

Ford® Mechanical Joint Tapping Sleeve (MJTS) Installation Instructions

Refer to the Ford® website (www.fordmeterbox.com) for additional and most recent installation instructions and product information.

1. Measure the pipe diameter carefully to ensure the pipe outside diameter is within the designated tapping sleeve range.

Remove any loose material from the pipe well beyond the gasket bearing surfaces. Ensure these gasket bearing surfaces are free from dents, flat spots, or pitted areas or any other obstruction that might impair a gasket seal. **Lubricate pipe under and beyond the gasket bearing surfaces, the end-seal gasket cavity and split end-seal gaskets** with an approved lubricant meeting AWWA C111.

2. **Do not remove or cut/trim the square side-seal gaskets** that are attached to the face of the side-seal clamping pads. If removed/detached, re-attach the side-seal gasket using a 'superglue' (Cyanoacrylate) type adhesive specified to bond rubber to metal.



Position and align the sleeve halves (saddle and band) together on the pipe. Install side-seal bolts and tighten to 20 ft-lb (keeping gaps between both sleeve halves even, end to end and side to side) starting from the inside bolts and progressing outwardly to the end bolts.

3. Move and/or rotate the sleeve to the final tapping position.

4. With the outlet set at the final position, for best results block and shim the sleeve to ensure both tapping sleeve ends are concentric to the pipe and the outlet remains properly positioned.

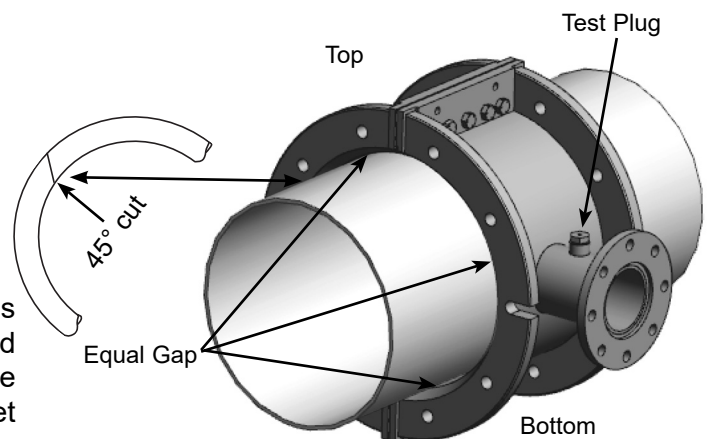
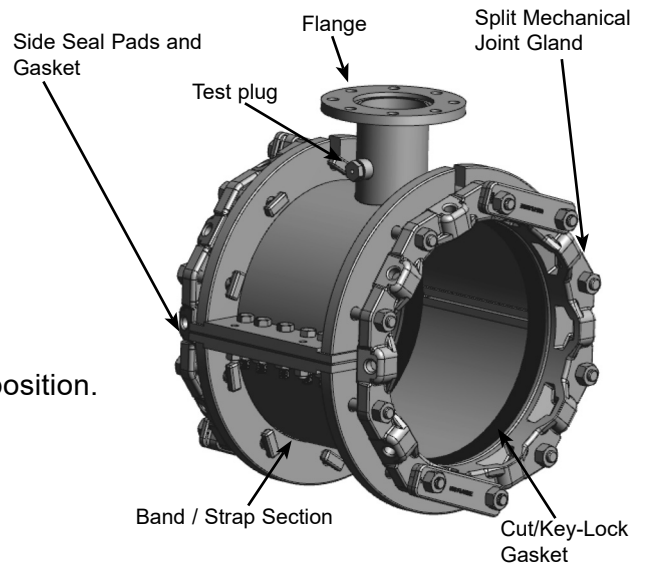
5. Slide cut/key-locked gaskets firmly and evenly into the end-seal cavities with key lock (45° cut) rotated at least one t-head bolt hole away from a side-seal clamping pad.

Avoid rotating or sliding the sleeve on the pipe throughout the remaining processes.

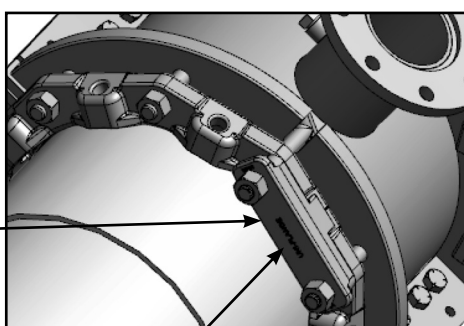
6. Place the split mechanical joint gland sections on the pipe with the lip extensions oriented toward the sleeve. Orient/rotate the splits in the gland staggered away from the end-seal gasket 45° cut/key-lock and the side-seal clamping pads.

Loosely assemble the halves of the glands to the sleeve by installing the shorter t-head bolts hand tight in all the sleeve's solid holes.

