













IMPORTANT INSTRUCTIONS

Read all instructions before installing or using this product.

SAVE THESE INSTRUCTIONS

When using this product, especially when children are present, basic safety precautions should always be followed, including the following:

-  **WARNING: Risk of scalding.** High water temperature can cause severe burns. Set the water temperature at or below 120°F (49°C) following the adjustment procedure in this guide.
-  **WARNING: Risk of scalding or other severe injury.** Before completing the installation, the installer must set the maximum water temperature setting of this valve to minimize the risks associated with scalding hazards according to ASTM F 444.
-  **WARNING: Risk of product scalding.** Always verify that the water temperature is safe before you enter the water flow.
-  **CAUTION: Risk of product damage.** Qualified technicians must install the product according to the instructions.
-  **CAUTION: Risk of scalding.** This device has been calibrated at the factory to ensure a safe maximum water temperature. Any variance in settings or water inlet conditions from those used during factory calibration may raise the discharge temperature above the safe limit, and may present a scalding hazard. Responsibility for installation and adjustment of this device in accordance with these instructions lies with the installer.
-  **CAUTION: Risk of product damage.** Do not apply excessive heat near the valve or apply flux or acids directly onto the valve. This valve contains plastic and rubber components that will melt if heat is directly applied.
-  **CAUTION: Risk of product damage.** Avoid performing any unspecified modifications to the product or its accessories. Use only genuine Kohler Co. replacement parts during servicing.
-  **CAUTION: Risk of product damage.** If the product is disassembled during installation or service, verify that all connections are tight and check for leaks upon completion.
-  **CAUTION: Risk of product damage.** Do not install any external outlet flow control. Use only KOHLER brand recommended outlet fittings.
-  **CAUTION: Risk of product damage.** Avoid adjusting the temperature control rapidly while using the product. When altering the water temperature while in use; always check the temperature before continuing to use the product.
-  **CAUTION: Risk of product damage.** Isolate the water supplies to the product if not used for a long period. Drain the product or pipework if at risk of freezing during this period.
-  **CAUTION: Risk of product damage.** Avoid applying excessive force to plumbing connections. Provide mechanical support when making plumbing connections.

NOTICE: Do not apply petroleum-based lubricants to the valve components, as damage may result.

NOTICE: Inlet and outlet threaded joint connections should be made with plumbers PTFE tape or liquid sealant. Oil-based, non-setting compounds should not be used.

Follow all local plumbing and building codes.

Avoid switching the product OFF and ON while standing in the water flow.


Descale the shower head regularly to prevent blockages that may affect showering performance.

Install the product unit in a position that allows easy access for maintenance.

The installer is responsible for adjusting the maximum water temperature of this valve according to instructions in this guide.

Factory Calibrated Inlet Conditions:	
Hot and cold water pressure	43.5 psi (3 bar)
Hot water supply temperature	145°F (63°C)
Cold water supply temperature	55°F (13°C)
If inlet conditions differ from those used during factory calibration, recalibration of the valve may be necessary after installation. The installer must check the mixed flow temperature after installation, and adjust the valve as needed according to the instructions.	

Site Preparation Requirements

 **WARNING: Risk of injury or product damage.** Do not install the product with reversed inlets. If installed incorrectly, the product will deliver dangerously unstable water temperatures.

NOTE: Before making any adjustments to the product, operate the temperature control from maximum hot to cold. Verify that the hot and cold water flows correctly from the product outlet. Repeat this process after you making any adjustments.

NOTE: Verify that the hot water temperature is at least 131°F (55°C). Also, confirm that the water supply is sufficient.

