



## Thermostatic Valve and Trim

### Description

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- Trim and PL8950 valve
- Brass lever handles and face plate

### Standards

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- ASME A112.18.1
- Listed IAPMO / UPC & CUPC
- ADA Accessibility Guidelines for Buildings and Facilities - 4.27.4 Controls and Mechanisms (lever handle only)



ML8950-xx

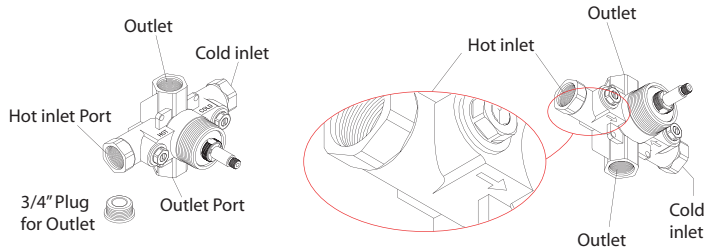
### Installing the HB 3/4" Thermostatic Valve

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- The plumbing lines used in installation must be copper pipes
- When soldering copper connections the plumber must first remove the thermostatic cartridge before applying heat. Refusal to follow this step will void the warranty. HB will not be responsible for any damage or defect in function due to this neglect.
- Look carefully at the diagrams provided on the installation sheet.
- The HB thermostatic valve is designed to run with only one outlet port open. The valve comes with the bottom port plugged. This plug can be switched if the installation requires it.
- When installing the trim, the stem length may have to be cut to specific dimensions to fit certain styles of trims.



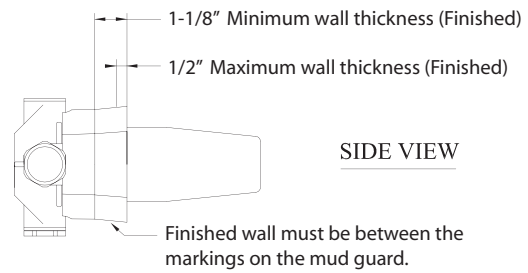
1



**3/4" PLUG MUST BE INSTALLED IN TOP OR BOTTOM OUTLET**

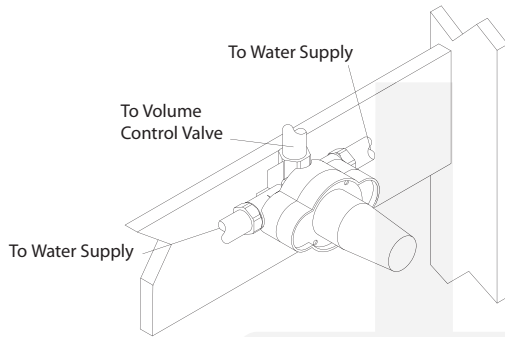
Please note that the valve is stamped with "HOT" & "COLD" on the top and "C" (chad / hot) and "F" (froid/cold) on the bottom. The valve is designed with two outlets for ease of installation, but are not intended to be used simultaneously. **Using both outlets will make the valve not function properly.** Determine which outlet port will be used for the installation and plug the other outlet with the 3/4" plug provided.

2



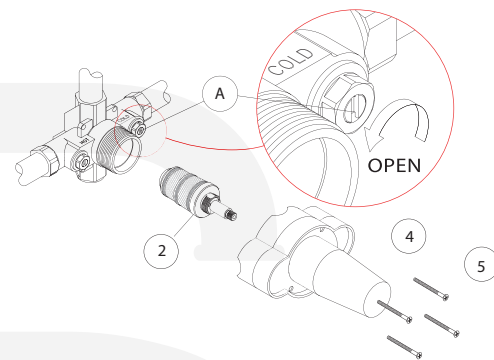
Make sure the tile guide is firmly secured to the valve and determine the proper location for the mixing valve. The from edge of the tile guide must be a minimum of 1/2" beyond the finished wall and no more than 1-1/8". Determine the proper orientation of the valve (see step 1). A reverse cartridge is available, but there is a reduction of 25 percents in the output of the valve.

