

## Instruction Sheet AquaMotionHot One AMH3K-R Point of Use Hot Water Recirculation System (For Tankless and Large Tank Systems)

**THANK YOU for purchasing a new Aquamotion Hot System!** For optimum reliability and performance please follow the installation instructions outlined below.

**NOTE:** Please note that this is not an anti-scald unit. There may be some warm water in the cold water line under the sink where the circulator is installed. Once the cold water line is opened, the warm water will disappear in a short time. (Longer hot water lines may result in longer time for hot water to reach the sink.)

### APPLICATION

The AquaMotionHot One circulators are designed to deliver hot water instantly at the point of use (under sink). Water savings can be as great as 12,000 – 15,000 gallons per year with 4-5 taps in a home. The AMH3K-R 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 AMH3K-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 AMH3K-R observe all applicable electrical and plumbing codes.

**WARNING:** To avoid electrical shock, disconnect power prior to connecting or disconnecting The AMH3K-R.

**WARNING:** Risk of electric shock. The AMH3K-R has not been investigated for use in swimming pool or marine areas.

**WARNING:** The AMH3K-R is acceptable for indoor use only. Employer uniquement a l'interieur.

**CAUTION:** The AMH3K-R has been evaluated for use with water only. The suitability of The AMH3K-R 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 176F (80 C)

### 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 AMH3K-R. Damage to the AMH3K-R may occur if it is dropped.

### KIT CONTENTS

The AMH3K-R "Hot One" package includes:

- (1) Pump, model AMR-S3FVAL with pre-wired 10 foot flexible cord, built-in aquastat and timer.
- (2) 3/4" NPT male threaded stainless steel flanges.
- (2) Flange gaskets

(2) Flex hoses 3/4" NPT x 3/4" NPT, 24 inches long.

(2) Tee, 1/2" compression x 3/4" NPT x 1/2" compression

### REQUIRED TOOLS

2 - Open-end wrenches 5/8" and 11/16"

1 - Adjustable wrench which opens to at least 1 1/4"

### INSTRUCTIONS for AMH3K-R

1. Turn off the house water supply
2. Open both the hot and cold faucets. This will relieve any remaining water pressure in water pipes

### Aquamotion Tee Installation (see Fig. 1)

3. Locate the hot and cold shut off valves (angle stops) typically located near the faucet(s) under the counter.
4. Remove the shut off valves that supply hot and cold water lines to the sink from the copper pipe. For ease of installation you may leave the compression ring and nut from the angle stop on the hot and cold water supply lines\*.
5. Remove the ferrule ring and nut from the compression fitting on the supplied Tee's and install them onto the copper supply pipes
6. Insert the 1/2" Copper tubing into the tee on the hot and cold water supply pipes. Tighten nuts securely
7. Thread the angle stops (valves) to the new Tee's. Both of these connections are compression "fine" threads. **Never apply either Teflon tape or pipe dope on compression threads or fittings/ This will void the warranty of AquaMotion Tee's.**
8. Install the flex hoses by attaching one end to the remaining port of the Tee and the other end to the pump. **MAKE SURE THE HOSE ATTACHED TO THE HOT VALVE IS CONNECTED TO THE INLET SIDE (THAT IS THE OPPOSITE DIRECTION OF THE ARROW) OF THE PUMP. MAKE SURE THE HOSE ATTACHED TO THE COLD VALVE IS CONNECTED TO THE DISCHARGE SIDE (THAT IS THE SIDE THE ARROW IS POINTING TO) OF THE PUMP.**

### Circulator Installation (see Fig. 2)

9. Attach the flanges and gaskets to the pump casing. The gaskets must be located between pump casing and flange. You will need two open-end wrenches 5/8" and 11/16" inches. Firmly tighten the nuts and bolts to avoid leaks. Do not install the pump upside down
10. Place the pump into its intended location supported by the flanges and pump support.



**NOTE:** Be sure the arrows on the pump point to the cold water side.

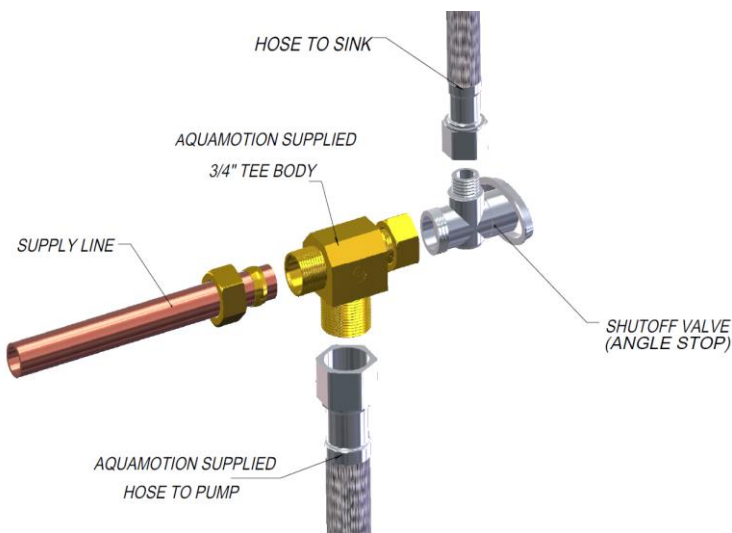
11. Open the valves. Check for leaks.
12. In case of air lock, turn the slotted screw on the relief valve counter clockwise 1 turn. **DO NOT UNSCREW COMPLETELY.** When water appears, close the valve by turning it clockwise 1 turn. (See Fig. 3)
13. Plug in the cord to any convenient grounded, 115 volt outlet.
14. Give the system 2 to 3 hours to settle. Opening faucets will help release the air.

\*If shut off valves (angle stops) do not have threaded connection, new shut off valves will be required

**Stainless hoses are NSF 61-9 listed Circulators are of stainless construction All Fittings are lead free**



**(Figure 3)**  
**Air Lock Relief Valve**



**(Figure 1)**  
**Shut Off Valve Installation**



**Installation Diagram**

