



ULTRA-Sleeve®

Patent Pending

INSTALLATION INSTRUCTIONS

The **ULTRA-Sleeve®** is a wide range product and may be used on most pipe diameters within a nominal pipe range. The gasket is designed with a removable layer to account for up to 1.3" of range. Follow these instructions to prepare the gasket for the correct pipe OD. Refer to the product label for the actual "upper" and "lower" range of the product.

Step 1. Prepare pipe surface by thoroughly cleaning the surface of all rust, dirt, scale, and debris. 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. 1). 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.

INSTALLATION NOTE

If the water main has a blowing/gushing leak, reduce the line pressure. A severe blowing leak will interfere with the **ULTRA-Sleeve®** installation and not allow it to seal properly on the main. If the water main has a small or weeping leak, the sleeve may be installed without reducing the line pressure.

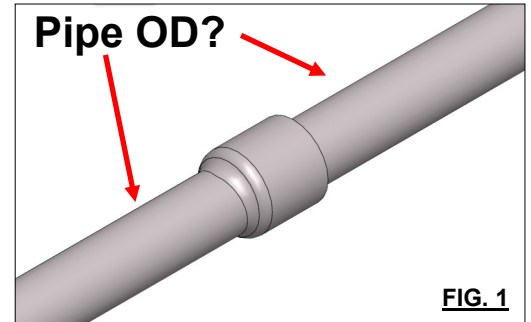


FIG. 1

CAUTION

NOTE: REMOVE OR GRIND OFF ANY RAISED LETTERING PRESENT ON PIPE SURFACE THAT MAY INTERFERE WITH GASKET SEALING.

Step 2. Prepare end gasket for proper Pipe OD. The end gaskets has a removable layer to allow the gaskets to conform to a wide range of Pipe OD's. The end gaskets are ready for the low range of the product right out of the box (refer to product label for lower range).

If the product is needed for the **UPPER** Range (refer to product label for upper range) begin tearing out the removable layers.

Table 1 shows the removable layer tearing out for the various gasket sizes. Note that the 8" gasket has a different style than the other sizes.

Table 1 shows the removable layer out, ready for the **UPPER** Range.

NOTE: Patented "Alignment Spokes" on removable layer may tear out and adhere to outer layer. This will not affect performance of the product.

Table 1	4"/6"/10"/12" Gaskets	8" Gasket
Low Range (With Inner Layer)		
Removing Inner Layer		
Upper Range (No Inner Layer)		

****NOTE: ONCE INNER LAYER IS REMOVED, IT CANNOT BE REINSTALLED INTO GASKET. CONTACT TPS IF REPLACEMENT GASKETS ARE NEEDED****



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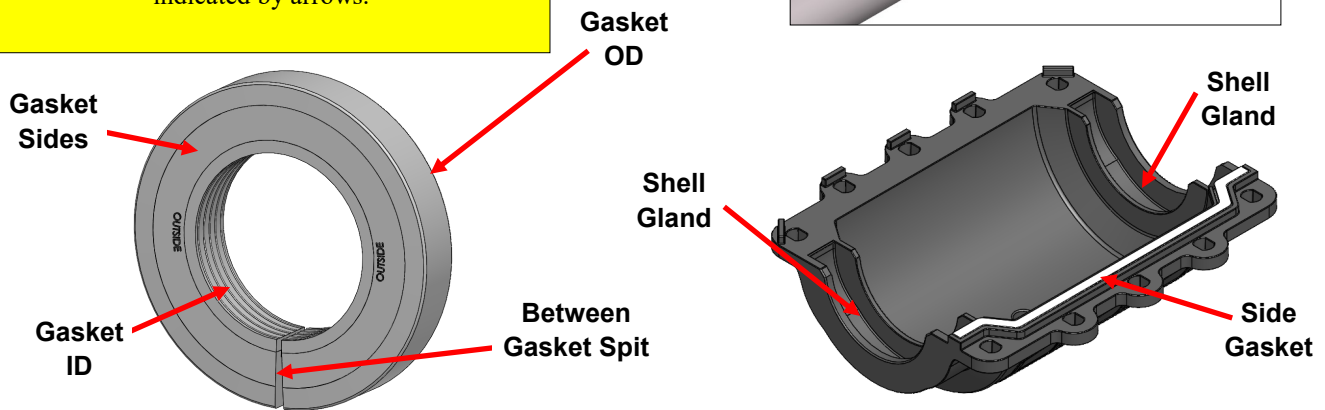
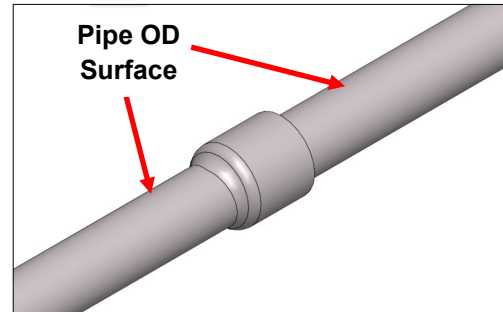
ROUGH WALL PIPE INSTALLATION : DUCTILE IRON, PIT CAST, AC

