1201 & 1302 Style Steel Service Punch Tee Installation Instructions
Weld Inlet x Compression Outlet for PE Pipe

> **IMPORTANT**
> **For use on:**
> Polyethylene (PE) gas pipe meeting the requirements of ASTM D 2513
>
> **Pressure Rating:** Designed to meet or exceed pressure rating of PE pipe per 49 CFR Part 192 and ASTM D 2513
>
> **Operating Temperature:** -20 to 140° F
>
> **Material:** Carbon Steel

1. Before installing the service tee, confirm the punch is rated for the steel pipe to be tapped.
   - 3/8" tip punches are rated for 0.280" maximum wall thickness and 70 ksi maximum yield strength.
   - 1/4", 1/2", 3/4" & 1" tip punches are rated for 0.250" maximum wall thickness and 65 ksi maximum yield strength.
2. Verify that the compression outlet on the service tee is the correct size for the polyethylene (PE) pipe. Verify the SDR (or wall thickness) of the pipe matches the SDR (or wall thickness) stamped on the end of the stiffener.
3. Remove the O-ring cap, the punch, outlet seal ring and compression nut from the service tee and place in the plastic bag in which the service tee was shipped. Do not remove the splatter shield from the inlet.
4. Clean the main of all coatings, rust, dirt, etc., in the area where the service tee is to be welded onto the main.
5. Weld service tee to main per your company's welding procedures.
6. When the outlet is cool to the touch, make the service connection. See other side for outlet assembly instructions.
7. To assure proper assembly and to comply with 49 CFR 192 Subpart J—Test requirements, the joint shall be leak tested.
8. The service tee must be cool to the touch before reinserting the punch.
9. **Lubricant must be applied to the punch threads and punch tip.** Acceptable lubricants include thread cutting oil, tapping fluid or tapping grease.
10. Insert punch in service tee and turn clockwise by hand to avoid cross threading.
11. Use a ratchet wrench with Continental drive key and bushing to make the tap.
    - For 1/2" body tees, use 23-3691-00 Hex Drive Key, Bushing & Socket Adapter
    - For 3/4" body tees, use 23-3692-00 Hex Drive Key, Bushing & Socket Adapter

IMPORTANT: To insure retention of the coupon - coupon retaining punches should be run all the way down until the punch seats on the main.

12. To allow gas to the service line, back punch valve up until it protrudes 2 to 3 threads above top of tee.
13. Insert the hex drive of the O-ring plug cap into the socket of the punch valve and run the unit down until it is leak tight. Take care as the threads of the O-ring plug cap engage the threads of the tee body to prevent cross threading.

NOTE: If desirable at a later date, the service may be interrupted by running the punch valve down until it seats on the main.

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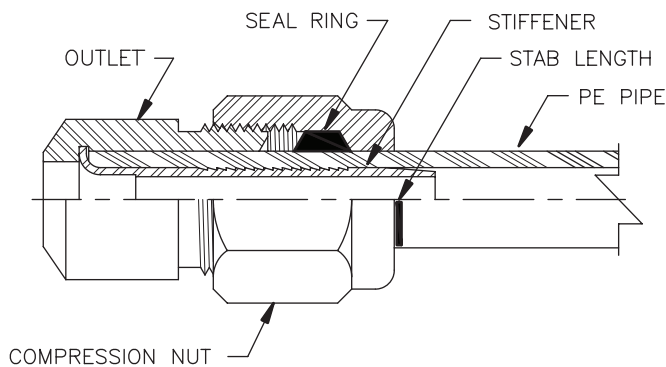
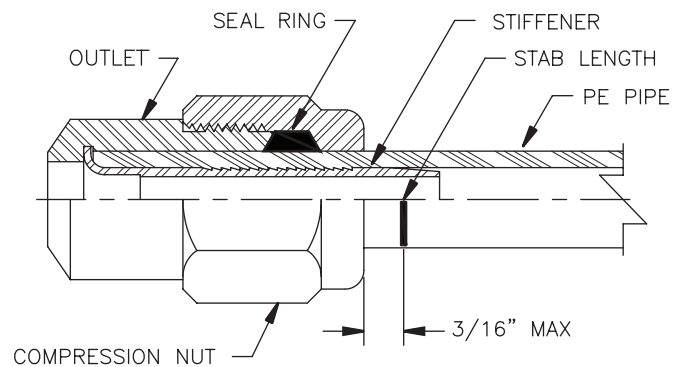# Compression Outlet for PE Pipe Installation Instructions

1. Install the compression nut and seal ring onto the outlet. Do not tighten the compression nut.

2. Cut polyethylene pipe end square, deburr inside and outside, clean thoroughly to assure there is no dirt, grease, oil, etc. on assembly area of pipe.

3. Mark stab length on pipe (see examples for correct pipe or tubing size and corresponding stab length).

3/8" OD, 5/8" OD 7/8" OD, 1/2" IPS	1 1/8" OD, 3/4" IPS, 1" IPS
1 11/16" STAB LENGTH	1 7/8" STAB LENGTH
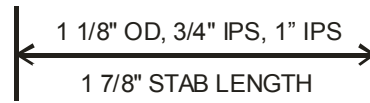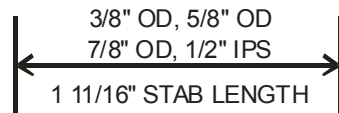
4. Insert the polyethylene pipe through the compression nut until it bottoms in the outlet. (See detail "A")

5. Tighten compression nut until it bottoms on shoulder (metal to metal). (See detail "B") The stab length line should be no more than 3/16" from face of the compression nut.

6. If the stab length line is more than 3/16" from the face of the compression nut, diassemble the joint and repeat steps 1 through 5.

SEAL RING — STIFFENER
OUTLET — STAB LENGTH
PE PIPE

COMPRESSION NUT

DETAIL "A"

SEAL RING — STIFFENER
OUTLET — STAB LENGTH
PE PIPE

COMPRESSION NUT

3/16" MAX

DETAIL "B"

NOTE: It is advisable to limit shear at main connections. In this regard, your company's policies should be followed. For further information, reference; ASTM D 2774 Standard Practice for Underground Installation of Thermoplastic Pressure Piping; Code of Federal Regulations, Title 49, Transportation Part 192; AGA Plastic Pipe Manual and/or The Guidance Manual for Operators of Small Gas Systems by the U.S. Department of Transportation.