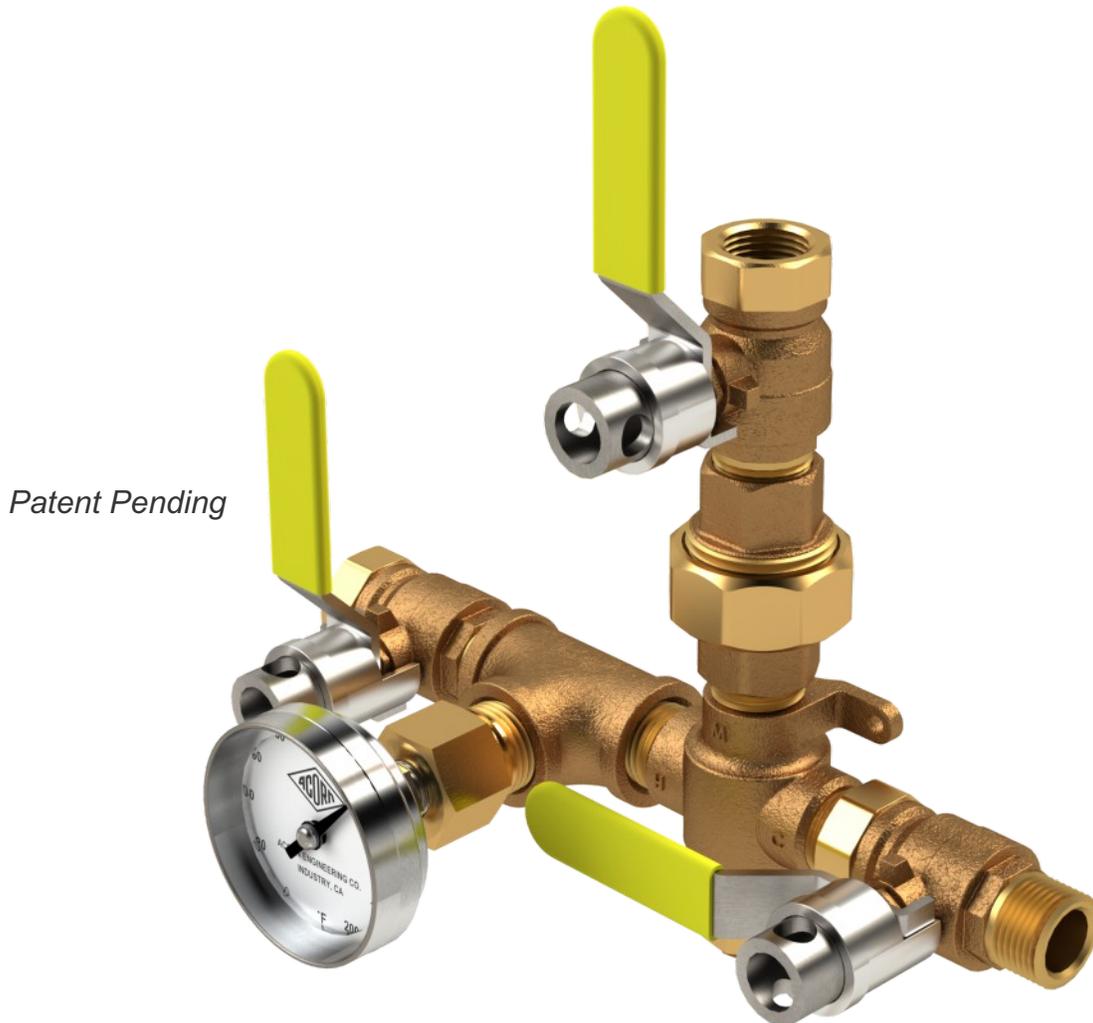




MGI CONTROLS®
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INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS

