

STEP BY STEP ILLUSTRATED INSTRUCTIONS

Leave this instruction sheet with installed faucet and write purchased model number here for future reference!



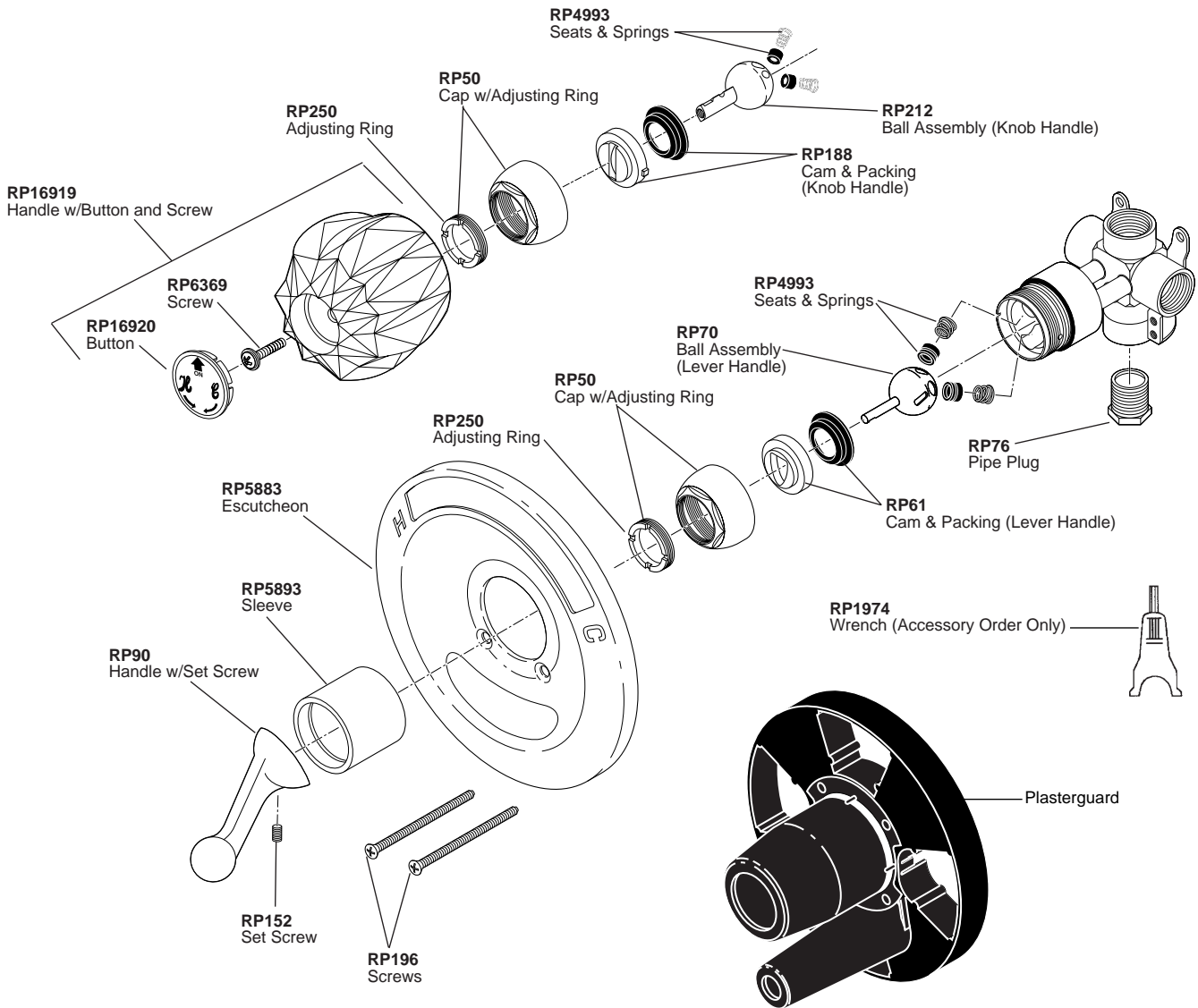
READ COMPLETE INSTRUCTIONS BEFORE INSTALLING YOUR SINGLE HANDLE WASHERLESS TUB/SHOWER VALVE



LISTED
UL Listed to US and Canadian
Safety Standards
21PL

MODEL 85110-SBS: Knob Handle
MODEL 85410-SBS: Lever Handle

The Delta SBS products shown here are protected by one or more of the following U.S. Patents: 4,043,359, 3,786,995, 4,562,960, 4,593,430, 4,089,347, 4,218,785, 4,696,322, 4,765,365. More patents are pending.



