MultiChoice® Valve Trim Installation Instructions

Owners Manual

14 T20
Series

79061

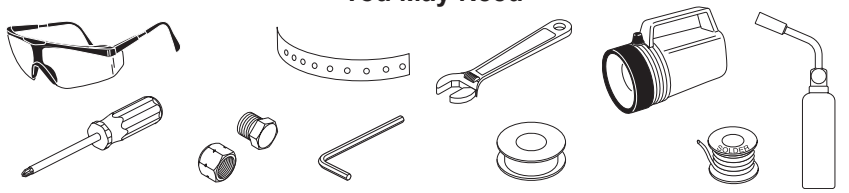
14 T20 Series

14 T20 Series

14 T20 Series

Write purchased model number here.

You May Need



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To order replacement parts, visit www.deltafaucet.com

CAUTION: This system/device must be set by the installer to ensure safe, maximum temperature. Any change in the setting may raise the discharge temperature above the limit considered safe and may lead to hot water burns.

NOTICE TO INSTALLER: CAUTION!–As the installer of this valve, it is your responsibility to properly INSTALL and ADJUST this valve per the instructions given. This valve does not automatically adjust for inlet temperature changes, therefore, someone must make the necessary Rotational Limit Stop or temperature knob adjustments at the time of installation and further adjustments may be necessary due to seasonal water temperature change. YOU MUST inform the owner/user of this requirement by following the instructions. If you or the owner/user are unsure how to properly make these adjustments, **please refer to page 10, and** if still uncertain, call us at **1-800-345-DELTA.**

After installation and adjustment, you must affix your name, company name and the date you adjusted the Rotational Limit Stop or temperature knob to the caution label provided and apply or attach the label to the back side of the closest cabinet door and the warning label to the water heater. **Leave this Instruction Sheet for the owner's/user's reference.**

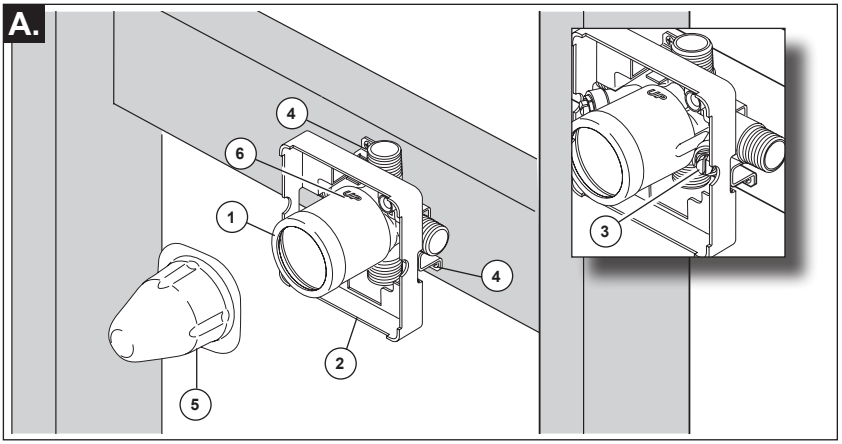
WARNING: This pressure balanced or thermostatic bath valve is designed to minimize the effects of outlet water temperature changes due to inlet pressure changes, commonly caused by dishwashers, washing machines, toilets and the like. It may not provide protection from hot water burns when there is a failure of other temperature controlling devices elsewhere in the plumbing system, if the rotational limit stop or temperature knob is not properly set or if the hot water temperature is changed after the settings are made or if the water inlet changes due to seasonal changes.

WARNING: Do not install a shut-off device on either outlet of this valve. When this type of device shuts off the water flow, it can defeat the ability of the valve to balance the hot and cold water pressures.

