

CHRONOMITE INSTANT-FLOW MICRO WATER HEATERS

INSTALLATION AND OPERATION INSTRUCTIONS (STANDARD MODELS)

(Before installation, compare electrical needed for the model of heater selected)

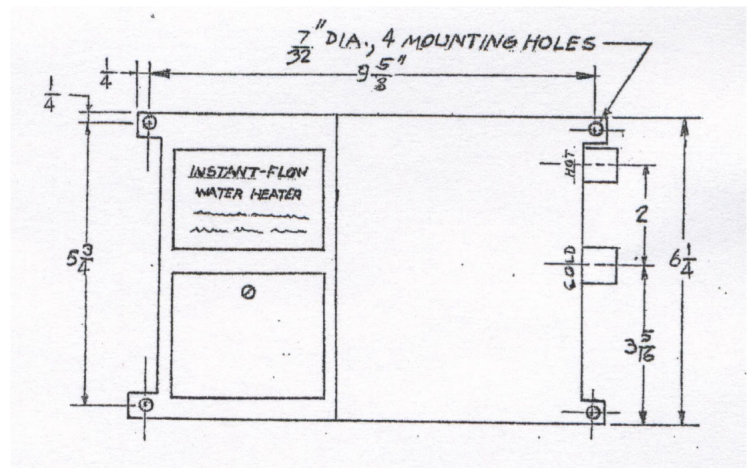
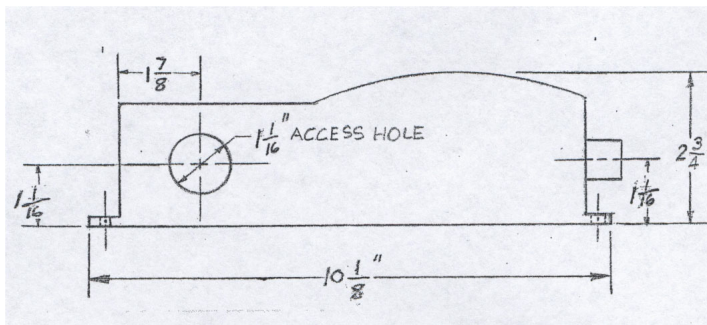
TABLE 1

Model No.	Wattage	Voltage	Breaker Size
M-30	6240	208	30A
M-30	7200	220/240	30A
M-30	8310	277	30A
M-40	8320	208	40A
M-40	9600	220/240	40A
M-40	11080	277	40A
M-50	11520	220/240	50A

Instant-Flow Micro

- Dimensions: 6 1/4" x 9 5/8" x 2 3/4"
- Weight: 5 lbs.
- Materials: Rugged cast aluminum alloy casing, Celcon waterways with nichrome parts
- Color: White (unless stainless steel housing)
- Pipe Fittings: Female 1/4" NPT standard pipe thread
- Pressure Requirements: 25 PSI Minimum 150 PSI Maximum (300 PSI tested) No pressure relief valve needed unless required by local codes.
- Maximum Operating Temp: 140°F
- Minimum Operating Flow Rate: .65 GPM
- * Minimum Operating Flow Rate: 1.0gpm for Models M-40-220/240, M-40/277 & M-50-220/240
- Listings: UL, HUD, IAPMO

Specifications:



THE MANUFACTURER OF THIS WATER HEATER WILL NOT BE LIABLE FOR ANY DAMAGES DUE TO THE FAILURE TO FOLLOW THESE INSTALLATION AND OPERATION INSTRUCTIONS.

CAUTION: BEFORE BEGINNING THE INSTALLATION:

- A) Turn off the circuit breaker to avoid dangerous electrical shocks.
- B) Turn off the water supply.

1. Remove electrical access cover. Attach conduit to the conduit access hole. Then feed wires. Do not attach wiring.
2. Mount unit horizontally against the wall so the silver label reads correctly (See Fig. 1). Mount with four screws through the flanges located on each corner using molly anchors or fasteners.
CAUTION: Heating elements may burn out if not mounted horizontally.
3. Connect plumbing. Use 1/4" tapered national pipe thread at cold water inlet and hot water outlet (See Fig. 1). Use compression fittings supplied for ease of installation. Do not apply heat to these fittings.
4. Run water through the unit to expel all air bubbles. Check for leaks at all fitting joints.
5. Connect wiring. Attach ground wire to center terminal and hot wires to outer terminals (See Fig. 3).
6. Replace electrical access cover. Turn on the circuit breaker. The unit is now ready for use.
7. Local plumbing and electrical codes must be followed in the installation of this water heater and it's accessories.
8. Failure to comply with code requirements voids the warranty.

