

## MODEL 3490CS – 3490AS – 3490CS MJ – 3490AS MJ Tapping

Quality control department **SAFETY FIRST** - Always use cave in protection, gloves, sturdy work boots and eye protection when tapping pipe

### GENERAL NOTES:

- Use cave-in protection during excavation and back-fill operations.
- Verify Pipe O.D. to make certain that the correct Tapping is being installed.
- Keep bolt threads clean and free from nicks, dents or other damage.
- If conditions permit, mark the pipe for a reference point to properly position the clamp.
- For cold weather lubrication, ethylene glycol can be added to the soap solution to prevent freezing.
- Before start, the installer shall determine the suitability of the product for his intended use and the installer assumes all risk and liability for the application of the product.

### OTHER INFO:

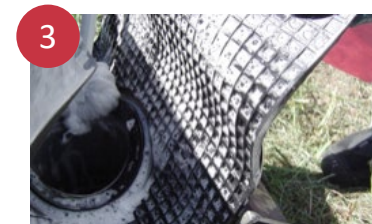
- **FOR SS BOLTS:** To avoid galling during installation, the threads **MUST BE KEPT CLEAN AND FREE FROM DAMAGE**. The fitting should not be thrown around or otherwise be abused, i.e. stored on truck without box, dropped from top of ditch, etc. A deep socket and ratchet wrench is recommended.
- Test the final assembly seals using the test plug on the sleeve, valve, or tapping machine. **Failure to pressure test before tapping voids all warranties expressed or implied.**
- All PowerSeal stainless steel tapping sleeves are hydrostatically tested at the factory to qualify welds and proper forming, but field testing is required to assure sound installation.
- When certain that all seals are leak tight, proceed with the tapping operation.



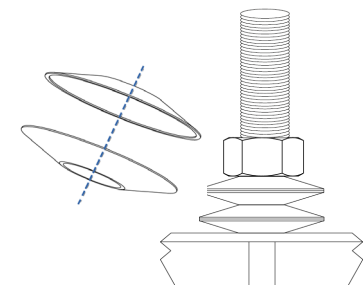
1  
Thoroughly clean the pipe so surface is smooth and free of dirt and other debris.



2  
Check the main outside diameter (OD) and confirm that it falls within the tapping sleeve pipe OD range.



3  
Lubricate pipe and gasket with soap/water solution. **Do not use grease or pipe lubricant.**



4  
**Waterworks pipes can experience changes due to temperature and pressure depending on the field conditions. High-Density Polyethylene Pipe (HDPE) possess mechanical and thermal properties that causes the expansion or contraction of the pipe because of these changes. Tapping sleeve with spring washers design will support those possible pipe changes without compromising the tightness of the tapping sleeve.**



Position flanged (or MJ-Mechanical Joint) half of sleeve on pipe making sure outlet is properly aligned with branch-line to be connected. Make certain that the tapered ends of the complete circle gasket are smooth against the pipe. **Never position so that rotation of sleeve is required.**



Nuts must be tighten in the order shown in the image.

| RECOMMENDED TORQUE |                |
|--------------------|----------------|
| Bolt Diameter      | Torque (ft-lb) |
| 1"                 | 140 - 200      |
| 5/8"               | 100-140        |
| 3/4"               | 120 - 160      |

## MODEL 3490CS – 3490AS – 3490CS MJ – 3490AS MJ Tapping

Quality control department SAFETY FIRST - Always use cave in protection, gloves, sturdy work boots and eye protection when tapping pipe

5



Make certain that the tapered ends of the complete circle gasket are smooth against the pipe, and position back half of sleeve over the tapered ends of the gasket being careful not to fold or roll the edges under themselves.

6



Install bolts, washers and nuts. Tighten maintaining an even gap distance between the bolt lugs on both sides of the sleeve; i.e. 25 ft-lb increments.

7



Tighten bolts in sequence, beginning at the ends of the sleeve and alternating on both sides. The gap between the two halves must be of equal distance when sleeve is fully tightened.

8

Tighten both top and bottom bolts evenly, alternating from one side of the sleeve to the other. Torque according to the specifications. Wait approximately 5 minutes to allow the gasket to fully compress and then re-tighten bolts. **All valves and tapping equipment must be blocked (supported) before, during and after installation. Failure to do so voids all warranties.**

### PRE-INSTALL CHECKLIST:

#### DID YOU:

- Clean pipe surface thoroughly? [Y] [N]
- Check O.D. of pipe with measuring tape? [Y] [N]
- Lubricate the Pipe with Dishwashing Soap? [Y] [N]
- Verify Proper Torque Required? [Y] [N]
- Bring the proper equipment required to support the valve during the tap? [Y] [N]

#### WARRANTY CHECKLIST (\*):

- Date of Installation \_\_/\_\_/\_\_
- Time of Installation \_\_\_\_\_ [AM] [PM]
- Was Pre-Tap Pressure Test completed to appropriate pressure level? [Y] [N]
- What Pressure was it tested to? \_\_\_\_ psi
- (PowerSeal recommends torquing in 25 ft-lb increments) \* Torque Applied: \_\_\_\_\_ ft-lbs
- Was standard re-torquing applied 5 minutes after reaching torque requirements? [Y] [N]
- Was an even gap between top and bottom shell maintained while torquing the nuts in sequence? [Y] [N]
- Was the Valve Supported During Installation? [Y] [N]

If so, with what was it supported by? \_\_\_\_\_

Signature of On-Site Leadman: \_\_\_\_\_

**\* Must be completed on day of installation to Validate Warranty**