CHRONOMITE INSTANT-FLOW MICRO WATER HEATER
INSTALLATION AND OPERATION INSTRUCTIONS - (LOW FLOW MODELS)

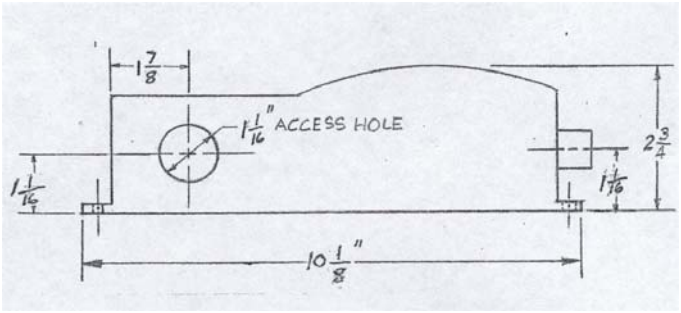
(Before installation, compare electrical needed for the model of heater selected)

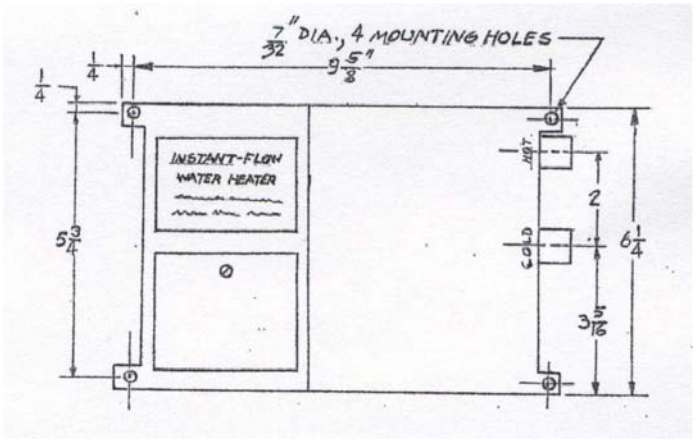
TABLE 1

Model No.	Wattage	Voltage	Breaker Size
M-15L	1800	110/120	15A
M-15L	4150	277	15A
M-20L	2400	110/120	20A
M-20L	4160	208	20A
M-20L	4800	220/240	20A
M-20L	5540	277	20A
M-30L	3600	110/120	30A

Instant-Flow Micro Specifications:

- Dimensions: 6¼" x 9 5/8" x 2 ¾"
- Weight: 5 lbs.
- Materials: Rugged cast aluminum alloy casing,Celcon waterways with nichrome parts
- Color: White (unless stainless steel housing)
- Pipe Fittings: Female ¼" 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
- Flow Switch Activation: .4 GPM
- Flow Switch De-Activation: .35 GPM
- Listings: UL, HUD, IAPMO





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 unit is not mounted horizontally.
3. Connect plumbing. Use ¼" 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.
9. Failure to install faucet flow control as shown on Fig. 2 will cause unsatisfactory operation of the heater.

IMPORTANT NOTES: Air in the heater may cause the elements 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.

