

TO-THIL-85 & TO-THQIL-85

1/2" Thermostatic Valve Trim with Single Volume Control Installation Instructions

CALIFORNIA FAUCETS RECOMMENDS THAT ALL PLUMBING PRODUCTS BE INSTALLED BY A LICENSED PROFESSIONAL



TO-THIL-85



TO-THIL-85B



TO-THIL-85W



TO-THQIL-85



TO-THQIL-85B



TO-THQIL-85W

IMPORTANT: Instructions to the Installer

Please read these instructions, fill in blanks below, and then give these instructions to the end user.

WARNING: Risk of Scalding

This valve **MUST** have the TEMPERATURE SETTING verified during installations. The **INSTALLER** is responsible for installing the valve and setting of water temperature in accordance with these instructions.

THIS THERMOSTATIC VALVE HAS BEEN PRESET

BY _____

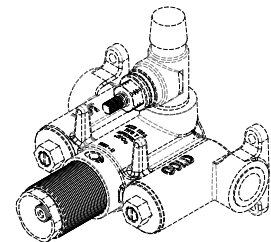
OF _____

TO A MAXIMUM DISCHARGE TEMPERATURE OF _____ °F.

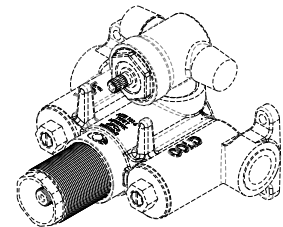
ANY CHANGES TO THIS SETTING MAY INCREASE THE DISCHARGE TEMPERATURE AND COULD RISK SCALDING OF END USER.

DATE _____

CAUTION: Danger of scald injury. Valve can be recalibrated to provide higher temperature water. This valve has been preset at the factory to provide a range of water temperatures. Any change in settings or water inlet conditions from those used during calibration at the factory may raise the outlet temperature and may cause scalding. The responsibility for the proper installation and any recalibration of this valve lies with the installer.



TH51-R
(ROUGH)

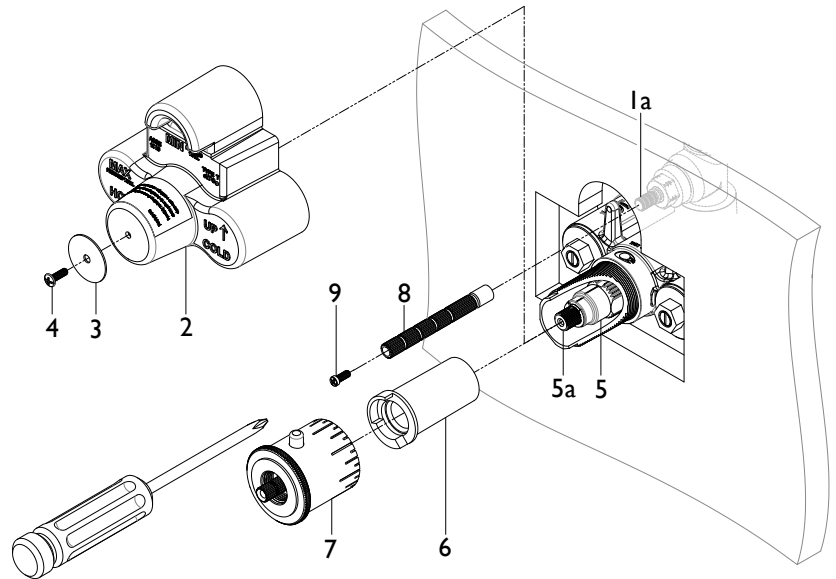
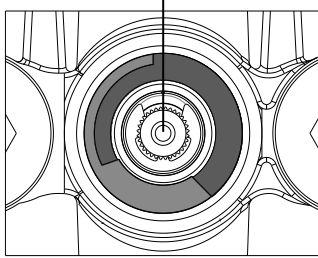


TH51D2-R
(ROUGH)

