

Installation Instructions For Pressure Balance Valve

Recommended for all SH-PB Series Shower Fittings with Auto-Drain™

Notice to the Installer

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- Read this entire instruction sheet before installing to ensure proper installation.
- Installation must comply with local codes and ordinances.

Pressurized plumbing fittings shall be installed in accordance with manufacturer's recommendations.

The supply piping to these devices shall be securely anchored to the building structure to prevent installed device from unnecessary movement when

operated by the user. Care shall be exercised when installing the device to prevent marring the exposed surface.

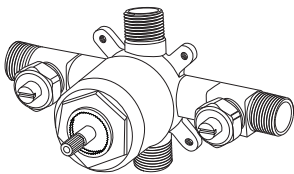
NOTE: The information in this manual is subject to change without notice.

Please leave this manual with the facility manager after completing the valve installation. This document contains information necessary for routine maintenance and servicing.

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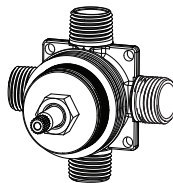
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Mixing Valve



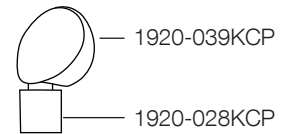
1910-VONF

Diverter Valve*



773-VONF

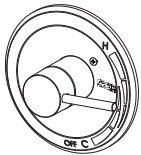
Remote Auto-Drain



1920-039KCP

1920-028KCP

Mixing Valve Trim



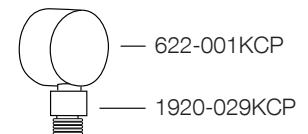
1910-002KCP

Diverter Valve Trim



763-TPCP

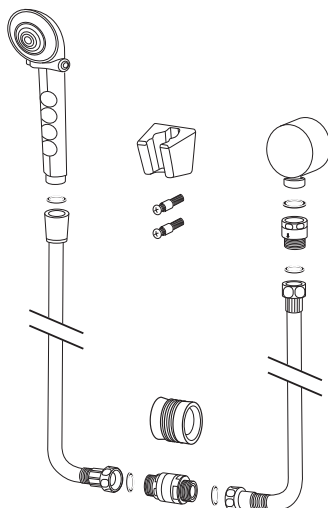
Hand Shower Elbow



622-001KCP

1920-029KCP

Hand Shower Complete Kit



150-ADCP

Auto-Drain Only



1920-022KCP

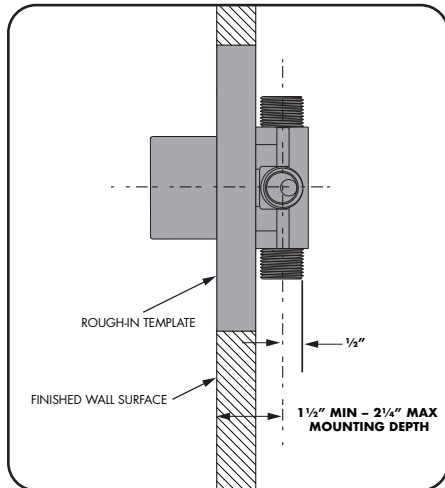
IMPORTANT! Setting Hot Limit Stop

The removal of the warning label barrier on the face of this mixing valve constitutes the transfer of liability from the manufacturer to the installer under the laws of the United States. It is the installer's responsibility to set the maximum output temperature of the valve to no more than 120°F, in accordance with Standard ASSE 1016/ASME A112.1016/CSA B125.16 dealing with individual thermostatic, pressure balancing, and combination pressure balancing and thermostatic control valves for individual fixtures, temperature limit setting.

