HydroGuard® Series LFe480 and LFG480 Lavatory Tempering Valve

Installation Instructions

⚠ WARNING

Read this Manual BEFORE using this equipment.

Failure to read and follow all safety and use information can result in death, serious personal injury, property damage, or damage to the equipment.

Keep this Manual for future reference.

⚠ WARNING

You are required to consult the local building and plumbing codes prior to installation. If the information in this manual is not consistent with local building or plumbing codes, the local codes should be followed. Inquire with governing authorities for additional local requirements.

⚠ WARNING

FAILURE TO COMPLY WITH PROPER INSTALLATION AND MAINTENANCE INSTRUCTIONS COULD CONTRIBUTE TO THE VALVE FAILURE, RESULTING IN INJURY AND/OR DEATH.

TO ENSURE THE ACCURATE AND RELIABLE OPERATION OF THIS PRODUCT, IT IS ESSENTIAL TO:

- Properly design the system to minimize pressure and temperature variations.
- This valve is factory preset. However, it can be adjusted to deliver scalding temperatures. **Check outlet temperature to ensure it does not exceed 105°F (41°C).** Make sure temperature limit stop is properly re-set to maximum 105°F (41°C) following valve maintenance or repair. Tampering with limit stop in any way may result in scalding temperature causing serious bodily harm and/or death.

⚠ WARNING

Need for Periodic Inspection and Yearly Maintenance: Periodic inspection and yearly maintenance by a licensed contractor is required. Corrosive water conditions, inlet temperatures over 200°F (93°C), and/or unauthorized adjustments or repair could render the valve ineffective for service intended. Regular checking and cleaning of the valve's internal components and check stops helps assure maximum life and proper product function. Frequency of cleaning and inspection depends upon local water conditions.



Advanced Thermal Actuation

Description ■

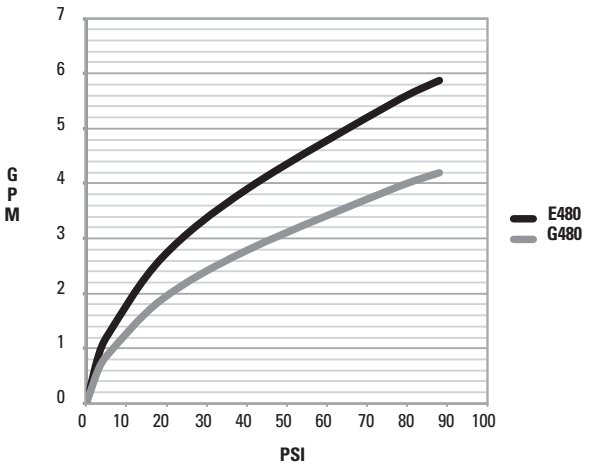
Powers Series LFe480 & LFG480 are designed for lavatory applications where the temperature of the hot water must be controlled for safe, economic use. An advanced thermal actuator quickly senses and compensate for outlet temperature fluctuations induced by water temperature and pressure changes in the supply line.

Specifications ■

Maximum Operating Pressure: ..... 125psi (861 kpa)
Maximum Hot Water Temperature: ..... 180°F (82°C)
Minimum Hot Water Supply Temp.: 5°F (3°C) Above Set Point**
Hot Water Inlet Temperature Range: ..... 120 – 180°F (49-82°C)
Cold Water Inlet Temperature Range: ..... 40 – 80°F (4-27°C)
Temperature Adjustment Range: ..... 80 – 120°F (27-49°C)
Minimum Flow:
LFG480 ..... 0.25 gpm (1.0 lpm)
LFe480 ..... 0.50 gpm (1.9 lpm)
Listing: ..... ASSE 1070 and IAPMO cUPC

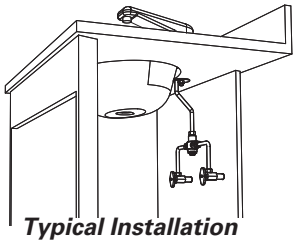
*** With Equal Pressure*

Flow Capacity ■



To Install ■

1. Installation should be in accordance with acceptable plumbing practices. Flush all piping thoroughly before installation. Installation and field adjustment are the responsibility of the installer.
2. Locate suitable place for the tempering valve. Valve should be accessible for service and adjustment and as close to the point-of-use as possible.



Typical Installation

3. Connect hot and cold supplies to valve and outlet of tempering valve to fixture (s) using 1/2" or 3/8" compression connections. For Quick-Connect refer to Quick-Connect installation section.
4. Turn on hot and cold water supplies. If any leaks are observed, tighten connections as necessary to stop leaks before proceeding.
5. Turn on fixture and allow water to flow for 2 minutes. Measure water temperature at the outlet. If water is not at desired temperature, adjust as necessary (see temperature adjustment section). Maximum outlet temperature of 105°F (41°C) is recommended.

Temperature Adjustment ■

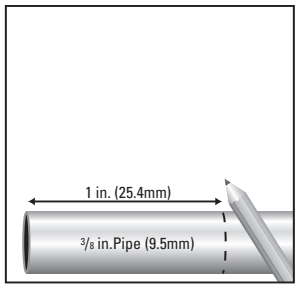
1. Loosen locknut.
2. Turn on fixture and run water for at least two minutes to allow supply temperature to stabilize.
3. Turn temperature stem counter-clockwise for hotter or clockwise for colder outlet temperature.
4. Tighten locknut to prevent accidental or unauthorized temperature adjustment.
5. Re-check outlet temperature.