I

REMOVING MUDGUARD

- Remove MUDGUARD SCREW (4), WASHER (3) and MUDGUARD (2) from installed VALVE (1)
- Slide plastic TEMPERATURE LIMIT STOP (6) onto thermostatic CARTRIDGE (5) with thin wall positioned slightly before 12 o'clock as shown
- Temporarily place BONNET (7) onto thermostatic CARTRIDGE STEM (5a)
- Place STEM (8) onto STOP/VOLUME CONTROL (1a) and secure STEM (8) with STEM SCREW (9)

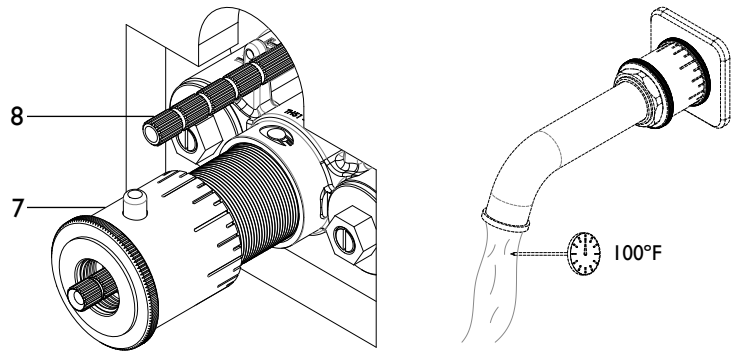


2

SETTING TEMPERATURE

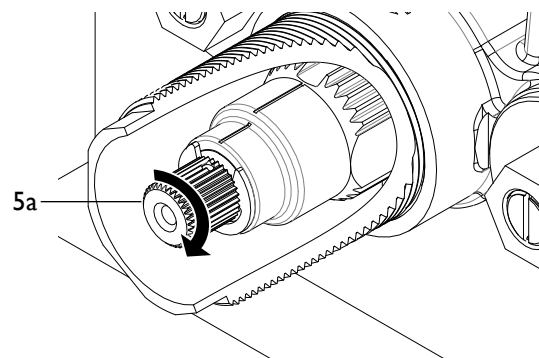
Front view of TEMPERATURE LIMIT STOP

- With both hot and cold water supplies on, open STOP/VOLUME CONTROL (1a) to one output device
- Use temperature measuring device to confirm temperature is 100°F when BONNET (7) button is positioned straight up at 12 o'clock as shown
- When button on BONNET (7) is depressed and rotated full left (CCW), the maximum temperature discharged from valve will be 115°F (**Note:** Follow all applicable local plumbing codes when setting maximum discharge water temperature)
- Carefully remove BONNET (7) and place aside until trim is installed



Note: If temperature is not 100°F with BONNET (7), button at 12 o'clock, the CARTRIDGE STEM (5a) must be rotated to change temperature setting (clockwise (CW) for cooler & counter-clockwise (CCW) for warmer)

WARNING: Forcibly rotating thermostatic cartridge stem prior to installing handle trim will damage cartridge and void warranty.



