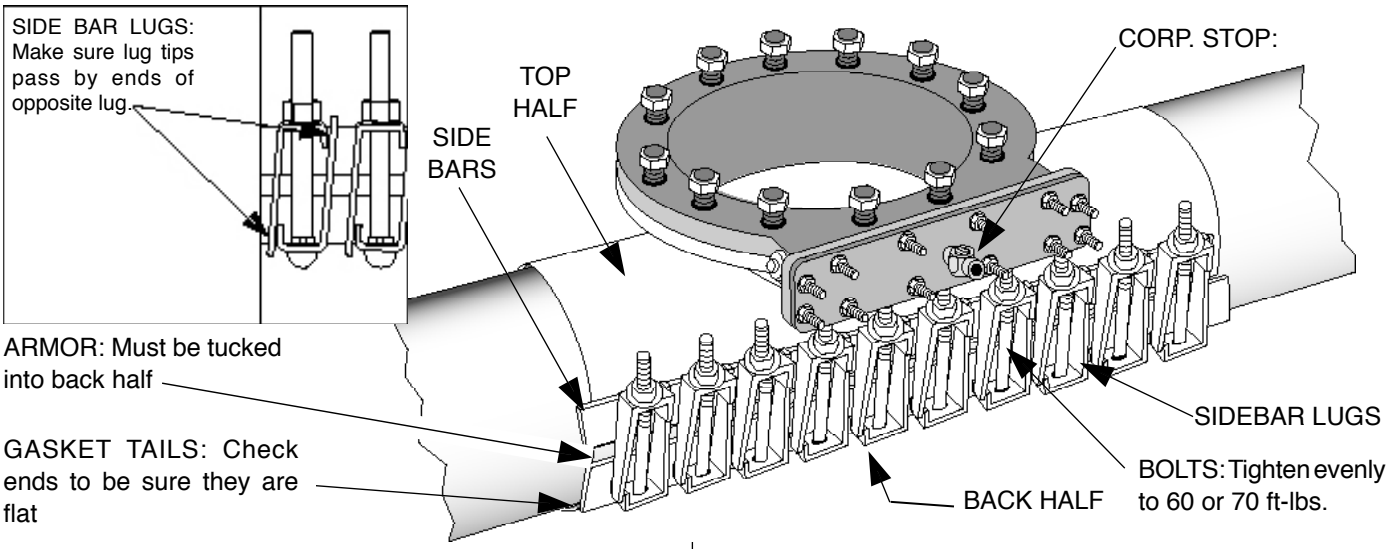
ROMAC INDUSTRIES, INC.

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 sleeve to ensure you have the proper size.

InsertaValve™ Valve Insertion Sleeves



Step 1 • Check the outside diameter (O.D.) of the pipe and the range marked on the tapping sleeve to ensure you have the proper size sleeve. Refer to the InsertaValve™ Manual for sleeve sizes available.

Step 2 • Remove bolts, washers, and nuts from side bar lugs, be careful not to lose washers. Note: Wood shims are to be discarded, these are for shipping purposes only. Separate Top Half from Back Half.

Step 3 • Before installing sleeve, clean pipe thoroughly, removing all dirt, rock, scale and foreign material in the area where the tapping sleeve is to be installed. The sleeve is 30" long, so a minimum of 36" of pipe should be cleaned. Lubricate the gasket tails.

Step 4 • Place Top Half of sleeve on pipe and move into position.

Step 5 • Bring back half of sleeve into position and install bolts, washers, and nuts. Check gasket edges along both sleeve halves to be sure they overlap and are not folded under. Make sure that the armors are tucked into the back half of the sleeve. Make sure the sidebar lugs are interlocked as shown above.

Step 6 • Insert bolts into sidebars lugs. Well tightened nuts are important to ensure a full-circle seal. Tighten nuts, starting with the center bolts, alternating on either side of the sleeve. The gap between the sleeve halves should be the same when bolts are fully tightened. Please note: Tighten nuts evenly in 20 to 25 ft-lb. increments to the correct value shown in the following table.

Pipe Material	Torque Required
PVC	60 ft. lbs.
Cast Iron, Ductile Iron, Steel	70 ft. lbs.
A/C	65 ft. lbs. max.

Wait 10 minutes, then retighten to the required torque. Check that corporation stops and test plugs are properly inserted and tightened.

Step 7 • Attach blind flange and hydrostatically test sleeve to 1.25 times the working pressure of the pipe to be tapped (250 psi max., or air test to a maximum of 35 psi). Use corporation stop to attach test equipment. All sizes of sleeves use the same size Blind Flange (12" with ANSI B16.5, Class 150 # Bolt Pattern). If assembly does not leak, proceed with tap and valve insertion. If assembly leaks, check Armor, Gasket Tails and retighten bolts to the proper torque and then retest.

Step 8 • Attach InsertaValve™ equipment. Proceed with the valve insertion.

Document #35-9-0001 02/28/2013

21919 20th Avenue SE • Suite 100 • Bothell, WA 98021 • Phone (425) 951-6200 • 1-800-426-9341 • Fax (425) 951-6201

ROMAC INDUSTRIES, INC.

INSTALLATION INSTRUCTIONS

InsertaValve™ Valve Insertion Sleeves

PRECAUTIONS

1. Check diameter of pipe to make sure you are using the correct size sleeve.
2. Clean pipe to remove as much dirt and corrosion as possible from the surface.
3. Make sure no foreign materials stick to the gasket as it is brought around the pipe, or become lodged between gasket and pipe as nuts are tightened.
4. Avoid loose fittings wrenches, or wrenches so short that achieving proper torque is difficult.
5. Keep threads free of foreign material to allow proper tightening. **Use a torque wrench.**
6. Bolts are often not tightened enough when a torque wrench is not used. Take extra care in this situation to make sure proper tightening occurs and that the tightening sequence is uniform.
7. Support the InsertaValve™ sleeve and equipment during tapping and plug insertion. Properly backfill the pipe and InsertaValve™ sleeve before tapping. **NOTE:** Tapping sleeves are designed for sealing purposes only, not structural support.
8. ALWAYS PRESSURE TEST FOR LEAKS BEFORE TAPPING PIPE.
9. Backfill and compact carefully around sleeve.

COMMON INSTALLATION PROBLEMS

1. Not enough torque on bolts.
2. No gasket lubrication
3. Rocks or debris cutting gasket.
4. Dirty threads on bolts or nuts.
5. Allowing tapping sleeve to support the load of the slide gate valve and tapping machine.
6. Not using the proper size sleeve for the pipe.

21919 20th Avenue SE • Suite 100 • Bothell, WA 98021 • Phone (425) 951-6200 • 1-800-426-9341 • Fax (425) 951-6201