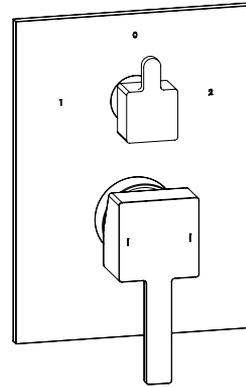
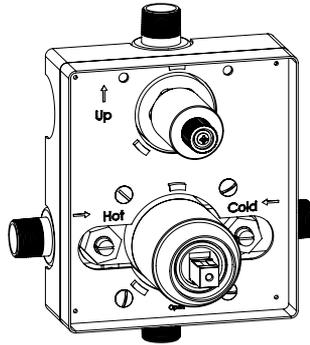


INSTALLATION MANUAL



Compliance:
ASME A112.18.1
CSA B125.1

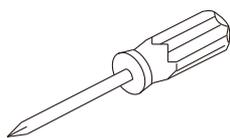
IMPORTANT CONSIDERATIONS

- This product and other additional shower components must be installed by a professional plumber who is experienced at installing custom shower sets.
- Read the complete installation manual thoroughly before beginning the install. Make sure you have gathered all of the necessary tools and components needed.
- To prevent scalding injuries, the maximum output temperature from the water heater shall not to exceed 120°F. In the state of Massachusetts the maximum output temperature shall not exceed 112°F.
- Excessive heat may damage the valve unit. Never solder directly onto the valve body.

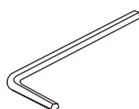
TECHNICAL INFORMATION

- Concealed single handle pressure balancing valve with built-in ceramic diverter for two individual functions (does not share).
- Integral service stops with check valves to prevent cross flow.
- Pressure balancing cartridge restricts hot water supply should the cold pressure fail (preventing scalding).
- Pressure balancing valves are designed to be used in conjunction with hot water supplied from pressurized storage heaters.
- Pressure balancing valves **cannot** be used in conjunction with low-pressure storage heaters (displacement water heaters).
- Installation of water arrestors is necessary to prevent water hammering.
- Flow rate up to 5.5 gpm @ 60 psi.
- Recommended water pressure is 20 - 80 psi.
- Recommended max hot water temperature is 120°F.
- Max tested water pressure is 145 psi.
- Max tested water temperature is 176°F.

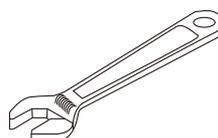
Tools you may need



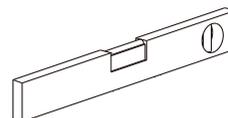
Flat and phillips
screwdriver



Hex allen key
(provided with trim set)



Adjustable wrench

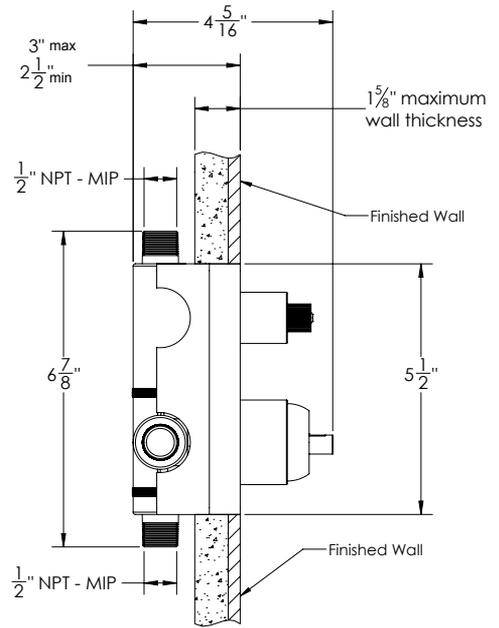
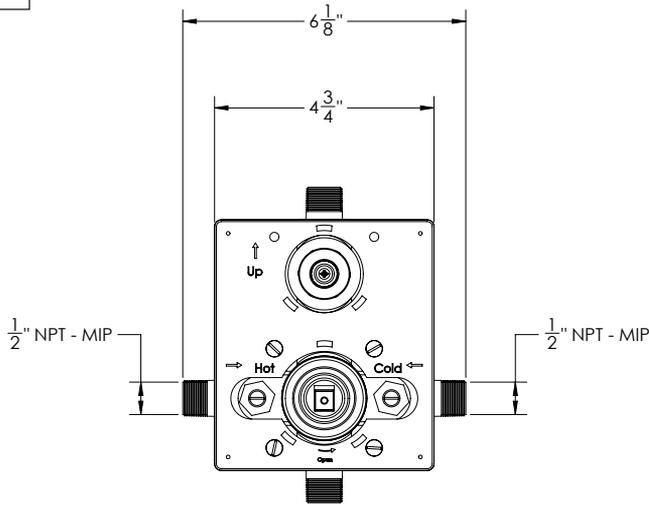


