

## Instruction Sheet

### AquaMotionHot Two AMH2K-R

#### For Large Tank and Tankless Systems (With Dedicated Return Line)

#### APPLICATION

The AquaMotionHot Two circulators are designed to deliver hot water instantly at all points of use between the hot water tank (tankless) and the return line. Water savings can be as great as 12,000 – 15,000 gallons per year with 4-5 taps in a home. The AquaMotionHot Two circulator together with the Aquamotion “On Call™” accessories are designed to be user friendly, reliable and to produce a professional installation.

**WARNING:** Risk of electric shock. The AMH2K-R kits are supplied with a grounding conductor and grounding type attachment plug. To reduce the risk of electric shock, be certain that it is connected only to a properly grounding type receptacle.

**WARNING:** When installing the circulator observe all applicable electrical and plumbing codes.

**WARNING:** To avoid electrical shock, disconnect power prior to connecting or disconnecting circulator.

**WARNING:** Risk of electric shock. This circulator has not been investigated for use in swimming pool or marine areas.

**WARNING:** This circulator is acceptable for indoor use only. Employer uniquement a l'interieur.

**CAUTION:** This circulator has been evaluated for use with water only. The suitability of this circulator for use with liquids other than water is the responsibility of the end user.

**CAUTION:** When making electric connections, do not apply excessive external loads to the junction box.

#### SYSTEM REQUIREMENTS

- Minimum water pressure 20 psi
- Maximum water pressure 125 psi
- Maximum water temperature 230F (110C)

#### SHIPMENT INSPECTION

Examine all components carefully to ensure they are all present and they have not been damaged in transit to you. Care should be taken to avoid dropping or mishandling the circulator. Damage to the circulator may occur if it is dropped.

#### KIT CONTENTS

The AMH2K-R “Hot Two” package includes:

- (1) Pump, model AMR-S3FVL with pre-wired 10 foot flexible cord.
- (1) ¾” NPT Female Stainless Flange Kit
- (1) Timer

#### REQUIRED TOOLS

- 2 - Pipe wrenches which open to at least 1 1/2”
- 2 - Adjustable wrench which opens to at least 1 1/2”
- 1 – Teflon tape or pipe dope for flange connection

#### INSTALLATION INSTRUCTIONS

1. Turn off the power to your hot water heater at the circuit breaker.
2. Close the valve on the cold water supply line to the tankless hot water heater or hot water tank\*. If you do not have a valve on the cold water supply line, close the main water valve to the house.
3. Attach a hose to the drain valve on your system and run the hose to a drain or into buckets.
4. Open the drain valve and allow the system to drain down. Note: Opening the faucet at a sink may speed the draining process.
5. After the system has drained, close the drain valve.
6. Run a dedicated return line from your hot water heater to the appropriate fixture.
7. Cut the hot water supply line at the fixture.
8. Install a tee fitting into the hot water supply line at the fixture that accepts the correct pipe size and material of the supply line and dedicated return line.
9. Attach the dedicated return line to the tee fitting that was previously installed in the hot water supply line at the fixture.
10. Install a tee fitting into the cold water supply line at the hot water heater that accepts the correct pipe size and material of the cold water supply line.
11. Apply Pipe Dope or Teflon tape to the male threads of one of the flanges supplied in the kit and install the flange onto the tee fitting previously installed in the cold water supply line at the water heater.
12. Allow a 6.5 inch space for the circulator to be installed. Apply pipe dope or Teflon tape to the male threads of the remaining flange and install the flange onto the dedicated return line at the water heater.
13. Place one of the gaskets supplied in the kit between the circulator discharge and the flange previously mounted on the cold water supply line. Use the bolts and nuts supplied in the kit to attach the flange to the circulator. Note: The discharge end of the circulator is the end the arrow on the stainless casting is pointing at. Place the other gasket between the fitting on the return line and the circulator inlet. Tighten both nuts.
14. Place the other gaskets supplied in the kit between the circulator inlet and the flange mounted previously on the dedicated return line. Use the bolts and nuts supplied in the kit to attach the flange to the circulator.
15. Open the valve in the cold water supply line to the hot water heater. Check for leaks at the fittings. If a leak occurs retighten or refit the joint. Note: To allow trapped air to escape, open a hot water faucet and allow the water to run until it is clear of bubbles.

16. Turn power on for the hot water tank at the circuit breaker.
17. If you are assembling with a kit containing a timer or if you have the optional timer, follow the step by step directions on the timer instructions to program the timer to meet your hot water needs. Note: The AquaMotion timers will maintain the time of day and programming through extended power outages.
18. Plug the timer into the nearest 3 prong wall outlet.
19. Plug the Aquastat piggyback plug into the timer

20. tubing. Note; the Aquastat power cord is 8 feet long. To minimize the runtime of the circulator the Aquastat should be clipped to the return line as far away from the circulator as the cord will allow.
21. Plug the circulator into the back side of the Aquastat piggyback plug Note: Initially the circulator will run continuously until the hot water tank has re-heated the water unless the timer is set to an off cycle.

\*If the dedicated return line is being connecting to a hot water tank, the connection can be made at the cold water supply or the drain on the hot water tank.

### AquaMotionHot Two AMH2K-R (Dedicated Return Line Installation)



### AquaMotionHot Two AMH2K-R (Recirculation Kit with Digital Timer)