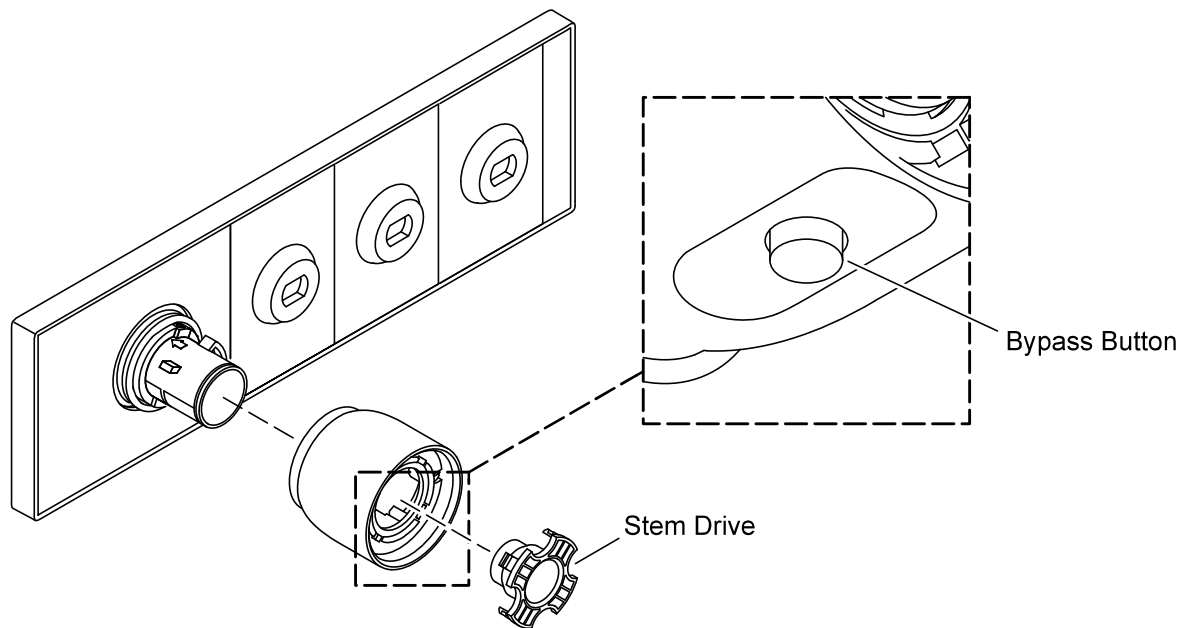
NOTE: Maximum achievable temperature is 120°F (49°C).

NOTE: Maintain the same pressure in the hot water supply and the cold water supply.

Maximum Temperature Setting: Before using the product, check that the maximum temperature is safe. The factory has preset the temperature to a safe level for most systems. However, site conditions or user preferences may require you to reset it.