Spirit level

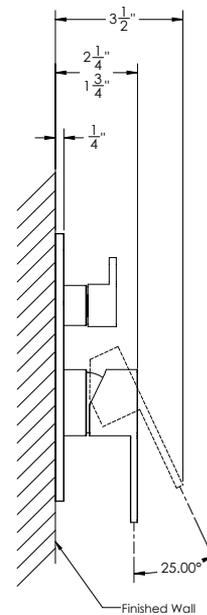
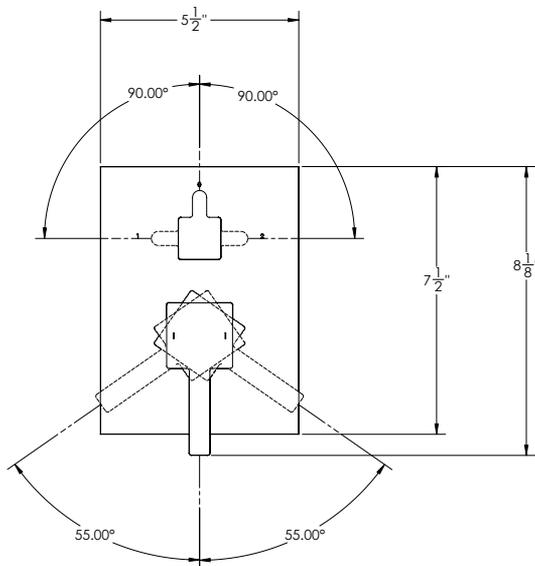


Teflon tape

1



IS102 Rough valve



IS102-1-X Trim set

ROUGH-IN

- Prepare and measure the wall space for the rough valve installation according to specs.
- The back of the rough shower valve should be within 2 1/2" - 3" to the finished wall.

CAUTION: Failure to comply with the above mentioned dimensions will result in a failed installation.

HINT: When is all set and done the square plastic case from the valve should be flush with the finished tile/wall.