3



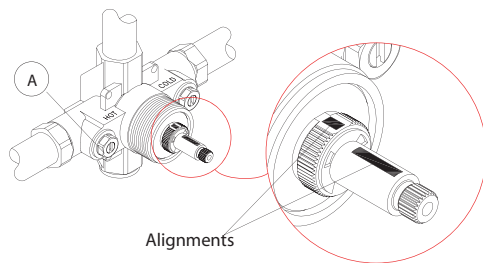
Once the location has been determined, install a cross beam. Level the valve and secure to the crossbeam. Connect the thermostat - mixing valve to the hot and cold supplies using copper supply lines and 3/4" male adaptors. (NOTE: Do not apply heat directly to the valves as this may damage rubber and plastic seals and will void the warranty). Connect the outlet port to the volume control valve (Huntington Brass volume control valves and trim kits are sold separately).

4



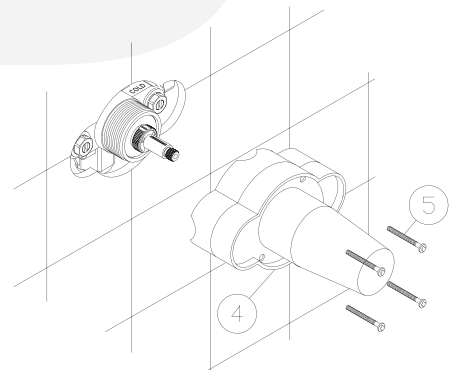
Flush supply lines. Remove the mounting screws (#5) and the tile guide (#4) Close integral stop (#A) by turning screwdriver slots clockwise fully. Remove cartridge (#2) by using a wrench and turning counter clockwise. Turn on water supply and open integral stops by turning screwdriver slots counter clockwise. Shut-off integral stops. Failure to complete this step will void the warranty.

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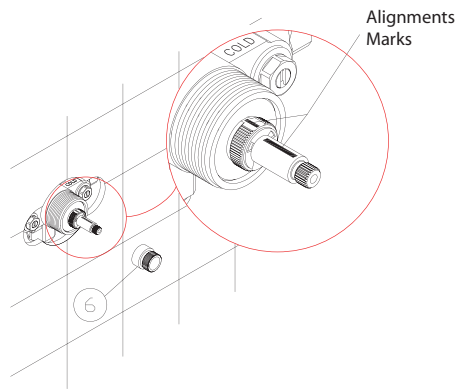
Reinstall cartridge. Make sure that the alignment marks on the cartridge stem are on the top of the cartridge. Secure cartridge back. Open integral stops and flash lines to volume controls (s), outlet (s), etc. Check all connections for leaks. Close integral stops and reinstall tile guide. The wall is now ready to be closed.

6



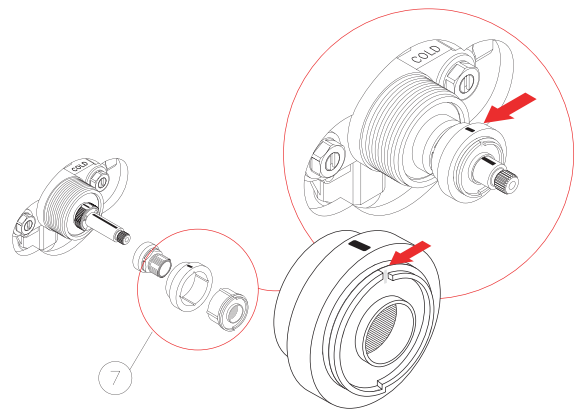
Once the finished wall has been completed, removed black tile guide (#4)

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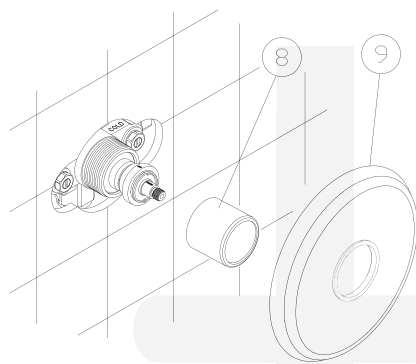
Make sure black alignment mark on the stem lines up with the mark on cartridge nut. Attach positioning cam (#6) to cartridge. Be sure that the fine broach of the cam is aligned with the cartridge and the cam is firmly positioned.