**TEMPFLOW®
MODEL TZV THERMOSTATIC ZONE VALVE**



Patent Pending

Model TZV-3110 Shown

FOR TECHNICAL ASSISTANCE

1-(847)-604-4773



Federal
Public Law
111-380
(No Lead)

NOTES TO THE INSTALLER:

- 1. Please leave this documentation with the owner of the fixture when finished.**
- 2. Please read this entire booklet before beginning the installation.**
- 3. Check your installation for compliance with plumbing and other applicable codes.**

**WARNING:**

You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

**IMPORTANT**

FAILURE TO READ AND FOLLOW PROPER INSTALLATION AND MAINTENANCE INSTRUCTIONS MAY RESULT IN PRODUCT FAILURE WHICH CAN CAUSE PROPERTY DAMAGE, PERSONAL INJURY AND/OR DEATH.

MGI CONTROLS® IS NOT RESPONSIBLE FOR DAMAGES RESULTING FROM IMPROPER INSTALLATION AND/OR MAINTENANCE. INSTALLATION OF THIS VALVE SHALL BE IN ACCORDANCE WITH UNIFORM PLUMBING CODE.

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

- Properly design the system to minimize pressure and temperature variations.
- Implement an annual maintenance program to ensure proper operation and temperature setting of valve(s).
- This valve is factory preset. However, it can be adjusted. It is the responsibility of the installer and or facility maintenance personnel to make sure valve outlet temperature is properly set.

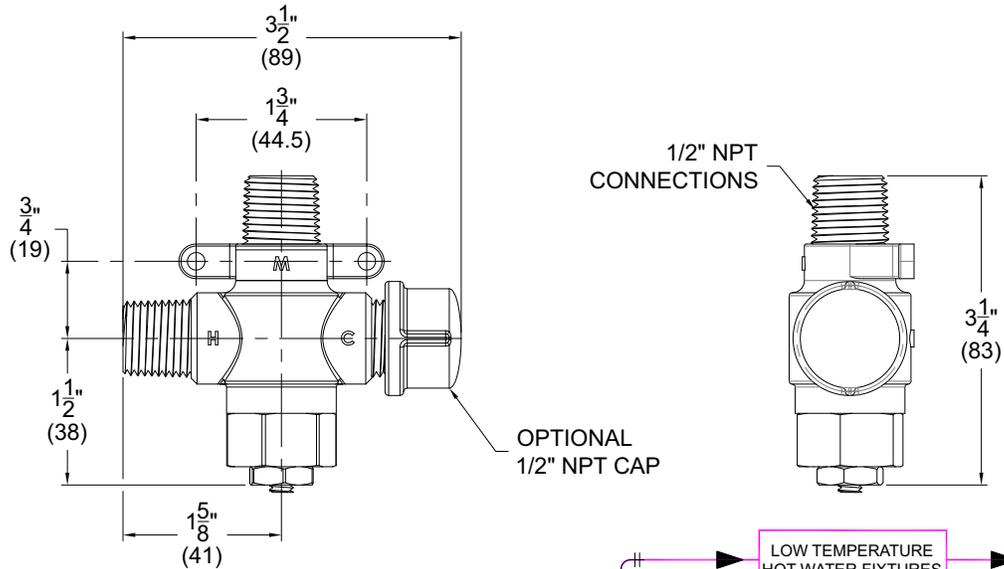
SUPPLIES REQUIRED:

(Not provided by **MGI CONTROLS®**)