2

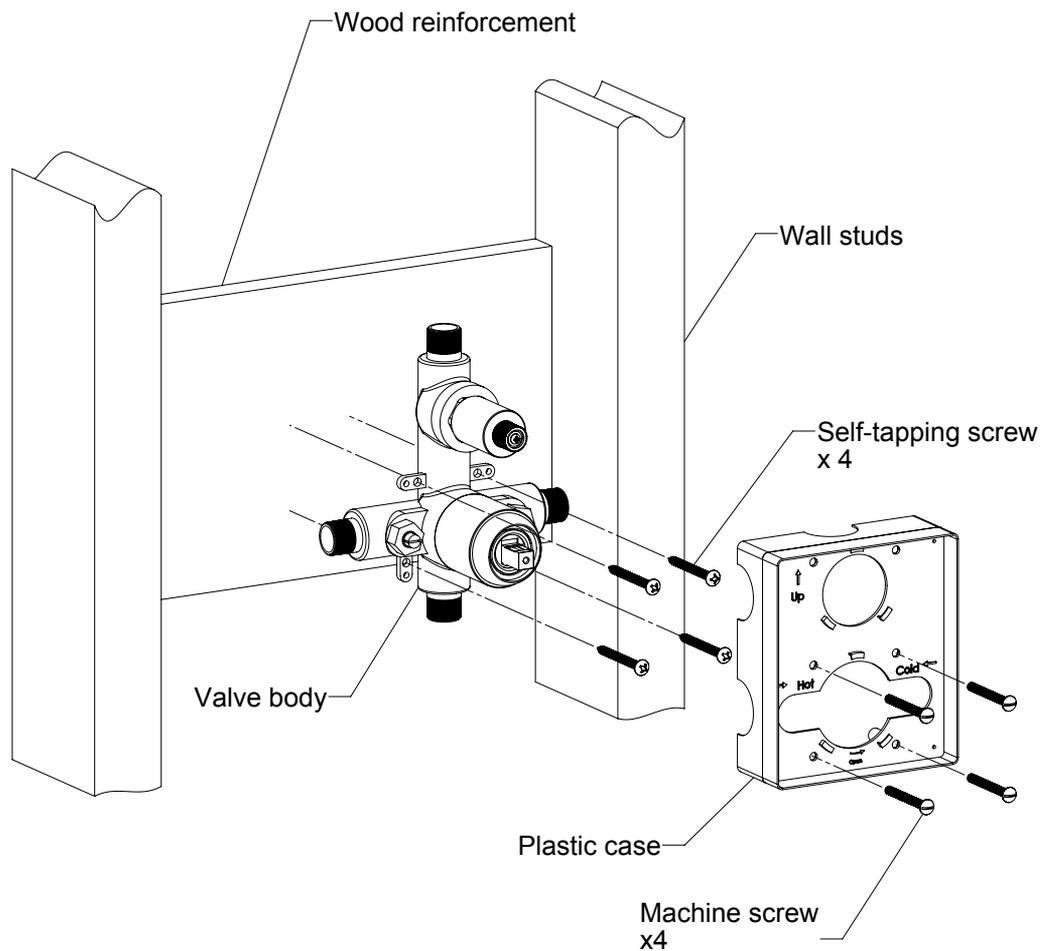


Fig #2

SECURE THE VALVE

- Build out an area of wood reinforcement in between wall studs.
- Remove plastic case from shower valve body.
- Fasten the shower valve body to the wood area using the self tapping screws.
- Re-install the plastic case onto the valve body.