8



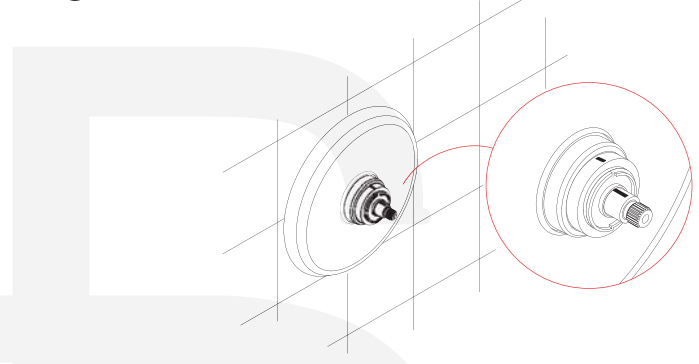
Place the black safety stop insert into the safety stop metal ring. Make sure that the opening in the black safety stop is lined up with the marking on the safety stop metal ring. The cartridges are factory calibrated, so the alignment mark on the safety stop (#7 see insert) must be located at the top. Line up the broach on the safety stop and the positioning cam and slip safety stop (#7) onto positioning cam. Take care not to strip the broach on the safety stop when attaching and be sure that it is firmly positioned.

9



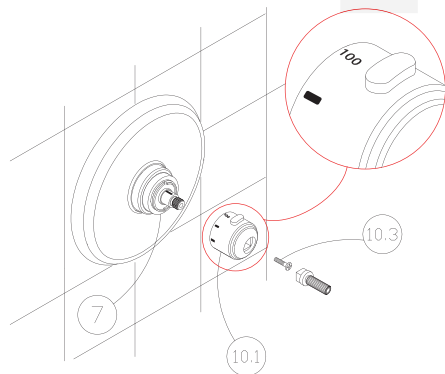
Thread the finished valve sleeve (#8) onto the thermostatic valve body. Check to make sure the seal ring is installed on the center hole of the plate (#9). Slide escutcheon plate onto sleeve until snug against finished wall. Use silicone caulking to seal the plate against the wall surface to avoid any leakage of water behind plate.

10



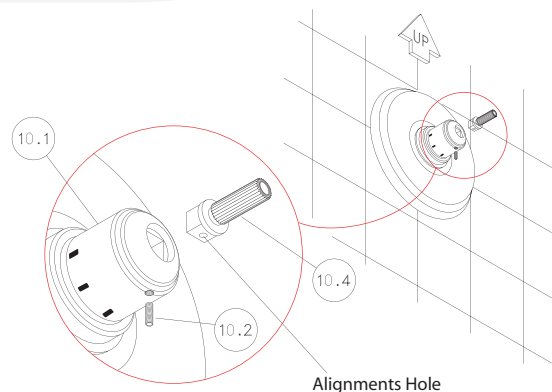
If the finished sleeve does not protrude beyond the finished escutcheon plate, an optional extension (#12) is available. If all installation specifications are followed there should be no need to use the optional extension kit. In the event that the installation instruction are not followed and an extension kit is needed HB does offer these parts, but will not assume any responsibility for the mistake. Please contact your local HB distributor if you have any questions.

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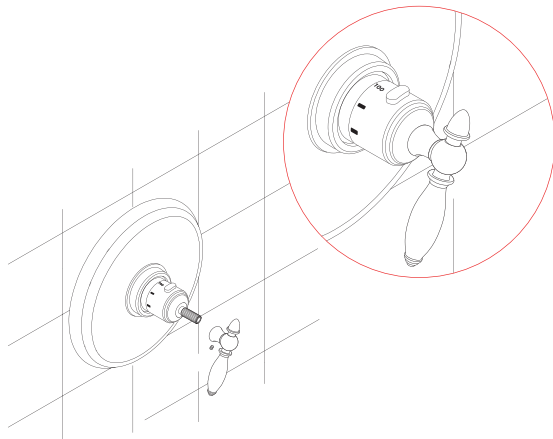
Attach the thermostatic handle base with temperature indicators (#10.1) to safety stop (#7) and stem. The red safety button (marked 100") should be placed at the top. Secure the handle with the screw provided.

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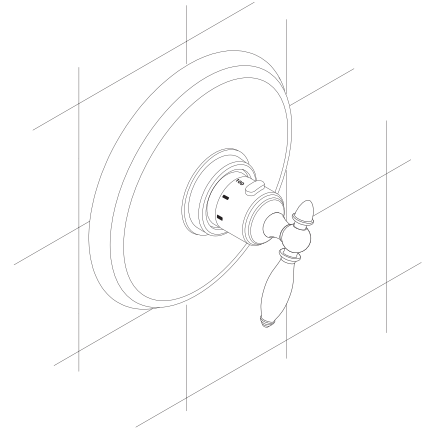
Orient handle broach stem (#10.4) so that the alignment hole is pointed down and insert into the handle base (#10.1). Stem should seat snugly in base with the alignment hole lined up with threads tapped on the underside of the handle base. Secure stem with setscrew (#10.2) provided.

