



Smith-Blair
a xylem brand

Installation Instructions

311, 313, & 331

Ductile Iron Service Saddle with Bale(s)

STEP 1

Inspect the shipment received to ensure no damage has occurred during transit or storage and no hardware is missing. Ensure the saddle is the proper type, tap size, and correct pipe size range for the installation prior to beginning.

STEP 2

Clean the pipe surface thoroughly, particularly in the area where the gasket will seat. Remove any scale, dirt, or debris that could affect the gasket seal.

STEP 3

Check the gasket for proper positioning in the saddle body. If necessary, properly position the gasket in the saddle body.

STEP 4

Lubricate the pipe and gasket face with a non-detergent soap solution. Ensure the lubricant does not freeze.

STEP 5

Mount the saddle body (with gasket in place) as close to the final tap position as possible.

STEP 6

Install the saddle bale(s), washer(s), and nut(s). Use the washer(s) on the open-lug side of the saddle body. Saddle bales are not recommended for use on PVC or HDPE pipe.

STEP 7

Before tightening, check the position of the saddle body to ensure correct orientation on the pipe. Do not move the saddle body while on the pipe. This can damage the gasket resulting in product failure.

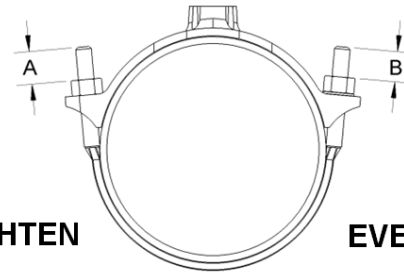
STEP 8

Tighten the nuts progressively and uniformly to the recommended torque values listed below. **DO NOT OVER TORQUE**. Bolt lengths A & B must be kept equal. See figure below.

NUT SIZE	TORQUE VALUE*
1/2"	40-50 ft-lbs
5/8"	60-70 ft-lbs
3/4"	80-90 ft-lbs

Use of a calibrated torque wrench is recommended

**The torque requirements above are to provide an effective seal between the saddle gasket and the pipe. The saddle assembly is not designed to provide structural rigidity for connections, equipment, or any other alternative use of the saddle assembly.*



TIGHTEN

EVENLY

STEP 9

Make the connection to the saddle boss. Suitable pipe thread sealant is recommended. Do not cross thread or twist/rock the saddle body while making the connection.



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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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