3

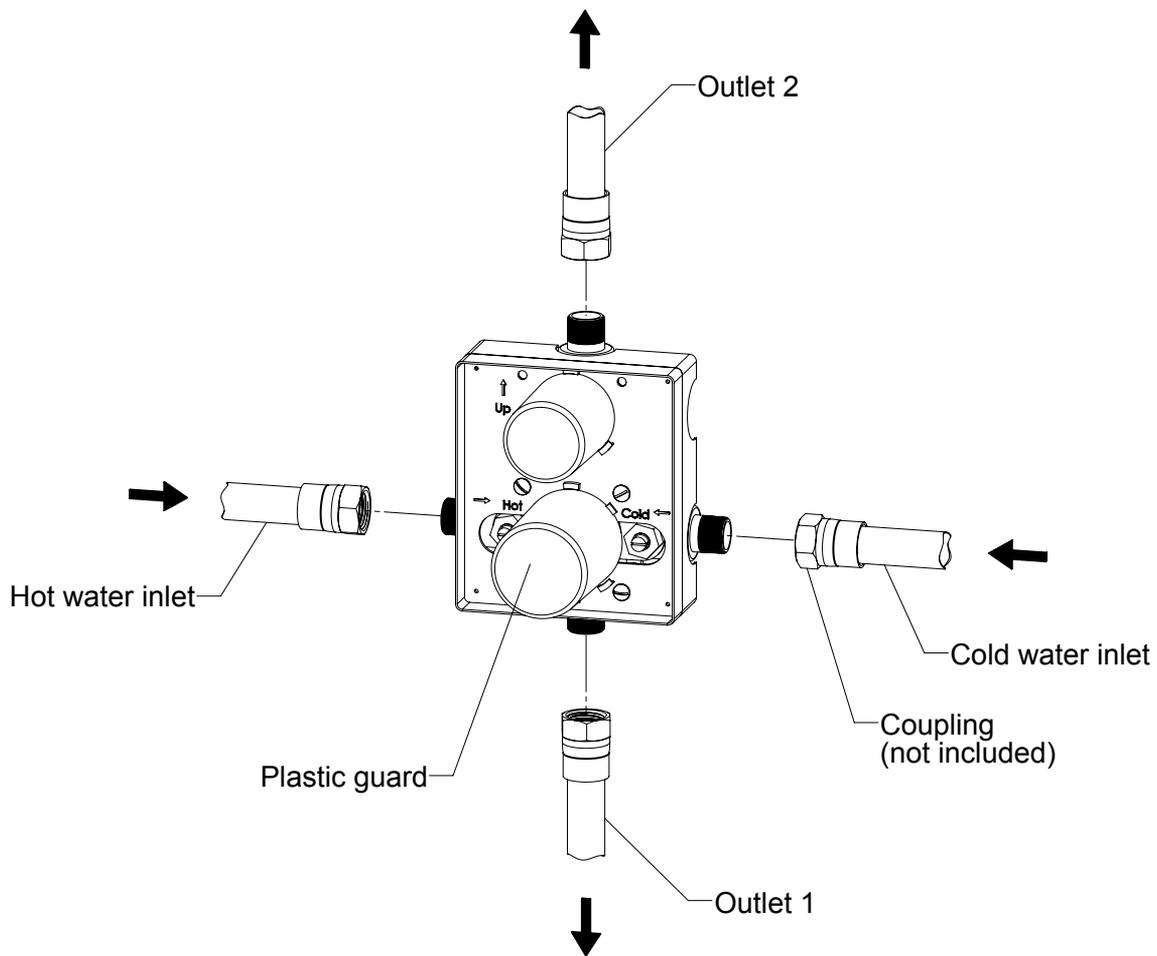


Fig #3

CONNECT THE VALVE

- Shut off the main water supply.
- Check the supply lines for damage. It is recommended to flush all pipes thoroughly before installation.
- Connect the hot and cold water supply as shown in fig #3.
- Connect the rest of the shower pipes accordingly. The bottom outlet of the valve will be function #1 and the top outlet will be function #2.
- During normal installation, it is **not** necessary to remove the pressure balancing cartridge.
- Turn water supply on and check for leaks.

CAUTION: Do not solder directly onto the valve body. Doing this will void your warranty and damage the valve.

HINT: If solder/brazing the fitting connections, pre-assembly hot & cold adapter fittings to copper piping. Using plumbers tape or equivalent to attach adapter/coupling to appropriate inlet port.

4

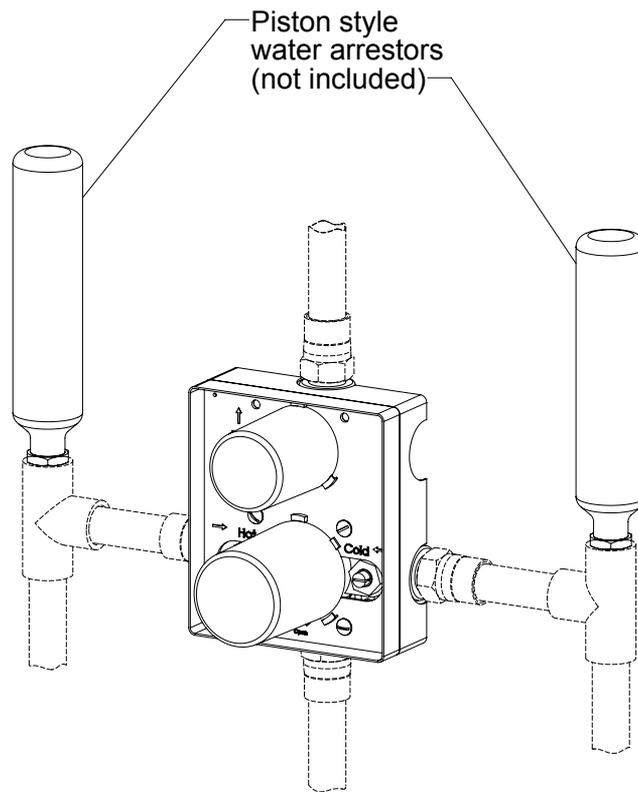


Fig #4

INSTALL WATER ARRESTORS

- Pressure balancing systems are fast closing systems and therefore require the installation of water arrestors to prevent water hammering (knocking).
- Install piston style water arrestors (or similar) as shown in fig #4.

CAUTION: Do not install the water arrestors farther away than six inches from the valve body. Installing the arrestors too far from the valve body might not prevent water hammering.