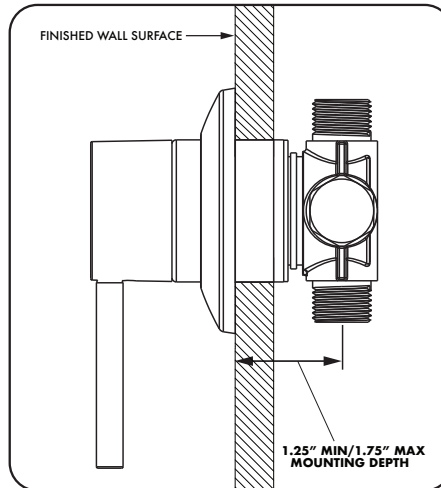
*U.S. Patent Pending

Rough-In of Valve and Assembly of Trim:

1. Rough valve body into wall, connecting piping to 1/2" female copper sockets or 1/2" male I.P. nipples (see Figure 1). Important: note "UP" and "DOWN" markings on back of valve.
2. The depth of rough-in should account for thickness of wall materials to be used (combined thickness of wall board and finished wall material). Face of guard should be positioned to be flush with finished wall surface.
3. Anchor installation to bracing between studs (ears on the valve body can be used for this by removing the plastic guard). Otherwise, anchor the connection piping.
4. Valve should be pressurized and tested for leaks at the connections.
5. Plastic guard should be left attached to the valve until finished wall material is installed.
6. After wall is finished, remove plastic guard and replace with trim sleeve and escutcheon plate (see Figure 2). Orient handle so that lever is pointed down toward "OFF" position.



Mixing Valve Mounting Depth



Diverter Valve Mounting Depth

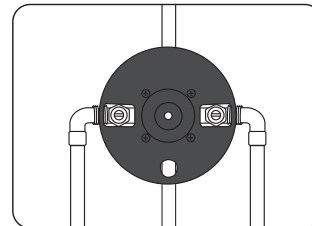


Figure 1

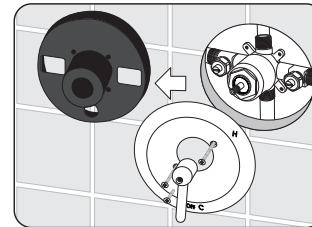
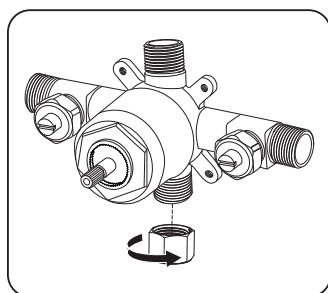


Figure 1

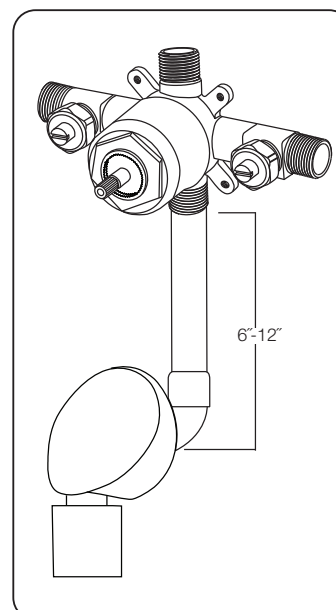
Installation Configurations

The 1910 Series valve has been designed to be installed like a conventional shower valve or with a quick drain system that allows water to drain from the valve and hand shower hose after each use. This optional system is designed to eliminate stagnant water in the shower system. Below are examples of three possible configurations using the 1910 Series valve.