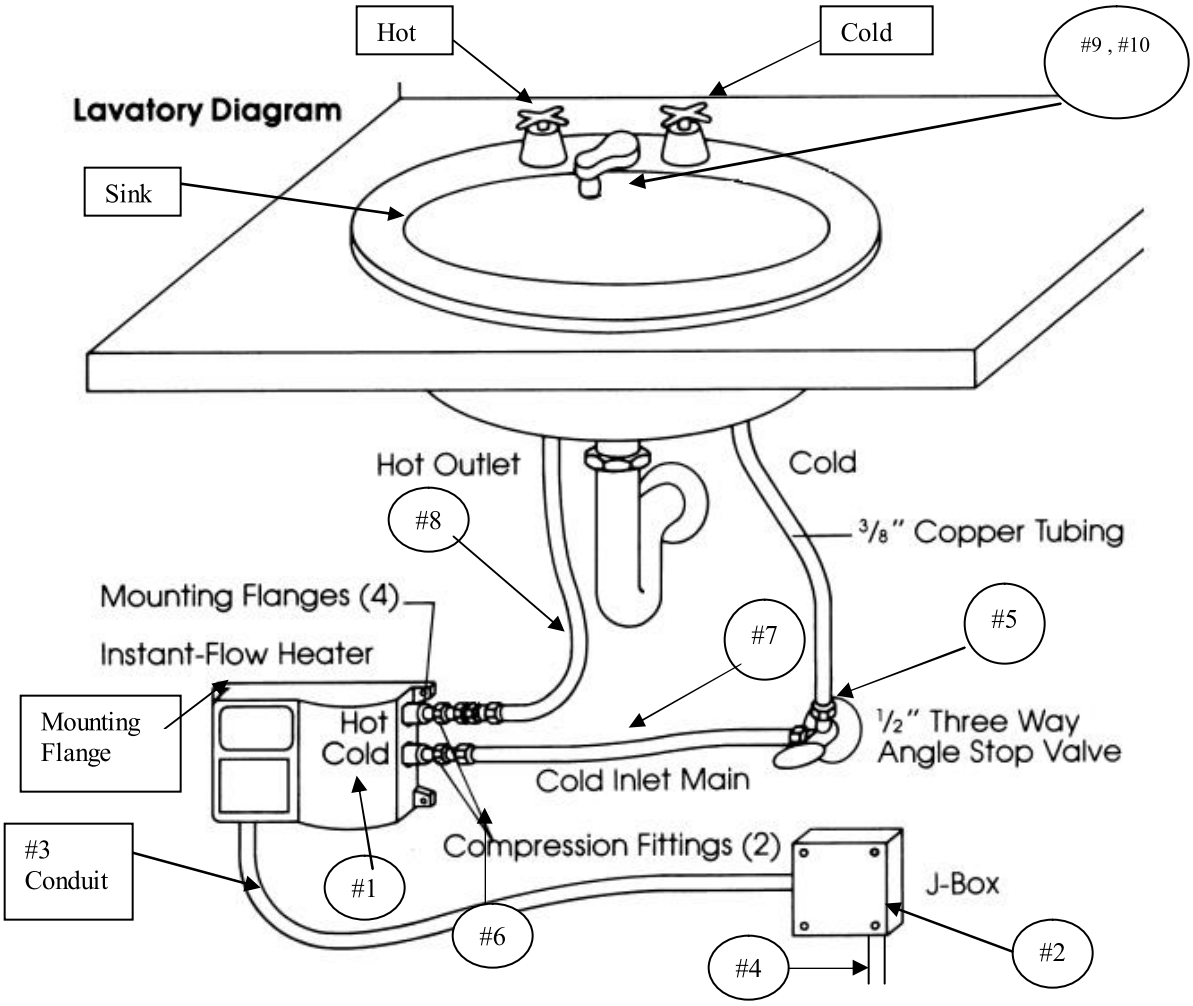


FIGURE 1 HEATER INSTALLATION

Faucet flow controls must be attached to the faucet to allow the water heating system to operate more effectively (See Fig. 2, pg. 3 for installation).

Item	Part No.	Names	Qty	Description
1.	M-_ _L	Chronomite Instant-Flow Micro Heater	1	Models shown in Table 1
2.		Electrical junction box		
3.		Electrical conduit		½" conduit, length as required
4.		Electrical wire		Wire size shown in Table 1
5.		Dual outlet angle valve	1	½" FPx7/16" comp.x3/8 comp., Brass Craft P/N R2701R-RGH
6.		Fitting (supplied)	2	3/8" comp x ¼"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.	L-412	Faucet flow control, dual thread	1	Supplied with Low Flow Heater
	OR	(see figure #2)		M-20L, M-30L
10.	LP-412	Faucet flow control, dual thread	1	Supplied with Low Flow Heater M-20L, M-30L

Note: MP =Male Pipe FP = female Pipe Comp = Compression Fittings

OPERATION INSTRUCTIONS

Turn the hot water fixture to activate the flow switch. The flow switch activates at .4 gallons per minute (GPM) and deactivates at .35 gallons per minute (GPM).

If you increase the flow rate of the water above .5 GPM the water temperature 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 .35 GPM the unit will deactivate. It is not advisable to operate the heaters at .35 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 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.

FLOW CONTROL SPECIFICATIONS

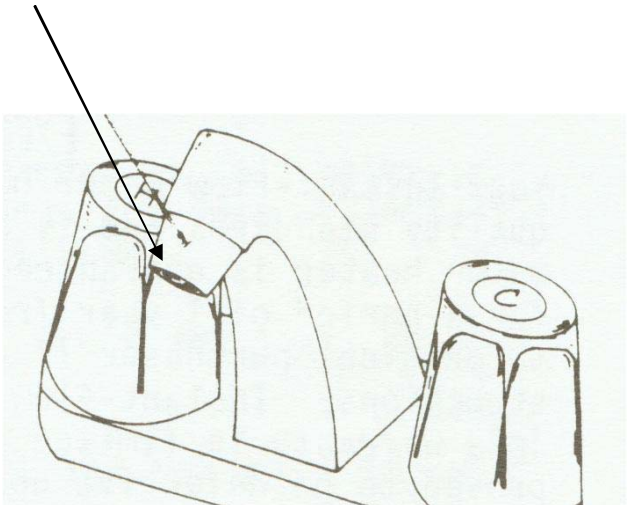
Material: Chrome plated, brass housing.
Threading: MODEL L-412 & LP-412 has male/female threads for faucets with 15/16" female or 55/64" male threads.