13



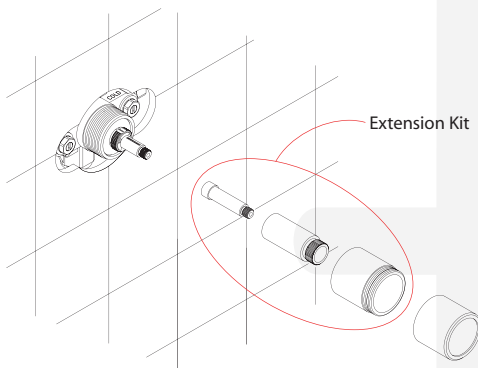
Finally, attached the handle tip to the stem. (Note: handle trim varies with series and can be mounted in any desired position). The stem may be trimmed to fit if the stem length is too long.

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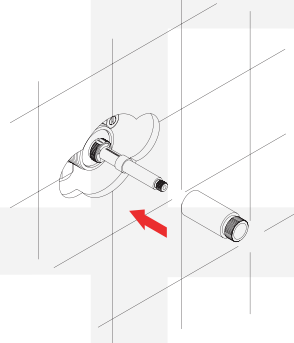


Once the handle tip is in the desired position, secure the handle tip with the side set screw provided (or some handles may use a top side screw that will screw into the tapped thread in the broach stem)

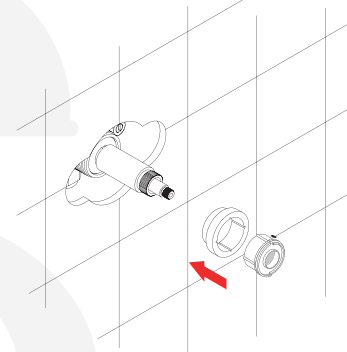
### Extension Kit Installation



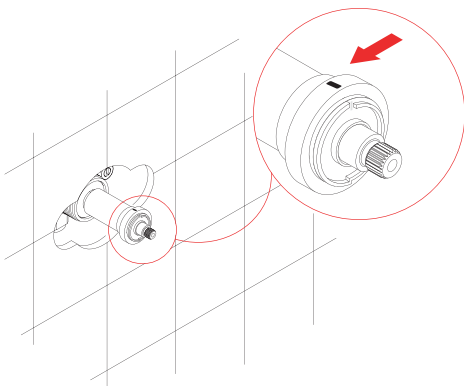
The thermostatic valve extension kit consists of 3 main components. 1) Broach extension 2) positioning cam extension 3) sleeve extension & 4) long handle screw. All of these parts are easily installed on to the valve body with out making any adjustments.



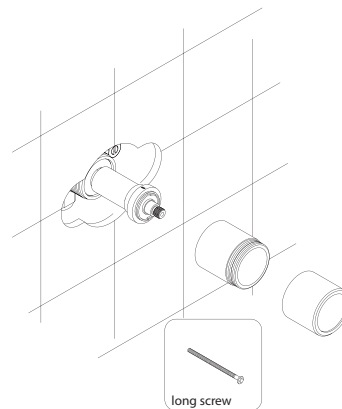
First, place the broach extension piece on to the thermostatic cartridge broach stem. This will later be secured when the handle trim is installed using the longer handle screw to reach the broach thread. Next, place the cam extension onto the cartridge.



Next, follow the same directions as step #8 in the installation instructions to assemble and install the safety stop ring onto the positioning cam extension piece.

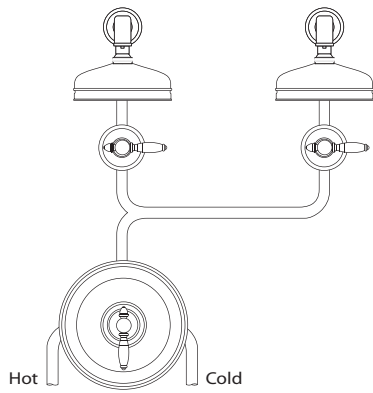


When installing the safety stop ring make sure to line up the marking on the metal ring with the calibration markings on the cartridge placing all marking aligned at the top position.