7. Connect the split mechanical joint gland halves by positioning the longest portion of the connecting clamp facing toward the outside of the gland halves to be joined. (The "Uni-Flange" text on the connecting clamp should be facing away from the gland if properly installed.) Insert the longer t-head bolts through the connecting clamps and hand tighten the nuts behind the sleeve's MJ flanges.

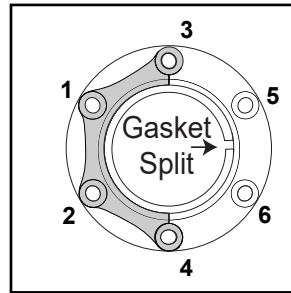
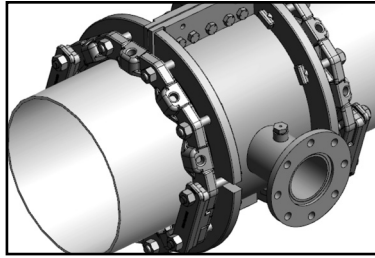


Longest Portion
of the Connecting
Clamp



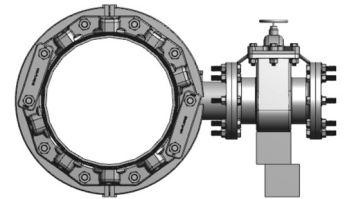
"Uni-Flange" text

9. Ensure the sleeve and split gland sections are concentric on the pipe and in relation to the cut/key-lock gasket.
10. Tighten the t-head bolts to approximately 20-30 ft-lb on the side 180-degrees from the 45° gasket split. Then tighten the remaining bolts to approximately 20-30 ft-lb by working in alternate directions towards the split in the gasket. Complete tightening all the t-head bolts to 60 ft-lb in an alternating manner, (starting at 6 o'clock, 12 o'clock, 3 o'clock, 9 o'clock) maintaining the same gap between the gland and the face of the sleeve. Re-tighten all of the t-head bolts to ensure the proper torque is achieved.



11. Tighten the (longer) side seal clamp bolts to 90 ft-lb working inside/out chasing the installation torque twice, repeating the same sequence as explained in step number 4.

12. Attach tapping valve to sleeve using either a drop-in style gasket or a Ford® CSFG gasket. Block and shim to support the valve's weight.

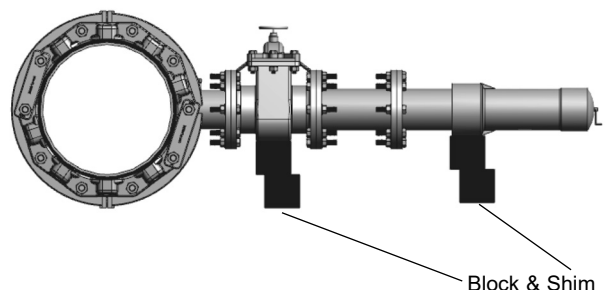


13. Pressure test valve and sleeve assembly using the tapping sleeve test port. AWWA C223 recommends "...the installer hydrostatically [water] test the seal between the gasket and pipe. For personal safety reasons, do not use a compressible fluid medium (such as air) to check for water tightness." If a leak is observed, relieve the pressure and re-tighten the bolts to the recommended torque. If the leak continues, remove the tapping sleeve, re-clean the pipe and repeat the necessary installation steps.

14. Attach the drilling machine to the valve, block and shim to support the machine's weight, and check for proper mating and alignment.

15. Make the following checks before proceeding with the tap.

- a. Gaps between the tapping sleeve saddle and the band sections are equal from side to side and from end to end.
- b. All bolts are tightened to the proper torque.
- c. All blocking is in place and secure.
- d. Valve and tapping machine are properly aligned.
- e. Correct cutter size has been selected for the job.
(MJTS tapping sleeves allow a full size cutter in outlet sizes 4" –12".
Outlets larger than 12" require a 1" undersized cutter.)



16. For best results, recheck tapping sleeve side-seal bolt torque and t-head bolt torque after the tap is made and before backfilling. The use of a torque wrench is highly recommended and required to ensure proper torque.

17. To prevent undue stress on the tapping sleeve and valve assembly, make sure the new water main will rest on a well compacted bed with its center line matching the center line of the valve.

IMPORTANT: FORD MECHANICAL JOINT TAPPING SLEEVE GLANDS, SHIPPED WITHOUT ACTUATING SCREWS, DO NOT PROVIDE MECHANICAL RESTRAINT SINCE THE TAP IS USUALLY COMPLETED THROUGH A SOLID SECTION OF PIPE. OTHERWISE, UNI-FLANGE ACTUATING SCREWS MUST BE PURCHASED AND PROPERLY INSTALLED IF MECHANICAL RESTRAINT IS REQUIRED.

