# INSTALLATION

GUIDE

TWO-WAY/
THREE-WAY
TRANSFER VALVE
TRIM



### **BEFORE YOU BEGIN**



**CAUTION:** Risk of property damage. When installed in a two-way configuration, the auxiliary outlet must be capped off to prevent possible leakage out of the unused auxiliary outlet.



CAUTION: Risk of product damage. The transfer valve is designed for use with Kohler non-diverting bath spouts. Do not use diverters, diverter spouts, or shut-off devices downstream of the transfer valve.

- Carefully read this entire instruction manual before beginning the installation; the illustrations do not show all possible configurations.
- The transfer valve is pre-assembled with a grey three-way stop collar for three-way connections. To convert the valve for two-way configurations, follow the instructions for changing the grey collar to the black two-way stop collar.
- Observe all local plumbing and building codes.
- Provide an access panel for all installations.
- This transfer valve contains an integral vacuum breaker.

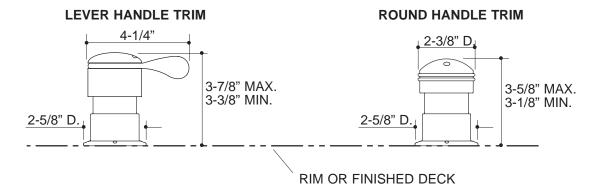


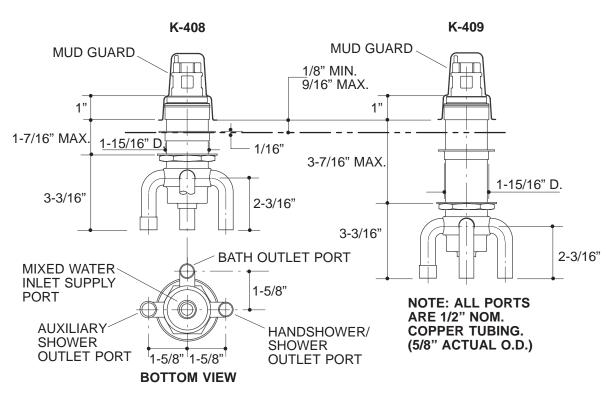
CAUTION: Risk of product damage. Petroleum-based lubricants will damage the plastic components of this valve, and should not be used.

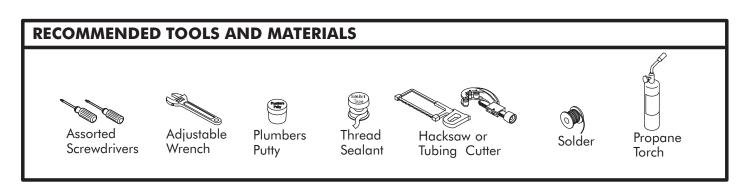


CAUTION: Risk of product Excessive heat will damage internal plastic components. Follow these steps to avoid product damage.

- **Important:** Do not apply excessive heat while soldering.
- **Important:** Direct the torch flame away from the brass body.
- Important: Only apply direct heat to the connectors and extensions.
- **Important:** If there is limited access to the solder connections, or if any other risk of excessive heat being applied to the brass body exists, remove the cartridge prior to soldering. If you remove the cartridge, protect the seals and O-rings from becoming dirty, damaged, or misaligned.
- Do not install hand-held shower units on the bath outlet.
- Kohler Co. reserves the right to make revisions in the design of faucets without notice, as specified in the Price Book.







# **COMPONENT LAYOUT**

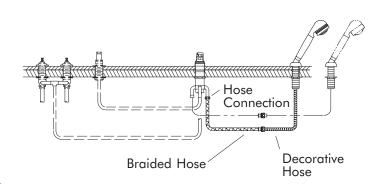
Verify the location of the components, and the orientation of all ports.

Decide in advance on the location and orientation of the transfer valve. The location of the bath spout, hand shower, and optional auxiliary shower will affect the piping and connectors needed.

Allow clearance for valve outlets, handles, bath spout, and hand shower hoses.

You can extend the distance between the transfer valve and the braided hose connection with 1/2" copper piping below the rim, but it may not be safe or practical. A long run of piping will mean a long run of room-temperature standing water when the hand shower is first activated for use.

Secure long runs of piping to the underside of the deck or rim. If the piping cannot be secured at a point near the transfer valve, secure from underneath with lumber or other suitable support.

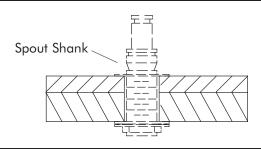


# 2 BEFORE SOLDERING

Provide an access panel for all installations. Allow for access to the connection between the hand shower and the hand shower decorative base.

For easiest installation, do not install the bath unit until all soldering (except supplies) is complete. Then install the bath and connect the supplies.

For the bath spout, install the spout shank according to the spout installation instructions. If possible, do not install the finished trim until all other installations and construction are completed.



