

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 restrainer to ensure you have the proper size.

Style RomaGrip Mechanical Joint Retainer



For use on: Ductile iron pipe 3" - 48", cast iron pipe 3" - 48" (same OD's as ductile iron), IPS size steel 3" - 12" with transition gasket and a minimum thickness per ASTM A53 std. weight class pipe.

| Model | UL Listed | | <FM> Approved |
|----------------------|-----------|----------|---------------|
| | RomaGrip | RomaGrip | RomaGrip |
| Pipe Type | DI | DI | DI |
| Pipe Size, in. | 3 - 16 | 18 - 24 | 3 - 12 |
| Rated Pressure, psi. | 350 | 250 | 175 |

NOTE: Romac endorses usage of RomaGrip fittings on IPS size steel 3-12" OD with minimum thickness per ASTM A53 standard weight class pipe. This application is not UL Listed or <FM> Approved.

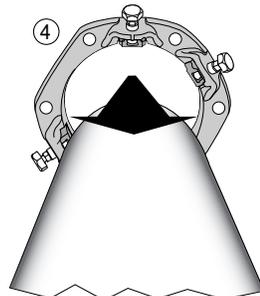
NOTE: Not for use on polyethylene pipe, plain end mechanical joint fittings or PVC pipe.

Step 1 • Check the parts to insure that no damage has occurred during transit and that no parts are missing.

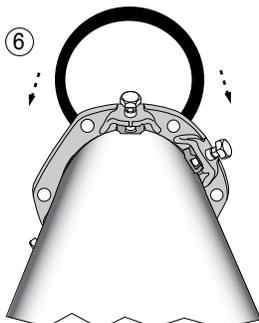
Step 2 • Clean pipe end for a distance of at least 2" past where the gland will sit.

Step 3 • Check area where gasket will seat to make sure there are no dents, projections, gouges, etc., that will interfere with the gasket seal.

Step 4 • Place gland on pipe.

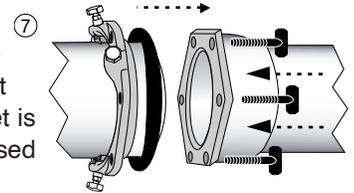


Step 5 • Lubricate the gasket and pipe surface with soapy water or other suitable gasket lubricant.

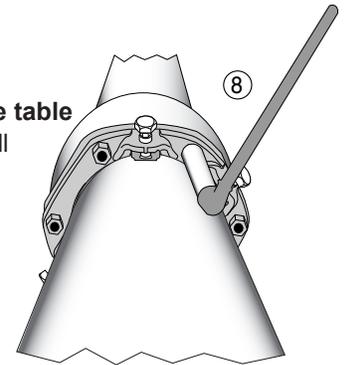


Step 6 • Stretch gasket over pipe with beveled edge toward the bell.

Step 7 • Insert pipe in mechanical joint fitting and insert bolts. Be sure that the gasket is properly seated and fully pressed into the gasket recess.



Step 8 • Tighten T-bolts to the torque recommended in the table below. Maintain the same overall gap between the RomaGrip and the MJ bell face by tightening the T-bolts in a uniform criss-cross pattern (12 o'clock, 6 o'clock, 3 o'clock, 9 o'clock) until proper torque is achieved. Using a torque wrench is highly recommended.

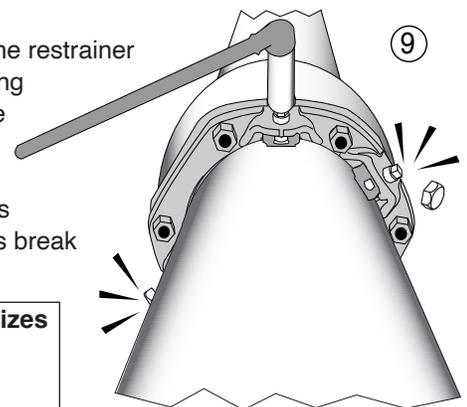


| Size | Recommended Torque: | Socket Size |
|----------|-----------------------------|-------------|
| 3" | RomaGrip: 45-65 ft-lbs. | 1 1/16" |
| 4 - 24" | RomaGrip: 75 - 90 ft-lbs. | 1 1/4" |
| 30 & 36" | RomaGrip: 100 - 120 ft-lbs. | 1 5/8" |
| 42 & 48" | RomaGrip: 120 - 150 ft-lbs. | 2" |

Note:
90 ft-lbs. torque = 12" wrench w/90 lbs. force

Step 9 • Tighten the restrainer bolts until the restraining pads touch the surface of the pipe. The bolts should be tightened in a uniform criss-cross pattern, until the heads break off above the notch.

| Pipe Size | Socket Sizes |
|-----------|--------------|
| 3" - 24" | 1 1/4" |
| 30" - 48" | 2" |



Style RomaGrip Mechanical Joint Retainer

PRECAUTIONS

1. Check diameter of pipe to make sure you are using the correct size RomaGrip; also check gasket to make sure it is the size you think it is.
2. Be sure to clean pipe of as much dirt and corrosion as possible in the area that the gasket will seal.
3. Lubricate both the gasket and the pipe end with soapy water or approved pipe lubricant per ANSI/AWWA C111/A21.11.
4. Make sure no foreign materials lodge between gasket and pipe.
5. Avoid loose fitting wrenches, or wrenches too short to achieve proper torque.
6. Keep threads free of foreign material to allow proper tightening.
7. Take extra care to follow proper bolt tightening procedures and torque recommendations. Bolts are often not tightened enough when a torque wrench is not used.
8. For best results, once T-bolts are properly torqued, wait 10 minutes and retighten proper torque.
9. Be sure that the gland is centered around the pipe.
10. Pressure test for leaks before backfilling.
11. Backfill and compact carefully around pipe and fittings.
12. 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 0.25" can be expected in restraints under 16". For larger sizes, movement of approximately 0.4" may be seen. If this is critical to your application please contact Romac Engineering for additional information.
13. If used as a mid span restraint ensure the direction of the Romagrip is correct for the thrust forces.
14. If restraint will be encased, the dynamic gripping mechanism needs to be protected against restriction of movement. Wrapping the restraint with polyethylene or similar coverings can be an effective approach.

COMMON INSTALLATION PROBLEMS

1. T-Bolts are not tightened to the proper torque.
2. Rocks or debris between pipe and gasket.
3. Dirt or debris between pipe and restraining pad.
4. Dirt on threads of bolts or nuts.
5. Restraining bolt heads not snapped off.
6. Not enough pipe inserted into bell.
7. Not using a transition gasket when using the RomaGrip on IPS size steel pipe.
8. Using the RomaGrip on IPS size steel pipe with wall thickness thinner than ASTM A53 std. weight class pipe.

IF RESTRAINER MUST BE REMOVED

1. Make sure pipe is not pressurized. Removing the restrainer could cause the pipe joint to separate.
2. To remove the RomaGrip restrainer, use a 5/8" hex wrench or socket.
3. To reassemble, follow installation procedures. For 3-24" tighten the restraining bolts using a 5/8" hex wrench to 75 ft-lbs. minimum. For 30 - 48" tighten the restraining bolts using 15/16" hex wrench to 110 - 135 ft-lbs.