Limited Warranty

All parts of this Delta SBS® product are warranted to the original consumer purchaser to be free from defects in material and workmanship for a period of five (5) years from date of purchase as shown on purchaser's receipt.

MASCO PLUMBING PRODUCTS DIVISION will replace, FREE OF CHARGE, during the warranty period, any part which proves defective in material and/or workmanship under normal installation, use, and service. Replacement parts can be obtained from your dealer or by returning the part to our factory. TRANSPORTATION CHARGES PREPAID, at the address listed on back. THIS WARRANTY IS THE EXCLUSIVE WARRANTY GRANTED BY MASCO PLUMBING PRODUCTS DIVISION AND IS IN LIEU OF ALL OTHER WARRANTIES INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND IS FURTHER LIMITED TO DEFECTIVE PARTS REPLACEMENT ONLY. LABOR CHARGES AND/OR DAMAGE INCURRED IN INSTALLATION, REPAIR, OR REPLACEMENT AS WELL AS INCIDENTAL AND CONSEQUENTIAL DAMAGES CONNECTED THEREWITH ARE EXCLUDED AND WILL NOT BE PAID BY MASCO PLUMBING PRODUCTS DIVISION.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Any damage to this faucet as a result of misuse, abuse, neglect, accident, improper installation, any use violative of instructions furnished by us, or any use of replacement parts other than genuine Delta parts WILL VOID THE WARRANTY.

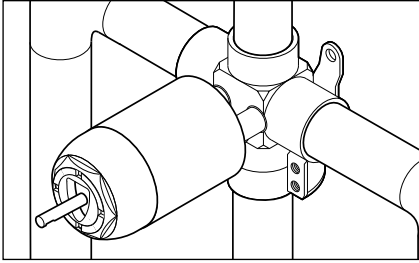
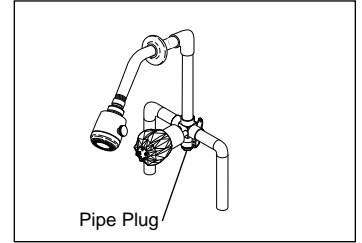
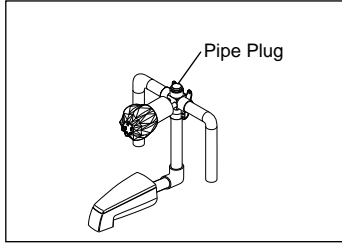
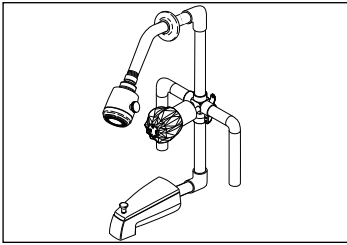
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INSTALLATION STEPS

IMPORTANT: USE TEFLON® TAPE ON ALL THREADED CONNECTIONS

Before you start, study the recommended valve configurations on stringers or framing: (A) Tub and Shower, (B) Tub Only, (C) Shower only. The threaded parts in the valve body are 1/2" (12.700mm) iron pipe size. With proper adapters, you can connect to copper.

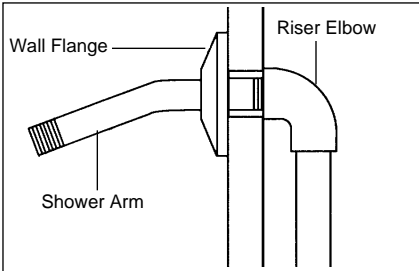


STEP 1.

Install valve. See options on page 3.

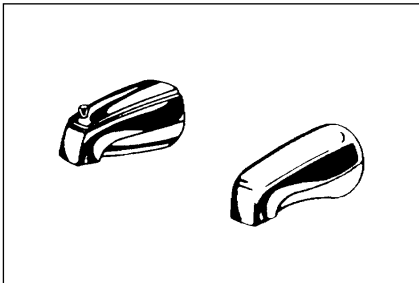
If you are making tub installation only, plug top outlet of valve (refer to illustration B). If you are making shower installation only, plug bottom outlet of valve (refer to illustration C).

Connect hot and cold supply lines to left and right inlets in valve body. Left inlet is hot and right inlet is cold. (Iron pipe connections are shown; copper pipe may be used with adapters.)



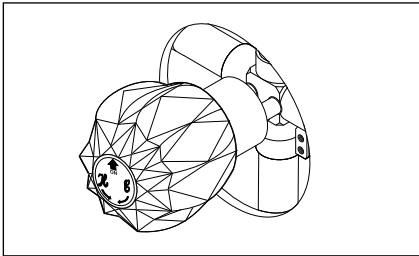
STEP 2.