IMPORTANT NOTES:

Air in the heater may cause the element to burn out. If the water lines are drained, allowing air into the heater, be sure to follow the following start-up procedure:

1. Turn off electrical supply at circuit breaker.
2. Turn on water supply.
3. Expel all air from lines and heater.
4. Turn on electrical power supply at circuit breaker.

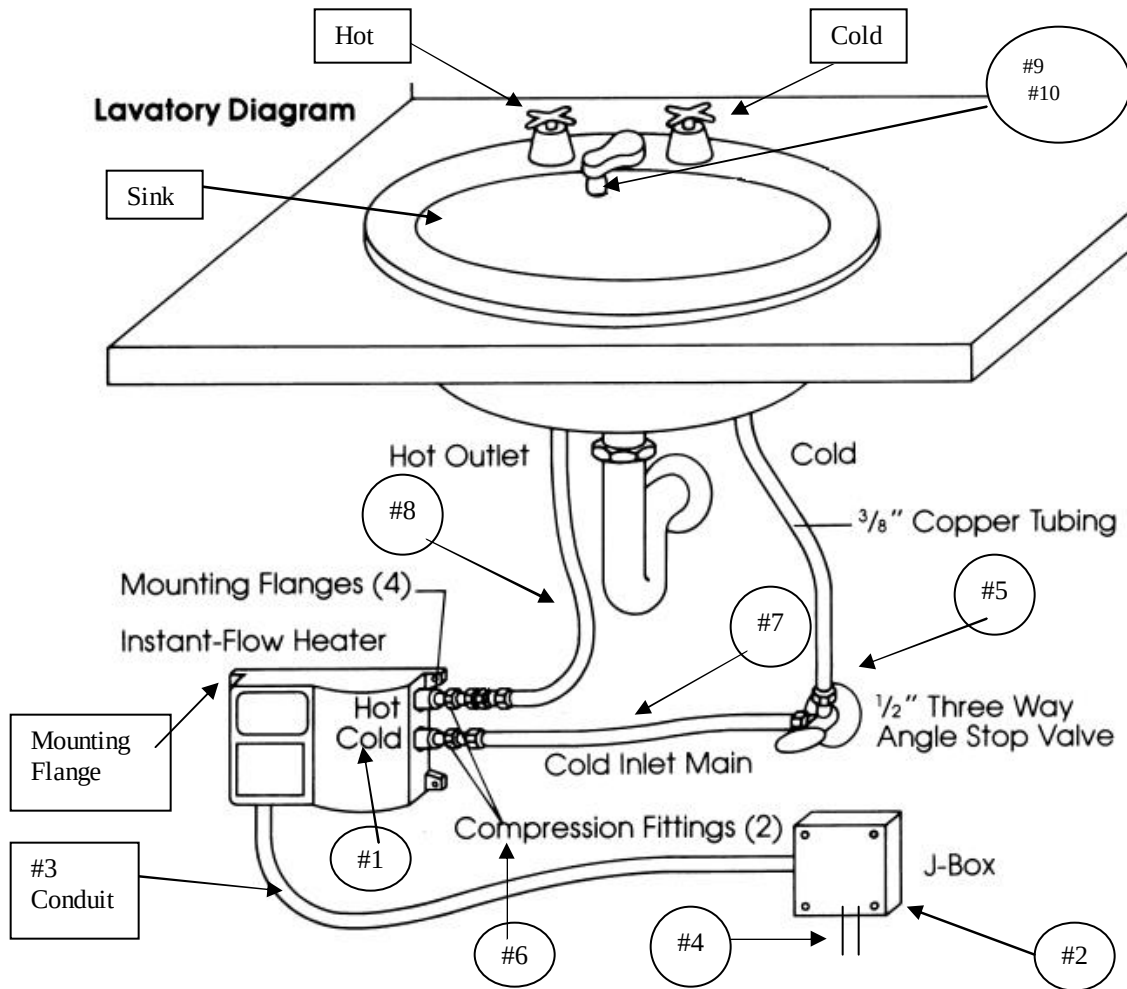


FIGURE 1 HEATER INSTALLATION

Faucet flow controls attached to the faucet allow the water heating system operate more effectively. For example, 2 GPM flow controls recommended for faucets, assure that the flow rate will not exceed 2 GPM. However, less water can always be used. Also, consumers can mix with cold water as with a conventional system (See Fig. 2, pg. 3 for Installation).