1. Shower Only

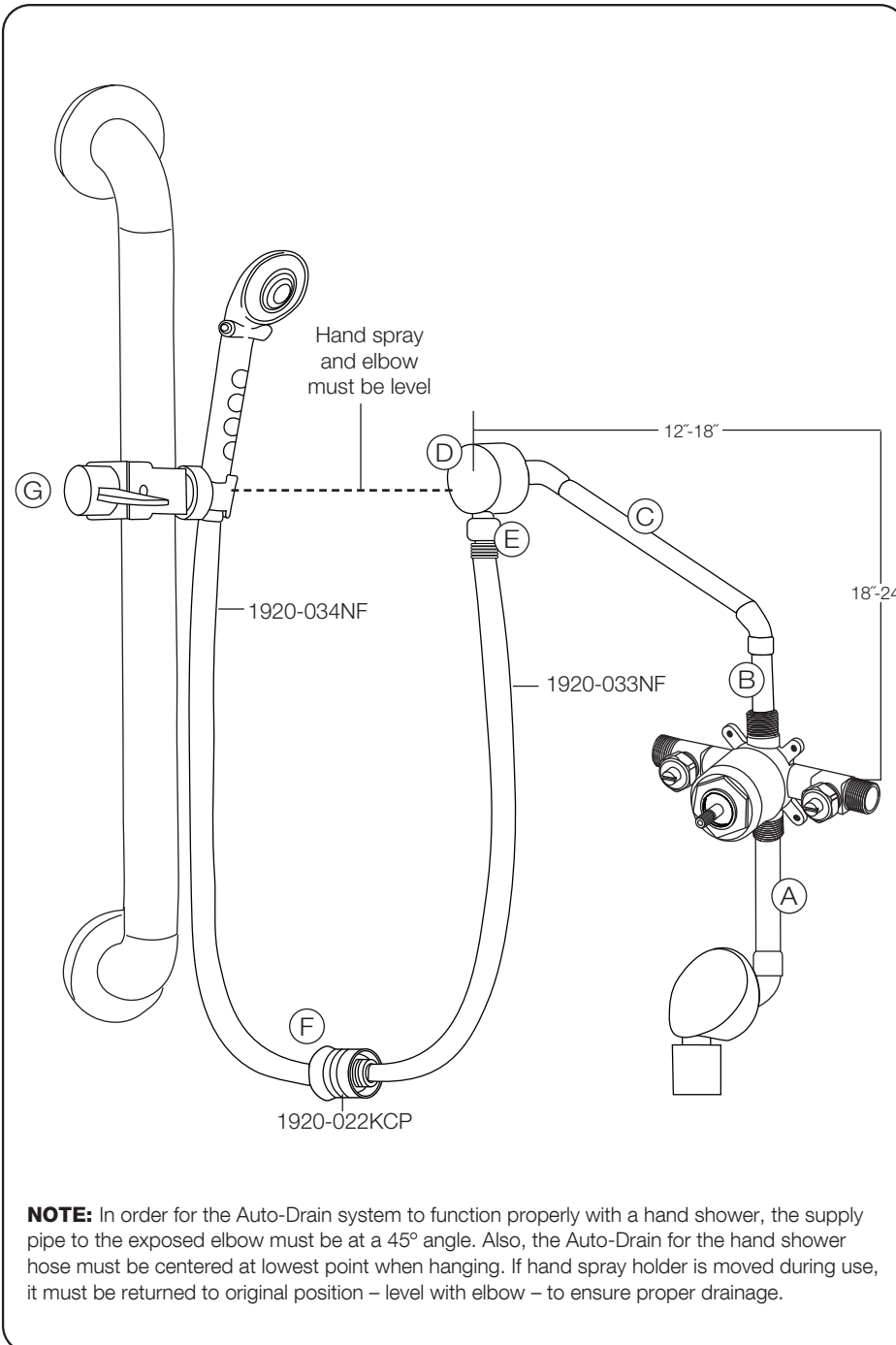
1. Apply thread seal tape to the lower outlet port.
2. Install the included cap.
3. Wrench tighten.



2. Shower with Remote Auto-Drain

1. Measure, cut and install a drain pipe with elbow. Attach to lower outlet port of valve. Auto-Drain can be placed 6" - 12" below valve. 1/2"-14 NPT thread is required for Auto-Drain installation.
2. Apply thread seal tape and install drain elbow. (Model no. 1920-039JKCP)
3. Install Auto-Drain with included gasket.

