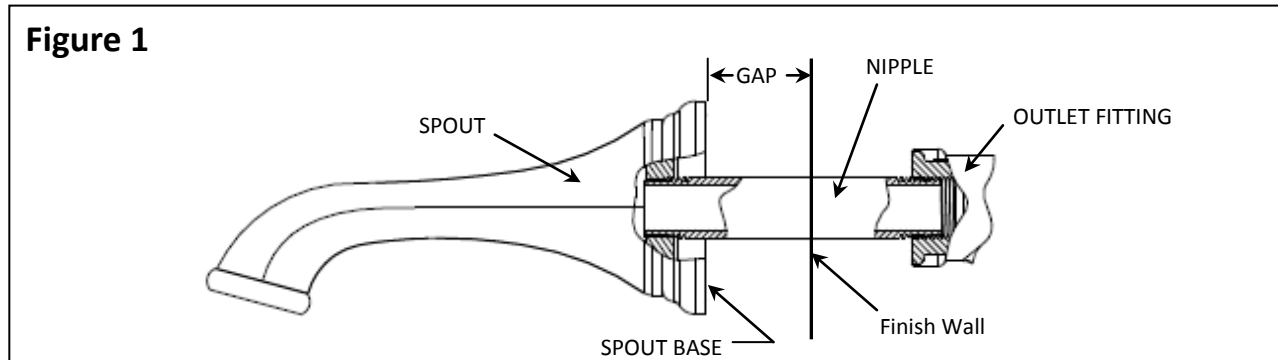


This instruction illustrates how to install Newport Brass In-wall Trim and use the Cartridge Adapter provided with the in-wall valves to adjust angular alignment for in-wall product handles.

I. Spout Installation

- Figure 1**, determine the proper length of NIPPLE to connect SPOUT to OUTLET FITTING. Use a temporary 6" length x 1/2" NPT NIPPLE to connect them together. Measure the GAP between the Finish Wall and the SPOUT BASE (including Base Ring where applicable). If length of the temporary NIPPLE is 6", and the GAP is 1", the proper length for the NIPPLE is 5" (6 - 1=5") to connect the SPOUT to OUTLET FITTING. Use plumbers tape or equivalent to seal all threaded joints.



2. Handle Installation:

Note: If installed valve model is I-532T or I-500T, follow the installation instruction of the valves to adjust stiffness of stem rotation by tightening or loosening the torque nut first. Handle should not rotate under its own weight. See installation instruction NWP-532 for more details.

2A. Trim Cartridge Stem

- Figure 2**, install ESCUTCHEON/BONNET and BASE RING trim pieces onto CARTRIDGE ALL-THREAD NIPPLE flush against Finished Wall. Mark the CARTRIDGE ALL-THREAD NIPPLE where excess needs to be trimmed.
- Also in **Figure 2**, temporarily install HANDLE onto CARTRIDGE ADAPTER and measure DISTANCE between top of ESCUTCHEON/BONNET and bottom of HANDLE. Record the DISTANCE measured.