MultiChoice® Rough-In Installation

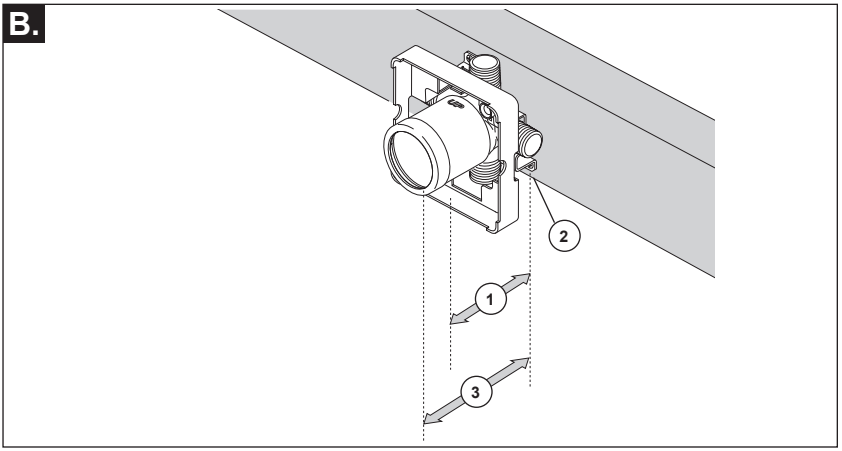
1

A.



SHUT OFF WATER SUPPLIES.
Consider the type and thickness of your finished wall before placing your stringer back plate. Install the body (1) so the surface of the finished wall is flush with the front of the plasterguard (2) ± 3/8". **Note: For models with stops (3), plasterguard must be flush or subflush 3/8" to finished wall.** Mount body using the two stringer mounting holes (4) on the bracket. **Note: Remove cover (5) to access mounting holes.** Make sure the word "UP" (6) is on top of the valve body when installing.

B.

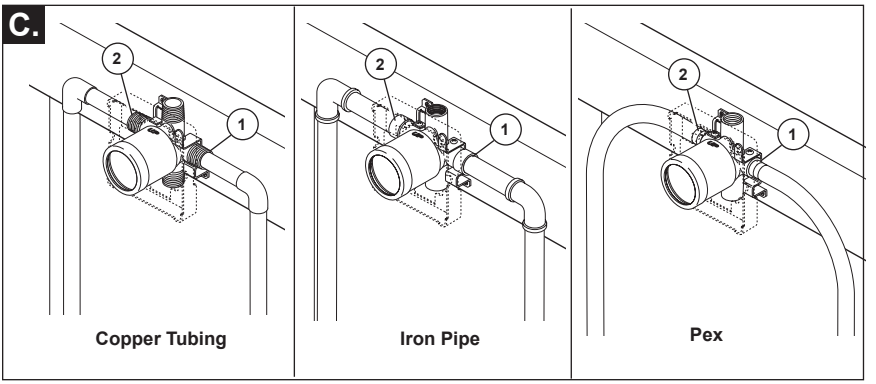


Distance (1) from the stringer (2) to the front of the plasterguard is 2.8" (71 mm). Distance (3) from the stringer (2) to the front of the bonnet is 3.9" (99 mm).

If a thin wall is used, be sure to have the plasterguard behind the wall, otherwise the wall should always be flush with the front of the plasterguard. See instruction on the bag for thin wall mounting.

MultiChoice® Rough-In Installation

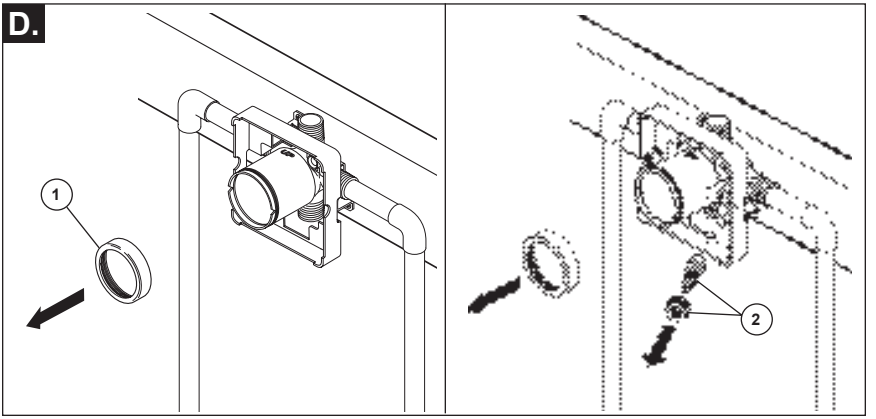
C.