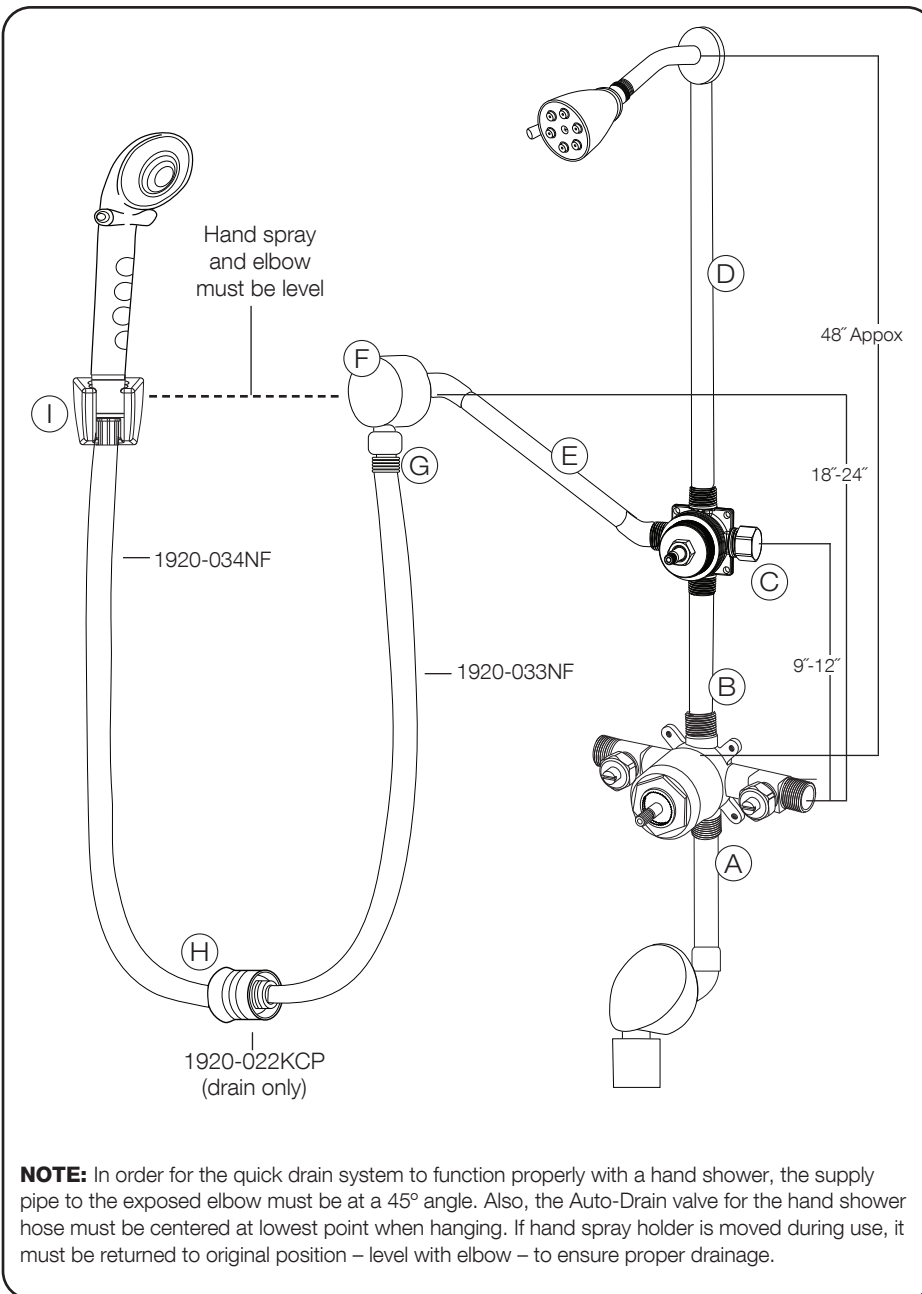
Installation Configurations (cont)



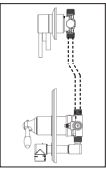
3. Hand Shower with Valve and Shower Hose Drain

1. Install lower valve drain following steps in configuration example #2 (A).
2. For hand shower, install a short supply pipe up from valve and attach a 45° elbow (B).
3. Run extension supply pipe from the elbow to desired location that is 18" - 24" above valve center, maintaining a 45° angle (C). ½-14 NPT thread is required for hand shower exposed elbow installation.
4. Apply thread seal tape and install exposed elbow (D).
5. Install atmospheric vent with included gasket (E).
6. Install hose segments to elbow and handspray.
7. Connect the end of each hose segment to hose drain valve (F).
8. Hand shower holder (G) must be placed at same height as exposed elbow and positioned so the drain valve (F) is centered at the lowest point in the hose.

