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› Taco i100T3S-1 i-Series 3-Way Mixing Valve User Manual

Taco i100T3S-1

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Model: i100T3S-1

1. INTRODUCTION

This manual provides essential instructions for the installation, operation, and maintenance of the Taco i100T3S-1 i-Series 3-Way Mixing Valve. Please read this manual thoroughly before installation and operation to ensure safe and efficient use of the product. Keep this manual for future reference.

2. SAFETY INFORMATION

Important Safety Instructions:

- Always disconnect power before servicing the valve or associated components.
- Ensure all plumbing connections are secure and leak-free to prevent water damage.
- Installation should be performed by a qualified professional in accordance with local codes and regulations.
- Wear appropriate personal protective equipment (PPE) during installation and maintenance.
- Do not exceed the maximum operating pressure or temperature specified for the valve.

3. PRODUCT OVERVIEW

The Taco i100T3S-1 is an i-Series 3-Way Mixing Valve designed for precise temperature control in hydronic systems. This model features 1-inch threaded connections and a setpoint control mechanism, making it suitable for various applications including radiant floor heating.

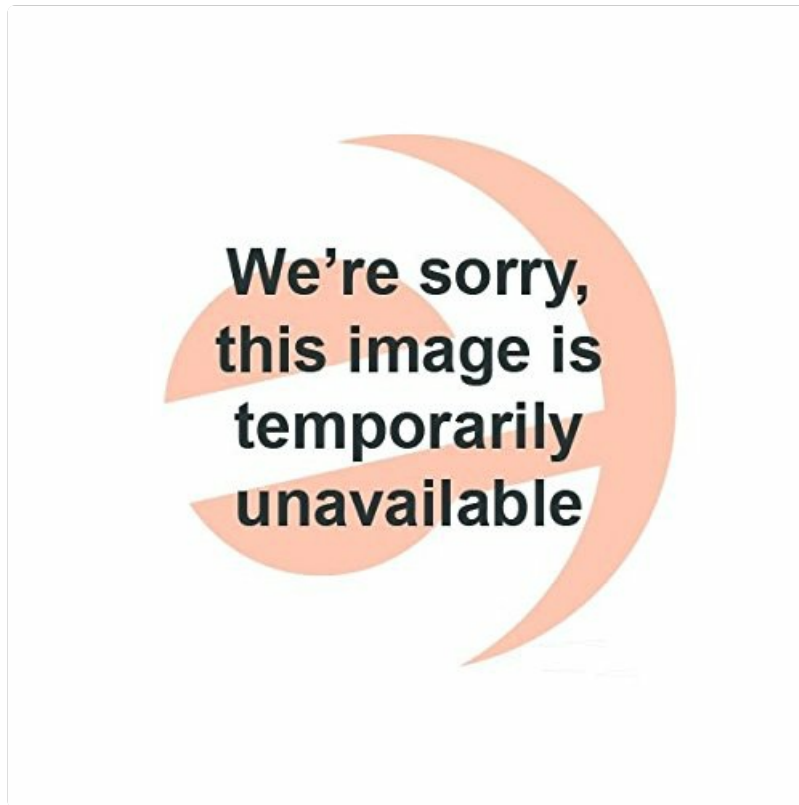


Figure 1: Taco i100T3S-1 i-Series 3-Way Mixing Valve. This image shows the compact design of the valve with its threaded connections visible on the sides and the control mechanism on top.

4. SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance of the mixing valve. Follow these steps carefully:

1. **System Preparation:** Ensure the system is depressurized and drained before beginning installation.
2. **Valve Placement:** Install the mixing valve in an accessible location, ensuring proper orientation as indicated by flow arrows on the valve body.
3. **Connections:** Connect the hot water supply, cold water supply, and mixed water outlet to the corresponding 1-inch threaded ports on the valve. Use appropriate pipe sealant or Teflon tape for all threaded connections to prevent leaks.
4. **Sensor Installation (if applicable):** If using an external temperature sensor, install it according to the system design, typically on the return line for radiant floor heating applications.
5. **System Fill and Purge:** After all connections are made, slowly fill the system and thoroughly purge air to prevent cavitation and ensure proper operation.
6. **Leak Check:** Inspect all connections for leaks once the system is pressurized.

5. OPERATING INSTRUCTIONS

The i100T3S-1 mixing valve is designed for automatic temperature control. Once installed and the system is operational, the valve will maintain the desired setpoint temperature.

- **Initial Setpoint Adjustment:** Refer to your system's specific requirements for the initial temperature setpoint. Adjust the control mechanism on the valve to achieve the desired mixed water temperature.
- **Monitoring:** Periodically monitor the mixed water temperature to ensure it is within the desired range.
- **Temperature Stability:** Allow the system to stabilize after any setpoint adjustments.

6. MAINTENANCE

Regular maintenance ensures the longevity and reliable performance of your mixing valve.

- **Annual Inspection:** Annually inspect the valve for any signs of leaks, corrosion, or damage.
- **Cleaning:** If the system water quality is poor, sediment may accumulate. The valve may require periodic cleaning. Consult a qualified technician for internal cleaning procedures.
- **Functionality Check:** Verify that the valve is responding correctly to temperature changes and maintaining the setpoint.

Note: Do not attempt to disassemble the valve unless you are a qualified service technician.

7. TROUBLESHOOTING

If you encounter issues with your Taco i100T3S-1 mixing valve, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Inconsistent mixed water temperature	<ul style="list-style-type: none">• Incorrect setpoint adjustment• Air in the system• Sediment buildup• Fluctuating supply temperatures	<ul style="list-style-type: none">• Adjust setpoint as needed.• Purge air from the system.• Clean the valve (consult technician).• Verify stable hot and cold water supply.
No mixed water flow	<ul style="list-style-type: none">• Closed isolation valves• Blocked inlet/outlet• Valve malfunction	<ul style="list-style-type: none">• Open all isolation valves.• Check for obstructions in piping.• Contact a qualified technician.
Leaks at connections	<ul style="list-style-type: none">• Improperly tightened connections• Damaged sealant/tape	<ul style="list-style-type: none">• Tighten connections carefully.• Reapply pipe sealant or Teflon tape.

If the problem persists after attempting these solutions, contact a qualified HVAC or plumbing technician for assistance.

8. SPECIFICATIONS

Key specifications for the Taco i100T3S-1 i-Series 3-Way Mixing Valve:

- **Model:** i100T3S-1
- **Brand:** Taco
- **Connection Type:** 1-inch Threaded
- **Valve Type:** 3-Way Mixing Valve
- **Control:** Setpoint
- **Part Number:** i100T3S-1
- **UPC:** 687752339253
- **Manufacturer:** Taco
- **Date First Available:** June 15, 2011

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Taco website or contact their customer service department. Keep your purchase receipt as proof of purchase for warranty claims.

Manufacturer: Taco

Website: www.taco-hvac.com (Example link, actual link may vary)