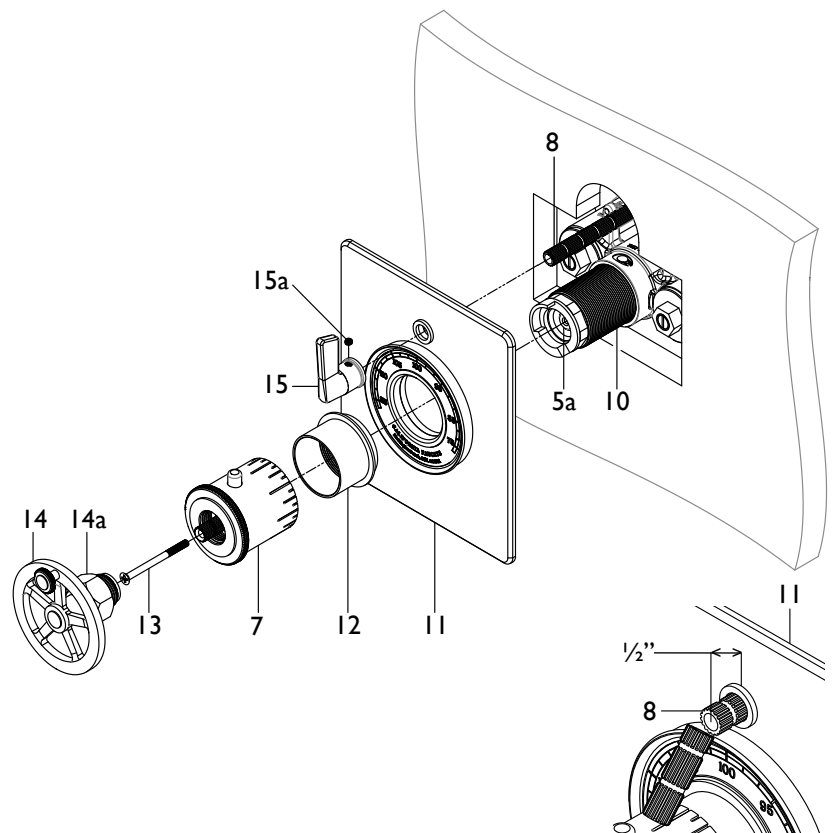
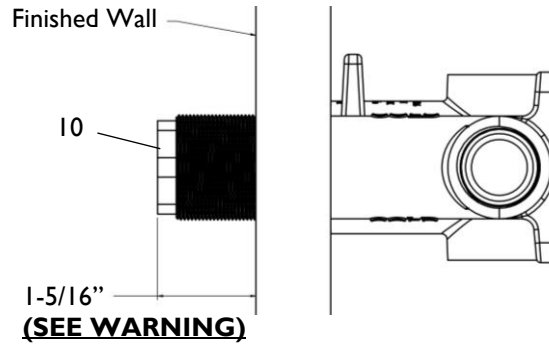
Rotate CW for Cooler (shown)
Rotate CCW for Warmer

3

INSTALLING TRIM

WARNING: If distance between finish wall & end of CARTRIDGE NUT (10) is less than 1-5/16", an extension kit (not included) **MUST** be used; **DO NOT** loosen CARTRIDGE NUT (10) to extend length as this will cause valve to not operate properly & lead to possible flood

- Position FACEPLATE (11) onto cartridge NUT (10) with the 100° marking positioned straight up at 12 o'clock as shown
- Install SLEEVE (12) onto cartridge NUT (10) and tighten to secure FACEPLATE (11) against shower wall
- Place BONNET (7) onto thermostatic CARTRIDGE STEM (5a)
- Secure BONNET (7) with SCREW (13)
- Place HANDLE (14) onto BONNET (7) and tighten HANDLE NUT (14a)
- Cut volume control STEM (8) 1/2" from surface of FACEPLATE (11)
- Place VOLUME CONTROL HANDLE (15) onto volume control STEM (8) and tighten SETSCREW (15a)



