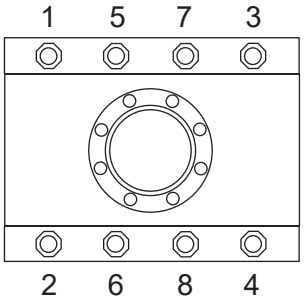
FTSAS, FTS AND FTSC WITH MECHANICAL JOINT OUTLET

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

Always follow pipe and tapping machine manufacturers' installation, operation and safety recommendations.

INSTALLATION INSTRUCTIONS

1. Clean all pipe surfaces thoroughly. Measure the pipe diameter to ensure the tapping sleeve range is the correct size.
2. Lubricate pipe under and beyond the gasket contact area with a thin coating of pipe joint lubricant. **Note:** Extra attention must be given to the lubrication of AC pipe due to its rough and absorbent nature. If it becomes absorbed, apply more lubricant to AC pipe.
3. Carefully position and assemble the tapping sleeve on the pipe by installing the bolts (placing the (1) long bolt (if provided) on each side of the sleeve) and tighten nuts working from the outside toward the center as shown in the illustration below. Ensure the gap between the sleeve sections remains equal at the top and bottom, and remains equal from end to end during tightening. **The use of a torque wrench is recommended and required to ensure proper torque.** The long bolt is intended to be a "starter" bolt for easier installation. DO NOT DRAG THE GASKET ON THE PIPE. Ford suggests positioning the saddle to avoid rotating on the pipe.



For thin-walled pipe applications or when pipe conditions are uncertain, be careful not to tighten the bolts to the point of damaging the pipe.

5/8" nuts - 75 ft-lb
3/4" nuts - 110 ft-lb
Pipe sizes 24" and larger - 150 ft-lb
Bring each bolt to torque once, then chase at least twice.

4. Make sure the flange face on the tapping sleeve and the contact area on the MJ valve are clean and free of dirt or debris. Inspect the face of the MJ valve for a smooth, even surface to ensure it will provide proper alignment with the tapping sleeve.
5. Apply a soap-based pipe lubricant to the exposed connecting gasket.
6. Place the open cavity of the valve onto the MJ outlet of the tapping sleeve and align the bolt holes. Note that it may be necessary to insert some of the fasteners into certain valves prior to making the connection. Apply blocks and shims to support the valve's suspended weight.
7. Evenly and alternately tighten the outlet fasteners with the appropriate wrench to maintain an even spacing as the components are drawn together. Continue to tighten the fasteners until the tapping sleeve flange and the MJ valve face make solid contact around the entire outlet. The flange is designed to come face-to-face with the valve.
8. 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.
9. Attach the drilling machine to the valve, block and shim to support the machine's weight, and check for proper mating and alignment.
10. **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.** Tapping sleeve, valve and tapping machine are properly aligned.
    - **e.** Correct cutter size has been selected for the job. (FTSAS, FTS and FTSC tapping sleeves allow a full size cutter in outlet sizes 4" –12". **Outlets larger than 12" require a 1" undersized cutter.**)

    Note: The tapping process must not push/pull the pipe away from the outlet gasket seal.

For video overview

11. For best results, recheck tapping sleeve bolt torque after the tap is made and before backfilling.
12. 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.