Verify sealing surface is free of debris prior to installation. Clean and de-scale pipe surface if necessary

****ROUGH WALL PIPE NOTE****

FOR DI, PIT CAST and AC pipe

Lubricate the pipe surface and all gasket surfaces with NSF 61 APPROVED SILICONE lubricant as indicated by arrows.



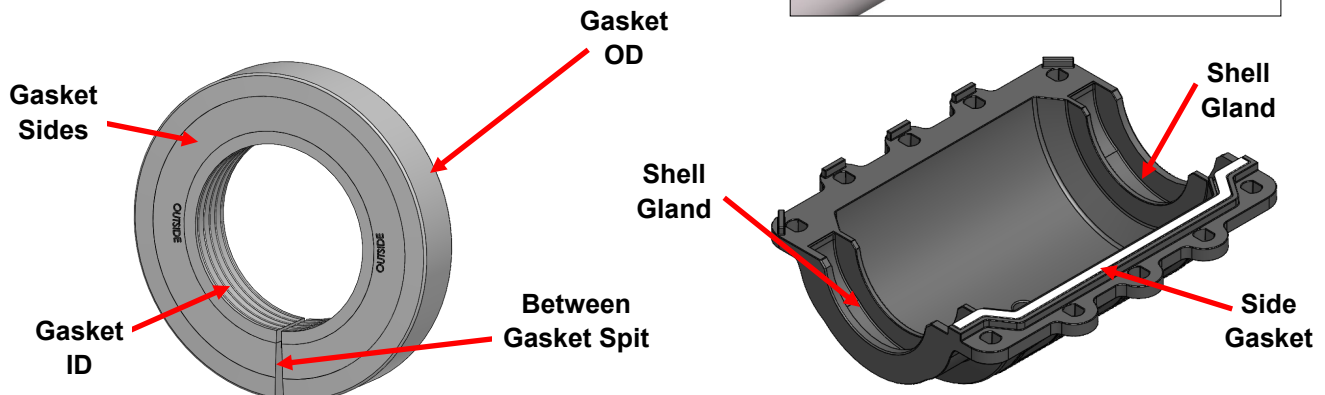
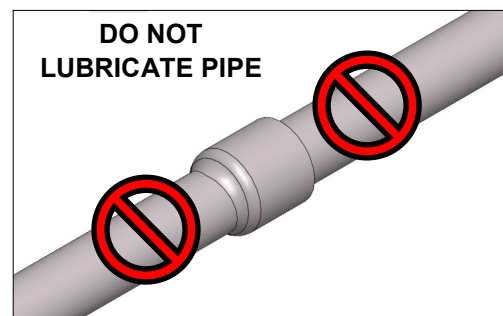
SMOOTH WALL PIPE INSTALLATION : PVC, HDPE, AND STEEL

Verify sealing surface is free of debris prior to installation. Thoroughly clean pipe surface.

FOR PVC, HDPE, AND STEEL PIPE

Lubricate the gasket surfaces and shell surfaces as shown. **DO NOT LUBRICATE THE PIPE**

USE NSF 61 APPROVED SILICONE LUBRICANT





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Step 3. Fit the end gaskets onto the pipe. Ensure the groove in the gaskets are facing inward and verify the splits in the gaskets are facing vertically down at the 6 O'clock position. (See Fig. 2-3).

NOTE: The gaskets are branded with the word "OUTSIDE". This branding should be facing away from the body when installed on the Pipe. (See Fig. 4)

Step 4. Set the top half of the fitting, ensuring the rubber gaskets are fully seated inside the gasket glands (See Fig. 5). Insert longer starter bolts on each side of the fitting (See Fig. 6).

Step 5. Raise up the lower shell and install the nuts onto the starter bolts (See Fig. 7). Draw up the lower half by tightening the starter bolts evenly. Once the fitting halves have been drawn together, install the remaining bolts. (See Fig. 8)

Note: When mating upper and lower halves together, verify the ends with matching yellow markings are mating.