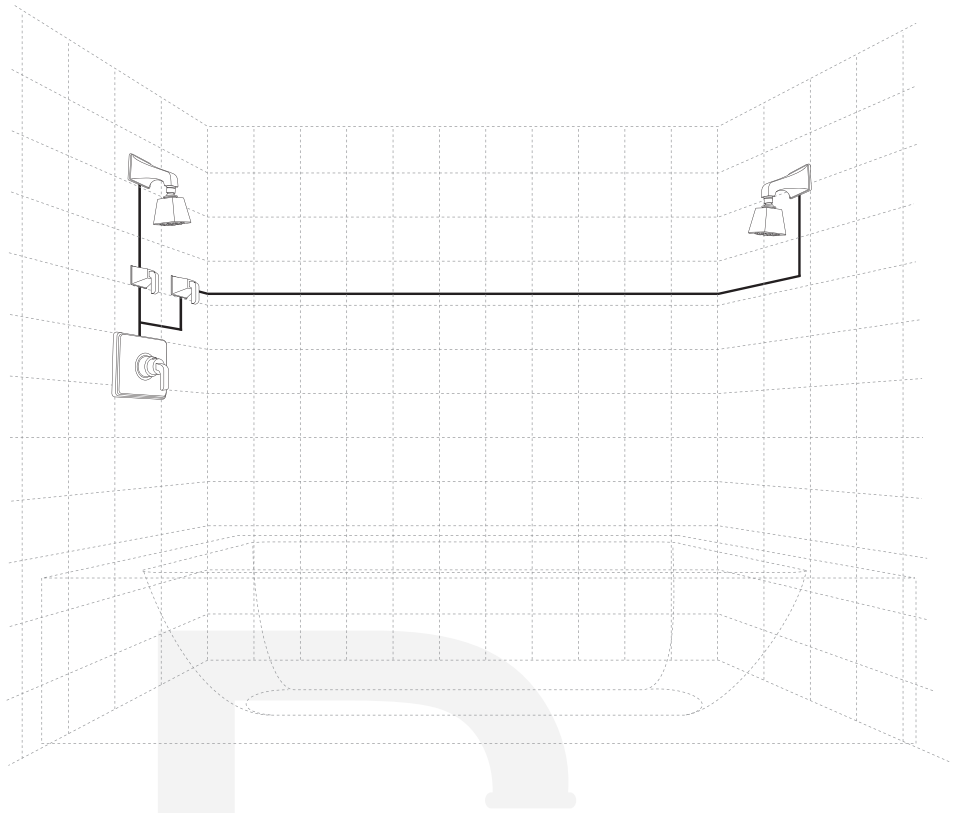
Finally, install the sleeve extension onto the valve body. Once all of the extension components are installed you can install the rest of the trim parts as normal using the long screw for the handle trim in place of the existing short screw.

## Custom shower combination 1

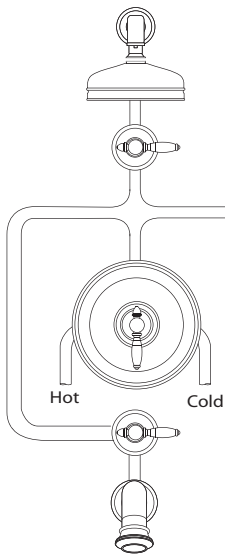


### Dual shower heads

1. 2 stop valves will be required for the 2 peripherals to function independently.
2. Note: Adding two stop valve for each shower head will allow you to control the shower heads function independently. (If desired, they can work at the same time, by hooking them up to one stop valve).

