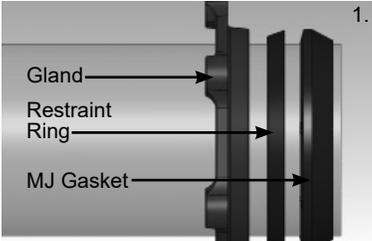


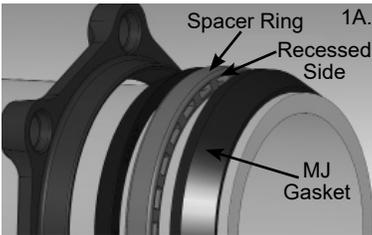
# 4"-12" UNI-RING JOINT RESTRAINT (MECHANICAL JOINT GRIPPING STYLE RESTRAINT) FOR USE WITH DUCTILE IRON PIPE SIZE AWWA C900 PVC, AWWA C906 HDPE, AWWA C909 PVCO, and AWWA C151 Ductile Iron Pipe

When installed on HDPE, The Ford Meter Box Company recommends the use of an insert stiffener. Not for use on Fiberglass, Asbestos Cement, or Steel Pipes.

Refer to the Ford® website ([www.fordmeterbox.com](http://www.fordmeterbox.com)) for additional and most recent installation instructions and product information.



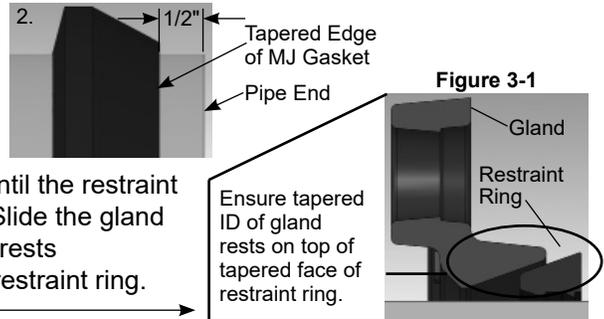
1. Inspect the Uni-Ring restraint gland, restraint ring, and gasket to ensure no defects are present. Verify the pipe diameter matches the size of the restraint to be installed, as noted on the components. Clean the MJ socket and the plain end of the pipe. Lubricate the MJ socket, gasket, and plain end with an approved pipe lubricant meeting AWWA C111. Place the gland on the plain end with the lip extension toward the plain end, followed by the restraint ring, and lubricated MJ gasket. The tapered side of the restraint ring should face the gland and the tapered edge of the MJ gasket should be towards the end of the pipe.



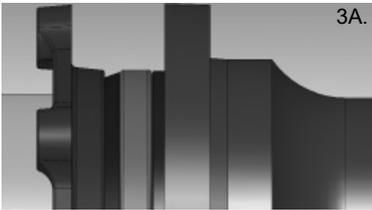
1A. If installing on AWWA C900 DR25 PVC or thinner or AWWA C909 PVCO, install the spacer ring on the plain end of the pipe, between the restraint ring and MJ gasket. Make sure the recesses on the side of the 4", 6" and 8" spacers are facing towards the MJ gasket.



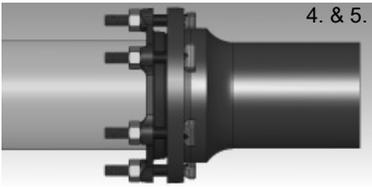
2. Place the tapered end of the MJ gasket 1/2" from the end of the pipe.



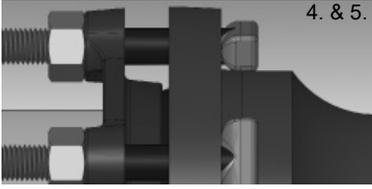
3. Insert the pipe into the MJ socket until MJ gasket is seated. Slide the restraint ring towards the MJ socket until the restraint ring is flush with the MJ gasket face. Slide the gland towards the MJ socket until the gland rests around the entire tapered face of the restraint ring. (See figure 3-1)



3A. If the spacer ring was installed (see Step 1A), slide the spacer ring, with the recesses towards the MJ socket, until flush with the MJ gasket. Slide the restraint ring towards the MJ socket until the restraint ring is flush with the spacer ring. Slide the gland towards the MJ socket until the gland rests around the entire tapered face of the restraint ring.

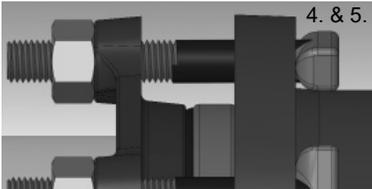


4. Insert Tee-head bolts and nuts and hand tighten nuts. Set the joint deflection between the pipe and the MJ fitting (Maximum allowable deflection is 5°).



5. Tighten the Tee-head bolt nuts to the recommended torque listed in the **Tee-Head Bolt Torque Table** below. Tighten in an alternating manner, maintaining the same gap between the gland face and the face of the MJ bell at all points around the MJ socket. Repeat the process until all bolts are within the recommended torque range. Use of a torque wrench is strongly recommended and required to ensure proper torque. It is important to ensure the same torque has been applied to each Tee-head bolt.

Tee-Head Bolt Torque Table			
Pipe Type	Pipe Size		
	4"-8"	10"	12"
DR14 & DR18 PVC, HDPE & DI	75-90 ft-lb	75-90 ft-lb	75-90 ft-lb
DR25 PVC or thinner & PVCO	50 ft-lb	50 ft-lb	75 ft-lb



**Note:** After installation is complete, the gland may not completely cover the restraint ring. If installed, a small portion of the spacer ring may have moved into the MJ cavity. It is best practice recommended to check torque after initial installation, after pressure test, and again prior to backfilling.



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