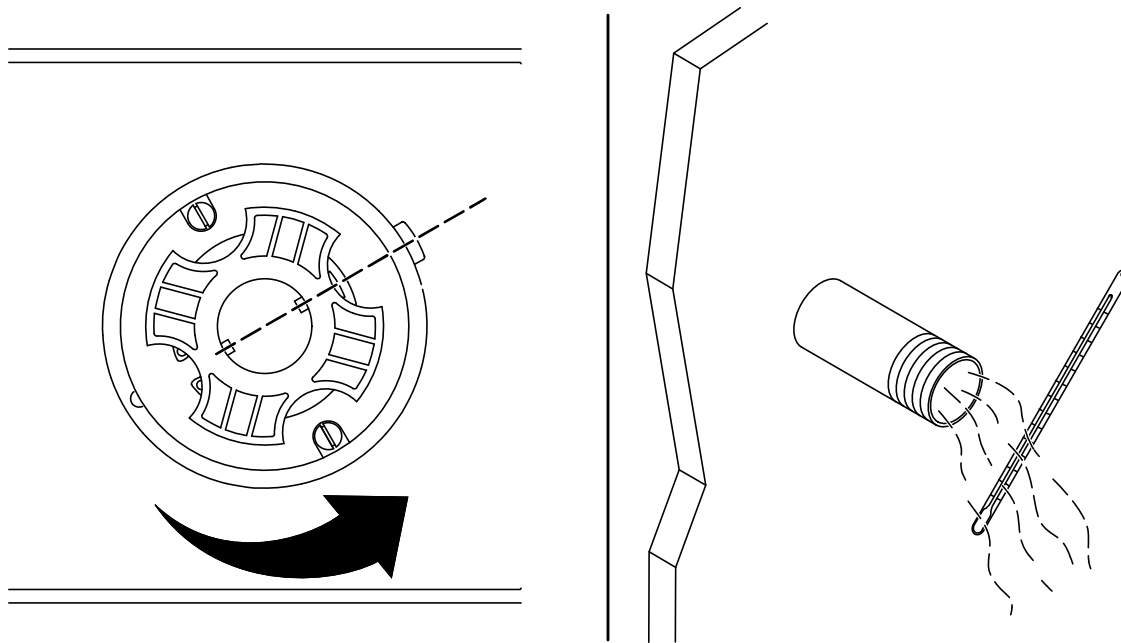
Site Prerequisites:	
Pressure:	
Minimum Maintained Pressure	2.90 psi (2 bar)
Maximum Maintained Pressure	7.25 psi (5 bar)
Temperature:	
Thermostatic Control Range	95°F (35°C) to 120.2°F (49°C). This can be achieved with supplies of 59°F (15°C) cold water, 149°F (65°C) hot water, and nominally equal pressures.
Recommended Hot Water Supply Temperature	140°F (60°C) to 149°F (65°C)
Minimum Hot Water Supply Temperature	131°F (55°C). Valve can tolerate up to 158°F (70°C) briefly; limit to 149°F (65°C) for safety. Warm up feature may not work if the hot water inlet temperature is below 131°F (55°C).
Minimum Recommended Temperature Difference (Hot Supply Vs Outlet)	53.6°F (12°C) at desired flow rates
Cold Water Supply Temperature Range	41°F (5°C) to 77°F (25°C)
Plumbing Connections:	
Hot Water Supply	3/4" (19 mm) female NPT inlet and 1/2" (12.7 mm) female NPT outlet pipe with insulation – nut/retaining ring connection
Cold Water Supply	3/4" (19 mm) female NPT inlet and 1/2" (12.7 mm) female NPT outlet pipe – nut/retaining ring connection

1. Install the Control Knob



- ☐ Position the control knob on the limit stop with the bypass button pointing down.
- ☐ Press the stem drive onto the control knob.