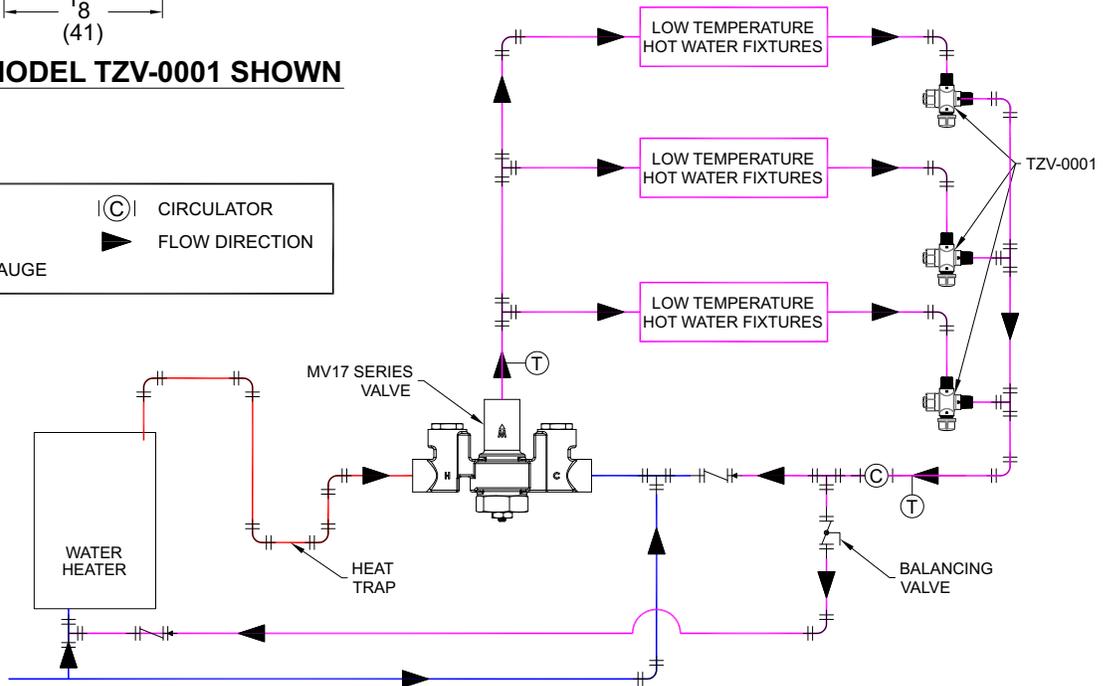
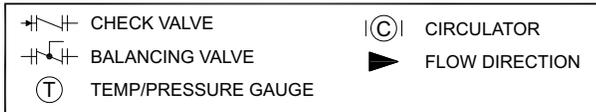
1. Wall anchors, screws, nuts and washers as required.
2. Lead-free solder and flux for sealing water connections.
3. Pipe fittings.
4. 5/8" combination wrench and an Allen wrench.

**IMPORTANT**

- To ensure proper installation, review the manual thoroughly to verify rough-ins before beginning any work.
- Installation and field adjustment are the responsibility of the installer.
- Maximum water pressure is 125 PSI (8.62 bars). Maximum inlet hot water temperature is 180°F (82°C). Temperature adjustment range* is 100°F - 160°F (38°C - 71°C). Valve assembly must be drained prior to being subjected to freezing temperatures. Valve includes integral check valves.



MODEL TZV-0001 SHOWN



TYPICAL PIPING DIAGRAM

Zone Valve(s): The TZV's are factory set to maintain a loop temperature of 110°F. Temperature adjustments can be made in approx. 5°F increments/decrements by rotating the TZV stem one full turn CCW or CW respectively. Be sure to allow enough time for the loop to change temperature and stabilize before readjusting. If recirculation pump deadheading is a concern, it is recommended to add a pump bypass valve or to manually adjust the TZV in the longest loop/zone to full hot. This can later be adjusted to a lower temperature as the system stabilizes and reaches an equilibrium point.

