

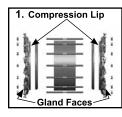


Series RCDD

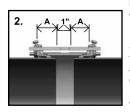
14"-36" Restrained
Coupling for
Ductile Iron Pipe

Installation Instructions

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



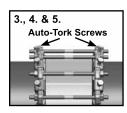
1. Measure the pipe diameters carefully, making sure the pipe O.D.'s fall within the size range of the RCDD. Check to ensure the RCDD is not damaged. Thoroughly clean each pipe end to a smooth, bare surface sufficiently longer than the RCDD length. Check the pipe surfaces to ensure that the gasket-bearing surfaces are free from dents, flat spots, or pitted areas that might impair the gasket seating. Lubricate both pipe ends and inside the RCDD sleeve ends (bevels) with an approved pipe lubricant meeting AWWA C111.



2. Slide a retainer gland and gasket onto each pipe with the compression lip against the gasket and the beveled end of the gasket facing the pipe end. Each pipe must be inserted into the RCDD sleeve a minimum distance (see chart and illustration #2) from the restraint gland face. Measure and mark this distance from pipe end as a reference point for proper insertion. Slide the RCDD sleeve onto one pipe end to at least the minimum insertion point but no more than half the sleeve length. With the

*MINIMUM PIPE INSERTION	
Size	"A"
14"	4-3/8"
16"	4-7/16"
18"	4-1/2"
20"	4-9/16"
24"	4-3/4"
30"	5-7/16"
36"	5-7/16"
* Not accounting for heveled	

* Not accounting for beveled unsquare or deflected pipe ends



pipe and sleeve centered along the same axis, press the gasket firmly and evenly into the gasket recess, push the gland toward the socket. Bring the restraint wedges in contact with the pipe surface by turning the Auto-Tork actuating screws in a clockwise direction until initial contact is made with the pipe surface. (Maximum allowable deflection is 3° per end for 14" - 24", 1° per end for 30" and 36".)

- 3. Tighten each Auto-Tork screw approximately 180 $^\circ$ (1/2 turn), alternating among screws until the heads twist off. Never turn a single screw more than 180 $^\circ$ without alternating to another screw.
- 4. Insert other pipe end into the RCDD sleeve. The optimum gap between pipe ends for the RCDD coupling is less than 1". With pipe and sleeve centered, press the gasket firmly and evenly into the gasket recess, push the gland toward the socket, insert and tighten the nuts on the rods hand tight. Set deflection before tightening rods.



5. Tighten the nuts on the tie rods to a torque recommended in AWWA C111 (75-90 ft-lb for 14"-24" sizes & 100-120 ft-lb for 30"-36" sizes). Tighten in an alternating manner, (6 o'clock, 12 o'clock, o'clock) maintaining the same gap between the restraint glands at all points around the RCDD sleeve. Repeat the process

until all tie rods are within the recommended torque range. Glands may contact the sleeve. Use of a torque wrench is strongly recommended and required to ensure proper torque. It is important to ensure equal torque has been applied to all tie rods.

6. Bring the remaining restraint wedges in contact with the pipe surface by turning the Auto-Tork actuating screws in a clockwise direction until initial contact is made with the pipe surface. Tighten each Auto-Tork screw approximately 180° (1/2 turn), alternating among screws until the heads twist off. Never turn a single screw more than 180° without alternating to another screw. Note: To re-use or re-install the restraint after the Auto-Tork break-off heads have been removed; tighten the 5/8" hex head of the actuating screw to 75 ft-lbs. Also, while it is not a requirement, it is always a good practice to recheck the tie rod torque prior to backfilling and/or after testing or applying water pressure. Be advised extreme torque can over stress the coupling components.

