
Installation and Operating Instructions

NSF 372 Certified

These units are designed for use on tankless water systems and to meet Calif. Title 24 which requires the end user to initiate the call for hot water.

Thank you for choosing the Aqua-Flash Instant Hot Water Recirculation System by AquaMotion, Inc. Please read and follow these step by step instructions to ensure that the system operates properly and reliably. Since the cold water supply line will be used to return the cooling hot water to the hot water heater you will experience some warm water from the cold water line. Opening the cold water faucet fully will flush the warm water from the cold line in a short period of time.

Warning: This is not an anti-scald valve.

Inspection

Inspect the system components to ensure no damage has occurred to them during shipping. Avoid dropping the circulator which may get damaged if dropped.

The Aqua-Flash System includes:

AMR -S3U AquaMotion Circulator with a built-in timer and a 10Ft line cord.

AquaMotion Flash By-Pass Valve

3/8" x 1/2" x 3/8" Compression Tee

2 ea. 3/4" NPT Male Flanges

4 ea. Bolts, 4 ea. Nuts and 2 ea. Gaskets

12" Long 1/2" x 1/2" Flex Hose

On-Call Wireless Button

Wireless Receiver with three prong plug

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Tools Needed:

9/16" open end wrench

5/8" open end wrench

15/16" open end wrench or an adjustable crescent wrench that opens to 1"

Pipe wrench that opens to 2"

Limits

Maximum water temperature 110°C/230°F

Maximum Pressure Rating 125 psi

Pump Installation

Warning: For Indoor Use Only

Warning: Do not plug the pump in until the pump installed is complete.

- 1) Turn off the breaker for your water heater.
- 2) Shut off the cold water supply to the water heater. This may be on the cold supply line above the tank or located where the water line enters the residence.
- 3) Open a hot water faucet in the residence and allow the water to run until it stops. Leave the faucet open until the installation has been completed.
- 4) Remove or separate the hot water line from the hot water heater at a point in the line that will accommodate the length of the circulator and flanges. **Fig. 1**
- 5) Using the appropriate 3/4" NPT fittings thread the 3/4" flanges onto the separated hot water outlet piping using pipe dope or Teflon tape to seal the threads. Ensure the orientation of each flange matches the other and that the circulator can be installed with the motor horizontal. **Fig. 2.**

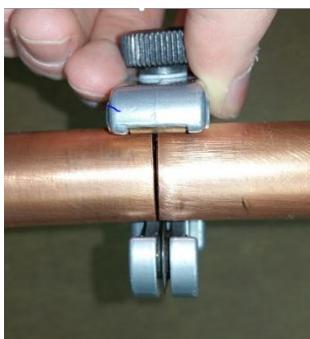


Fig. 1.



Fig. 2.



Fig. 3.

6) Place the gaskets between the flanges and the circulator and tighten the bolts and nuts. Fig. 3.

7) Reopen the cold water supply valve to the hot water. Allow the water to run at the faucet to purge the air from the cold lines. Close the faucet.

8) Turn the breaker back on for the water heater.



Fig. 4.



Fig. 5.



Fig. 6.



Fig. 7.

Valve Installation

Note: Pipe dope and Teflon tape are not required for any of the valve threads.

The valve is normally installed at the faucet that is furthest away from the hot water heater. If there are separate hot water branches in the residence, additional valves may be required.

- 1) Close both the hot and cold angle stop valves under the sink. Fig. 4.
- 2) Open both the hot and cold water faucets to relieve the water pressure.
- 3) Disconnect the riser pipes or hoses from the angle stop valves. Place a pan or rag below the connections to catch any water that may leak from the risers. Fig. 5.
- 4) Attach the cold water riser to the 3/8" thread on the tee.
- 5) Install the tee from the kit to the cold water angle stop valve using the 3/8" nut on the tee. Fig. 6.
- 6) Attach the 1/2" hose from the kit to the 1/2" connection on the tee. Fig. 7.
- 7) Attach the Flash valve to the hot water angle stop valve using the 3/8" nut on the Flash valve.
- 8) Attach the hot water riser to the 3/8" thread on the Flash valve.
- 9) Attach the 1/2" hose from the kit to the 1/2" connection on the Flash valve. Fig. 8.
- 10) Open the hot and cold Close angle to stop valves and purge air from the lines using the faucets.

Note: The spacing dimensions between angle stops vary. Position the valve and tee hose connections to suit your system.

On Call Features

The wireless button and the receiver are preprogrammed at the factory to communicate with one another. Plug the receiver into a properly grounded receptacle and plug the circulator into the receiver. Fig. 9. When the wireless button is pressed the circulator will be activated. The time needed for hot water to reach the sink will vary based on type, length and size of the hot water supply line.



Fig. 9



Fig. 10