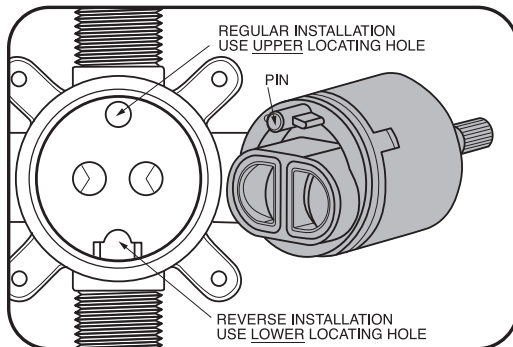
Installation Configurations



4. Hand Shower with Valve and Shower Hose Auto-Drain

1. Install remote Auto-Drain following steps in configuration example #2 (A).
2. Run extension supply pipes from the mixing valve and the diverter valve. There may be a difference in mounting depths that may require an offset connection (B). If there is a difference in mounting depths, two 45 degree elbows are recommended. 
3. Install the diverter valve. Apply thread seal tape to the unused outlet port and install the included cap (C). Wrench tighten.
4. For the shower head, run extension supply pipe (D) from the diverter valve to desired location that is approximately 48" above mixing valve center.
5. For hand shower, run an extension supply pipe from diverter valve to the desired location of the elbow to that is 18" - 24" above mixing valve center, maintaining a 45° angle (E). 1/2-14 NPT thread is required for hand shower exposed elbow installation.
6. Apply thread seal tape and install exposed elbow (F).
7. Install atmospheric vent with included gasket (G).
8. Install hose segments to elbow and hand spray.
9. Connect the end of each hose segment to Auto-Drain (H).
10. Hand shower holder (I) must be placed at same height as exposed elbow and positioned so the drain valve (H) is centered at the lowest point in the hose.

Back-to-Back Installation



When a valve is installed with reversed supply connections (typically in a back-to-back situation), the cartridge can be reversed to allow normal operation.

1. Remove trim sleeve to expose top of valve.
2. Loosen and remove hex nut above cartridge.
3. Remove cartridge from valve cavity.
4. Look into cavity to see upper and lower locating holes for cartridge pin on the floor of the cavity.
5. Re-insert cartridge, aligning the pin with lower locating hole (partially cut away by discharge opening).
6. Press cartridge in firmly to assure that pin has been properly inserted.
7. Secure cartridge by tightly reassembling the hex nut.
8. Reassemble trim.