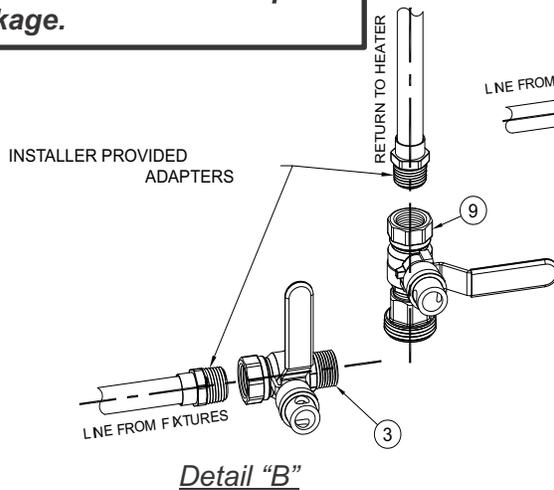
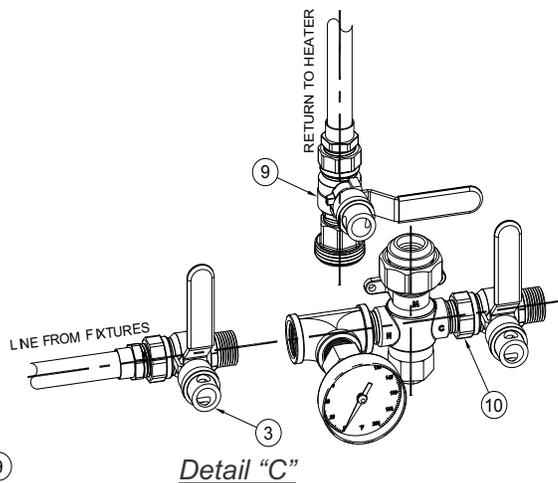
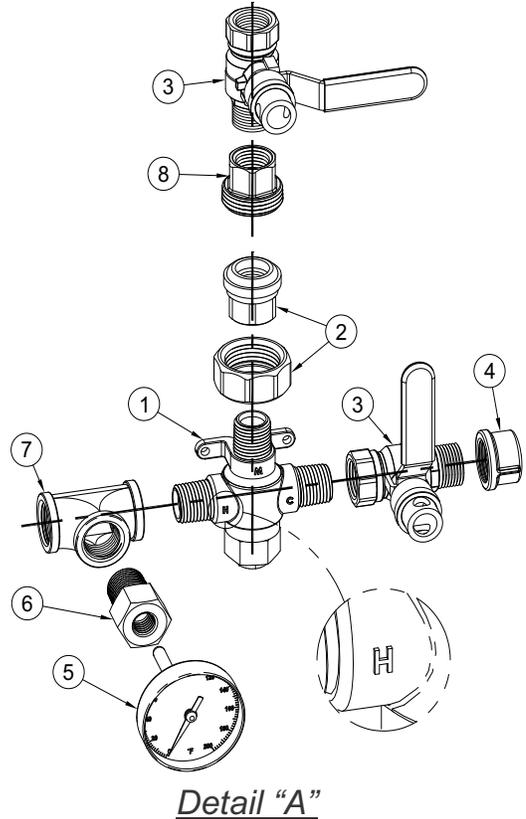
INSTALLATION:

1. Assemble TZV **1** to optional union or union by others, female half **2** as shown. *Detail "A"*.
2. Assemble optional Cap **4** or Ball Valve **3**, or 1/2" NPT Cap or Ball Valve by others, to COLD port.
3. Assemble optional, Temperature Gauge **5** to adapter **6** then to tee **7** or Temperature Gauge and other components by others. After assembled and tightened, assemble to HOT port of TZV **1** as shown.
4. Assemble optional union male half, or by others, **8** to optional ball valve, or ball valve by others **3**.
5. Locate a suitable place to install the TZV at the end of each zone on return line to water heater; accessible for servicing and adjusting.

! IMPORTANT
Ensure water to specific zone is turned off.

