

421, 422 Top Bolt®

Wide Range Coupling 14"-24"

Please read installation instructions carefully! See reverse side for notices and warnings!

NOTE: This coupling is designed for stab fit. DO NOT DISASSEMBLE!

STEP 1

Inspect the shipment received to ensure no damage has occurred during transit and that no hardware is missing. If present, remove banding straps from coupling prior to installation.

STEP 2

Clean pipe surface thoroughly, particularly in area where gasket will seal. Be sure to remove any scale, dirt, or debris that could affect the gasket seal.

STEP 3

Measure the outer diameter where gasket will seal and compare the measurement with the gasket range chart below. If the pipe diameter is within the outer gasket range, remove the inner gasket. If not, proceed to Step 4. Repeat this step for each pipe and coupling end.

NOTE: For Oversize (OS) couplings—identified by one end of the coupling having **grey-coated flanges**—the gasket ranges differ on each end. Be sure to match the correct pipe size with the appropriate end of the coupling and its corresponding gasket range.

If the inner gasket is removed by mistake, simply align both the outer and inner gasket grooves and firmly press the inner gasket into place.

STEP 4

Slide coupling entirely onto one pipe. If reducing, slide coupling onto smaller pipe. If necessary, slightly loosen nuts to facilitate installation.

NOTE: No lubrication on the coupling or pipe is necessary!

STEP 5

Center coupling sleeve over both pipe ends. Do not exceed recommended gap between pipe ends listed below. Do not exceed 4° deflection per end.

STEP 6

On end of coupling, tighten bolts equally alternate sides and maintain equal gap distances between flange halves to the recommended torque listed below. Repeat this for opposite end of coupling.

NOTE: Use of a calibrated torque wrench is required!

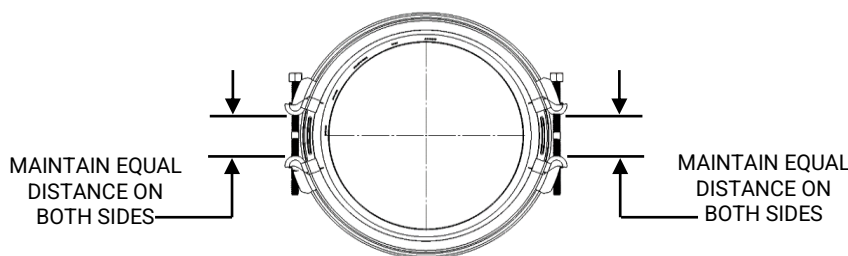
NOTE: Do not lubricate bolts!

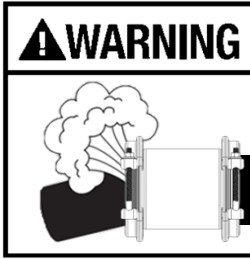
STEP 7

Verify bolt torque after line pressurization and/or before backfill. If any leakage occurs, remove the line pressure and increase the below torque by up to 25%.

Nominal Size (in)	Catalog Number	Overall Range (in)	Inner Gasket Range (in)	Outer Gasket Range (in)	Maximum Gap* (in)	Torque (ft-lb)	Working Pressure (psi)	Test Pressure (psi)
14	42X-15001688-XXX	15.00-16.88	15.00-15.94	15.94-16.88	4	110	260	390
16	421-16001785-XXX	16.00-17.85	16.00-16.50	17.35-17.85	4	150	260	390
16 OS	421-16001920-XXX	16.00-19.20	17.15-17.95	18.45-19.20	4	150	232	350
18	42X-19202130-XXX	19.20-21.30	19.20-20.25	20.25-21.30	4	150	260	390
20	42X-21252335-XXX	21.25-23.35	21.25-22.30	22.30-23.35	4	150	260	390
24	421-24002632-XXX	24.00-26.32	24.00-24.80	25.25-26.32	4	150	232 DIPS 150 IPS	350 DIPS 225 IPS
24 OS	421-24002732-XXX	24.00-27.32	25.00-25.80	26.25-27.32	4	150	232	350

* When using the 422, the maximum gap between pipe ends can be doubled.



THIS PRODUCT DOES NOT RESTRAIN PIPE MOVEMENT.
Proper anchoring is required to prevent pipe pull out. Failure to anchor or improper anchoring can result in dangerous pipe content escape, property damage, serious injury, and/or death. Read the product installation instructions prior to installing this product.



NOT FOR GAS SERVICE!

This product is not designed and tested to be used on any applications containing gas. Failure to use the proper coupling for any gas pipeline can result in dangerous pipe content escape, property damage, serious injury, and/or death.

Smith-Blair Top Bolt® Series Wide Range Couplings

US Patent 8,528,945 8,864,181 B2 8,776,351 B2

8,789,832 B2 & Other Patents Pending

WARRANTY

Smith-Blair, Inc. warrants its products to be free of defects in materials and workmanship for a period of one (1) year from the date of shipment by Smith-Blair, Inc. (the "Warranty Period"). Dated proof of purchase, such as a bill of sale, is required to establish warranty eligibility. If a product fails to perform due to a defect in materials or workmanship during the Warranty Period, Smith-Blair, Inc. will repair or, at Smith Blair, Inc.'s option, replace the product with the same or comparable item. In the event that the product cannot be repaired and a suitable replacement item is not available, Smith-Blair, Inc. will refund the original purchase price shown on the proof of purchase. In all cases, the customer is responsible for returning the allegedly defective product to the factory or warehouse designated by Smith-Blair, Inc.

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CORROSION & PRODUCT SELECTION NOTICE

Metal products are subject to corrosion, particularly when used outdoors and/or underground. A large number of factors and local conditions affect the rate of corrosion. Consult a local corrosion expert to determine the life expectancy of this product when used with your pipeline content, soil, and environment. Also, consult your system designer to determine the suitability of this product in your piping system. Failure to determine the suitability of this product in your application, soil, and/or environment can result in premature product failure. Smith-Blair will provide additional information about this product's material specifications at your request. You may also obtain product information at www.smith-blair.com.

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