Setting Limit Stop

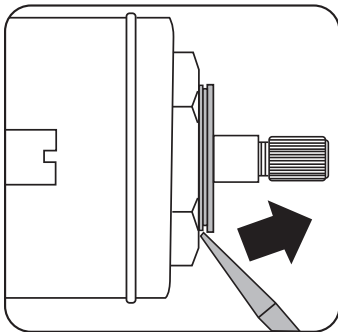


Figure 2

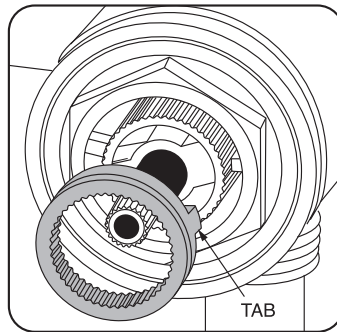


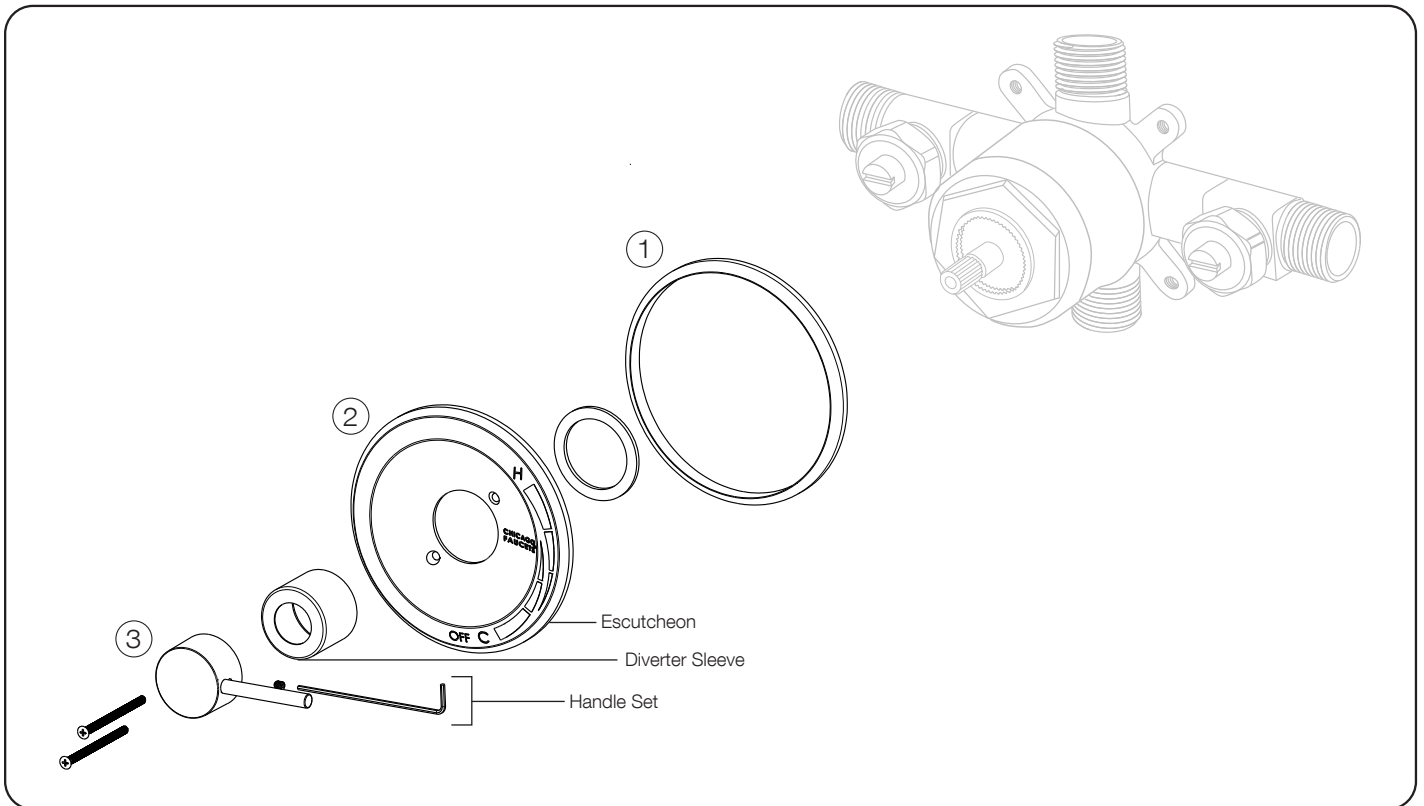
Figure 3

To properly set the limit ring, you must use a thermometer or calibrated sensing device to accurately measure the outlet water temperature. The adjustment ring is positioned as follows:

1. Expose the top of the cartridge by removing the trim sleeve from the valve body. Do not remove the hex nut holding it in place.
2. Remove the grey adjustment ring by placing the blade of a knife into the groove and prying it off (see Figure 2).
3. Note the stop tab on the bottom of the ring (see Figure 3). The further it is reoriented in a counter-clockwise direction, the shorter the travel allowed (and thus, the lower the temperature output possible). Important: before re-orienting the ring, be sure the stem is in the full "OFF" position.

NOTE: After adjusting the temperature limit stop, you must use a thermometer or calibrated sensing device to accurately measure the outlet water temperature.

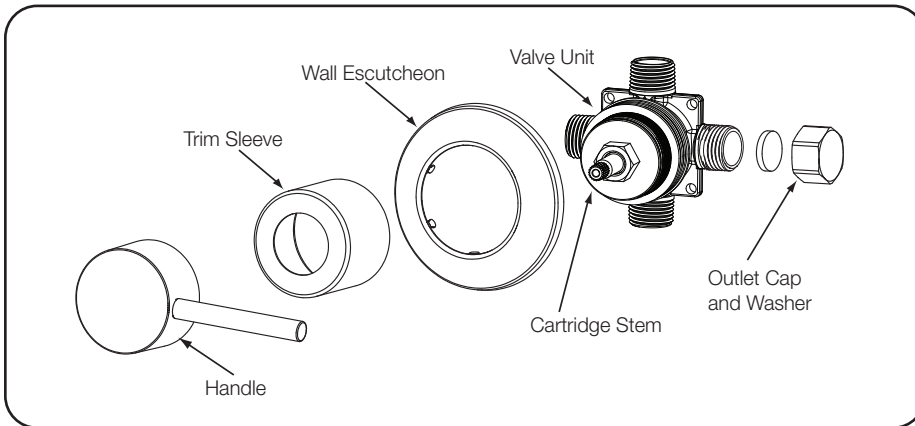
Standard Mixing Valve Trim Installation



Follow "Setting Limit Stop" instructions below before proceeding.