*Flow controls are adaptable to other thread configurations.
Please call factory If adapter is needed.

FLOW CONTROL MODELS

Model	GPM	Vandal Proof Models	GPM
L-412 (Dual)	0.5	L-910VR (Female)	0.5
LP-412 (Dual)	0.5		

FIGURE 2
FLOW CONTROL INSTALLATION (See Parts List #9 & #10)



FACTORY SET TEMPERATURES

Choose from the following:

104 ºF
110 ºF see *** below
120 ºF see *** below

* Other Temperature Settings are available upon request up to 140 ºF

** Temperature Settings are not

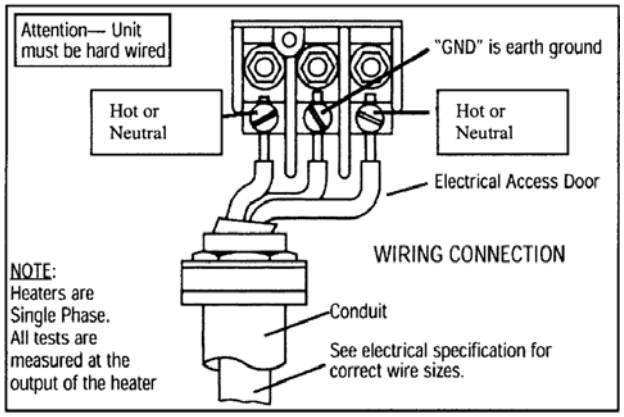
Field adjustable

*** 110 ºF / 120 ºF Temperature settings are not recommended with metering / sensor faucets (cold water mix needed)

TEMPERATURE INCREASE ABOVE INCOMING WATER TEMPERATURE

MODEL	VAC	0.5 GPM	1.0 GPM
M-15L	110/120	24 °F	12 °F
M-15L	277	57 °F	28 °F
M-20L	110/120	33 °F	16 °F
M-20L	208	57 °F	28 °F
M-20L	220/240	65 °F	33 °F
M-20L	277	75 °F	38 °F
M-30L	110/120	49 °F	25 °F

Microprocessor limits temperature increase to the factory set temperature



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 the reading against the voltage specified in the Installation Instructions. The center terminal is always the earth ground. The hot and neutral legs, in the case of 110 V heaters, are attached on the two outside terminals.
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 Instructions (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 than 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. In the case of the low flow rate heater it is mandatory that the flow control be attached to the end of the faucet. Check your flow rate to insure proper operation of the heater. Low Flow Rate Models require .4 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 installed 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 per 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

CHRONOMITE
Point of Use Water Heaters
Est. 1966

TERMS, CONDITIONS OF SALES & WARRANTY

Prices: Prices of the Company's Products are subject to change without notice. Quotations are conditioned upon acceptance within 30 days unless otherwise stated and are subject to correction for typographic or clerical errors. Sales order confirmation will be considered accepted by Buyer if objection is not submitted in writing to Chronomite Customer Service within (1) one week of receipt. The sales order confirmation is the governing document. All prices exclude sales, use, occupation, license, excise and other taxes in respect to manufacture or delivery. Unless a proper exemption certificate is furnished to the Company, all such taxes shall be paid by the Buyer to Company at the time of payment.

Term and Conditions of Payment: Terms of payment are **Net 30 from date of invoice.** Past due accounts will be subject to a 2% per month service charge from the date of the invoice. If any proceedings be instructed by or against Buyer under any bankruptcy or insolvency law, or if Buyer shall fail to make timely payment on this or any other order, or if, in the Company's judgment, Buyers financial situation justifies such action, the Company may, at its election, require payment in advance or cancel the order as to any unshipped item and require payment of its reasonable cancellation charges. If Buyer delays completion of manufacture, the Company may elect to require payment according to percentage of completion. Equipment held for Buyer shall be at Buyer's risk and expense. In all cases, regardless of partial payment, title to the Products shall remain in the Company until payment for the Products (including any notes given therefore) has been made in full. Should legal action be necessary to enforce payment of an unpaid invoice, the Buyer will assume full responsibility for any court costs and reasonable attorney fees. All orders are subject to credit check and approval prior to shipment. **Minimum invoice amount $100.00.**

The minimum NET order value is $100 Chronomite / $50 Omni. In the event an order is received under that stated minimum order value, a $25.00 "minimum invoice service charge" will be applied to the order but at no time will the minimum order exceed $100.00 NET before shipping, handling and taxes. All service charges are non-refundable.

