



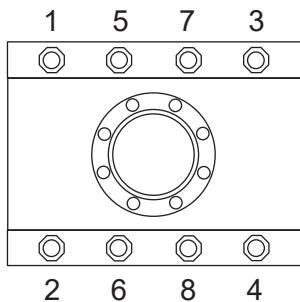
FTSAS, FTS AND FTSC TAPPING SLEEVE

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.
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 in the order shown below, 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. Attach tapping valve to sleeve using a drop-in style gasket or a Ford CSFG gasket; block and shim to support the valve and tapping machine's weight.
5. 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.
6. Attach the drilling machine to the valve, block and shim to support the machine's weight, and check for proper mating and alignment.
7. **Make the following checks before proceeding with the tap.**
 - Gaps between the tapping sleeve saddle and the band sections are equal from side to side and from end to end.
 - All bolts are tightened to the proper torque.
 - All blocking is in place and secure.
 - Valve and tapping machine are properly aligned.
 - 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.
8. For best results, recheck tapping sleeve bolt torque after the tap is made and before backfilling.
9. 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 centerline matching the centerline of the valve.



For video overview