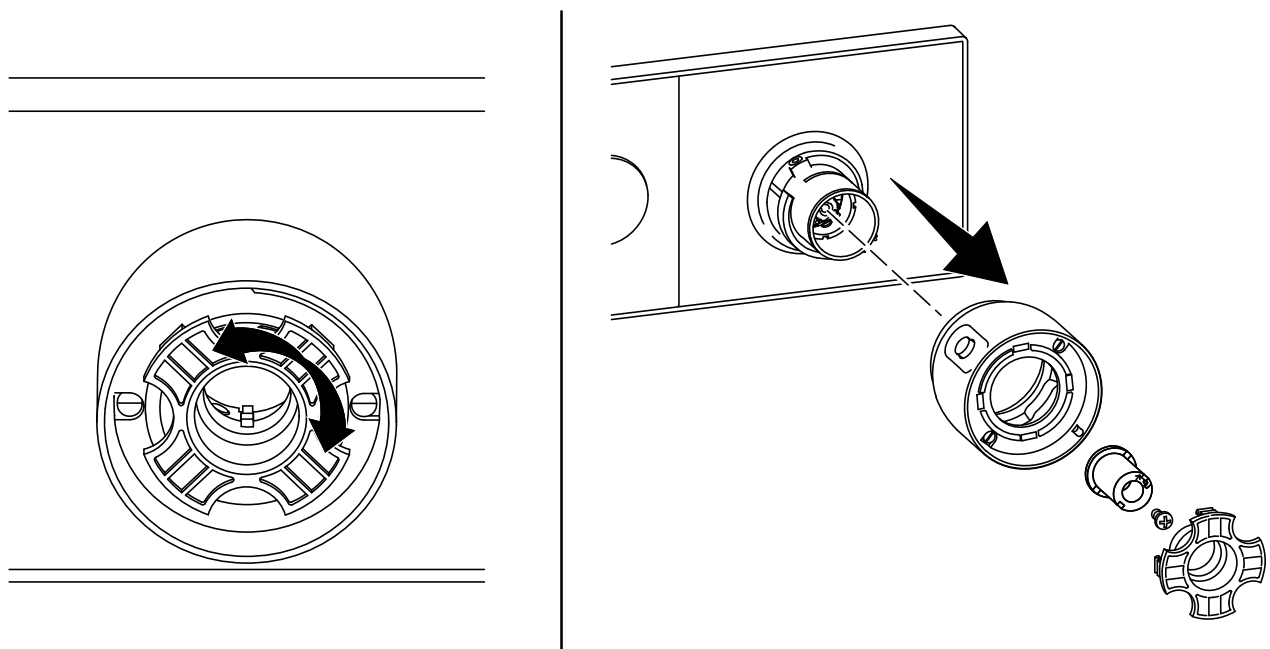
2. Check the Water Temperature



WARNING: Risk of personal injury. If the water temperature is set too high, scalding will occur. The water temperature should never be set above 120°F (49°C).

- ☐ Rotate the control knob counterclockwise until the knob stops and the bypass button is in the two o'clock position.
- ☐ Press one of the outlet buttons to turn ON the water.
- ☐ Allow the water to flow for several minutes to stabilize the water temperature.
- ☐ Hold a thermometer in the water stream to check the temperature.
- ☐ If the water temperature stabilizes at or just below 120°F (49°C), continue to the “Install the Control Knob Components” section.

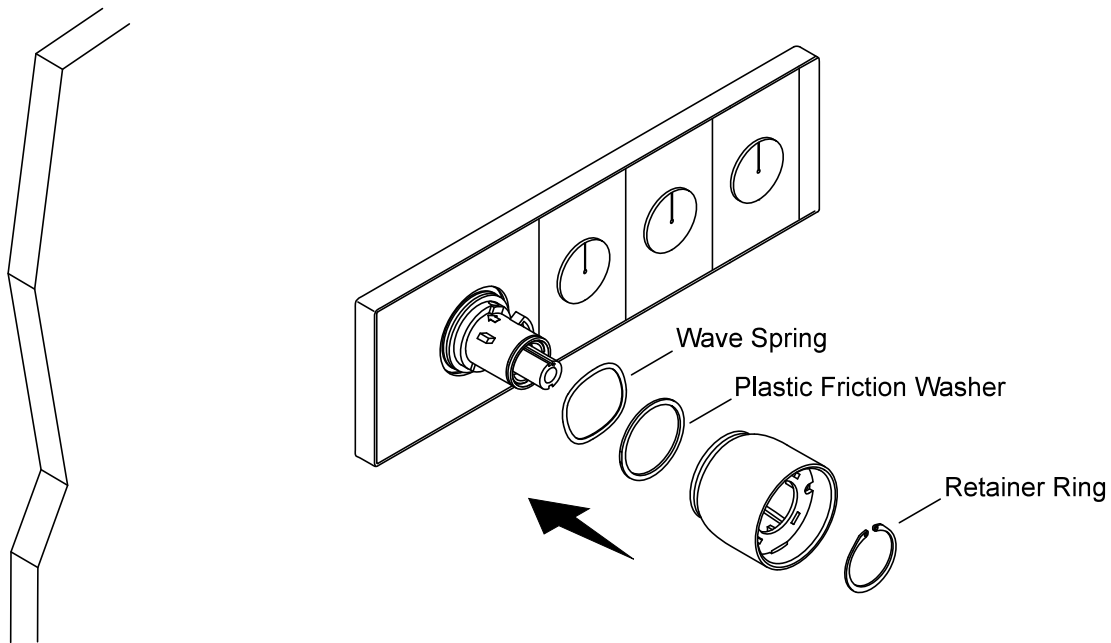
3. Set the Water Temperature



NOTE: The following step is only required if the water temperature at the high temperature limit stop is too low or exceeds 120°F (49°C).