Item	Part No.	Names	Qty	Description
1.	M-__	Chronomite Instant-Flow Micro	1	Models shown in Table 1
2.		Electrical junction box		
3.		Electrical conduit		1/2" conduit, length as required
4.		Electrical wire		Wire size shown in Table 1
5.		Dual outlet angle valve	1	1/2" FPx7/16" comp.x3/8 comp., Brass Craft P/N R2701R-RGH
6.		Fitting (supplied)	2	3/8" comp x 1/4"MP
7.		Copper or flex tubing	1	3/8" OD, 5" long (keep short)
8.		Copper or flex tubing		3/8" OD, length as required (keep short)
9.	A-212	Faucet flow control (supplied) or and	1	dual thread 15/16" male thread 55/64" female thread (See

Note:C=Copper Cup **MP=Male Pipe** **FP=female Pipe** **STD=Thread** **Comp=Compression Fittings**
page 2

OPERATION INSTRUCTIONS

Turn the hot water fixture to activate the flow switch. The flow switch activates at one gallon per minute (GPM) and deactivates at .65 gallon per minute.

If you increase the flow rate of the water will become cooler. Cold water can always be mixed just as with a conventional system if using a two handle faucet.

Once you decrease the flow rate to .65 GPM the unit will deactivate. It is not advisable to operate the heaters at the .65 GPM.

>Periodically inspect the supply lines, connections and heater for any moisture, corrosion or other potential preventable problems.

HOW INSTANT-FLOW MICRO WORKS

The cast alloy case houses a series of ingeniously designed coils that instantly heat water as it flows through the vessel. A unique power switch automatically applies electrical current to the coils when hot water is being requested. The electrical current is not applied when the water is not in use. The microprocessor is internally preset at the factory to maintain a constant output temperature with varying flow rates.

OPTIONS/ FLOW CONTROLS

You may want to install the supplied flow control in your design. This high-quality control makes the water heating system operate more effectively, as well as saving water. The supplied 2.0 GPM flow control assures that the flow rate will not exceed 2 GPM. However, less water can always be used. Consumers can mix the cold water as with a conventional system.

LOW FLOW RATE SYSTEM

For applications where a 0.5 GPM flow rate is desirable and / or where only 110 VAC is available, see our low flow rate system outlined in Installation Sheet #927.

FLOW CONTROL MODELS

Model	GPM	Vandal Proof Models	GPM
A-212 (Male/female)	2.0	A-200VR (Male)	2.0
Adapters		A-210VR (Female)	2.0

FLOW CONTROL SPECIFICATIONS

Material: Chrome plated, brass housing.

Threading: MODEL A-212 has male (outside) threads for faucets with 15/16" female threads and has female (inside) threads for faucets with 55/64" male threads.

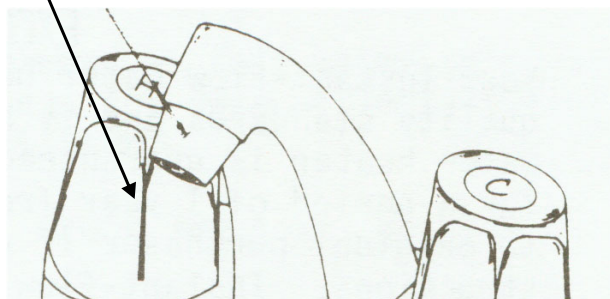
*Flow controls are adaptable to other thread configurations.

Please use one of the three adapters supplied if needed.

Please call factory if adapter is needed and one of the supplied adapters doesn't work.