If you are installing a model with showerhead, connect top outlet to shower arm with proper fittings. To prevent damage to finish on shower arm, insert wall end of shower arm into shower arm flange before screwing arm into riser connection. Adjust flange.



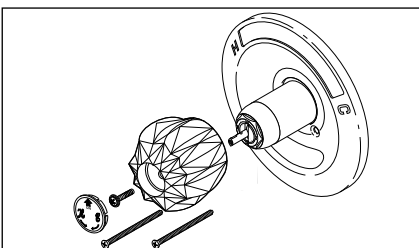
STEP 3.

If you are installing a model with tub spout, piping between valve body and tub spout must be a minimum of 5/8" O.D. copper pipe or 1/2" iron pipe in a straight drop no more than 18" long with only one iron pipe or copper 90 degree elbow to the spout nipple.



STEP 4.

Important: After connections have been made (remove showerhead on shower only models), place handle on valve stem and turn handle to full on mixed position. Turn on water supplies, check for leaks and let lines flush for one minute without moving valve handle. This will remove debris from line which can damage internal parts of valve and create leaks. After flushing shut off water at faucet.

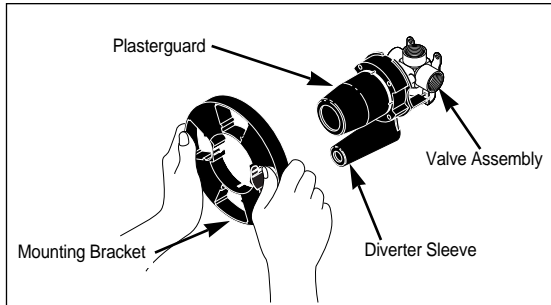


STEP 5.

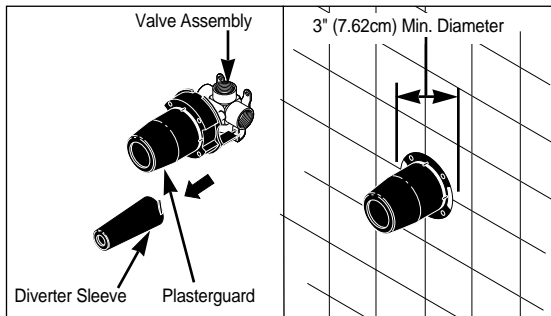
Remove handle and attach escutcheon with screws provided. Replace handle. Attach showerhead to shower arm.

IMPORTANT:

PLASTERGUARD—CONVENTIONAL INSTALLATION INSTRUCTIONS

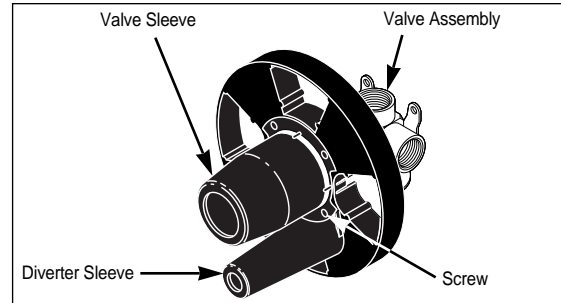


- NOTE:** MOUNTING BRACKET CAN BE REMOVED FOR CUTTING SMALLER HOLE IN FINISHED WALL. Take hold of the mounting bracket by placing both hands at the sides as shown above. Gently pull the mounting bracket from the plasterguard, snaps will disengage the two parts. Discard mounting bracket.

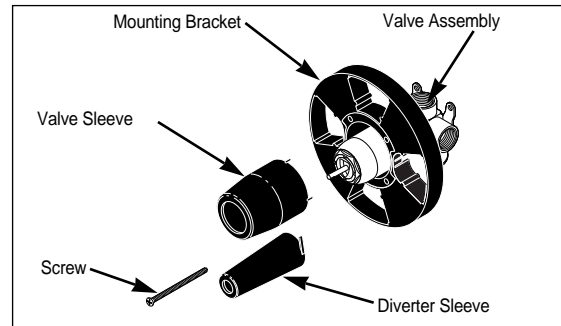


- Break or cut diverter sleeve from plasterguard and discard. Finished wall can be cut to a 3" (7.62mm) minimum diameter.

