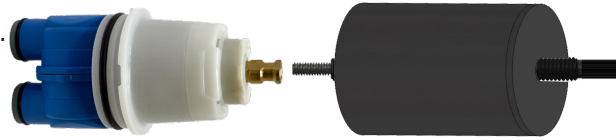


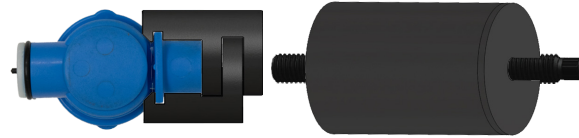
ONA DELTA INSTRUCTIONS

1. Turn off the water supply.
2. Remove the trim and bonnet (locking nut) from the valve body.
3. Insert the LONG THREADED ROD through the DELTA ONA TUBE and thread it into the Delta cartridge.
4. Thread the DELTA ONA TUBE onto the valve body until it is fully seated.
5. Thread the HANDLE onto the LONG THREADED ROD.
6. Turn the handle clockwise to draw the cartridge into the DELTA ONA TUBE and remove it from the valve body.



If only half the cartridge is removed and the balancing spool section remains inside the valve body, follow the steps below.

7. Assemble the claw around the balancing spool section.
 - Position one claw half above the spool.
 - Position the other claw half below the spool.
 - Align the claw lips with the spool.
 - Align the holes in both claw halves.
8. Insert the SHORT THREADED ROD through the aligned holes until it bottoms out.
9. Thread the DELTA ONA TUBE onto the valve body until it is fully seated.
10. Thread the HANDLE onto the SHORT THREADED ROD.
11. Turn the handle clockwise to draw the balancing spool section into the DELTA ONA TUBE and remove it from the valve body.



ONA MOEN INSTRUCTIONS

1. Turn off the water supply.
2. Insert the LONG THREADED ROD through the Posi-Temp PULLER TUBE, threading it into the old cartridge stem.
3. Center the PULLER TUBE over the cartridge and hold firmly in line.
4. Thread the HANDLE onto the LONG THREADED ROD and turn. This will draw the old cartridge into the PULLER TUBE.



1. Turn off the water supply.
2. Insert the LONG THREADED ROD through the PULLER TUBE, threading it into the old cartridge stem.
3. Center the PULLER TUBE over the cartridge and hold firmly in line.
4. Thread the HANDLE onto the LONG THREADED ROD. This will draw the old cartridge into the PULLER TUBE.

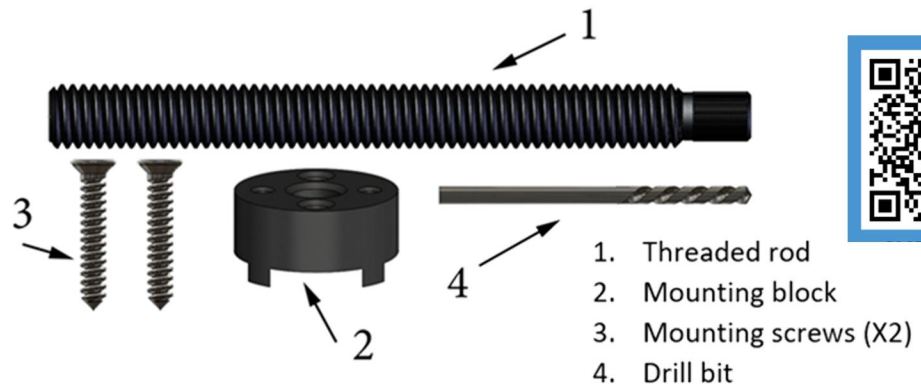


If the cartridge pulls out but the cartridge sleeve remains, follow the steps below.

5. Remove the PULLER TUBE and LONG THREADED ROD from the HANDLE.
6. Assemble the TAPERED BOLT through the EXPANDER on the HANDLE and thread the CROSS PIN onto the TAPERED BOLT
7. Insert the EXPANDER into the cartridge sleeve until it bottoms out and tighten the TAPERED BOLT with the CROSS PIN until the EXPANDER will not turn in the cartridge sleeve.
8. Work the HANDLE back and forth to break the cartridge sleeve loose, pulling on the CROSS PIN with your other hand to remove the sleeve.



Instructions for Broken Posi-Temp Puller



1. Place the drill bit in the drill sticking out about 1-1/8". Make sure water is turned off to the valve, and remove the clip holding the cartridge in the valve.



2. Place the mounting block on the broken 1222 cartridge with the groove in the mounting block sitting on the ridge of the cartridge so that the two small drill guide holes are facing up and down.



3. Drill the two pilot holes into the cartridge using the small drill guide holes. Drill until bit is bottomed out on guide bushings. Drill the second hole the same way.



4. Turn the block 90 degrees so that the mounting block sits on the ridge of the cartridge and the two large holes are facing up and down. Drive the two screws into the mounting block and the broken cartridge.



5. Screw the threaded rod into the mounting block.



6. Place the ONA Posi-Temp tube over the top of the threaded rod, indexing on the ears of the valve body.



7. Use the handle from the ONA Puller, turning clockwise to evenly remove the broken cartridge.



8. Make sure to check for any damage to the interior surface of the valve body.

9. Grease the new cartridge and install into the valve body.

After installed, replace clip and trim.