5

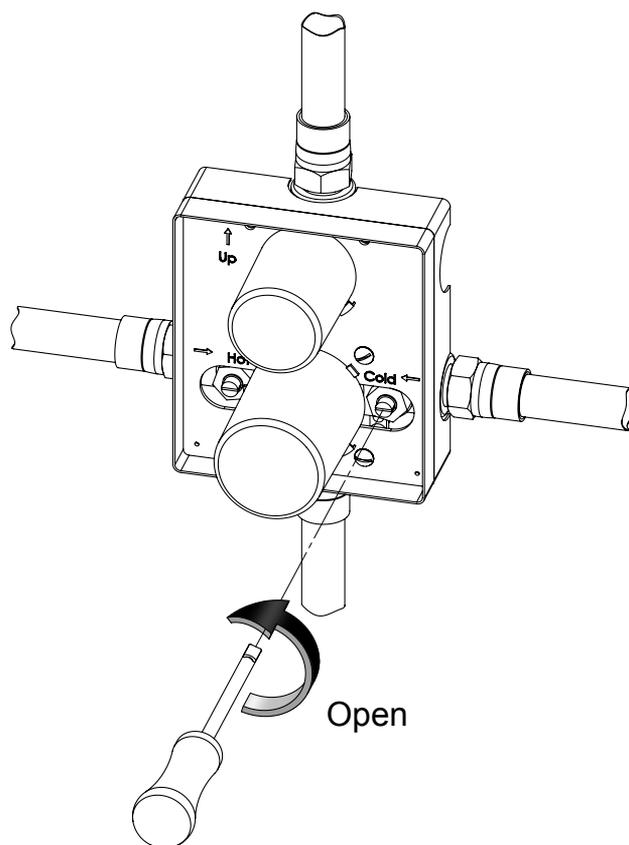


Fig #5

OPEN THE SERVICE STOPS

- The valve is equipped with service stops for your convenience.
- Using a flat head screwdriver, rotate counter-clock wise to fully open the service stops and allow flow into the system.
- Check for leaks at this time
- To close the service stops, rotate clock-wise

CAUTION: Do not force the service stops past its normal open/close travel. Doing so can harm the stop valve.

HINT: Open/close the service stop valve until reaching the natural stop.