Connect valve body to water supplies using the proper fittings for your valve body type (copper tubing, iron pipe or Pex). **Note: (1) is the cold inlet port and (2) is the hot inlet port.** If either of the two outlet ports is to be unused, seal the port with a pipe plug.

If you are making a back to back or reverse installation (hot on right and cold on left) install the valve body as described, but the water supply lines will be reversed. **Note: (1) is the hot inlet port and (2) is the cold inlet port.**

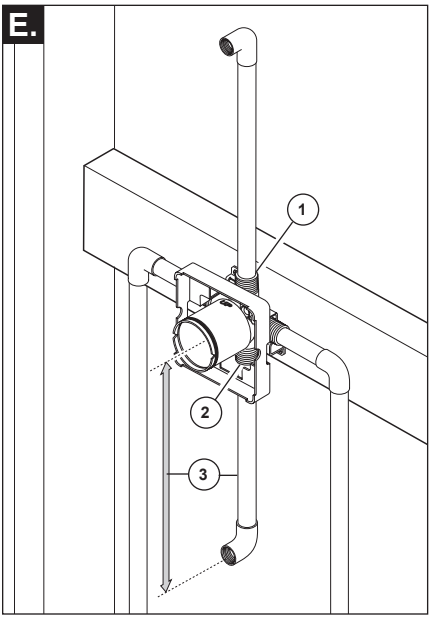
D.



Remove bonnet (1). **Warning: Avoid soldering at high temperatures.**

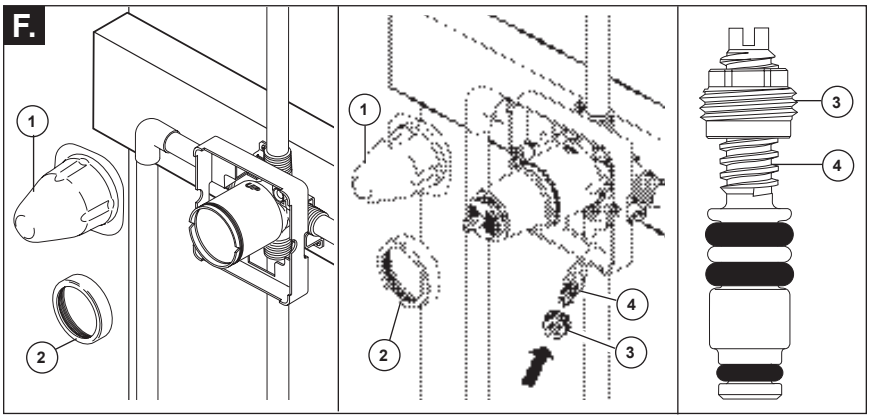
Be sure stops (2) are removed from the w/stops version before soldering. (Do not install stops before soldering.)

E.



Connect top outlet (1) to shower pipe with proper fittings. Connect bottom outlet (2) to tub spout pipe with proper fittings. Pipe (3) between valve body and tub spout must be a minimum of 1/2" (13 mm) copper pipe or 1/2" (13 mm) iron pipe in a **straight** drop no less than 8" (203 mm) but no more than 18" (457 mm) long with only **one** iron pipe or copper 90 degree elbow to the tub spout nipple. **Do not use PEX tubing for tub spout drop.**

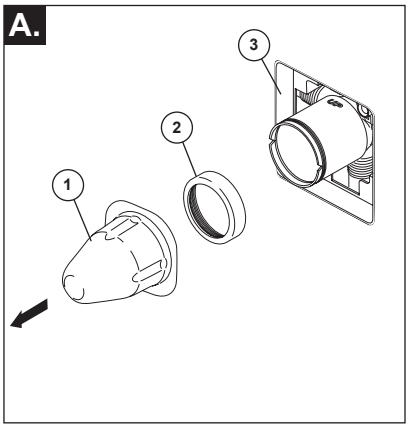
F.



