

INSTALLATION INSTRUCTIONS

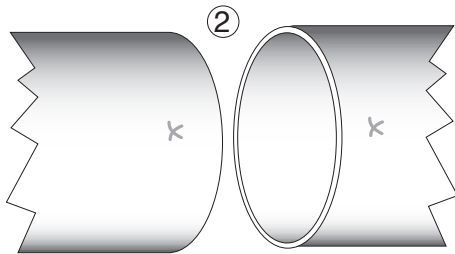
Read installation instructions first before installing. Check parts to ensure that no damage has occurred during transit and that no parts are missing. Also check the diameter of the pipe and the range marked on the coupling to ensure you have the proper size.

Style 400RG Restrained Coupling with RomaGrips™

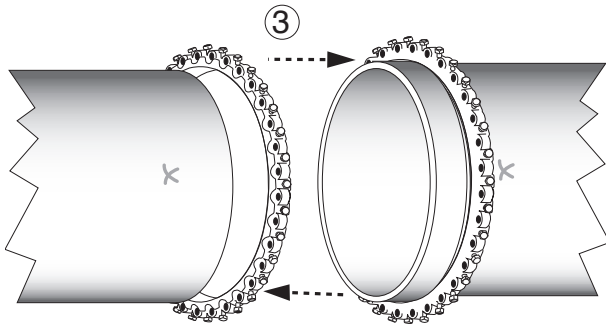
NOTE: Not for use on polyethylene pipe, plain end mechanical joint fittings or PVC pipe. May be used on cast iron pipe as long as it's the same OD as ductile iron pipe.

Step 1 Clean pipe ends for a distance of 2" greater than length of the coupling. Check area where gaskets will seat to make sure there are no dents, projections, gouges, etc. that will interfere with the gasket seal. Welds on steel pipe must be ground flush.

Step 2 Place a reference mark on pipe an equal distance from each pipe end for centering coupling over the pipe ends.

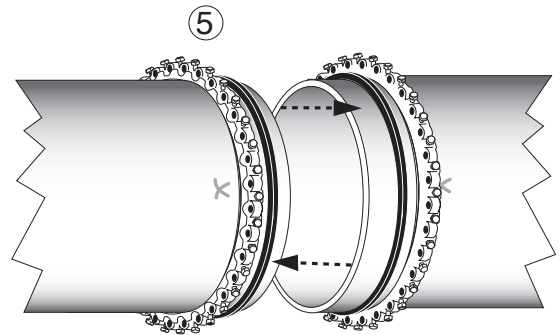


Step 3 Place one RomaGrip on each pipe end.

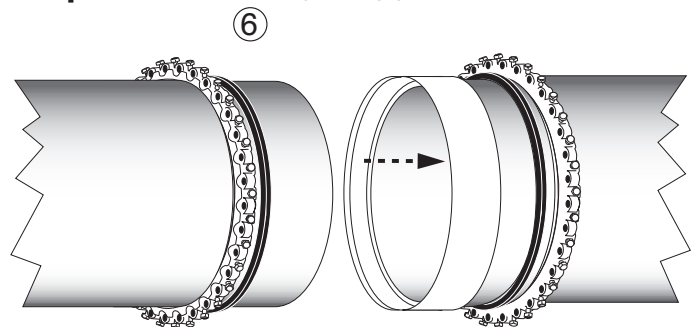


Step 4 Lubricate the gaskets and pipe surface with a suitable gasket lubricant.

Step 5 Place one gasket next to each RomaGrip with beveled edge toward the pipe end.

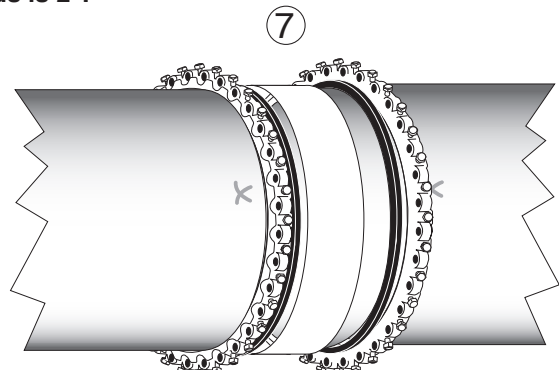


Step 6 Slide center ring onto pipe end.



Step 7 Bring the other pipe end into position.

