

# 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 saddle to ensure you have the proper size.

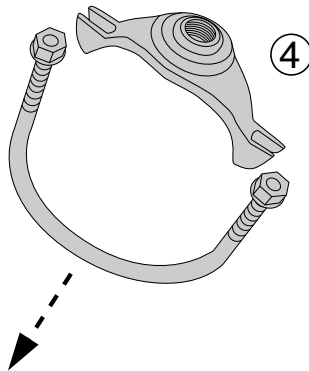
## 101U & 202U Ductile Iron Service Saddles with U-Bolts

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

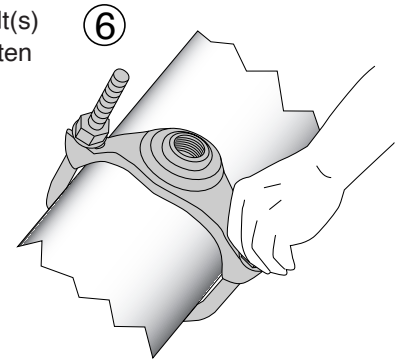
**Step 2** • Check the diameter of the pipe and the range marked on the saddle to ensure you are using the correct size saddle.

**Step 3** • Thoroughly clean the pipe surface that will be covered by the saddle. A suitable gasket lubricant should be used on rough surface pipe (such as DI and A/C) to ensure proper seal.

**Step 4** • Remove U-bolt(s) from saddle body.



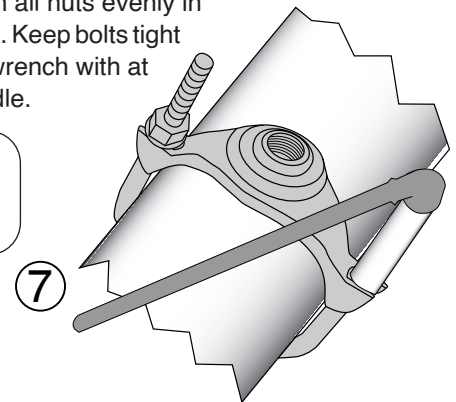
**Step 6** • Install U-bolt(s) on saddle body, and tighten finger tight. Make sure the gasket has seated itself flat on the pipe face.



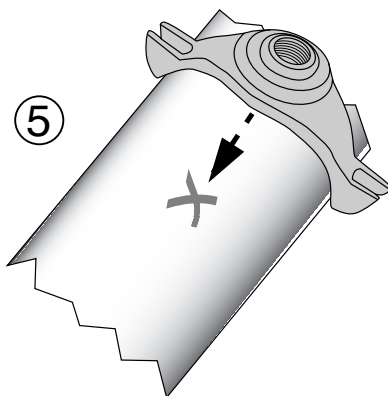
**Step 7** • Tighten all nuts evenly in 20 ft-lbs. increments. Keep bolts tight to the body. Use a wrench with at least a 12 inch handle.

**Note:**

50 ft-lbs. torque = 12" wrench w/50 lbs. force



**Step 5** • Position the saddle body on the pipe such that the outlet is in the correct location.



Pipe Material	Torque (ft-lbs)
PVC	U-bolts should not be used on PVC pipe.
Rigid (D.I., A/C, Steel) sizes 2" - 8"	40-50
Rigid (D.I., A/C, Steel) sizes 10" - 12"	60-75

Always pressure test for leaks before tapping.

Backfill and compact carefully around saddle and service line.

## 101U & 202U Ductile Iron Service Saddles with U-Bolts

### PRECAUTIONS

1. Check diameter of pipe to make sure you are using correctly sized saddle.
2. Clean pipe to remove as much dirt and corrosion as possible from the surface.
3. Make sure no foreign material comes between the gasket and the pipe as the nuts are being tightened.
4. Avoid loose fitting wrenches, or wrenches too short to achieve proper torque on the nuts.
5. Keep threads free of foreign material to facilitate tightening.
6. Bolts should be tightened incrementally and evenly in an alternating pattern.
7. Bolts are often not tightened enough when a torque wrench is not used, Take extra care in this situation to make sure that proper tightening occurs.
8. Pressure test for leaks before backfilling.
9. Backfill and compact carefully around saddle.

### COMMON INSTALLATION PROBLEMS

1. Bolts are not tightened to the proper torque.
2. Rocks or debris between pipe and gasket.
3. Dirt on threads of bolts or nuts.
4. Not properly supporting the branch pipe.
5. Not using stainless steel strap on PVC pipe.
6. Improper backfilling around branch pipe.