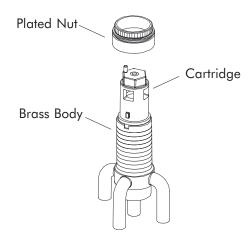
Install the valve bodies according to the valve body installation instructions. Loosely secure the valve bodies.

Follow the handle installation instructions to temporarily assemble the handles to adjust the valves to the proper height before connecting the lines to the transfer valve or supply.

### THREE-WAY TO TWO-WAY CONVERSION

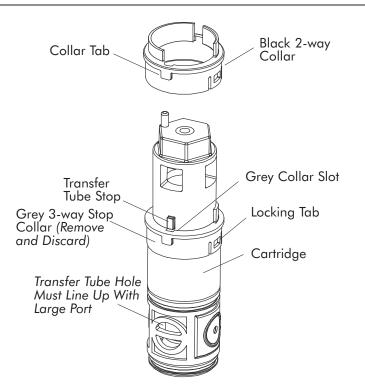
**NOTE:** The valve is pre-assembled for use as a three-way transfer valve. Read the following instructions to convert the valve to a two-way configuration.

Remove the plated nut. Carefully pull the cartridge from the brass body. Use care to prevent the cartridge seals and O-rings from falling off, or becoming dirty or damaged.



Line up the transfer tube stop with the slot in the grey collar. Use a thin-bladed screwdriver to carefully pry the two locking tabs loose from the transfer tube. Remove and discard the grey three-way stop collar.

Verify that the transfer tube lines up with the large port in the cartridge, as shown. Align the black collar on the transfer tube so the collar tab lines up with the large port. Snap the collar in place so both locking tabs are fully engaged.

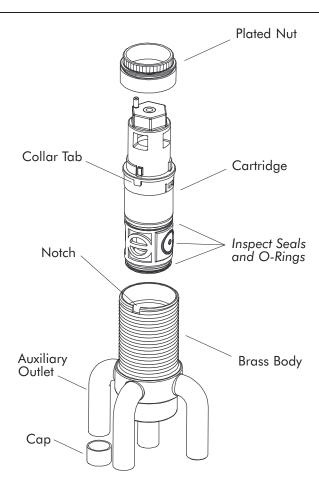


Inspect the seals and O-rings for damage and proper fit. Adjust them as needed. Carefully work the cartridge into the brass body so the collar tab fits fully into the notch in the brass body.

Hand tighten the plated nut to the brass body.



**CAUTION:** Risk of property damage. When installed in a two-way configuration, the auxiliary outlet must be capped off to prevent possible leakage out of the unused auxiliary outlet.



### INSTALL TRANSFER VALVE



CAUTION: Risk of product damage.

Excessive heat will damage internal plastic components. Follow these steps carefully to avoid product damage.

**IMPORTANT:** Do not apply excessive heat while soldering.

**IMPORTANT:** Direct the torch flame away from the brass body.

**IMPORTANT:** Only apply direct heat to the connectors and extensions.

**IMPORTANT:** If there is limited access to the solder connections, or if any other risk of excessive heat being applied to the brass body exists, remove the cartridge prior to soldering. If you remove the cartridge, protect the seals and O-rings from becoming dirty, damaged, or misaligned.

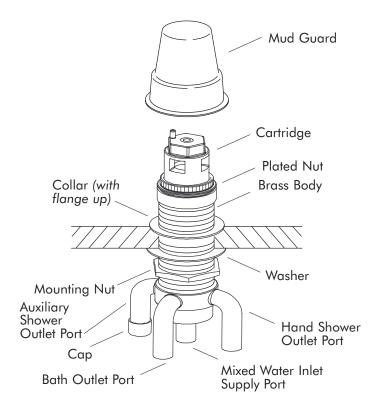
If the transfer valve is to be used in a two-way configuration, solder a cap to the auxiliary outlet.

Solder the inlet and outlet connectors and extensions.

Remove the mud guard and plated nut from the valve. Do not remove the cartridge. Remove the collar from the brass body. Thread the mounting nut completely down the brass body. Position the washer on the mounting nut.

Fit the valve up through the deck or rim, and thread the collar part way onto the brass body with the flange up, as shown. Hand tighten the plated nut onto the brass body. Re-install the mud guard.

Position the collar to create a gap of between 1/8" and 9/16" between the finished deck and the bottom of the mud guard. Securely tighten the mounting nut.



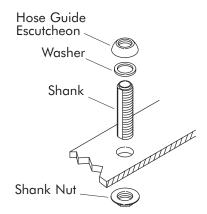
# SOLDER REMAINING CONNECTIONS

Dry fit all the piping and connectors.

Solder the remaining piping and connectors.

# AFTER SOLDERING

For the hand shower hose guide, fit the washer over the top of the shank. Thread the hose guide escutcheon onto the top of the shank. From the underside, thread the shank nut onto the shank, and tighten firmly.

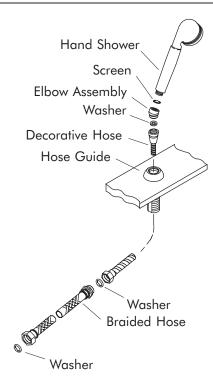


The decorative interlock hose has a smooth plated finish. One end of this hose is smaller than the other. Feed this smaller end down through the hose guide, and attach, with a washer, to the braided hose.

