WARRANTY IMPLIED BY LAW INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS IS IN EFFECT ONLY FOR THE DURATION OF THE EXPRESS WARRANTY SET FORTH ABOVE.

THE ABOVE WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR STATUTORY, OR ANY OTHER WARRANTY OBLIGATION ON THE PART OF ENOVATIVE GROUP, INC.

ENOVATIVE GROUP, INC. WILL NOT BE LIABLE FOR ANY SPECIAL INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF ITS PRODUCTS OR ANY INCIDENTAL COSTS OF REMOVING OR REPLACING DEFECTIVE PRODUCTS.

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