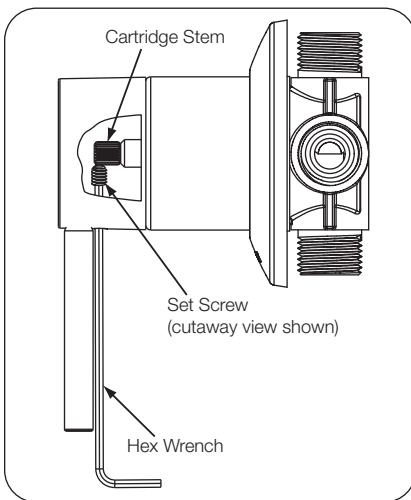
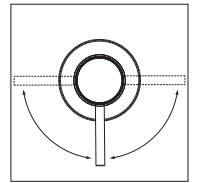
1. Attach foam seal to back of trim plate along outer edge. Cut to size leaving 1/8" gap at the bottom of the plate.
2. Align face plate with mounting holes on valve and attach with screws.
3. Attach handle. Make sure it is positioned in "OFF" position.

Standard Diverter Valve Trim Installation



1. Before installing the valve trim, be sure the final wall finish is completely installed. The wall surface should be level, clean, and dry.
2. Remove the trim sleeve from the trim pack and slide it over the valve unit, seating it flush to the valve (see Figure 4).
3. Remove the wall escutcheon from the trim pack and slide it over the trim sleeve.
4. Attach handle. Make sure that the handle stem is pointing directly down when assembled.

The handles are designed to rotate at 90 degrees in a clockwise and counter-clockwise movement. Rotate the handle in the clockwise and counter-clockwise direction to verify that the handle stops in the 90-degree position in both directions.



Care and Maintenance

All Chicago Faucets fittings are designed and engineered to meet or exceed industry performance standards. Care should be taken when cleaning this product. Do not use abrasive cleaners, chemicals or solvents as they can result in surface damage. Use mild soap with warm water for cleaning and protecting the surface of Chicago Faucets fittings.

For additional technical assistance, call 800/TEC-TRUE (800-832-8783) or visit our website at chicagofaucets.com.

CHICAGO FAUCETS LIMITED WARRANTY

TO WHOM DOES THIS WARRANTY APPLY? — The Company extends the following limited warranty to the original user only.

WHAT DOES THIS WARRANTY COVER AND HOW LONG DOES IT LAST?

This warranty covers the following Chicago Faucets branded Products:

LIFETIME WARRANTY — Any metal cast, forged, stamped or formed portion of the Product, not including electronic or moving parts or other products separately covered by this Limited Warranty or water restricting components or other components, is warranted against material manufacturing defects for the life of the Product.

FIVE YEAR WARRANTY — Certain Products or portions of the Product are warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase. Products warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase are referred to by the product series 90, 99, 150, 410, 420, 430, STB, STC, W4D, W4W, W8D, W8W, 1900, 1905, SH, 537, 548, 549, 640, 897, 2500, 8400, 9800 and E-Tronic™.

FIVE YEAR CARTRIDGE WARRANTY — The "Cartridge", defined as the metal portion of any Product typically referred to by the product numbers containing 1-099, 1-100, 217, 274, 313, 333, 335, 376, 377, 386, 408, 409, 617, 625, 628, 667, 670, 671, 672, 745, 776, 807, 824, 825, 826, 919, 937, 962, 966, 977, 1105, 2500, 3300 and 5235 excluding any rubber or plastic components, is warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase.

ONE YEAR FINISH WARRANTY - COMMERCIAL — For Products used in commercial applications, the finish of the Product is warranted against material manufacturing defects for a period of one (1) year from the date of Product purchase.

OTHER WARRANTIES — All other Products not covered above are warranted against material manufacturing defects for a period of one (1) year from the date of Product purchase.

Other restrictions and limitations apply. For complete warranty details, call Chicago Faucets Customer Service at 847-803-5000 or visit chicagofaucets.com.

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