Repair Kit ■

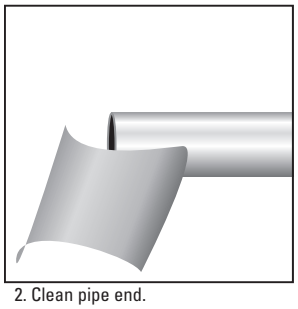
Motor Repair Kit: 480 270

Quick-Connect Installation ■

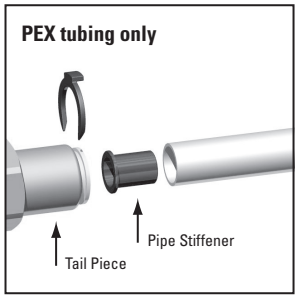
TO CONNECT



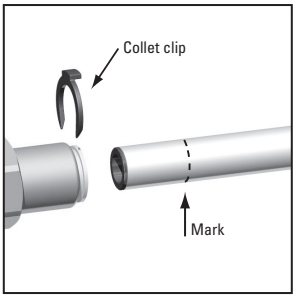
1. Mark pipe as shown. This is pipe insertion depth.



2. Clean pipe end.

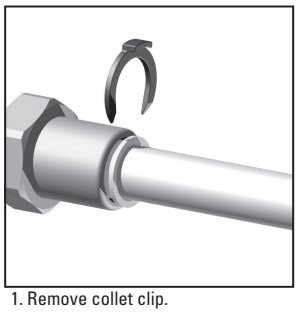


3. If using PEX tubing, insert pipe stiffener (provided) into end of pipe.

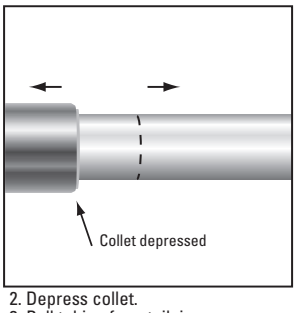


4. Push tubing into tailpiece up to mark.
5. Insert collet clip.

TO DISCONNECT



1. Remove collet clip.



2. Depress collet.
3. Pull tubing from tailpiece.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information: www.watts.com/prop65

Warranty ■

The Seller warrants that the equipment manufactured by it and covered by this order or contract is free from defects in material and workmanship and, without charge, equipment found to be defective in material or workmanship will be repaired, or at Seller's option replaced F.O.B. original point of shipment, if written notice of failure is received by Seller within one (1) year after date of shipment (unless specifically noted elsewhere), provided said equipment has been properly installed, operated in accordance with the Seller's instructions, and provided such defects are not due to abuse or decomposition by chemical or galvanic action. THIS EXPRESS WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, GUARANTEES, OR REPRESENTATIONS, EXPRESS OF IMPLIED. THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. The Seller assumes no responsibility for repairs made on the Seller's equipment unless done by the Seller's authorized personnel, or by written authority from the Seller. The Seller makes no guarantee with respect to material not manufactured by it.

POWERS™

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INSTALLATION INSTRUCTIONS

HydroGuard® T/P Series e480
Motor Replacement, Kit # 480-270

Form II e480R v1

INSTALLATION INSTRUCTIONS

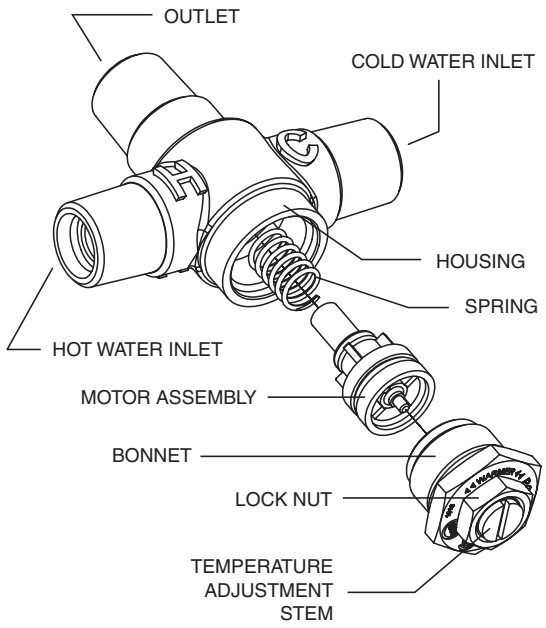
Note:
Installation should be in accordance with accepted plumbing practices. Flush all piping thoroughly before installation.

1. Turn off hot and cold water supplies.
2. Unscrew Bonnet and remove the top assembly.
3. Pull out the motor assembly, make sure spring stay inside the body.
4. Ensure the inside of the body is free of deposits and debris. Clean as necessary.
5. Insert the motor replacement kit into the body.
6. Screw Bonnet into the housing. Tighten it to 100 +/- 10 in-lbs.
7. Turn on the hot and cold water supplies. Check for leaks.
8. Turn on fixture and allow water to flow for 2 minutes. Measure water temperature at outlet. If water is not at the desired temperature, adjust as follows:

TO ADJUST TEMPERATURE

1. Loosen locknut.
2. Turn on fixture and run water for at least two (2) minutes to allow supply temperature to stabilize.
3. Turn temperature adjustment stem counter-clockwise for hotter or clockwise for colder outlet temperature.
4. Tighten locknut to prevent accidental or unauthorized temperature adjustment.
5. Re-check outlet temperature.

Figure 1



CALIFORNIA PROPOSITION 65 WARNING

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California law requires this warning to be given to customers in the State of California.)
For more information: www.wattsind.com/prop65

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