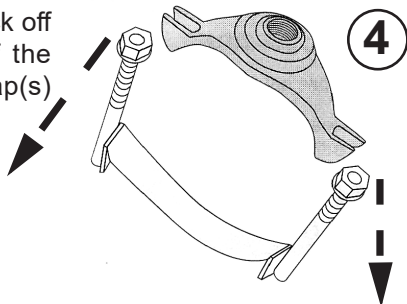


**STEP 1** • Check the saddle parts to ensure that no damage has occurred during transit and that no parts are missing.

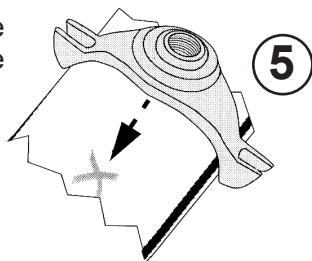
**STEP 2** • Check the pipe diameter and the range marked on the saddle to insure you are using the correct size saddle.

**STEP 3** • Thoroughly clean the pipe surface that will be covered by the saddle. Make sure no foreign material comes between the gasket and the pipe and keep threads free of foreign material to facilitate tightening. A suitable gasket lubricant should be used on rough surface pipe (Iron and A/C) to assure proper seal.

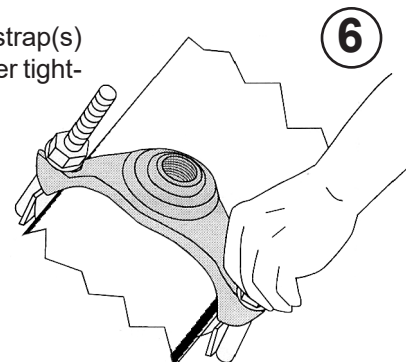
**STEP 4** • Back off nut to the end of the bolt. Remove strap(s) from saddle body.



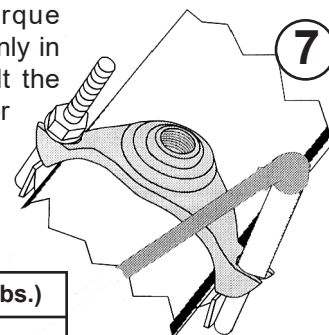
**STEP 5** • Position the saddle body on the pipe with the outlet in the correct location.



**STEP 6** • Install the strap(s) on saddle body, and finger tighten with gasket seated flat onto the pipe face.



**STEP 7** • With a torque wrench, tighten all nuts evenly in 20 ft-lb. increments. Consult the Pipe Material Chart below for optimal pressures. Use a snug-fitting wrench with at least a 12-inch handle to achieve proper torque.



Pipe Material	Torque (ft-lbs.)
PVC	30-40
Rigid (D.I., A/C, Steel)	40-50

35 ft-lbs. torque=12" wrench w/35 lbs. force  
45 ft-lbs. torque=12" wrench w/45 lbs. force

**STEP 8** • Pressure test for leaks after installation. Backfill and compact carefully around saddle.

### COMMON INSTALLATION PROBLEMS

1. Bolts not tightened to the proper torque.
2. Rocks or debris between pipe and gasket.
3. Dirt on threads of bolts or nuts.
4. Improper support of branch pipe.
5. Incorrect size saddle for pipe.
6. Reinstallation of stainless steel hardware may result in a loss in pressure holding ability if the threads were damaged or worn during or since the original installation.