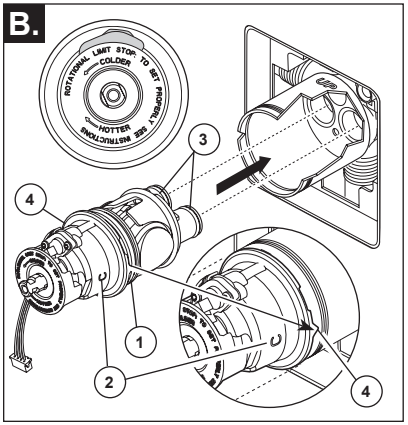
PRESSURE TESTING & FLUSHING THE INSTALLATION

Prior to testing, remove cover (1) and bonnet nut (2). Insert cartridge and tighten bonnet nut. Turn cartridge stem counter clockwise until it will no longer rotate. Plug both outlets with proper fittings. Check for leaks. After testing, remove cartridge, shower and/or tub spout plug and flush system by slowly turning on water supply to purge valve system of debris. After flushing, reinstall cartridge (see page 6), bonnet nut and cover. Install stops (3 & 4) in the models with stops and set to full open. **Note: Install stops as follows: Thread nut (3) onto stem (4) as shown. Then press stem and nut assembly into body and tighten using a 3/8", 6 point, deep well socket. With a flat head screwdriver, adjust stem clockwise to close and counterclockwise to open.**

2 Cartridge Installation

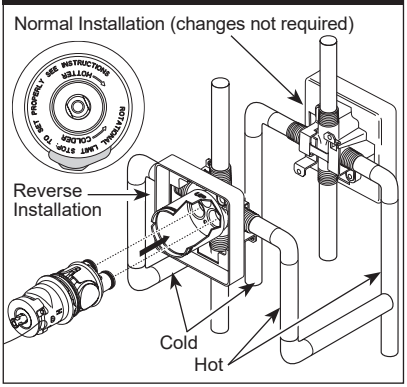


Turn off water supplies. Remove cover (1) and bonnet nut (2) from the body, if necessary. If this is not a thin wall mounting, the entire plasterguard (3) may be removed.

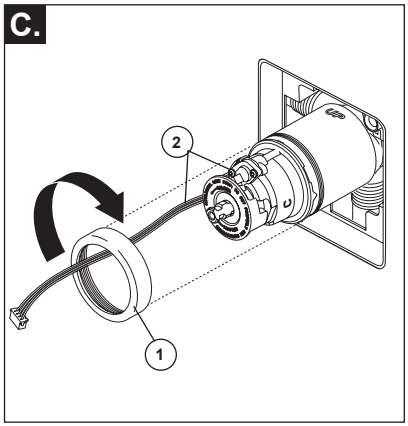


Rotate the cartridge (1) so the letter 'C' (2) appears on the right. Insert cartridge into valve body as shown. Make sure the cartridge tubes and O-rings (3) are properly seated in holes at the base of the body. Ensure the keys on the body are fully engaged with the slots in the body (4).

Back to back Installation

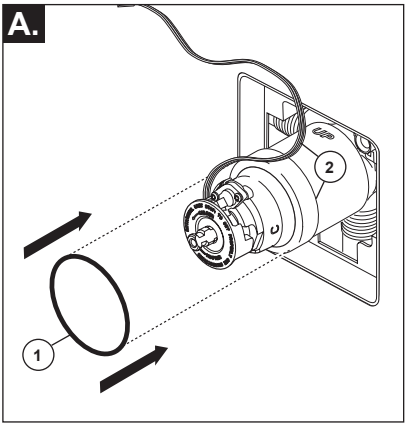


For back to back or reverse installations (hot on right and cold on left) insert the cartridge with the 'C' on the left. If you are not making a reverse or back to back installation skip this step and continue with step 2C.