NOTE: For the bottom shell, it is recommended to install the test plug or valve prior to completely drawing up the bottom shell. A valve may be used to blow off water during installation on either shell.

NOTE: FOR FINAL BOLT TIGHTENING, BEGIN AT THE OUTSIDE CORNER BOLTS AND WORK INWORD
(See Fig. 9)

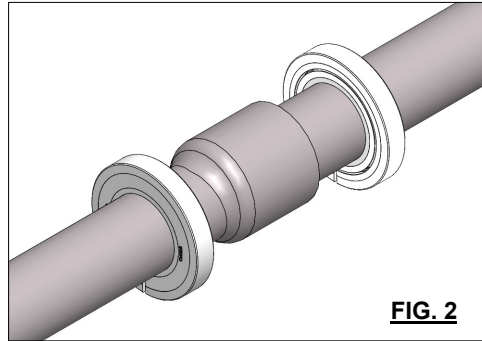


FIG. 2

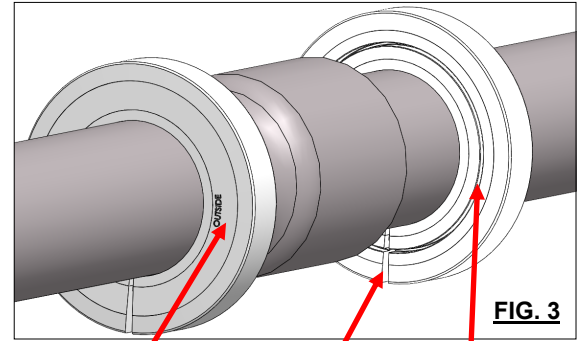


FIG. 3

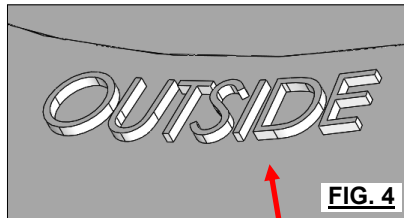


FIG. 4

Split Facing Down

Gasket Groove Facing toward Repair

"Outside" Facing away from repair

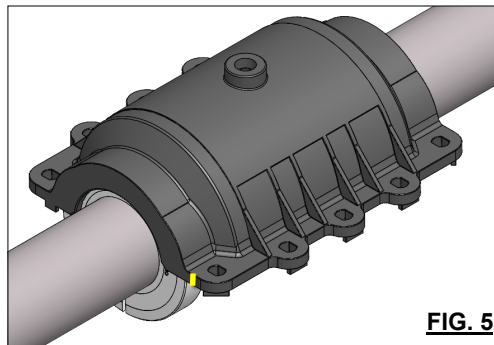


FIG. 5

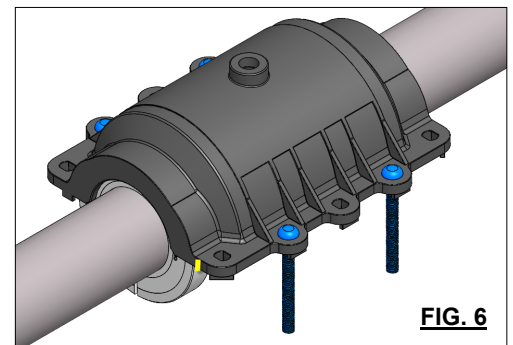


FIG. 6

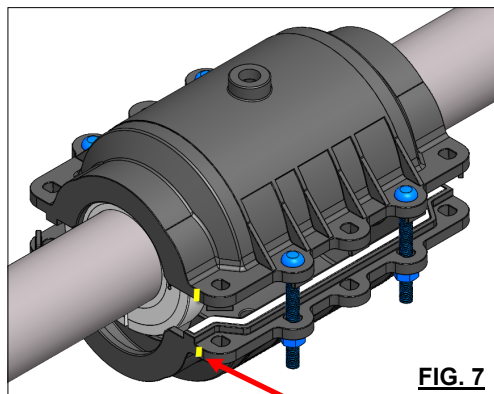


FIG. 7

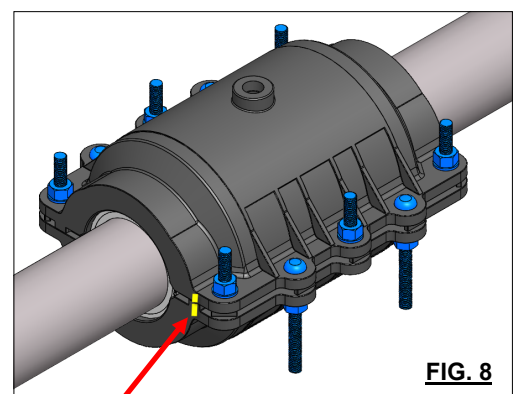


FIG. 8

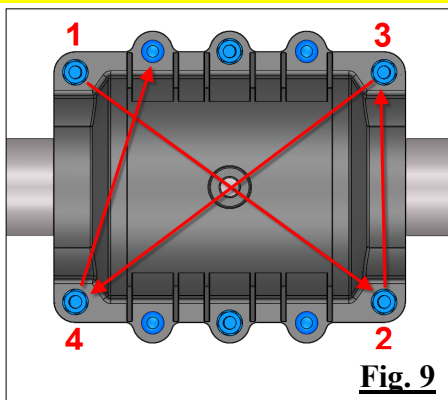


Fig. 9

Verify Yellow Marks line up



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Step 6. Using a torque wrench, tighten and torque the bolts evenly to the torque specified on the product label. Starting from the **OUTSIDE CORNERS** and moving inward in a crisscross pattern. The upper and lower halves may become metal-bound (iron-bound). (See Fig. 9) Re-apply torque after about 10 mins.

Step 7. Install provided test plugs or valves to completely seal unit. Verify no leaks are present prior to backfilling.

Step 8. Backfill carefully around the fitting to prevent fitting or coating damage, and to provide earth support. If coating becomes damaged, touch up with a two-part epoxy coating.

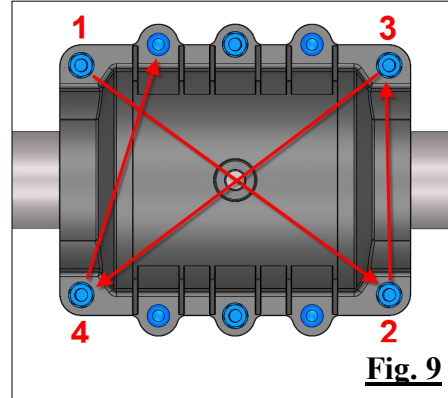


Fig. 9

*****IF NEEDED AS A TRANSITION FITTING, CONTACT TOTAL PIPING SOLUTIONS, INC. FOR ADDITIONAL INFORMATION*****

INSTALLATION NOTES

Note 1: Refer to individual product label for actual pressure rating. Pressure rating will never be greater than Pressure rating of main pipe.

Note 2: Maximum Fitting Operating Temperature: See Product Label

