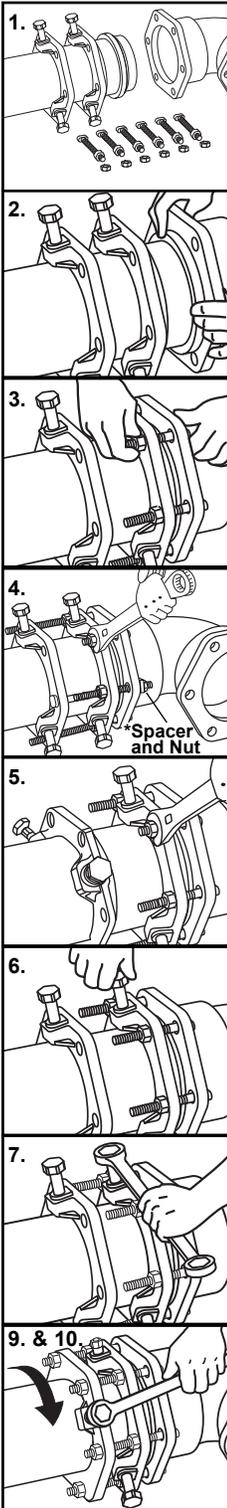




Series 2800 (3" - 48") Tandem Joint Restraint for Ductile Iron Pipe Installation Instructions

Refer to the FMB website (www.fordmeterbox.com) for additional and most recent instructions and product information.



1. Clean the socket and plain end. Lubricate gasket and plain end with approved pipe lubricant meeting AWWA C111. Place both glands on the plain end with the lip extension toward the plain end, followed by the gasket with the narrowed edge of the gasket toward the plain end. Uni-Flange SO-EZ gasket may be used on 3"-12" pipes. The SO-EZ gasket can be snapped onto the gland compression lip instead of first pressing it into the socket as stated in step number 2.
2. Insert and center the pipe into the socket and press the gasket firmly and evenly into the gasket recess. Keep the joint straight during assembly. In cold conditions, it is best to warm the gasket to approximately room temperature to facilitate assembly.
3. Push the inner gland toward the socket and center it around the pipe with the gland lip against the gasket. Hand-tightening some of the Auto-Tork actuating screws may assist in centering the gland. (For 3" - 10" glands only; rotate the outer gland so the Auto-Tork actuating screws are not in line with the inner gland. Rotate 3" and 4" glands 90°, 6" and 8" glands 60°, 10" glands 45°. See illustration 5.)
4. Insert the T-bolts through the inner gland and hand tighten the *nuts behind the gland. (Some fittings may not allow the long T-bolts to be installed in the traditional direction at all the holes. At these locations, reverse the T-bolt and insert it through the outer gland and spin a nut all the way to the end of the threads see illustrations 4 and 4a. For 3" - 10" glands only; rotate the outer gland so the Auto-Tork actuating screws are not in line with the inner gland. Rotate 3" and 4" glands 90°, 6" and 8" glands 60°, 10" glands 45°. See illustration 5.) Align all the bolts and position the outer gland to maintain a 1" minimum gap between the glands. Place the included spacer and a nut on the end of each bolt that has the threaded end facing the fitting. Hand tighten the outer nut against the inner gland.
- 4a. *Spacer (4"-12" units only) and Nut
5. With the gland positioned and centered on the pipe, loosen any Auto-Tork actuating screws used for positioning and continue to tighten the nuts. Set deflection after joint assembly but before tightening nuts. Contact Ford Meter Box for available deflection.
6. Tighten the inner gland nuts to the same torque recommended in AWWA C111 (45-60 ft-lb on 3", 75-90 ft-lb in 4" - 24" sizes, 100-120 ft-lb in 30" - 36" sizes, 120 - 150 ft-lb in 42" - 48" sizes). Tighten in an alternating manner, (6 o'clock, 12 o'clock, 3 o'clock, 9 o'clock) maintaining the same gap between the gland and the MJ bell face at all points around the socket. Repeat the process until all bolts are within the recommended torque range. Use of a torque wrench with an open end crowfoot wrench is recommended and required to ensure proper torque.
7. After correct assembly of the mechanical joint, bring all wedges in contact with the pipe surface by turning the Auto-Tork actuating screws in a clockwise direction.
8. Tighten the Auto-Tork actuating screws in an alternating manner until the break away heads have twisted off. If the restraint is re-used, use a torque wrench to ensure a torque of 75-110 ft-lb has been applied to the actuating screws.
9. If not already positioned, align the outer gland with the T-bolts. (For 3" - 10" glands only; rotate the outer gland so the Auto-Tork actuating screws are not in line with the inner gland. Rotate 3" and 4" glands 90°, 6" and 8" glands 60°, 10" glands 45°. See illustration 5.) Maintain a 1" minimum gap between the glands. Repeat steps 7 and 8 for outer gland.
10. Tighten nuts behind outer gland to "hand tight".
11. Although it is not a requirement, it is always good practice to check t-bolt torque prior to back filling and/or applying water pressure.

* **Note:** Spacers provided for and to be used on 4"-12" sizes only. See Illustration 4a.

THE SERIES 1400 IS INTENDED FOR USE ON ANY PRESSURE
OR THICKNESS CLASS OF DUCTILE IRON PIPE MEETING
AWWA C151 STANDARD, WITHOUT LIMITATION.

Not recommended for use on plain end fittings.



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