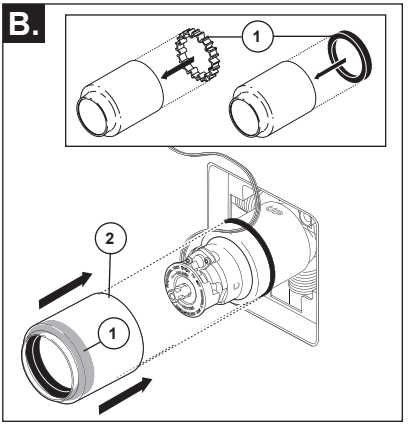


Slide bonnet nut (1) over the wire and cartridge (2) and thread onto the body. Hand tighten securely. **Note: After bonnet nut is installed, verify the valve is in the off position. Rotate stem clockwise.**

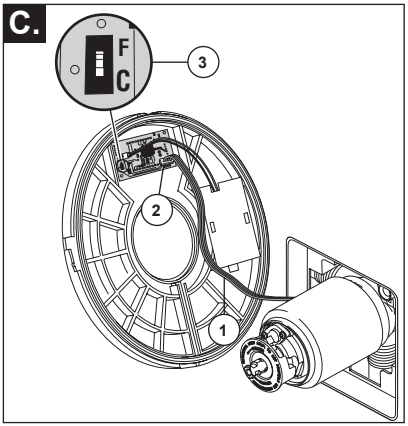
3 Backplate and Trim Installation



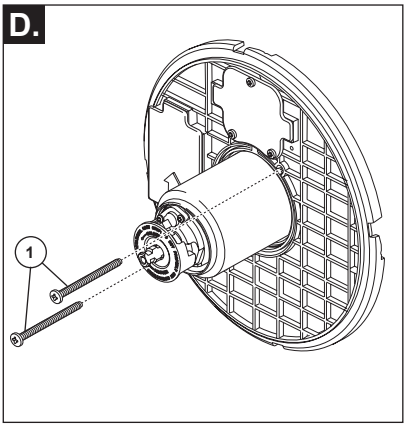
Slide O-ring (1) over cartridge, wire and the bonnet nut (2). The O-ring, which acts as a spacer to steady the sleeve, should rest behind the bonnet nut.



If your model requires a spacer (1), insert it into the sleeve (2) and push it to the front. Slide the sleeve over the cartridge, body and O-ring. **Caution: Do not damage the wire during installation of the sleeve.**



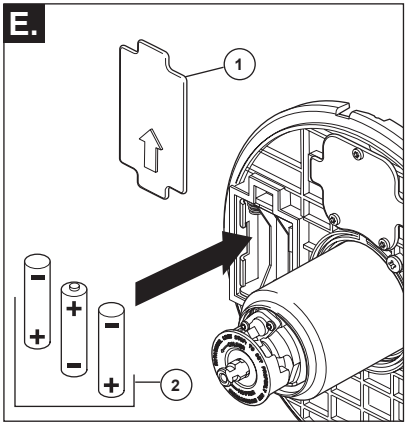
Connect wire from cartridge (1) to back side of backplate (2). **Note: Switch (3) is used to change the temperature from Celsius to Fahrenheit.**



Mount the backplate onto body using screws (1) provided. Do not over tighten screws.

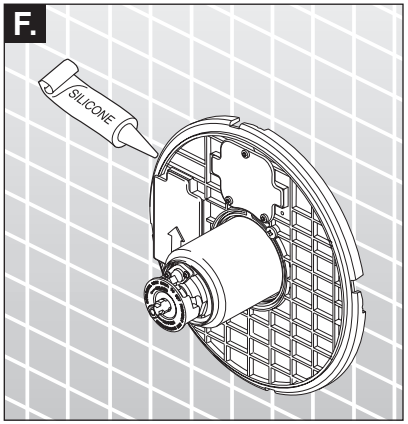
3 Backplate and Trim Installation

E.



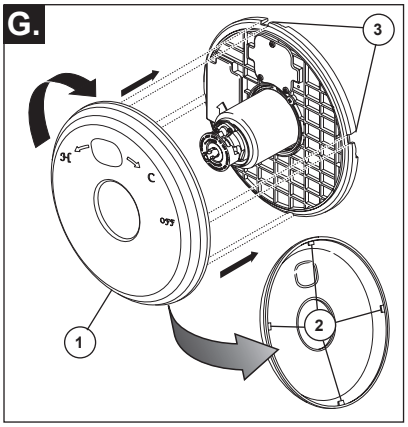
Remove battery cover (1) by pushing in the direction of the arrow. Insert 3 “AAA” batteries (2) making sure to orient in proper direction.