Note 3: Use of a pipe diameter (PI) tape is strongly recommended to verify main conductor pipe diameter prior to final installation.

Note 4: Nut Size is 1-1/16 across flats. Use of appropriate socket wrench is recommended. Pneumatic/Air powered tools may be used to torque bolts as long as tightening sequence and multistage torque application steps are followed.

Note 5: Extra Long deep well socket available from TPS to aid in installation.

Note 6: For ease of installation In cold weather, allow gaskets to warm to room temperature before installation.

Note 7: If the water main is leaking, reduce the line pressure.

A severe blowing leak will interfere with the Ultra-Sleeve installation and not allow it to seal properly on the main.

WARNING This product is not intended for use on natural gas piping or any other type of gas piping. To do so could result in escaping gas that could ignite and cause property damage, serious injury or death.

WARNING This is a non-restraining product. If pipe pullout can occur, proper anchoring of the pipe joint is required. Failure to anchor the pipe could result in the escape of line content, and may cause property damage, serious injury or death.

WARNING This product is intended for use on HDPE SDR-17 or greater wall thicknesses, and shall be used for buried service only. The TPS Triple Tap product line is not approved for above ground applications on HDPE or other plastic pipe.

ATTENTION

CONTAINS GASKET WITH REMOVABLE INNER LAYER

INNER LAYER IN FOR LOWER RANGE

INNER LAYER OUT FOR UPPER RANGE

SEE PRODUCT LABEL FOR RANGES

WARNING

NOT A RESTRAINING FITTING

END GASKETS MUST MATCH

BOTH MUST HAVE INNER LAYER IN OR BOTH MUST HAVE INNER LAYER OUT

DO NOT REINSTALL INNER LAYER IF IT GETS REMOVED. CONTACT TPS FOR REPLACEMENT GASKET(S)

*****SEE PRODUCT LABEL FOR BOLT TORQUE, PRESSURE RATINGS, APPROVED LINE CONTENT, TOTAL PIPING SOLUTIONS, INC. 1760 Haskell Road P. O. Box 525**