



COSMOIND USA



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**Electro Fusion
Joining Manual**

SERVICE TAPPING TEE

– Tapping

After sufficient cooling on the pressurized pipe, the electrofusion tapping tee can be tapped. The tapping tee contains a cutter that can be threaded downward by using the appropriate tapping tool until it pierces the main pipe and removing the cap. The tapping tool has stop indicators that provide a maximum cutter depth. The cutter retains the pipe coupon and is retracted to its final service position at the top of the tapping tee chimney. Do not remove the cutter from the tapping tee. For a service tee, the cutter should be located at the same height as the top of the fitting chimney. For large size tapping tee (1-1/4" or 2" IPS outlet), the cutter should be located in contact with the upper O-ring seal as described in the following instruction. Replace the cap by hand tightening only.

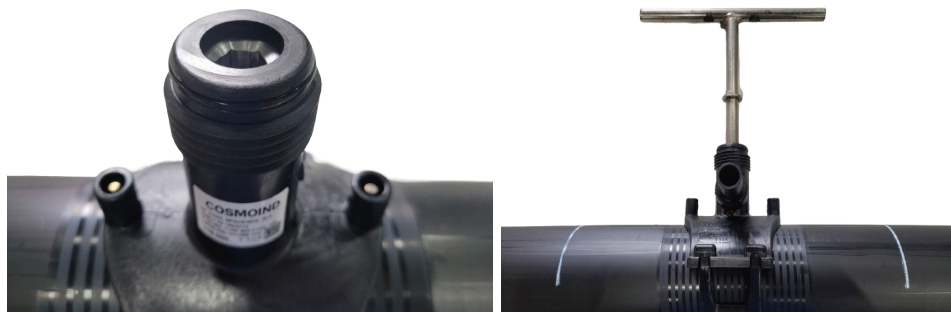
- * Cap O-rings are lightly coated with a dry film lubricant to prevent possible contamination of the fusion surface during manufacturing. Additional lubrication of the cap O-ring after the fusion process has been carried out is an acceptable practice and can be beneficial in initial seal.
- * Do not tighten the threaded caps with a wrench. Wrenches can cause overtightening and long-term failure of the plastic threads. Tighten with your hands only.
- * Do not exceed the maximum cutter depth of the tapping tool stop. The cutter can bottom out and strip fitting threads.
- * Do not tap using power tools. Excessive heat from friction can cause the fitting threads to melt or strip.
- * Do not remove the self-tapping cutter from the fitting. Removing cutter while the system is pressurized may result in personal injury or leakage of pipeline.
- * When working in a flammable gaseous environment, follow all safety rules and protocols for grounding and static discharge.

– Service Tapping Tee:

A. Remove the cap to expose punch.



B. Insert tapping tool into punch.





C. Rotate the tapping tool clockwise until the stop is reached. Apply equal rotational force to the handle and avoid lateral pressure. Do not continue to rotate the punch after the stop has been reached.



D. Punch upward by rotating counter-clockwise until the punch is level with the top of the fitting chimney. Do not remove punch from chimney.



E. Remove the tapping tool. If necessary, lubricate the cap and chimney O-ring and replace the cap. Tighten cap hand tight only, do not use wrenches. Check for leaks per normal procedures.

■ When the cutter is raised back to the top of the fitting, DO NOT rotate excessively so that the cutter lift up the top-stop. It is inappropriate that the cutter invades the top-stop as shown in the figure below.