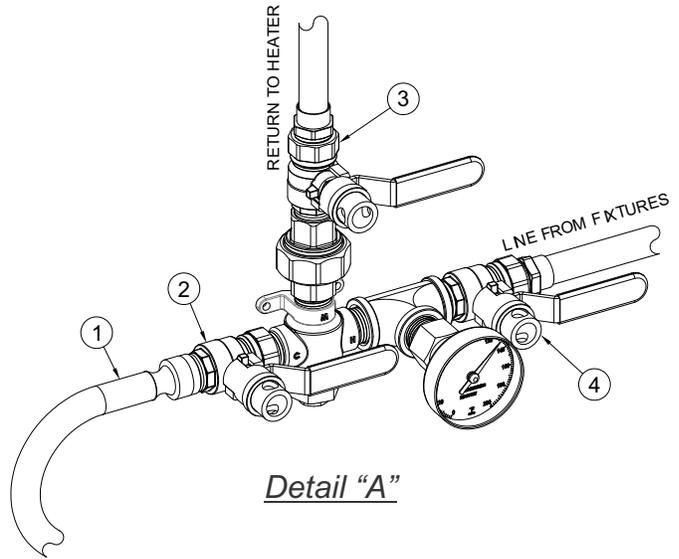
6. Install optional Ball Valve or Ball Valve by others **3**, with union fitting **9** to return line to Water Heater and optional Ball Valve or Ball Valve by others **3** to line coming from fixtures (Zone Leg). *Detail "B"*.
7. Install TZV assembly **10** to optional Ball Valve or Ball Valve by others, **3** on line from fixtures then tighten to optional, Ball Valve or Ball Valve **3** by others with union **9**. *Detail "C"*.

! IMPORTANT
Upon completion of installation check all points of connection for leakage.



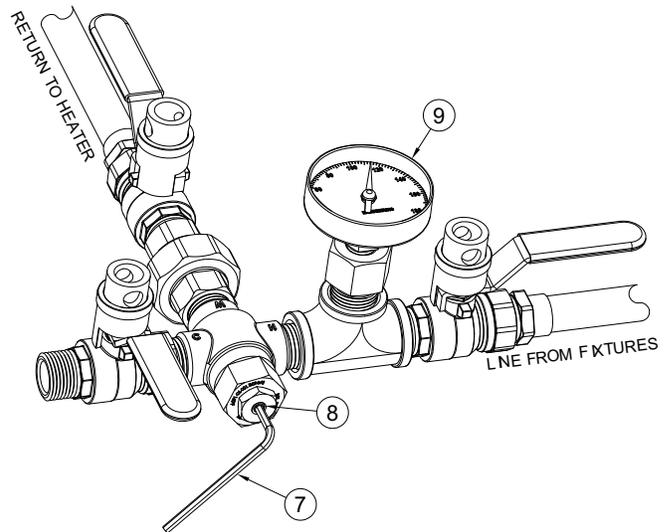
PURGING ZONE:

1. Connect installer provided 1/2" hose **1** to ball valve **2**, on cold port of valve and run to a drain. *Detail "A"*
2. Turn on water to specific zone.
3. With ball valves **2** and **3** closed, slowly open ball valve **4**. *Detail "A"*
4. Slowly open ball valve **2**, allowing the zone to purge any air in the line.
5. Slowly open ball valve **3** to allow the system to be purged of any remaining air.
6. Once a constant flow of water is coming out of the hose **1**, close ball valve **2** and remove hose **1**.



ADJUSTMENT:

1. Loosen locknut **6**. *Detail "B"*
2. Let temperature can stabilize.
3. Using an Allen wrench **7** turn adjustment stem **8** counterclockwise for hotter or clockwise for colder outlet temperature. *Detail "C"*
4. Tighten locknut **6** to prevent any unauthorized or accidental temperature adjustment.
5. Re-check temperature gauge **9**.



! IMPORTANT

The Cold Water Port must be piped with either the optional Cap, or Cap by others, or optional lock-able Ball Valve, or Ball Valve by others. Failure to do so will result in water damage and will not be covered under warranty by **MGI CONTROLS®**.