FIGURE 2

FLOW CONTROL INSTALLATION (See Parts List #9, #10)



FACTORY SET

Choose from the following:

104 °F

110 °F see *** below

120 °F see *** below

* Other Temperature Settings are available upon request up to 140 °F

****** Temperature Settings are not Field adjustable

******* 110 °F / 120 °F Temperature settings are recommended with cold water mixing faucets

TEMPERATURE INCREASE ABOVE INCOMING WATER TEMPERATURE

MODEL	VAC	0.65GPM	1.0 GPM	1.5 GPM	2.0GPM
M-30	208	66°F	42°F	28°F	21°F
M-30	240	64°F	49°F	33°F	25°F
M-30	277	64°F	57°F	38°F	28°F
M-40	208	87°F	57°F	38°F	29°F
M-40	240	xxxx	65°F	44°F	33°F
M-40	277	xxxx	75°F	50°F	38°F
M-50	240	xxxx	79°F	55°F	41°F

Microprocessor limits temperature increase according to the factory set temperature

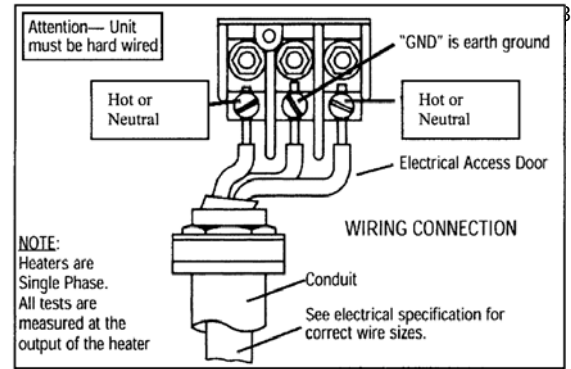


FIGURE 3 Wiring Connection

TROUBLESHOOTING GUIDE

Your Instant-Flow Micro water heater has no internal user serviceable parts and should be returned to the factory for repair or replacement. Please contact factory for return authorization. If after following the Installation Instructions, your Instant-Flow Micro does not heat water in accordance with this literature, please check the following:

1. **Low Power** – Verify your voltage by using a voltage meter. You should obtain your reading off the two outside terminals located on the heater. Compare this reading against the voltage specified in the Installation Instructions. The center terminal is always the earth ground.
2. **Low Voltage** – The percentage of reduction in voltage will result in a like reduction in temperature increase.
3. **Check Low Amperage Draw** – Check amperage draw using an Amperage Probe. Please compare your results with the Installation Instruction (Table 1) to determine if the heater is operating correctly.
4. **Length of Pipe** - Length of pipe run will affect the temperature increase. The heater should be mounted no more the 12-18 inches from the point of use.
5. **Check shut – off valve** – Check shut-off valve and make sure valve is open 100% to allow full water pressure to the heater.
6. **Check Flow Rate** – Controlling flow rate is essential to insure proper temperature increase. Check your flow rate to insure proper operation of the heater. Standard Flow Rate Models require 1.0 GPM to activate.
7. **Installation** – Heater must be installed in a horizontal position. The silver label will then be located in the upper left corner as you face the heater.
8. **Water Supply** – Cold water supply to only feed Instant-Flow Micro cold water inlet.
9. **Freezing** – Instant-Flow Micro heaters must be drained and stored if in a location subject to freezing. Disconnect the inlet/outlet compression fittings and blow air through one side of the heater to assist draining. Failure to completely remove water from the unit will result in freezing and cracking.
10. **Problems?** – Call our toll-free hotline 800/447-4962 or 626-937-4270.

EXCLUSIVE 12-MONTH WARRANTY

Your Instant-Flow Micro water heater has been engineered and built to the highest quality standards and is backed by a full, factory warranty. Every Instant-Flow Micro water heater is guaranteed to be free from defects in material and workmanship for a period of one (1) year from the date of purchase. The above warranty applies to original purchaser if unit is installed to Chronomite Laboratories, Inc.'s Installation Instructions. Chronomite Laboratories, Inc. will repair or exchange parts at the factory at no cost. This warranty is limited to repairing or replacing said products which prove to be defective upon factory inspection, F.O.B. City of Industry, California.

**Chronomite Laboratories Inc.
17451 Hurley Street.
City of Industry, CA 91744**

**Toll Free Technical Hotline 800-447-4962 Telephone 626-937-4270
Fax 626-937-4279**