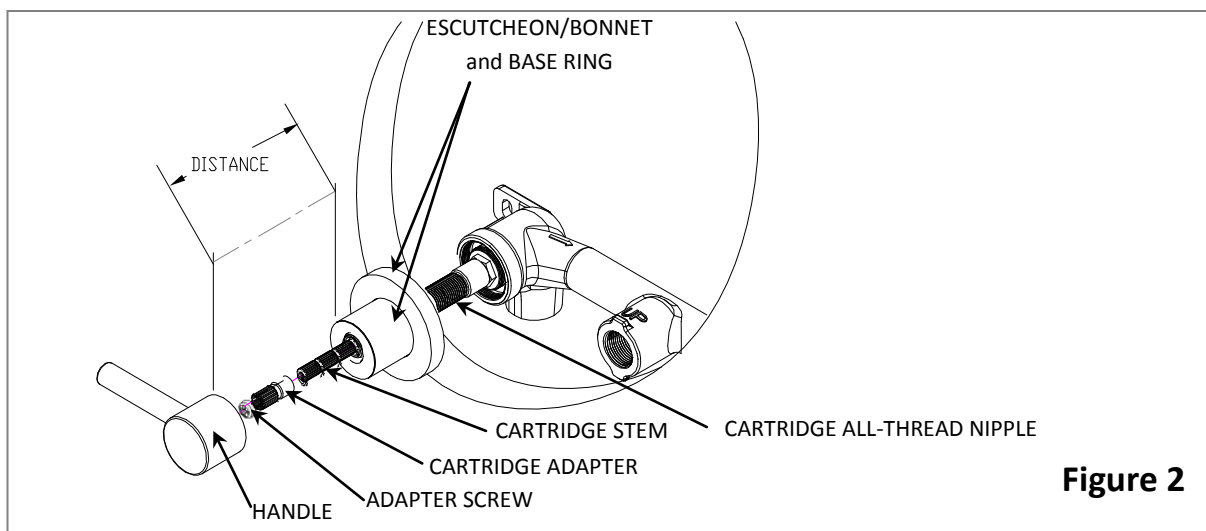


Figure 2

3. **Figure 3**, disassemble HANDLE, ESCUTCHEON/BONNET, BASE RING, ADAPTER SCREW, and CARTRIDGE ADAPTER. Cut the SUM length from the 20 tooth CARTRIDGE STEM (SUM= DISTANCE + 1/16"). **Note:** For some HANDLE styles, where a portion of the HANDLE base is inserted inside ESCUTCHEON/BONNET, additional CARTRIDGE STEM trim is needed to achieve desired aesthetic look.

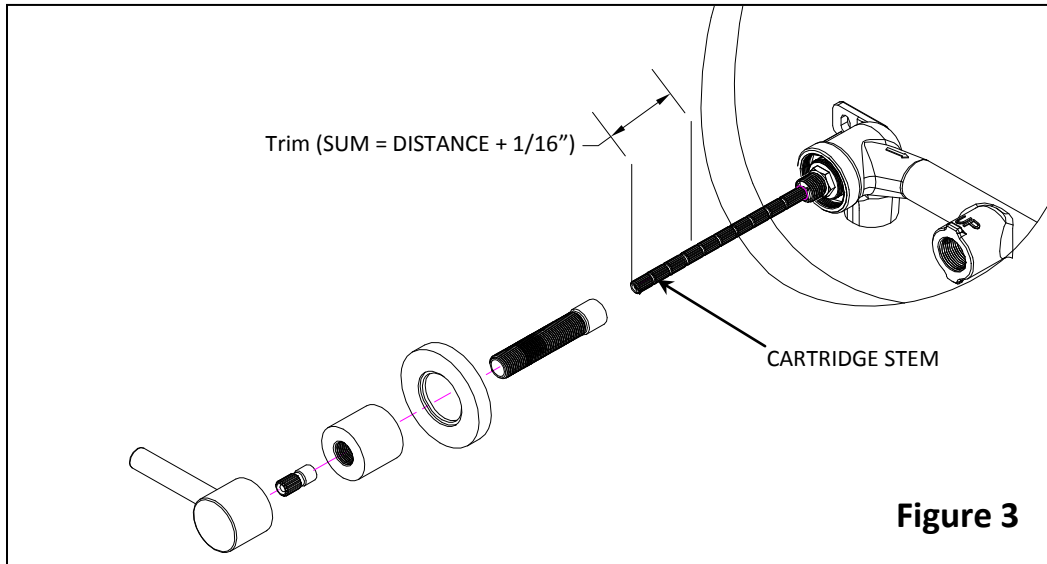


Figure 3

2B. Adjust Handle Alignment

1. In **Figure 4**, ensure cartridges in full closed position, use previously removed ADAPTER SCREW to loosely install CARTRIDGE ADAPTER onto 20 tooth CARTRIDGE STEM. Temporary install the HANDLE and check alignment.
2. If the HANDLE lever is not correctly aligned, remove HANDLE, loosen up (but do not completely remove) the ADAPTER SCREW and rotate CARTRIDGE ADAPTER one tooth clockwise (18 degrees), reassemble the HANDLE and recheck alignment. Repeat until HANDLE is aligned.