F.



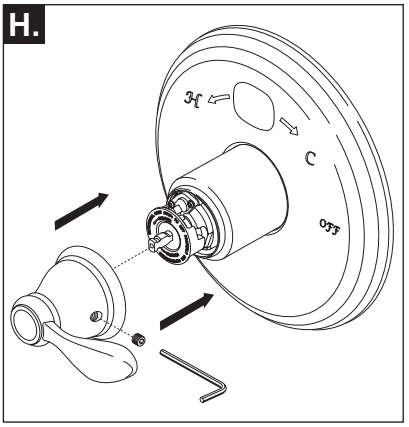
If shower wall is uneven, please seal backplate to the wall with silicone to prevent moisture access to the electronics.

G.



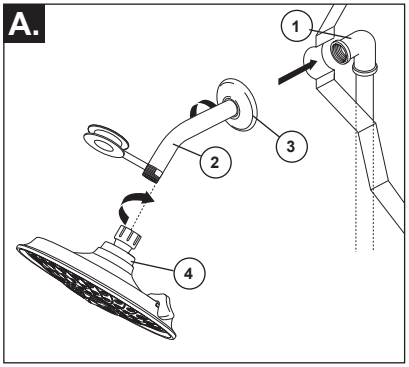
Secure the escutcheon (1) by aligning the 4 tabs (2) with the 4 slots (3) in the backplate. Engage all 4 tabs fully into the slots and rotate clockwise to lock.

H.



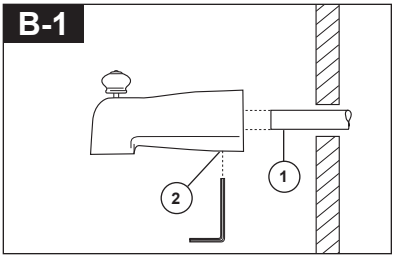
Using an Allen wrench to secure the set screw, install the handle onto the stem. **Note: If no set screw hole - handle may have cap with screw.**

4 Showerhead and Tub Spout Installation

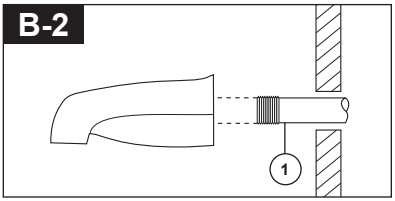


FOR SHOWERHEAD INSTALLATION:
Connect top outlet (1) to shower arm (2) with proper fittings. To prevent damage to finish on shower arm, insert wall end of shower arm into shower flange (3) before screwing arm into riser connection. Thread showerhead (4) onto shower arm. Apply plumber tape to pipe threads on both ends. Do not overtighten showerhead.

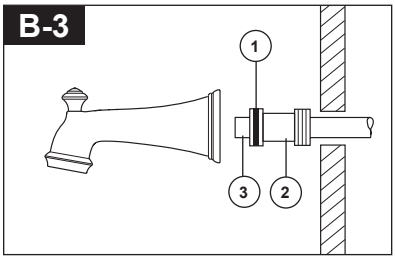
FOR TUB SPOUT INSTALLATION:
Refer to the installation instructions supplied with your spout. Do not connect deck mount spouts to in-wall valves. Do not use hand showers connected in lieu of a tub spout to a tub/shower valve. Do not use PEX tubing for tub spout drop.



Slip-On Installation
The copper tube (1) must be 1/2" nominal copper. Important: If it is necessary to cut the copper tube, the end must be chamfered free of burrs to prevent cutting or nicking O-ring inside the spout. Slide spout over copper tube flush with the finished tub or wall surface. Tighten set screw (2), but do not overtighten.

