

INSTALLATION INSTRUCTIONS

TX3— WIDE RANGE LARGE DIAMETER COUPLING PATENT PENDING

Step 1. Prepare pipe surface by thoroughly cleaning surface of all rust, dirt, scale, and debris (See Fig. 1). Verify that the sleeve is the proper diameter for the main pipe on which it is to be installed. Use a pipe outside diameter (OD) tape to confirm main pipe diameter (See Fig. 2). Verify that the pipe to be repaired has the structural integrity to withstand the fitting's mechanical forces. Consult with a piping engineer if needed.

CAUTION

- 1. DO NOT install over any raised lettering that may interfere with gasket sealing surfaces
- 2. DO NOT install coupling with sealing gasket surfaces over any gouge in pipe. (HDPE & PVC)
- 3. MAX PIPE OUT OF ROUND-NESS = 0.16"

Step 2. Place two marks on each pipe end (Fig. 3.). Place on mark at 4in.(MIN STAB DEPTH) and place the other mark at 5 in. (MAX STAB DEPTH). The coupling ends must fall between these lines during installation.

<u>NOTE:</u> RECCOMENDED PIPE GAP = 2"

Step 3. Prior to installation, lubricate all gasket and pipe surfaces. Smooth wall pipes: PVC & HDPE use soapy water Rough wall pipes: Steel, Ductile Iron, Pit Cast, AC use pipe joint lubricants

Step 4. Remove coupling from packaging. Inspect the coupling for shipping damage, verify there is no missing parts. Verify end rings (see Fig. 4) are centered over the middle ring.

<u>NOTE:</u> If product is damaged or not centered, DO NOT attempt to repair as it must be returned to TPS. Disassembly of product voids warranty.



<u>Fig. 1</u>

<u>Fig. 2</u>



Fig. 3





Step 5. Loosen the middle ring stop pins (Fig 5). These can be loosen until stopped by the retaining clip on the end of them. This allows the coupling to be slid on and off the pipe.



Step 6. The TX3 is a wide range stab fit coupling with a two-layer hydraulic assist gasket. Do not remove the inner gasket layer unless the measured pipe diameter falls within the upper range of the coupling as shown on the product label. If the inner layer of the gasket must be removed for proper fit to the pipe, then gently pry the inner gasket away from the outer gasket using a screwdriver or other suitable blunt tipped instrument. Under no circumstances should the inner layer of the gasket be removed unless the pipe diameter is verified to fall in the high (upper) range of the coupling as shown on the product label.

Step 7. Slide the coupling over the pipe ends aligned with the marks on pipe. Allow enough space between the pipe ends for the middle ring stop pins to fully thread in (MUST FULLY THREAD INTO BOSS TO SEAL).

Step 8. Using a 1 1/16" socket wrench tighten down the stop pins ensuring the o-ring engages with the sealing surface.

Step 9. Tighten end rings with 1 1/16" socket and torque wrench. "**End rings gaps**" (Fig. 5) must close evenly. Follow max torque readings as shown (Fig 7.). Do not overtighten or lubricate bolts. Torque reading must be confirmed after 10 minutes before the line is re-pressurized.



SEE PRODUCT LABEL FOR PRESSURE RATINGS, APPROVED LINE CONTENT, AND TEMPERATURE RATING.





<u>Fig. 7</u>

INSTALLATION NOTES

<u>Note 1:</u> Refer to individual product label for actual pressure rating. Pressure rating will never be greater than Pressure rating of main pipe. <u>Note 2:</u> Maximum Fitting Operating Temperature: See Product Label <u>Note 3:</u> Use of a pipe diameter (PI) tape is strongly recommended to verify main conductor pipe diameter prior to final installation.