6

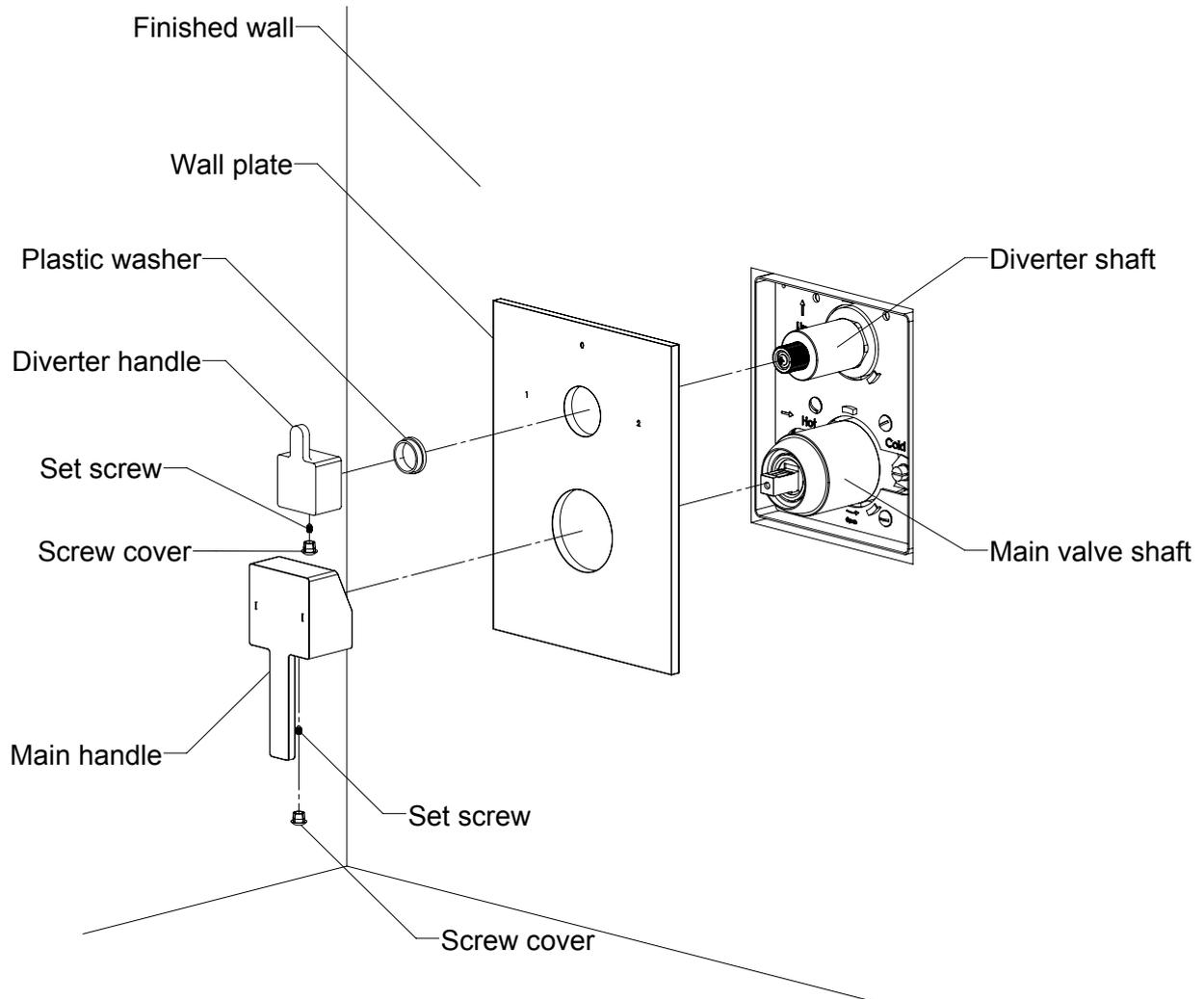


Fig #6

INSTALL THE TRIM SET

- Remove the plastic guard from the valve shaft.
- Carefully insert the wall plate onto the valve shaft until it's flush against the finished wall.
- Insert the main handle onto the valve stem. The lever must be pointing down as shown in fig #6.
- Tighten the set screw using the allen key provided and insert the screw cover into place.
- With the diverter at the #1 position, insert the diverter handle onto the diverter stem extender pointing towards the #1 on the wall plate.
- Tighten the set screw using the allen key provided and insert the screw cover into place.

HINT: Use clear silicone to hold the wall plate in position.