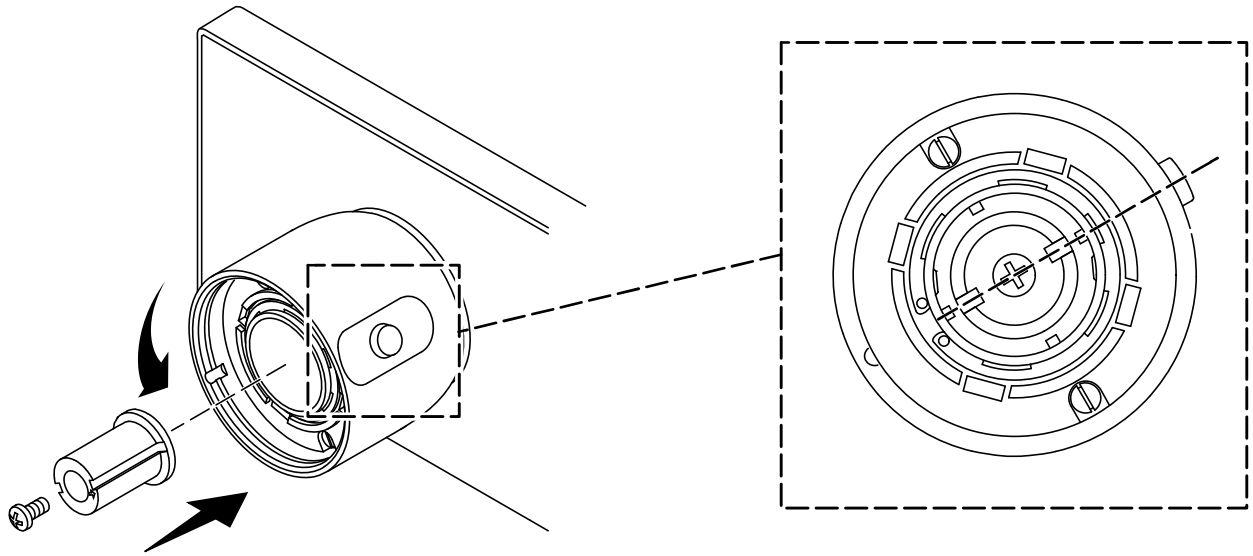
- ☐ Separate the stem drive from the control knob.
- ☐ Using the stem drive, rotate the stem extension to increase or decrease the water temperature until the temperature stabilizes at or just below 120°F (49°C).
- ☐ Remove the stem drive, screw, and stem extension once the desired water temperature is reached.
- ☐ Turn OFF the water.
- ☐ Remove the control knob from the valve.

4. Install the Control Knob Components



- ☐ Install the wave spring and the plastic friction washer.
- ☐ Reinstall the control knob with the bypass button pointing down.
- ☐ Install the retainer ring.