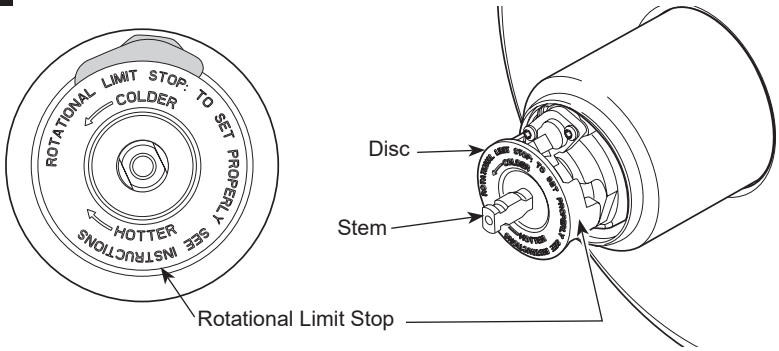


Iron Pipe Installation
Install threaded pipe nipple (1) to extend past finished wall. Apply plumber tape to threads on pipe nipple and screw on tub spout.



Copper Sweat Installation
Remove O-ring (1) from adapter (2). Solder adapter to tube taking care to keep solder away from O-ring groove. CAUTION: NO SOLDER PERMITTED ON OUTSIDE DIAMETER OF ADAPTER ADJACENT TO O-RING GROOVE. Cut off tube (3) and replace O-ring on groove of brass adapter. Thread tub/spout onto adapter, taking care not to damage O-ring, and hand tighten until spout is firmly against finished wall and all slack is taken up behind wall.

5 Adjusting the Rotational Limit Stop



IMPORTANT:
The Rotational Limit Stop is used to limit the amount of hot water available such that, if set properly, the user will not be scalded if the handle accidentally is rotated all the way to “hot” when a person is showering or filling a tub. The first position allows the **LEAST** amount of hot water to mix with the cold water in the system. In the first position the water will be the coldest possible when the handle is turned all the way to hot. As you move the Rotational Limit Stop clockwise, you progressively add more and more hot water in the mix. The last position will result in the greatest amount of hot water to the mix, and the greatest risk of scald injury if someone accidentally turns the valve handle all the way to the hot side while showering or filling a tub.

WARNING: In some instances, setting the Rotational Limit Stop in the hottest position (full clockwise) could result in scald injury. It is necessary to adjust the Rotational Limit Stop so that the water coming out of the valve will not scald the user when the handle of the valve is rotated to the hot side.

• According to the majority of industry standards, the maximum allowable temperature of the water exiting the valve is 120°F (Your local plumbing codes may require a water temperature less than 120°F).

• The Rotational Limit Stop may need to be readjusted seasonally if the inlet water temperature changes. For example, during the winter, the cold water temperature is colder than it is during the summer which could result in varying outlet temperatures. A water temperature for a comfortable bath or shower is typically between 90°F - 110°F.

• Use a thermometer to set the rotational limit stop. Do not rely on the digital display temperature. There may be up to a 7° F difference in temperature of the water coming out of the spout or showerhead as compared to the reading on the display.

• Run the water so that the cold water is as cold as it will get and hot water is as hot as it will get. Place the handle on the stem and rotate the handle counterclockwise until the handle stops.

• Place a thermometer in a plastic tumbler and hold in the water stream. If the water temperature is above 120°F, the Rotational Limit Stop must be repositioned counterclockwise to decrease valve outlet water temperature to be less than 120°F or to meet the requirements of your local plumbing codes.

• To adjust the temperature of the water coming out of the valve, remove the o-ring and pull the disc back to a position where it is possible to remove the Rotational Limit Stop and readjust the teeth engagement position to the desired temperature. Counterclockwise will decrease the outlet temperature, clockwise will increase the outlet temperature. Temperature change per tooth (notch) could be 4° - 16°F based on inlet water conditions. Repeat as necessary. Push disc until fully seated and replace o-ring.

WARNING: Failure to re-install disc and o-ring after setting Rotational Limit Stop could result in scald injury.

• MAKE SURE COLD WATER FLOWS FROM THE VALVE FIRST. MAKE SURE WATER FLOWING FROM THE VALVE AT THE HOTTEST FLOW POSSIBLE DOES NOT EXCEED 120°F OR THE MAXIMUM ALLOWED BY YOUR LOCAL PLUMBING CODE.

Faucet leaks from tub spout/showerhead:
SHUT OFF WATER SUPPLIES.
Replace valve cartridge EP78407. Check condition of lower O-rings and replace if necessary RP14414. See Helpful Hints 1, 2, & 3.