7

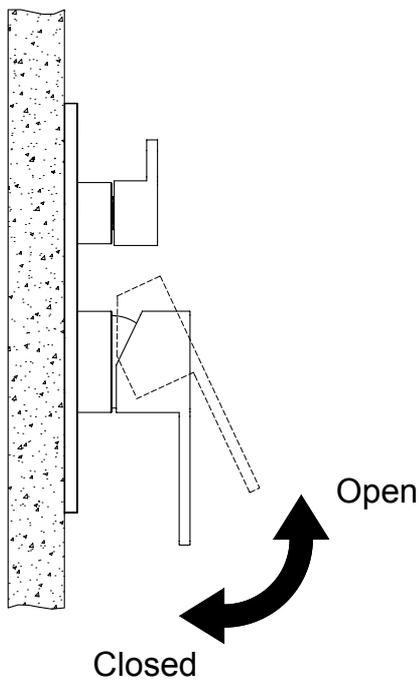


Fig #7

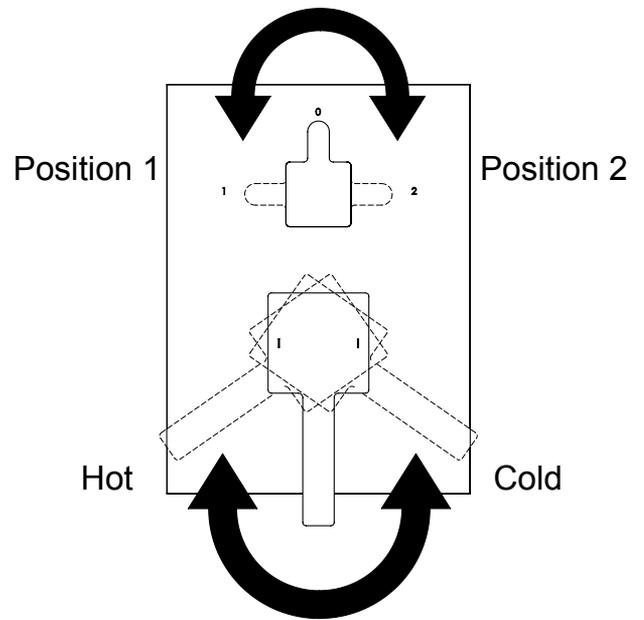


Fig #8

OPERATE THE VALVE

- Open the valve by lifting up the main handle as shown in fig #7.
- Rotate the main handle left for hot and right for cold. Refer to fig #8.
- Only operate the valve within the operational range shown in fig #7 & #8.

CAUTION: Never force the handle past the operational range. Doing so will damage the main cartridge.

OPERATE THE DIVERTER

- Rotate the diverter left or right to obtain the desired position of use. Refer to fig #8.
- If the installation was done correctly, the diverter lever must be pointing up at the midway point between function #1 and #2.