**Optional:** Thread the supplied elbow assembly, with the screen, onto the hand shower. Thread the decorative hose, with the washer, onto the elbow assembly.

**All Installations:** Position the washer in the hose end of the braided hose. Tighten to either the transfer valve outlet, or a custom outlet extension.

**NOTE:** Be sure to remove any loops in the hose to avoid kinking.



Remove the mud guard.

Turn on the water supplies, operate the transfer valve and associated fittings, and carefully inspect the entire installation for leakage and proper operation. Correct as needed.

If water flows from the valve cartridge during operation, or if the transfer valve becomes plugged or inoperable, disassemble and clean the cartridge in the following manner:

Remove the cartridge and collar according to the "Three-Way to Two-Way Conversion" instructions beginning on Page 5. Carefully remove the rectangular seals from the cartridge, and set them on a clean, soft surface.

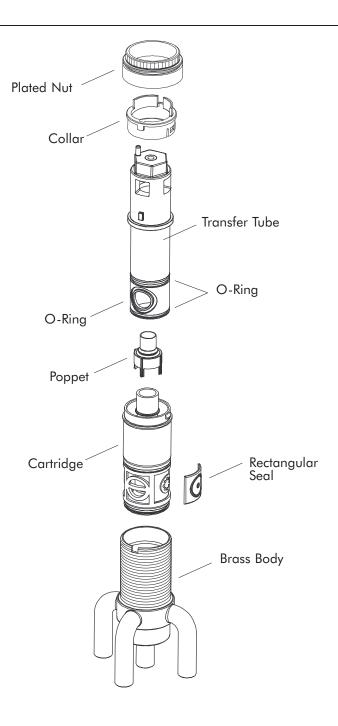
Slowly work the transfer tube out of the cartridge body. Do not lose or damage the transfer tube O-rings now exposed.

Lift the poppet out of the cartridge, and carefully clean both with hot water. Do not use any solvents to clean the components.

Re-install the poppet to the cartridge, and carefully slip the transfer tube back into the cartridge. Use special care to work the O-ring past the large port in the cartridge without pinching or scoring the O-ring. Slightly twist the transfer tube back and forth to ease re-assembly. Verify that the transfer tube hole lines up with the large port in the cartridge. Align the collar on the transfer tube so the collar tab lines up with the large port. Snap the collar in place so both locking tabs are fully engaged.

Inspect the rectangular seals for dirt or damage, and install the seals to the cartridge. Carefully press the cartridge into the brass body so the collar tab fits fully into the notch in the brass body.

Hand tighten the plated nut to the brass body. If the trim will be installed at a later date, re-install the mud guard.



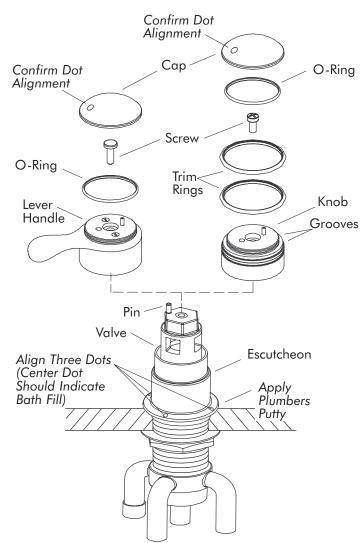
#### **ROUND HANDLE**

Turn the transfer valve to the bath fill position (fully clockwise for two-way valve; center position for three-way configuration). Apply a bead of plumbers putty or other sealant around the escutcheon flange according to the putty manufacturer's instructions. Then position the escutcheon loosely on the valve so the three dots will be clearly visible after installation. (The center dot should indicate the bath fill position.) Temporarily position the knob on the valve to confirm proper dot alignment. Remove the knob, and press the escutcheon firmly into place. Remove any excess putty. Install the trim rings to the knob grooves, using care to avoid stretching the trim rings. Secure the knob to the valve with the screw. Install the O-ring to the remaining knob groove. Snap the cap onto the knob.

#### LEVER HANDLE

Turn the transfer valve to the bath fill position (fully clockwise for two-way valve; center position for three-way configuration). Apply a bead of plumbers putty or other sealant around the escutcheon flange according to the putty manufacturer's instructions. Position the escutcheon so the three dots will be clearly visible after installation, and press the escutcheon firmly into place. (The center dot should indicate the bath fill position.) Remove any excess putty.

Position the lever handle on the valve. You may break off the pin on the valve to ease handle alignment, if necessary. Secure the lever handle to the valve with the screw. Install the O-ring to the lever handle groove. Snap the cap onto the lever handle so the dot lines up with the lever.



## **CALL US FOR HELP**

Questions? Problems? First review the installation instructions to ensure correct installation. For additional assistance in the USA, call our Customer Service Department for direct help. You may also contact us at our web site listed below.

1-800-4-KOHLER