Return Goods Authorization: No materials shall be returned without a Return Goods Authorization (RGA) from Chronomite Customer Service. Returns must reference the RGA number and be shipped freight prepaid or the shipment will not be accepted. Credit issued for the return will apply only to future shipments and will be subject to a 35% handling charge. Any cost associated with restoring product to saleable condition will be deducted from the credit and any outgoing freight charges paid by Chronomite. Non-stock and custom fabrications are non-returnable. If an item has been returned under warranty a Chronomite Customer Service Representative will contact you with the results of your inspection and testing.

Delivery: Shipments are F.O.B. Factory, Industry, California or other designated shipping point determined by Chronomite. **Any shipment or delivery dates quoted by the Company are estimated.** The Company shall be obligated to use reasonable efforts to meet such dates. **The Company will in no event be liable for any delays in delivery or failure to give notice of delay,** or for any other failure to perform hereunder due to causes beyond the reasonable control of the Company. Such causes shall include, but not be limited to acts of God, the elements, acts or omissions of manufacturers or suppliers of the Products or parts thereof, acts or omissions of Buyer or civil and military authorities, fires, labor disputes or any other inability to obtain the Products, parts thereof, or necessary power, labor, materials or supplies. The Company will be entitled to refuse to make, or to delay any shipments of the Products if Buyer shall fail to pay when due any payment owed by it to the Company, whether under this or any other contract between the Company and Buyer. Shipments are normally sent prepay or charge. A surcharge of $8.00 handling will be added to each small parcel package shipment.

Claims and Shortages: F.O.B. factory shipments are the full responsibility of the Buyer. Losses or damages must be reported to the carrier immediately. Claims will be filed on orders if the Buyer complies with the following within (5) five days of receipt of shipment; inspect shipment immediately, have delivering carrier inspect shipment, file inspection report with carrier, and send a copy to Chronomite. No claim for failure to receive shipment or shortage will be honored unless Chronomite is notified immediately upon receipt of invoice or within five working days of receipt of shipment, whichever is sooner.

Non-stock and custom fabrications are not subject to cancellation.

Limited Warranty

Chronomite warrants that all of its products are guaranteed against defective material or poor workmanship for a period of one year from date of shipment. Chronomite 's liability under this warranty shall be discharged by replacing without charge F.O.B. City of Industry, California any goods, or part thereof, which appears to the company upon inspection to be of defective material or not of first class workmanship, provided that the claim is made in writing to the company within a reasonable period after receipt of the product.

Exclusion of coverage from this limited warranty:

1. Manufacturer is not liable for any water damage or other damages arising directly or indirectly from/and defect in the Chronomite tankless water heater component part(s) or from its use.
2. Manufacturer is not liable under this limited warranty or otherwise if the water heater has not been installed or maintained in accordance with manufacturers printed instructions or installed with improper installation materials. The water heater or any its component parts have been subject to misuse, neglect, alteration or accident and the water heater has not been installed in accordance with the applicable local plumbing and or building codes and/or regulations.
3. Manufacturer is not liable under this warranty if the water heater has not been continuously supplied with potable water or the waters inlet temperature is above manufacturer recommended maximum temperature or the water heater experiences any water pressure or flow interruptions, normal inlet water pressure is outside of the published specification for the heater, is exposed to any condition that causes the heater to turn on before the air is purged from the heater also known as "dry fire"
4. Manufacturer is not liable if the water heater has been exposed to conditions resulting from floods, earthquakes, winds, fire, freezing, lightning or circumstances beyond the manufacturers control or the water heater has been removed from its original installation or the water heater has been used for other than the intended purpose.

If violation occurs from the stated exclusions of coverage from this limited warranty; owner, and not manufacturer or its agent/ representative, is liable for and shall pay for all field charges for labor or other expenses incurred in the removal and/or repair of the water heater or any expense incurred by owner in order to repair the water heater.

April 2019

Terms, conditions of sales and warranty are subject to change. Always refer to online documentation at www.chronomite.com.

Chronomite is a Member of Morris Group International