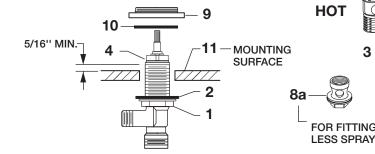


3 VALVE ASSEMBLY

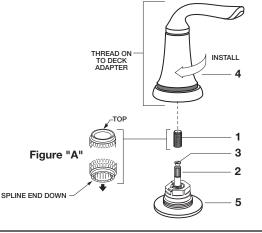
- Install LOCKNUTS (1) and RUBBER WASHERS (2) onto valve shanks.
- Push TUBING (3) ends into VALVE (4) side outlets. Insert VALVES (4) into mounting holes from underside of ledge.
- Press TEE (5) onto SPOUT SHANK (6) making certain that the O-RING (7) is properly seated on SHANK (6). Push COUPLING (8 or 8a) into TEE (5) and attach to SPOUT SHANK (6) and tighten. For 4508.901 use a 10 mm (3/8") hex key.
- Thread of VALVE BODY (4) should extend at least 5/16 inch above MOUNTING SURFACE (11). If necessary, adjust LOCKNUT (1).
- Place RUBBER RING (10) into ESCUTCHEON ADAPTERS (9) and thread onto valves until snug against internal stop.
- Tighten LOCKNUT (1) to secure VALVE (4) position.
- Slide FERRULE (12) and COUPLING NUT (13) to outlet of VALVE (4) and tighten COUPLING NUT (13) firmly.
- Connect HOT water supply to inlet of left VALVE and COLD water supply to inlet of right VALVE using appropriate connector.



INSTALL HANDLES

4

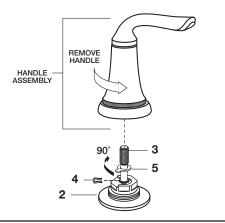
- Push ADAPTER (1) on VALVE STEM (2), so that the hole of the ADAPTER (1) without a spline is facing up. See figure "A". Tighten STEM SCREW (3) to secure ADAPTER (1).
- Find correct position of LEVER HANDLE ASSEMBLY (4) by adjusting male teeth on ADAPTER (1) to female teeth in HANDLE (4).
- Thread LEVER HANDLE ASSEMBLY (4) onto DECK ADAPTER (5) until snug against mounting surface.



5 SERVICE

To change direction of handle rotation, proceed as follows:

- Turn valve to OFF position. Unthread HANDLE BASE (1) from DECK ADAPTER (2).
- Pull HANDLE ASSEMBLY off VALVE STEM (3).
- Remove SPRING CLIP (4). Lift STOP WASHER (5), turn 90° and replace. Replace SPRING CLIP (4).
- Find correct position of HANDLE ASSEMBLY by adjusting male teeth on VALVE STEM (3) to female teeth in HANDLE.
- Thread HANDLE ASSEMBLY onto DECK ADAPTER (2) until snug against mounting surface.



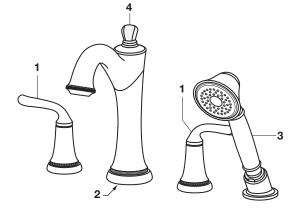
⁶ HAND SHOWER INSTALLATION

- Install RUBBER RING (2) on SPRAY ESCUTCHEON (1) and install SPRAY ESCUTCHEON
 (1) through fifth hole on tub ledge (12" max from Spout) making sure the SPRAY ESCUTCHEON
 (1) opening is directed toward tub center. Install RUBBER WASHER (3), BRASS WASHER (3a) and LOCKNUT (4) from underside of ledge. Be sure RUBBER RING (2) is properly seated in ESCUTCHEON (1). Install RUBBER WASHER (3) and LOCKNUT (4) from underside of ledge.
- Secure SPRAY ESCUTCHEON (1) by tightening LOCKNUT (4).
- Slip SHOWER HOSE (7) with HOSE CONNECTOR through SPRAY HOLDER (5) and ESCUTCHEON (1) from above deck. Note: SPRAY HOLDER (5) must be separate from ESCUTCHEON (1) to get SPRAY HOSE (7) through ESCUTCHEON (1). Make sure threads on SPRAY HOLDER (5) are facing the SPRAY ESCUTCHEON (1). Install CHECK VALVE (11) and SEAL (8) on SPRAY HOSE (7) and connect HOSE (10) to SPRAY HOSE (7). Install SEAL (8) on SPRAY HOSE (7) at HAND SHOWER (9) connection and connect HAND SHOWER (9) to SPRAY HOSE (7).

NOTE: When not in use, HAND SHOWER should be seated in the HOLDER.

TEST INSTALLED FAUCET

- Turn VALVES (1) to "off" position.
- With handles in "off" position, turn on water supplies and check all connections for leaks.
- Operate both handles and flush water lines thoroughly.
- Check SPOUT (2) mounting for leaks.
- Lift HANDSHOWER (3) from holder, direct spray into tub, lift TRANSFER KNOB (4) to check HANDSHOWER (3) and HOSES for leaks.
- Turn VALVES "off".
- If spout drips, operate handles several times from OFF to ON position. Do not force handles turn only 90°.



11

CONTRACTOR OF CO

8

12

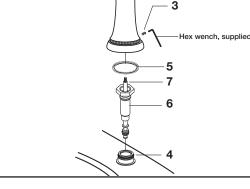
6

2

CAUTION: The flow rate of this Tub Filler exceeds 20 gallons/minute at higher water pressure. Do not fill bathtub unattended.

8 Before the bathroom is completely finished, you may want to remove spout, handshower, and handles.

- To remove handles, reverse steps in SE 4.
- To remove SPOUT (1), proceed as follows:
- Lift TRANSFER ROD (7) and unscrew KNOB (2).
- Remove SET SCREW (3) using 5 mm hex wrench supplied.
- Lift SPOUT (1) off SHANK (4) carefully and remove RUBBER RING (5).
- Unscrew SHANK SLEEVE (6) and lift TRANSFER ROD (7) from SHANK (4).
- Reverse sequence to re-install SPOUT (1). Be sure RUBBER RING (5) is properly seated in its recess at the base of the SPOUT (1). Make certain SET SCREW (3) is properly aligned and tight so that SPOUT (1) is locked in place.



2

9 CARE INSTRUCTIONS:

DO: SIMPLY RINSE THE PRODUCT CLEAN WITH CLEAR WATER. DRY WITH A SOFT COTTON FLANNEL CLOTH. DO NOT: DO NOT CLEAN THE PRODUCT WITH SOAPS, ACID, POLISH, ABRASIVES, HARSH CLEANERS, OR A CLOTH WITH A COARSE SURFACE.