3A. For HANDLE with set screw(s) on side or NO mounting screw (see **Figure 4A**), remove HANDLE from CARTRIDGE ADAPTER (**Important:** do not remove the CARTRIDGE ADAPTER from CARTRIDGE STEM). Tighten the ADAPTER SCREW to firmly secure CARTRIDGE ADAPTER to cartridge. Reattach HANDLE to CARTRIDGE ADAPTER and secure in place with set screw(s). Note: When reattaching the HANDLE, assure a small gap between HANDLE and ESCUTCHEON to prevent metal to metal contact.

3B. For HANDLE with screw on top (see **Figure 4B**), discard the screw provided with the HANDLE. Remove HANDLE and ADAPTER SCREW shown (**Important:** do not remove CARTRIDGE ADAPTER from CARTRIDGE STEM). Feed the ADAPTER SCREW through the center hole of HANDLE and use the ADAPTER SCREW to firmly secure HANDLE and CARTRIDGE ADAPTER to 20 tooth CARTRIDGE STEM.

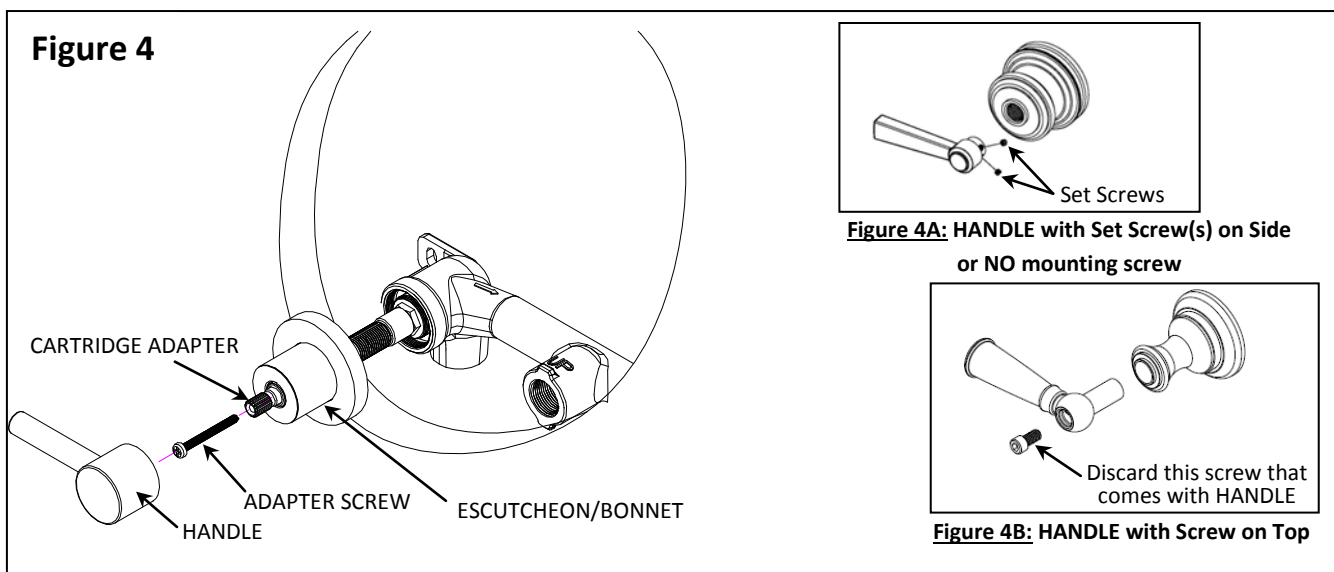


Figure 4

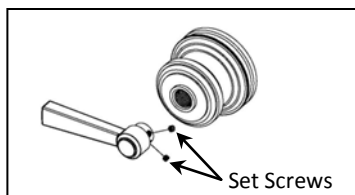


Figure 4A: HANDLE with Set Screw(s) on Side or NO mounting screw

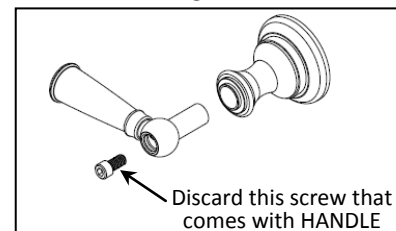


Figure 4B: HANDLE with Screw on Top