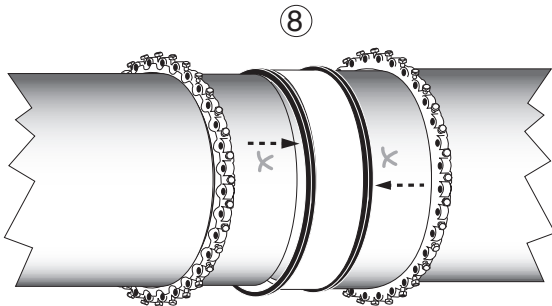
For best results, maintain a gap between the pipe ends of 1/2" - 3/4". The maximum allowable gap between pipe ends is 2".



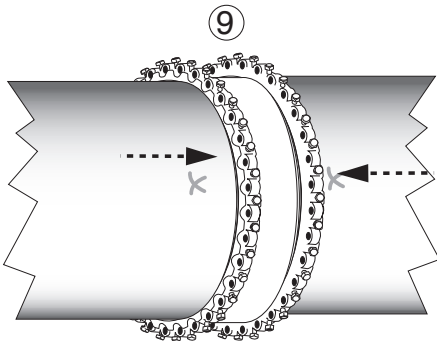
Installation Instructions continued on back

Style 400RG (continued from front)

Step 8 Center ring should be positioned such that it is centered over the pipe gap. Refer to the reference marks made in Step 2. Slide gaskets into position with the beveled edge engaging the flared end of center ring.

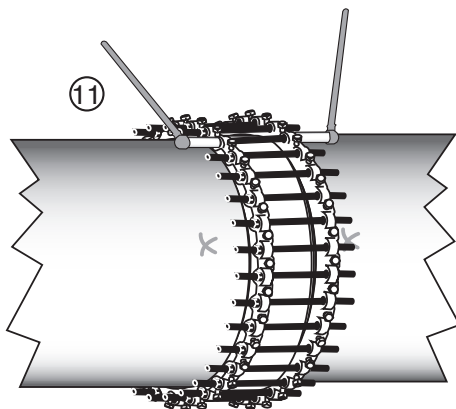


Step 9 Slide the RomaGrips into position against the gaskets.



Step 10 Check coupling for proper positioning over pipe ends using reference marks. (See Step 2).

Step 11 Insert the all-thread-rod into RomaGrips and thread nuts onto each end of the all-thread-rod. Bolt tightening should be done evenly, alternating to diametrically opposite positions to bring bolts to recommended tightness. Two wrenches are required.



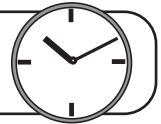
Recommended Torque:

12" - 24" RomaGrip: 75 - 90 ft-lbs.
30" & 36" RomaGrip: 100 - 120 ft-lbs.
42" & 48" RomaGrip: 120 - 150 ft-lbs.

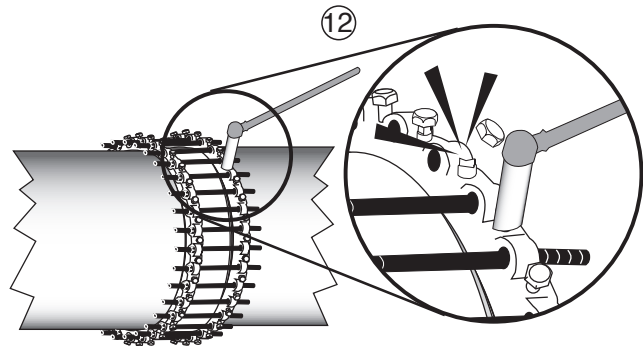
Maximum Deflection:

12": up to 10°
14" - 16": up to 4°
18" - 24": up to 3°
30" - 48": up to 2°

Wait 10 minutes and retighten to account for settling of the gasket.



Step 12 Tighten the restrainer bolts until the restraining pads touch the surface of the pipe. The bolts should be tightened evenly, alternating between diametrically opposite positions, until the heads break off above the notch.



Step 13 • Confirm proper installation by pressurizing the line and checking for leaks.

CAUTION: When reinstalling parts with stainless steel hardware there may be a loss in pressure holding ability due to worn or damaged threads during the original installation.

NOTE: Some initial axial movement may occur in lug style restraints as the lugs seat. Movement is directly related to the size of the piping system and the system pressure. In general terms movement of approximately 0.50" can be expected in restraints under 16". For larger sizes, movement of approximately 0.80" may be seen. If this is critical to your application please contact Romac Engineering for additional information.