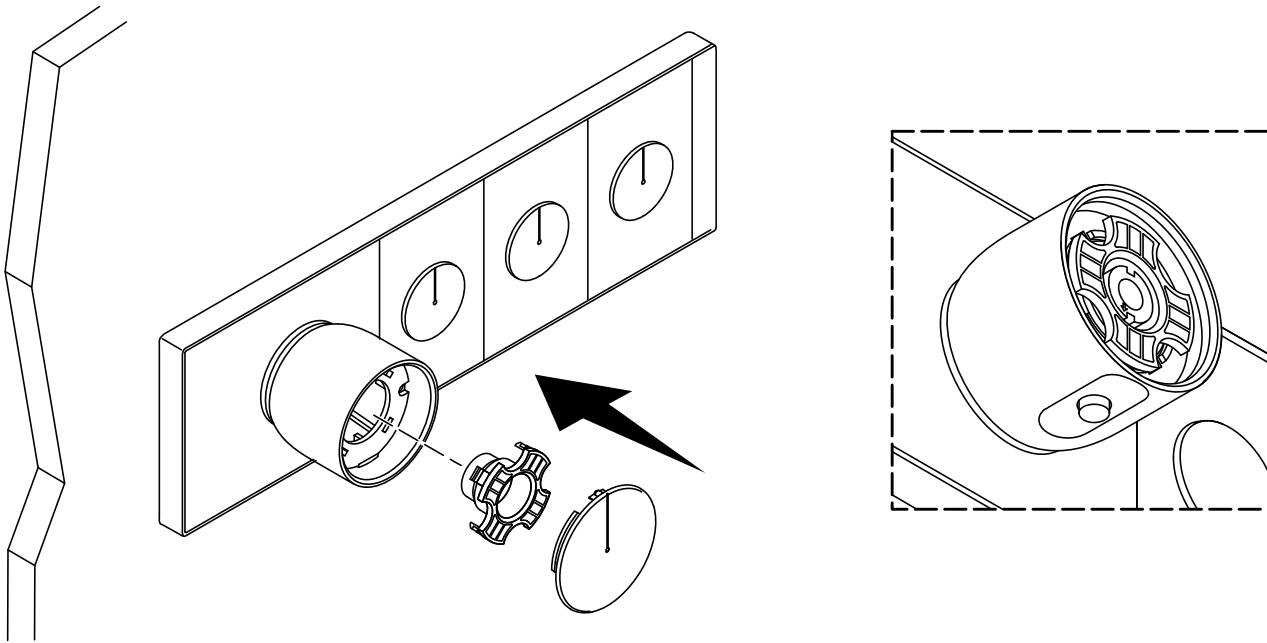
5. Reinstall the Stem Extension



NOTE: If the maximum temperature did not need to be adjusted, proceed to the "Complete the Installation".