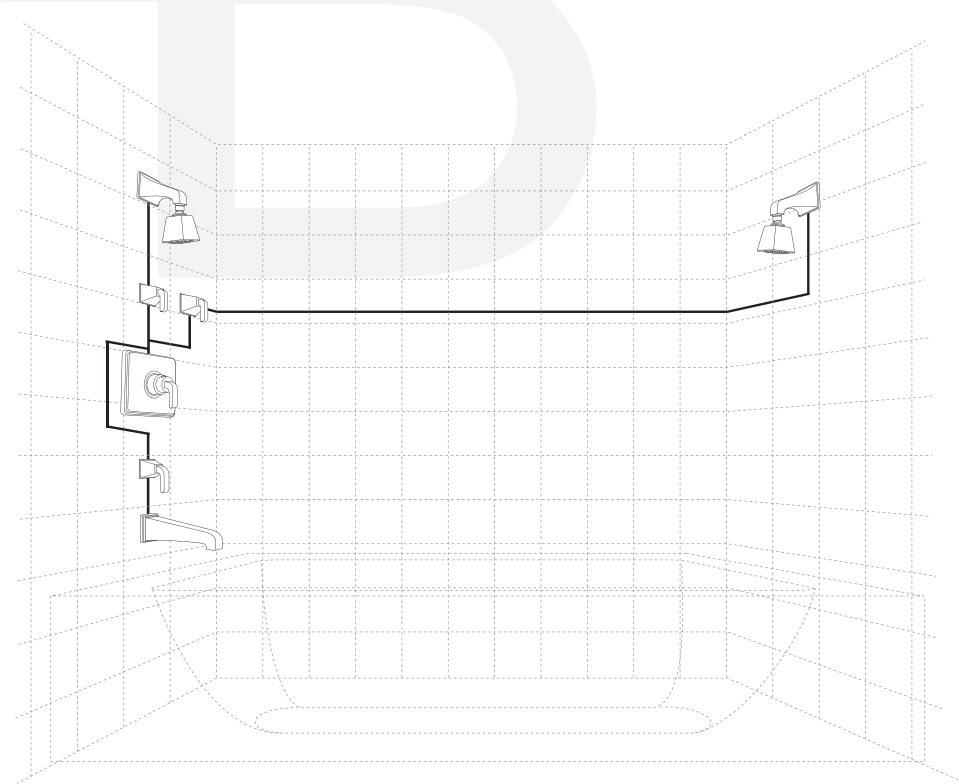


## Custom shower combination 2

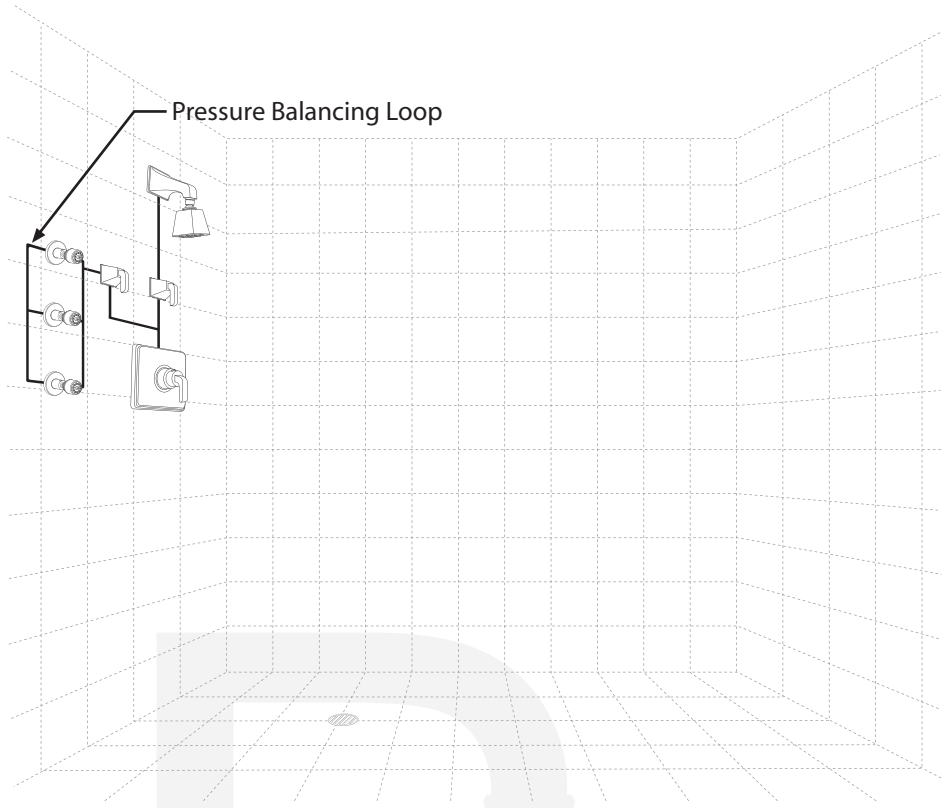
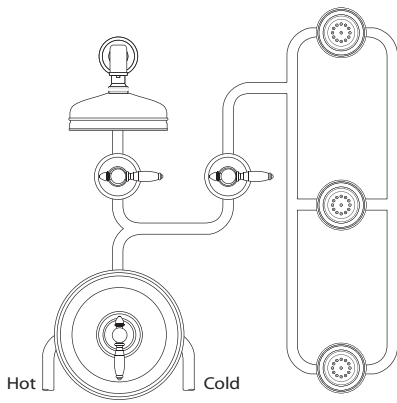


### Dual shower heads & tub spout

1. 3 stop valves will be required for the 3 peripherals to function independently.
2. Note: For spout, do not use the opposite outlet on the valve. Use only one outlet for all functions. (Using both outlets will reduce performance of the valve) Spouts vary in installation. Check spout specifications for correct method.