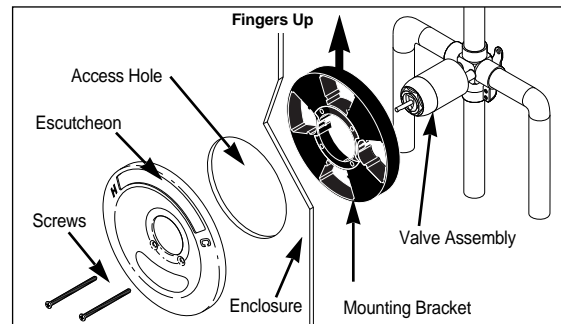
MOUNTING BRACKET INSTRUCTIONS FOR FIBERGLASS, METAL AND PLASTIC ENCLOSURES 1/8" TO 7/8" THICK



- Break or cut valve sleeve and diverter sleeve from mounting bracket. Remove screw that attaches the mounting bracket to valve and discard.



- Remove mounting bracket for valve rough-in.



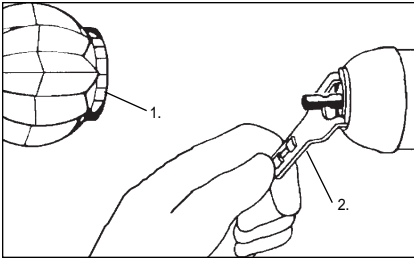
- After valve rough-in has been completed, slide mounting bracket over valve with the two protruding fingers on the top section of the mounting bracket as shown and leave in place. Cut access hole in enclosure (5" maximum diameter), and install enclosure. Mount escutcheon by securing finished screws through escutcheon, access hole, and adapter to valve.

ROUTINE MAINTENANCE

IMPORTANT: AFTER ANY MAINTENANCE BE SURE TO REMOVE AERATOR AND FLUSH BOTH HOT AND COLD LINES FOR ONE MINUTE.

Your *Delta SBS*[®] washerless faucet will give you years of trouble-free performance. When maintenance is eventually called for it's a quick clean job with one of the inexpensive *Delta*[®] repair kits available where you bought your faucet. The replacement parts in these kits will restore your faucet to the same condition as the day you bought it.

The *Delta SBS*[®] 5 year limited warranty on valve mechanism and chrome plated parts is made possible by superior design, quality parts and careful workmanship in manufacturing. Should you ever need replacement parts that are not included in the regular parts kits that are available where you purchased your faucet, simply write to: **MASCO PLUMBING PRODUCTS DIVISION** Customer Service, 55 E.111th Street, Indianapolis Indiana 46280.



IF FAUCET LEAKS FROM UNDER HANDLE

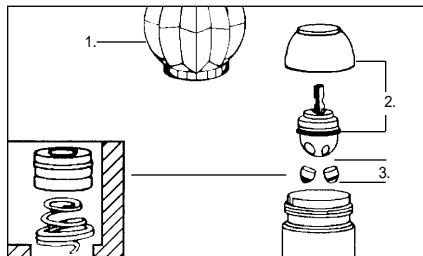
1. **DO NOT SHUT OFF WATER SUPPLIES.** Remove handle.
2. Using wrench (Accessory Order Only), tighten adjusting ring until water no longer leaks around stem of ball when faucet is on and pressure is exerted to force ball into socket.¹

HELPFUL HINTS:

1. Never tighten cap assembly to stop a leak; always tighten adjusting ring.

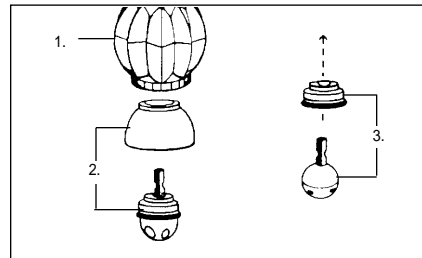
IF FAUCET LEAKS FROM TUB SPOUT/SOWERHEAD—Replace Seats and Springs, Repair Kit RP4993.

1. **SHUT OFF WATER SUPPLIES.** Remove handle.
2. Unscrew cap assembly and lift out ball and cam assembly by pulling up on stem.¹
3. Remove old seats and springs. **NOTE:** Refer to insert for proper seat and spring installation. Reassemble faucet in reverse order.



IF LEAK PERSISTS—Replace Ball Assembly, Repair Kit RP70 or RP212.

1. **SHUT OFF WATER SUPPLIES.** Remove handle.
2. Unscrew cap assembly and lift out ball and cam assembly by pulling up on stem.¹
3. Slip packing then cam on new ball and insert into socket. Reinstall cap and handle.



HELPFUL HINT:

1. Using wrench (Accessory Order Only), partially unscrew adjusting ring before attempting to remove cap assembly. Always install cap assembly **HAND TIGHT**, then tighten adjusting ring.

CLEANING AND CARE

Your new *Delta SBS*[®] faucet is designed and engineered in accordance with the highest quality and performance standards. With proper care, it will give you years of trouble-free service. 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: DOW BATHROOM CLEANER WITH SCRUBBING BUBBLES AND LYSOL FOAMING 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.

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