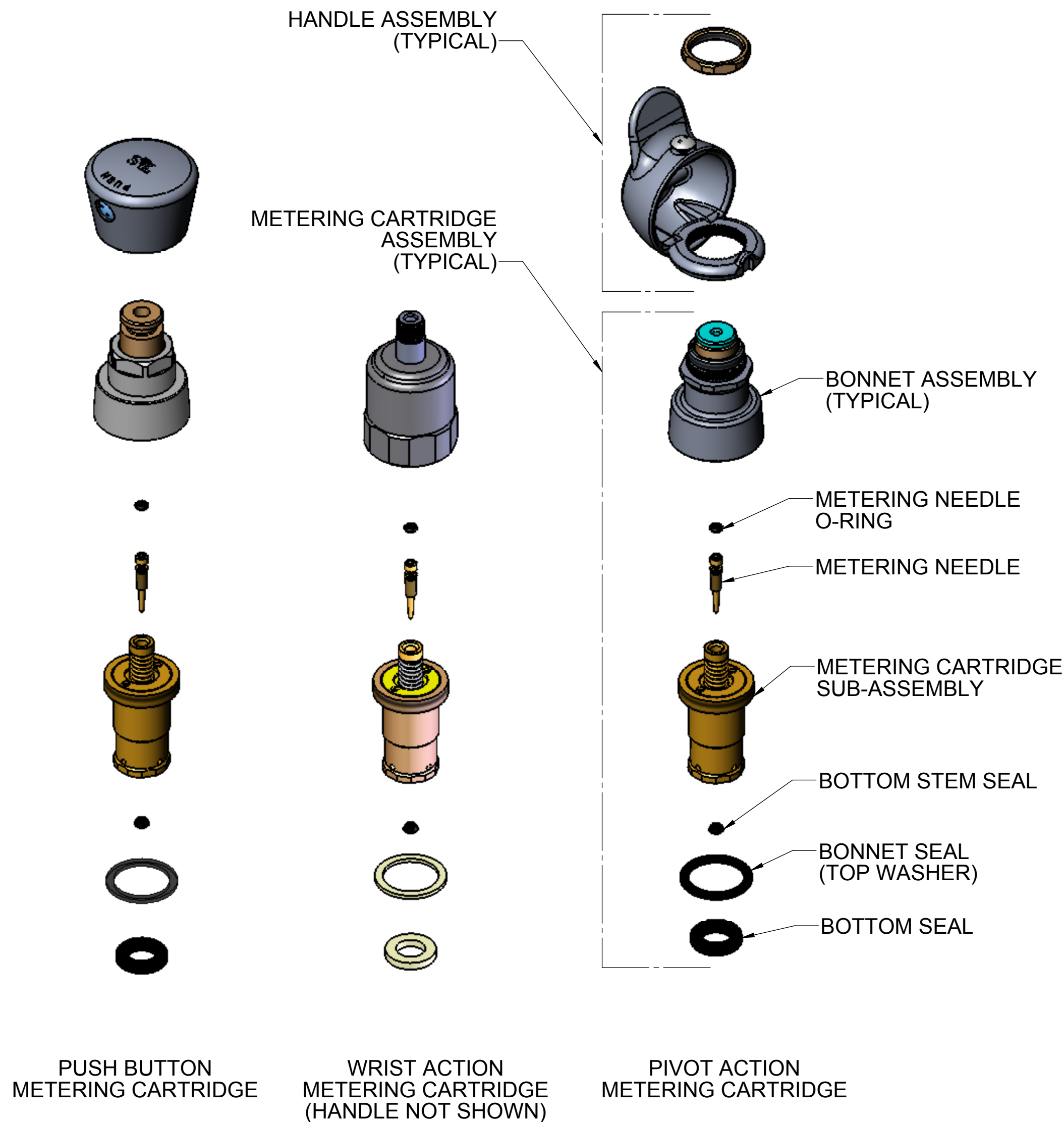


# METERING CARTRIDGE ASSEMBLY REPAIR



To Replace METERING CARTRIDGE ASSEMBLY Seals:

1. Remove METERING CARTRIDGE ASSEMBLY from faucet - Turn off Hot and Cold water supply to faucet. Activate HANDLE to relieve pressure.

Remove HANDLE ASSEMBLY:

- PUSH BUTTON HANDLE ASSEMBLY - Loosen Vandal Resistant screw and lift HANDLE ASSEMBLY off cartridge.
- WRIST ACTION HANDLE ASSEMBLY - Remove HANDLE screw and lift HANDLE off cartridge.
- PIVOT ACTION HANDLE ASSEMBLY - Loosen Vandal Resistant screw and flip up HANDLE. Remove RETAINING NUT and lift HANDLE ASSEMBLY off cartridge.

Remove the METERING CARTRIDGE ASSEMBLY by unscrewing the BONNET ASSEMBLY from the faucet.

2. Replace BOTTOM STEM SEAL (all types):
  - Activate METERING CARTRIDGE ASSEMBLY by pushing the Plunger in the BONNET ASSEMBLY (Loosely attach the HANDLE ASSEMBLY if needed). The BOTTOM STEM SEAL will be exposed at the bottom of the METERING CARTRIDGE ASSEMBLY. Remove the old seal from the groove in the Stem and install the new BOTTOM STEM SEAL (note - the wide part of the conical shape seal is closest to the end of the Stem).
3. Replace BOTTOM SEAL (all types):
  - Pull the old seal free from the bottom of the METERING CARTRIDGE ASSEMBLY (note - the seal may be stuck in the faucet). Install the new BOTTOM SEAL.
4. Replace BONNET SEAL (all types):
  - The BONNET SEAL is located deep within the threaded portion of the BONNET ASSEMBLY where it screws into the faucet. Pick the old seal out and replace with the new BONNET SEAL (note - BONNET SEAL can be replaced more easily in Step 5 while replacing the METERING NEEDLE O-RING).
5. Replace METERING NEEDLE O-RING (all types):
  - Separate the BONNET ASSEMBLY from the METERING CARTRIDGE SUB-ASSEMBLY using two wrenches. (note - this assembly may be considerably tight and two socket wrenches are suggested. Note the location of any loose parts).
  - Carefully unscrew the METERING NEEDLE with a 3/32" hex key. A pair of needle nose pliers may be needed to extract the METERING NEEDLE from the METERING CARTRIDGE SUB-ASSEMBLY. The METERING CARTRIDGE SUB-ASSEMBLY is oil filled and care should be taken not to spill oil or activate the cartridge while the METERING NEEDLE is removed.
  - Carefully remove the old o-ring and install the new METERING NEEDLE O-RING. Install the METERING NEEDLE back into the METERING CARTRIDGE SUB-ASSEMBLY. Tighten the Needle till it lightly seats then back it out 3 full turns. Metering time adjustment will need to be made once the METERING CARTRIDGE ASSEMBLY has been installed in the faucet.
  - Remove and replace the BONNET SEAL on the METERING CARTRIDGE SUB-ASSEMBLY at this time if not done in Step 4.
  - Assemble the BONNET ASSEMBLY and METERING CARTRIDGE SUB-ASSEMBLY and tighten securely.
6. Install the METERING CARTRIDGE ASSEMBLY in the faucet and tighten the BONNET ASSEMBLY securely. Set the metering time by adjusting the METERING NEEDLE (see Installation Instructions). Install the HANDLE ASSEMBLY in reverse order as described in Step 1.