

## 3371

# ExactTemp Service Manual



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HELPFUL TOOLS					
5/8″ Soc	ket				

S/O SOCIEC		
1-1/4″ Socket		
Small Flat Head Screwdriver		
Phillips Head Screwdriver		
Channel Locks		
Thermometer		
Needle Nose Pliers		
Safety Glasses		

### LEGAL/DISCLAIMER/SAFETY



**CAUTION** — TIPS FOR REMOVAL OF OLD FAUCET: Always turn water supply OFF before removing existing faucet or disassembling the valve. Open faucet handle to relieve water pressure and ensure that complete water shut-off has been accomplished.

### FLUSHING

Flush supply lines prior to installation is strongly recommended to prevent malfunction of thermostatic cartridge.

#### WARNING: Risk of scalding

Varying the calibration of this thermostatic valve to increase water temperature increases the risk of injury from scalding. The installer is responsible for installing the valve and any recalibration of the water temperature in accordance with the instructions.

#### 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.

### VALVE SPECIFICATIONS

#### DESCRIPTION

- Brass construction
- 3/4" IPS connections
- Thermostatic valve design with integral checkstops

#### **OPERATION**

- Temperature lever operates through a 340 degree arc with maximum cold at full clockwise rotation and maximum hot at full counterclockwise rotation
- Safety stop preset temperature at 105 degrees F (41degrees C)
- Safety stop override allows maximum temperature at 120 degrees F (49 degrees C)
- Factory established temperature range from 70 degrees F (21 degrees C) to 120 degrees F (49 degrees C)
- Must be used with at least one 3600 valve.

#### CARTRIDGE

• 130156 thermostatic cartridge design with non metallic/nonferrous materials

#### **STANDARDS**

 Third party certified to ASME A112.18.1/CSA B125.1, ASSE 1016 and all applicable requirements referenced therein including



### **EXPLODED VALVE DIAGRAM**



- 1. Check Valve
- 2. Stop Body
- 3. Stop Stem
- 4. Temperature Limit Stop
- 5. Cartridge Nut

- 6. Handle Adapter Nut
- 7. Spring
- 8. Stem
- 9. Screw

### **★** For service kit numbers refer to moen.com



- 1. Bottom O-Ring
- 2. Middle O-Ring
- 3. Top O-Ring
- 4. Screens

5. Pre-Set Temperature Alignment Markings (105°)

### **TROUBLE SHOOTING**

Problem	Description	Cause	Fix
No flow or reduced flow	Reduced flow or no flow from device	Stop stems are closed	Turn stop stems counterclockwise
No flow or reduced flow	Reduced flow or no flow from device	Blocked screens on cartridge	Remove cartridge and rinse. See "Cartridge Servicing" (pg 9).
Outlet water temperature too high	Water is hotter than 105°F at safety stop or 120°F in full hot	Cartridge is out of calibration	Remove cartridge and rinse. See "Cartridge Calibration" (pg 7).
Outlet water temperature too high	Water is hotter than 105°F at safety stop or 120°F in full hot	Missing or damaged bottom o-ring	Replace cartridge. See "Cartridge Servicing" (pg 9).
Leak from around the cartridge	Continuous leak from behind trim	Cartridge has missing or damaged top o-ring.	Replace cartridge. See "Cartridge Servicing" (pg 9).
Leak from around the cartridge	Continuous leak from behind trim	Missing or loose cartridge nut	Replace or tighten cartridge nut. See "Cartridge Servicing" (pg 9).
All hot or all cold water	Temperature adjustment does not provide mixed temperature	Inlets are reversed	Reinstall with hot water line to hot side of the valve and cold water line to cold side of the valve.
No temperature stop detected	Handle rotates greater than 200° and does not engage a stop	Temperature limit stop is not properly seated in the valve	Reassemble temperature limit stop. See "Cartridge Servicing" (pg 9).

### **CARTRIDGE CALIBRATION**

Rotate the temperature control counterclockwise from the coolest setting (80° F) at the 7:00 position to the safety stop setting (105° F) at the 12:00 position.

Push in the end of the stem to activate the safety stop override, then rotate the stem counterclockwise from (105° F) at the 12:00 position to the maximum temperature (120° F) at the 9:00 position. (*fig.1*)

Use a thermometer to test the temperature of the water. If it is 120° F or less, turn the water off and attach your trim. No calibration is necessary.



fig.1

If the temperature is higher than 120° F, the valve must be calibrated to a lower temperature. To lower the maximum temperature, proceed to step 2 on page 7.

### **CARTRIDGE CALIBRATION**

cont.

Rotate the temperature stem from the hottest position (9:00) clockwise to the safety stop position position (12:00). This is 1/4 of a turn and the stem will pop out when the proper position is reached.

Continue rotating the stem clockwise from the (12:00) position to the (2:00) position. (*fig.2*)



fig.2

While holding the stem to prevent rotation, remove the screw turning counterclockwise.

Pull the stem from the valve without rotating. (*fig.3*)



fig.3

### **CARTRIDGE CALIBRATION**

cont.

Rotate the stem from the (2:00) position counterclockwise to the (12:00) position.(*fig.4*)



fig.4

Replace the stem in the new position and secure with screw. (*fig.5*)



Test the temperature of the water. If it is still over  $120^{\circ}$  F, repeat steps 3 and 4 to lower the maximum temperature.

#### **Removal of cartridge:**

1. If water supply shut off valves are not accessible or are not present, actuate the stops by rotating the stop stem clockwise. Do not over tighten stop stem as this could damage the check valve. (*fig.1*)

2. While holding the stem to prevent rotation, remove the screw turning counterclockwise. (*fig.2*)

3. Remove spring. (fig.3)

4. Using a wrench, remove the handle adapter nut by turning counterclockwise. *(fig.4)* 







fig.2



#### Removal of cartridge continued:

5. Using a 1-1/4" socket, remove the cartridge retaining nut by turning counterclockwise.



6. Remove temperature limit stop.



7. Remove cartridge by using a wrench to pull out the cartridge.



#### Installation of the cartridge:

1. Verify that the cartridge is properly set by aligning the drilled hole in the cartridge stem to the indent on the cartridge body.



2. Assemble the temperature limit stop to the cartridge ensuring that the key on the temperature limit stop is aligned to the slot in the cartrige.



3. By pushing on the front of the temperature limit stop, insert cartridge into the valve body until the temperature limit stop key is fully seated into the valve.





#### Installation of the cartridge continued:

4. Using a 1-1/4" socket, install the cartridge retaining nut in the valve.



5. Using a wrench, install the handle adapter nut onto the valve.



6. Install spring.



7. Without rotating the cartridge stem, align the temperature limit stop and the stem.



8. While pushing in the stem, install the screw by turning clockwise until the screw bottoms out.



9. If integrated stops were used, release them by turning stop stem counterclockwise until they stop.



### **REPLACING STOPS & CHECKS**

#### NOTE: If servicing stops, water shut off valves must be shut off prior to removal.

#### Removal of the stops and checks:

1. Using a 5/8" socket, remove the stop by turning counterclockwise.



2. Using pliers, remove check valve by pulling on the check valve's ribs.



#### Installation of the stops and checks:

1. Push the check valve into the opening.



2. Using a 5/8" socket, install the stop body by turning clockwise.



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# **MAINTENANCE RECORD** THERMOSTATIC MIXING VALVE

Valve ref.: Location:

Installation Date: \_\_\_\_\_\_ Maintenance frequency: \_\_\_\_\_

Commissioning/maintenance check: \_\_\_\_\_

DATE	TECHNICIAN	SERVICE DETAILS

### **NOTES**

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