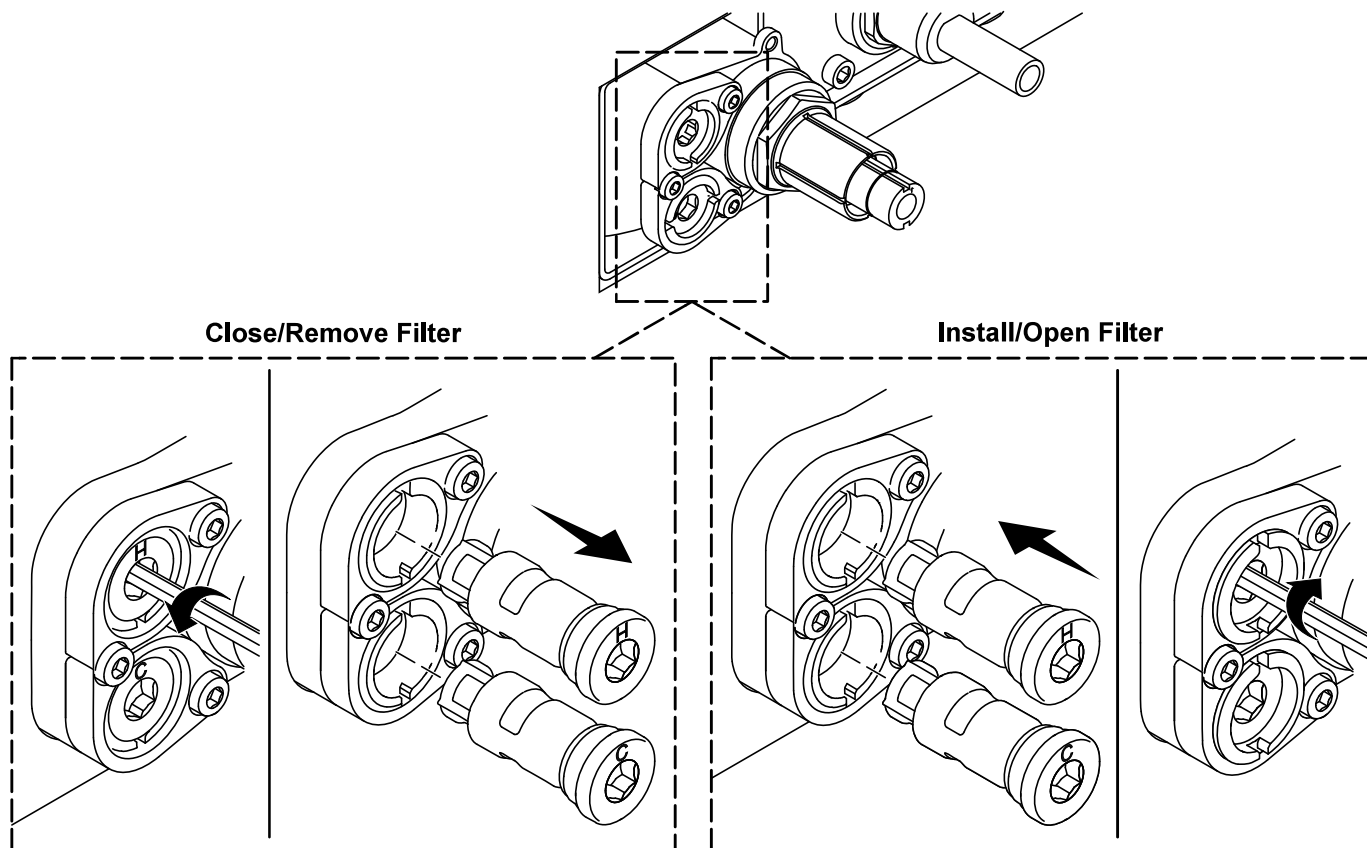
- ☐ Press in the bypass button and turn the control knob counterclockwise until the knob engages with the high temperature stop.
- ☐ Reinstall the stem extension with the grooves aligned with the bypass button.
- ☐ Secure the stem extension with the screw.

6. Complete the Installation



- ☐ Reinstall the stem drive.
- ☐ Rotate the control knob until the bypass button points down.
- ☐ Repeat steps "Check the Water Temperature" to "Complete the Installation" as needed to increase or decrease the maximum water temperature.
- ☐ Install the cap onto the control knob.
- ☐ Check the operation of the temperature control knob, bypass button, and high temperature limit stop setting.