If leak persists:
SHUT OFF WATER SUPPLIES.
Replace valve cartridge EP78407.
See Helpful Hints 1, 2, 3 & 5.

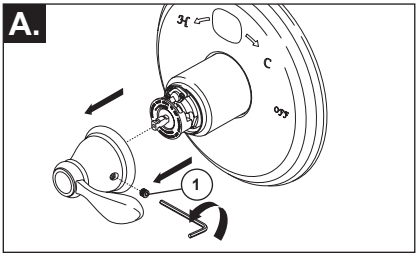
Unable to maintain constant water temperature:
Replace valve cartridge EP78407 or follow instructions in Helpful Hints 1, 2, 4 & 5.

Helpful Hints:

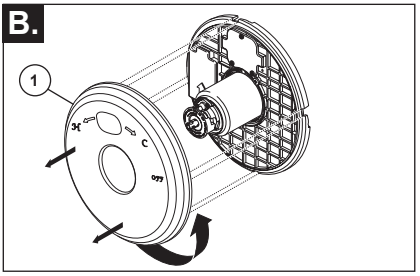
1. Before removing valve cartridge assembly for any maintenance, be sure to note the position of the rotational limit stop on the cap. The valve cartridge assembly must always be put back in the same position. BE SAFE! After you have finished the installation, turn on valve to make sure COLD WATER FLOWS FIRST.
2. To remove valve cartridge from body, shut off water supplies and remove handle and bonnet nut. Do not pry the valve cartridge out of the body with a screwdriver. Place handle on stem and rotate counterclockwise approximately 1/4 turn after the stop has been contacted. Lift valve cartridge out of body.
3. To remove seats and springs, remove valve cartridge. Separate cap assembly from the housing assembly by rotating the cap assembly counterclockwise 90° (degrees). Separate cap and housing assemblies. Remove seats and springs and replace. Place the largest diameter of the spring into the seat pocket first and then press the tapered end of the seal over the spring. Reassemble valve cartridge and replace in body following instructions given in 1 above.
4. If the water in your area has lime, rust, sand or other contaminants in it, your pressure balance valve will require periodic inspection. The frequency of the inspection will depend on the amount of contaminants in the water. To inspect valve cartridge remove it and follow the steps in note 1 above. Turn the valve to the full mix position and shake the cartridge vigorously. If there is a rattling sound, the unit is functional and can be reinstalled following instructions given in note 1 above. If there is no rattle, replace valve cartridge EP78407.
5. Push disc until fully seated. See page 10 for more details.

To order replacement parts, visit www.deltafaucet.com or call 1-800-345-DELTA (3358)

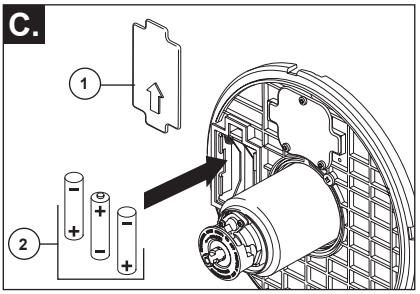
To change batteries:



Using an Allen wrench to loosen the set screw (1), remove the handle from the stem. **Note: If no set screw hole - handle may have cap with screw.**



Remove the escutcheon (1) by rotating it counterclockwise until it can be pulled from the backplate. Carefully, slide the escutcheon over the sleeve and remove.



Remove battery cover (1) by pushing in the direction of the arrow. Remove old batteries and insert 3 new “AAA” batteries (2) making sure to orient in proper direction. Reinstall parts in reverse order.

Cleaning and Care

Care should be given to the cleaning of this product. Although its finish is extremely durable, it can be damaged by harsh abrasives or polish. To clean, simply wipe gently with a damp cloth and blot dry with a soft towel.

Warning: Scrubbing Bubbles® Bathroom Cleaner and Lysol® Basin Tub and Tile Cleaner must not be used on the clear knob handles and levers. Use of these cleaners can result in cracked or severely damaged handles. If overspray gets onto the handles, immediately wipe them dry with a soft cotton cloth