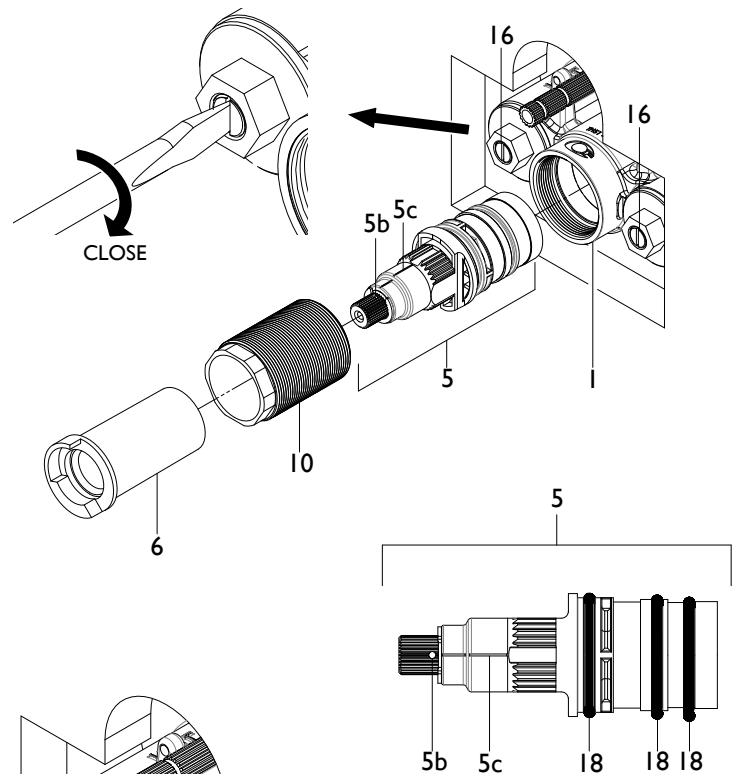
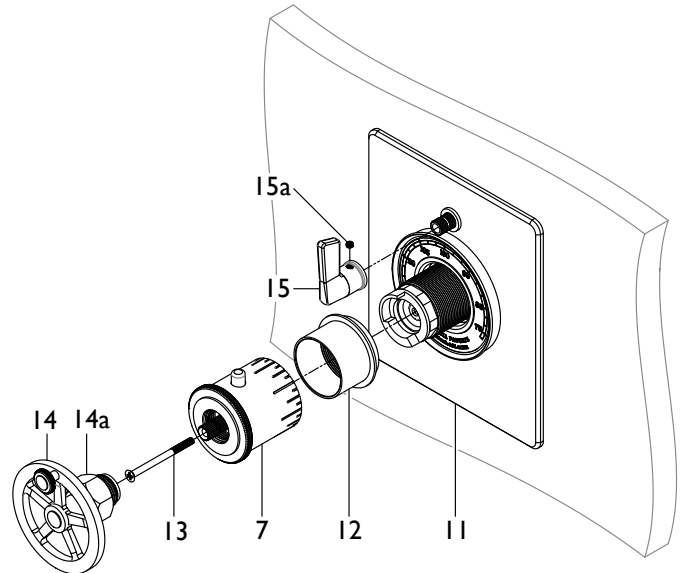
The thermostatic cartridge has built-in screens to prevent debris from affecting proper operation of anti-scald protection. Debris may build up on screens which will affect water flow and require occasional service.

Thermostatic Cartridge Service

- Loosen HANDLE NUT (14a) and SETSCREW (15a) then remove HANDLE (14), SCREW (13), BONNET (7), SLEEVE (12) and FACEPLATE (11)
- Shut off water supply to thermostatic cartridge by turning hot & cold SERVICE STOP SCREW (16) clockwise until screw stops
- Remove plastic TEMPERATURE LIMIT STOP (6) from thermostatic CARTRIDGE (5)
- Remove cartridge NUT (10) from the BODY (1)
- Gently pull thermostatic CARTRIDGE (5) out of BODY (1) (rotating cartridge while pulling may assist in removal)
- Rinse cartridge screens under running water to remove any possible debris
- Prior to installing thermostatic CARTRIDGE (5) into BODY (1), apply a thin film of non-petroleum based grease onto O-RING (18)
- Align thermostatic cartridge stem INDENTATION (5b) or ink line with thermostatic cartridge GROOVE (5c) and insert thermostatic CARTRIDGE (5) into BODY (1) with thermostatic cartridge GROOVE (5c) positioned straight up at 12 o'clock
- Tighten cartridge NUT (10) to 10 ft-lbs
- Open water supply to thermostatic cartridge by turning hot & cold SERVICE STOP SCREW (16) counter-clockwise (outward) until screw stops
- See **2** SETTING TEMPERATURE
- See **3** INSTALLING TRIM

Check Valve Service

- Shut off water supply to valve inlets at main or valve upstream from BODY (1)
- Remove check VALVE (17) from BODY (1)
- Rinse check VALVE (17) under running water
- Prior to installing check VALVE (17) into BODY (1), apply a thin film of non-petroleum based grease onto O-RING (19)
- Tighten check VALVE (17) to 10 ft-lbs
- See **2** SETTING TEMPERATURE
- See **3** INSTALLING TRIM



WARNING: Forcibly rotating thermostatic cartridge stem prior to installing handle trim will damage cartridge and void warranty.

