

a xylem brand

Water TI-009

# 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 surface and gasket(s) using a soap and water solution (anti-freeze may be required). All lubricant solutions should meet the requirements of the water and pipe supplier.

#### STEP 5

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

#### STEP<sub>6</sub>

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.

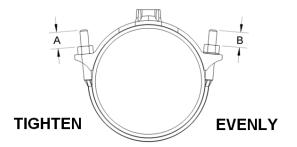
#### STEP 8

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.

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

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.



#### STEP 9

Make the connection to the saddle boss. Use a good quality pipe thread compound that is both a lubricant and sealant (also called pipe dope, paste, etc.). Do not use tape type products! Use a thread compound that meets the requirements of the water supplier. Do not cross thread or twist/rock the saddle body while making the connection.



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#### WARRANTY

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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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