Close/Open the Filter Stops



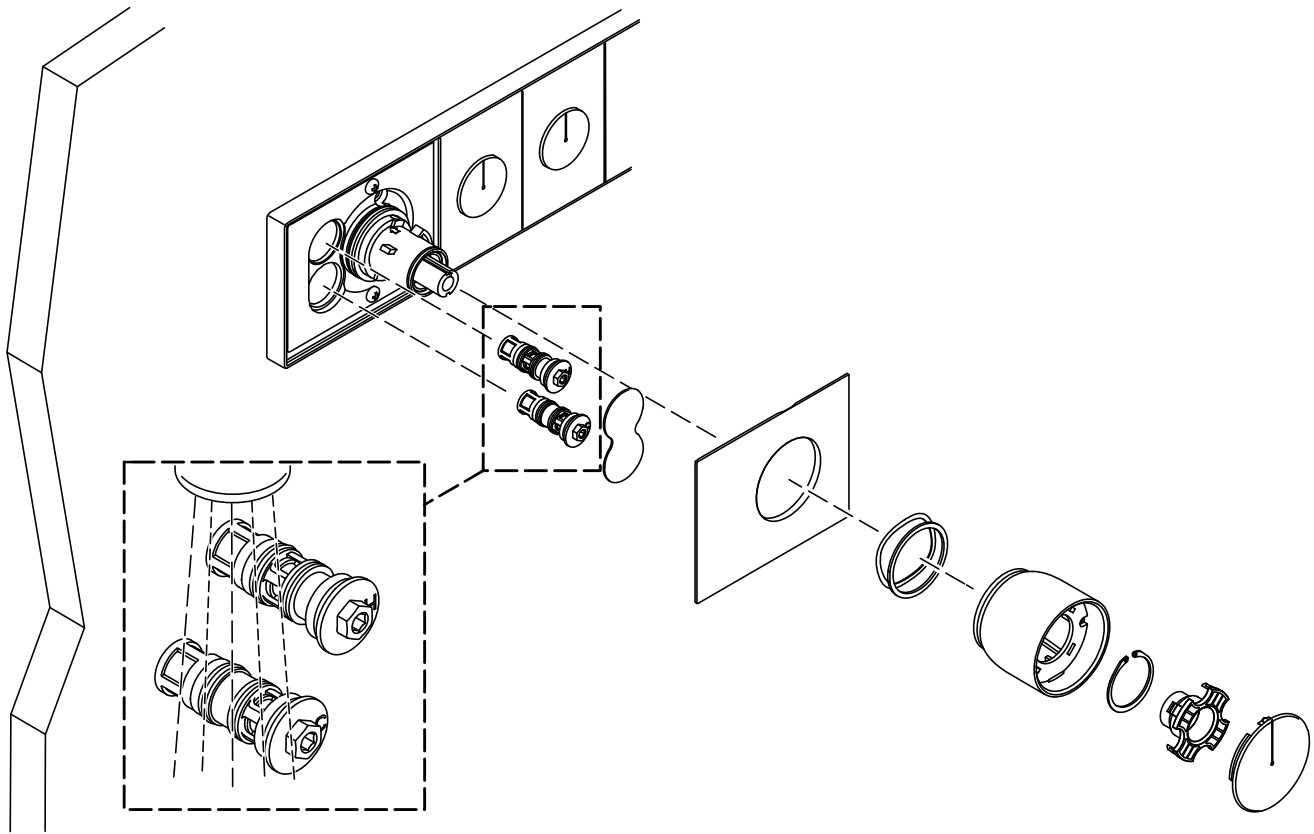
Close/Remove Filter

- ☐ **Close Filter Stop:** Using a hex wrench or hex bit, rotate the filter assembly counterclockwise until the filter stop body is tight. This closes the filter stop.
- ☐ **Remove Filter:** Continue to rotate the filter assembly counterclockwise until the filter breaks free from the filter stop body. Rotate the filter counterclockwise until the filter can be removed.

Install/Open Filter

- ☐ **Install Filter:** Insert the filter into the filter stop body. Rotate the filter clockwise until the filter is fully threaded into the filter stop body.
- ☐ **Open Filter Stop:** Continue rotating the filter and filter stop body clockwise until the filter stop body cannot rotate anymore. The filter stop body is now open.

Cleaning the Screens



NOTE: The cartridges are not interchangeable. Make note of the hot and cold positions during removal.

- ☐ Turn OFF the water supply to the valve.
- ☐ Remove the control knob components.
- ☐ Remove the trim plate and the valve plug.
- ☐ Unthread the cartridges from the valve. Note the hot and cold positions for reinstallation.
- ☐ Rinse any debris from the filter screens.
- ☐ Inspect the check valve and O-rings. Replace as necessary.
- ☐ Reinstall the cartridges in the proper ports.
- ☐ Reinstall the valve plug and trim plate.
- ☐ Reinstall the control knob components.
- ☐ Turn ON the water supply to the valve.