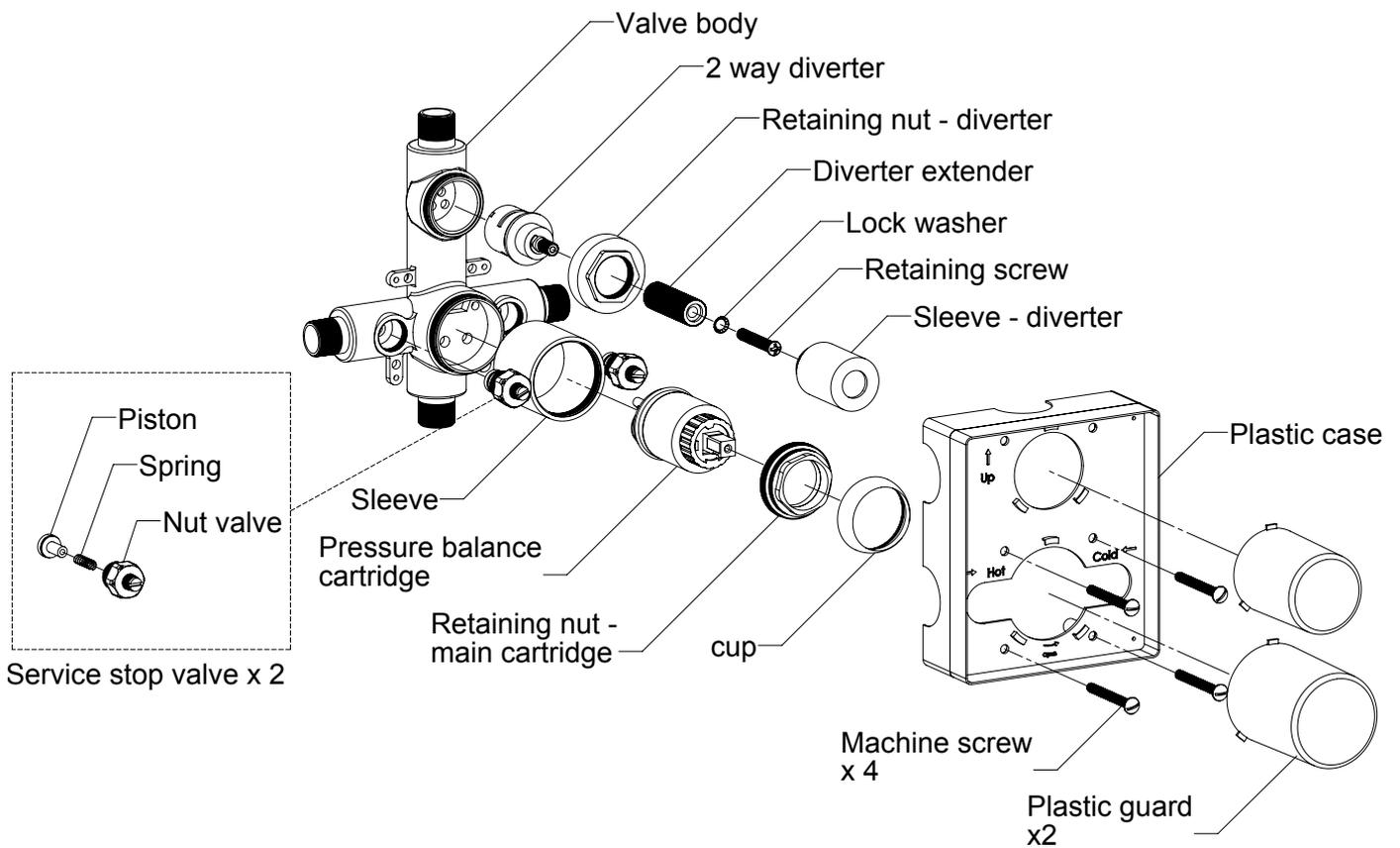


Fig #9

PRESSURE BALANCE CARTRIDGE REMOVAL / INSTALLATION / MAINTENANCE

- Close both service stops using a flat screw driver.
- Carefully remove the cup piece by rotating counter-clock wise.
- Unscrew the retaining nut using an adjustable wrench.
- Carefully remove the cartridge by pulling straight out. You may slightly wiggle the cartridge to loosen it up.
- Clear the cartridge opennings and re-install or replace with a new cartridge.
- Re-open the service stops.

HINT: When re-installing the pressure balance cartridge, align the plastic cylinders at the bottom of the cartridge with the two top holes in the valve body. See fig #10.

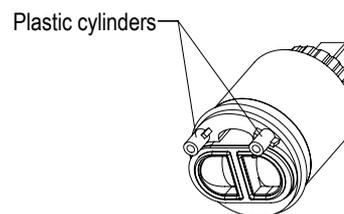


Fig #10

DIVERTER CARTRIDGE REMOVAL / INSTALLATION / MAINTENANCE

- Close both service stops using a flat screw driver.
- Carefully remove diverter sleeve by rotating counter-clock wise.
- Unscrew the retaining nut using an adjustable wrench.
- Carefully remove the diverter cartridge by pulling straight out.
- Clean the cartridge openings and re-install or replace with a new cartridge. Refer to fig #9.
- If replacing with a new diverter cartridge, remove the extender from old cartridge and re-install onto the new one.

SERVICE STOP REMOVAL / INSTALLATION / MAINTENANCE

- Close the main water supply from house or building.
- Unscrew the service stop using an adjustable wrench.
- Remove spring and piston.
- Inspect and re-install or replace with a new service stop valve. Refer to fig #9.
- Open the main water supply.

TROUBLE SHOOTING

Problem	Cause	Action
Insufficient water pressure.	Service stops are not fully open. Main cartridge is clogged.	Open both service stops fully. Clean or replace cartridge.
No water coming out of valve.	Incorrect operation of valve. Main water supply is turned off.	Refer to step 7. Check/open main water supply.
Water leaks from the handle.	The cartridge is loose or worn out.	Tighten the cartridge retaining nut. Clean or replace cartridge.
Incorrect temperature reading.	Hot and cold supply are reversed.	Correctly re-install the water supplies.

CLEANING AND CARE

Clean the faucet often with a soft cloth to keep it looking like new. For heavy cleaning you can use mild liquid detergents or non-abrasive liquid polisher. Rinse with water and dry with a soft cloth. Avoid abrasive cleaners, steel wool and harsh chemicals as these will dull the finish and void your warranty.

LIMITED LIFETIME WARRANTY

INOLAV provides its customers with an extensive warranty as a result of our excellent workmanship and high quality components used in our products.

Mechanical warranty: A limited lifetime warranty is provided on all mechanical parts to be free from manufacturing defects in materials and workmanship under normal use for as long as the original purchaser owns their home.

Finish warranty: A 5-year warranty is provided on all INOLAV faucet finishes to the original purchaser against manufacturing defects in materials and workmanship.

At its sole discretion, INOLAV will repair or replace any part or finish that proves to be defective in material and/or workmanship under normal installation, use and service.

This warranty is extended to the original consumer owner, but does not cover installation or any other labor charges. In no event shall INOLAV be liable for any incidental, consequential or special damages, installation cost, labor, travel time, freight costs incurred, lost profits, or contingent liabilities. INOLAV makes no representation that its products comply with any or all local building or plumbing codes. It is the consumer's responsibility to determine local code compliance.

For questions please call us at 1-855 472 4304 or visit our website at www.inolav.com