

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 DJ405 Dismantling Joint

Step 1 • Check the DJ405 parts to ensure no damage occurred during transit and that no parts are missing.

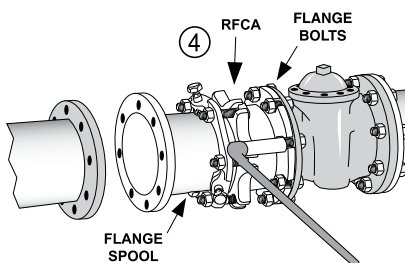
Step 2 • Check the mating flanges to insure that they match the drilling of DJ405 flanges. Mating flanges must be aligned, and angular deflection must be within the limits stated in the chart below. Also, check the length between the flange faces and make sure the DJ405 face to face length matches.

Nom. Size	Maximum Angular Deflection (degrees)
3	2.0
4 - 6	3.5
8	3.3
10 - 12	3.0
14 - 16	2.0
18 - 24	1.5

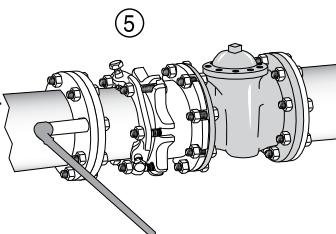
Step 3 • If needed, loosen the T-bolts to allow the spool piece to move freely within the Restrained Flange Coupling Adapter (RFCA) body.

When stainless steel fasteners are requested, Romac provides all-thread-rod and two nuts. The underside of the lug on the RFCA body is designed to capture hex nuts as well as "T" head bolts.

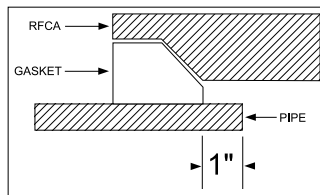
Step 4 • Move the DJ405 into position between the mating flanges. Insert a flange gasket between the flange faces on flange spool side. The RFCA side has an o-ring flange gasket. No additional gasket is required. Using flange bolts, fasten the RFCA end of the dismantling joint to one of the mating flanges.



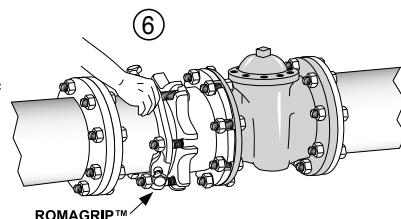
Step 5 • Attach the flanged spool to the opposite mating flange, and fasten together with flange bolts. Make sure the spool piece is inserted at least 1 inch past the gasket inside the RFCA body. Snug up all of the flange bolts.



Note: The spool piece should be within the deflection tolerance of the RFCA after bolting the flanges. If this is not the case, the mating flanges must be realigned.



Step 6 • If the RFCA was completely disassembled, make sure the beveled edge of the gasket matches the gasket pocket of the RFCA. Slide the RomaGrip into position and install the T-bolts, tightening them finger tight.



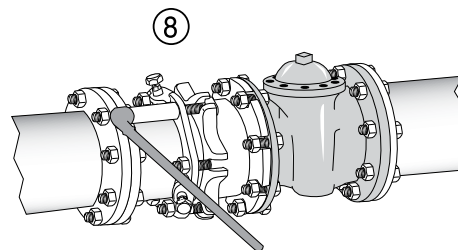
Step 7 • Tighten flange bolts evenly, alternating to diametrically opposite positions at approximately 20 ft-lb increments, to the recommended torque for your size.

Nom. Size	Flange Bolt Size	Recommended Min. Torque (ft-lbs)
3 - 4	5/8	60
6 - 8	3/4	100
10 - 12	7/8	160
14 - 16	1	245
18 - 20	1 1/8	355
24	1 1/4	500

Step 8 • Tighten T-bolts on RomaGrip evenly, alternating to diametrically opposite positions at approximately 20 ft-lb increments, to the recommended torque for your size.

Note: 90 ft-lbs torque = 12 inch wrench with 90 pounds force.

For best results, wait 10 minutes and retighten all bolts to the proper torque.



Nom. Size	T-Bolt Size	Recommended Min. Torque (ft-lbs)
3	5/8	45 - 65
4 - 24	3/4	75 - 90

Installation Instructions continued on back

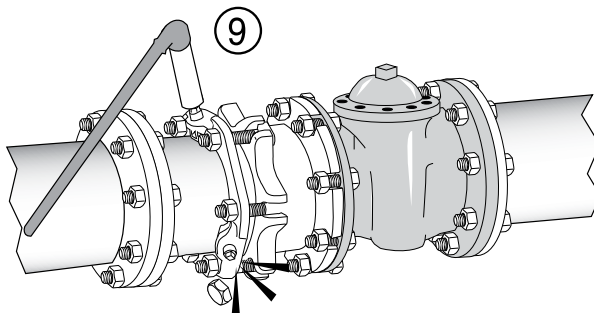
INSTALLATION INSTRUCTIONS

Style DJ405 Dismantling Joint (continued from front)

Step 9 • Hand tighten the restrainer bolts until the restraining pads touch the surface of the pipe. The bolts should then be tightened in a uniform crisscross pattern, until the heads break off above the notch.

Note: Do not turn a bolt more than one turn before alternating to the next bolt.

Step 10 • Pressure test for leaks before backfilling.



PRECAUTIONS

1. Check flanges to make sure you are using the correct size DJ405; also check the length of DJ405 to make sure it will fit in the space allocated.
2. Make sure a flange gasket on spool side is used between mating flanges.
3. Make sure no foreign materials lodge between gasket and spool.
4. Avoid loose fitting wrenches, or wrenches too short to achieve proper torque.
5. Keep threads free of foreign material to allow proper tightening.
6. Make sure angular deflection is within limits
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. Pressure test for leaks before backfilling.
9. Backfill and compact carefully around pipe and fittings.
10. 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.
11. 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.

COMMON INSTALLATION PROBLEMS

1. Flange gasket not installed on flange spool side.
2. Bolts are not tightened to the proper torque.
3. Rocks or debris between spool and gasket.
4. Dirt or debris between pipe and restraining pad.
5. Dirt on threads of bolts or nuts.
6. Restraining bolt heads not snapped off.
7. Not enough pipe insertion.
8. Incorrect mating flange.

IF DJ405 MUST BE REMOVED

1. Make sure pipe is not pressurized. Removing the restrainer could cause the pipe joint to separate.
2. To remove the DJ405, use a $\frac{5}{8}$ " hex wrench or socket.
3. To reassemble, follow installation procedures. Tighten the restraining bolts using a $\frac{5}{8}$ " hex wrench to 75-ft-lbs minimum.