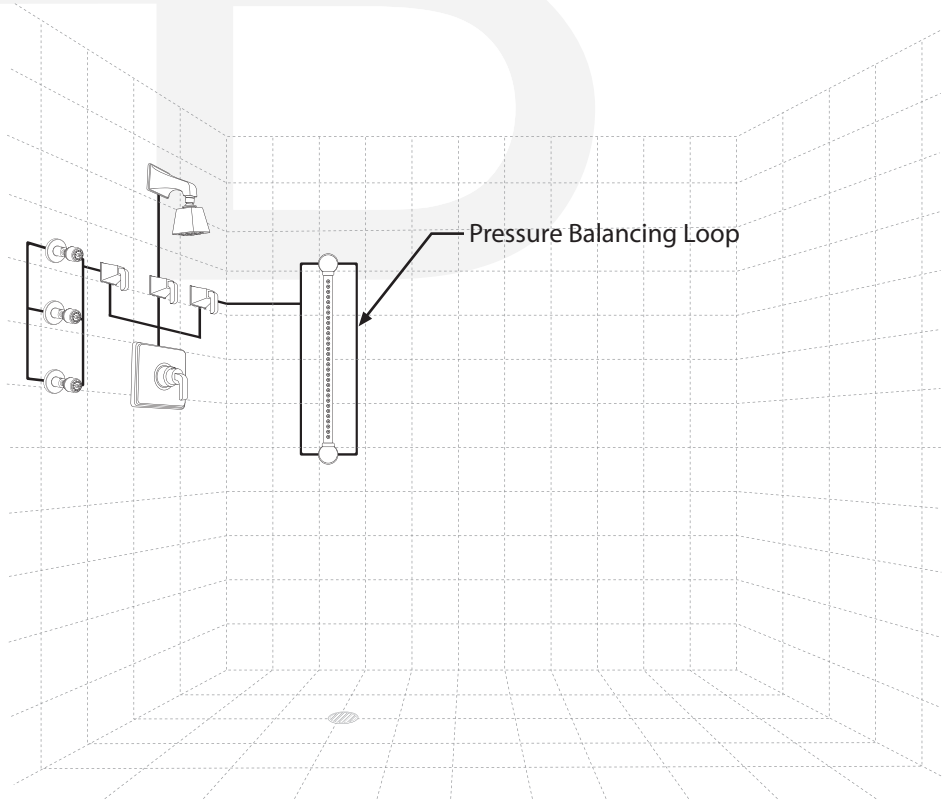
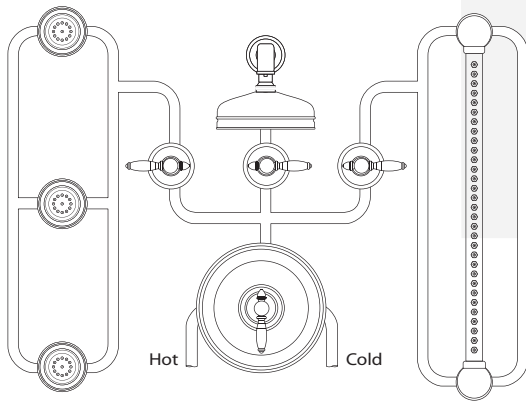
## Custom shower combination 3



### Single shower head & Body Sprays

1. 2 stop valves will be required for the 2 peripherals to function independently.
2. For the body spray installation. 3 body sprays installed in a vertical configuration is standard to achieve total body spray coverage. When installing the body sprays a pressure balancing loop is required. The purpose of this method of installation is to ensure output of each device is uniform.

## Custom shower combination 4



### Single shower head, Body Sprays & Rain Bar

1. 3 stop valves will be required for the 3 peripherals to function independently.
2. For the body spray installation. 3 body sprays installed in a vertical configuration is standard to achieve total body spray coverage.
3. When installing the body spray and the rain bar a pressure balancing loop is required. The purpose of this method of installation is to ensure output of each device is uniform.