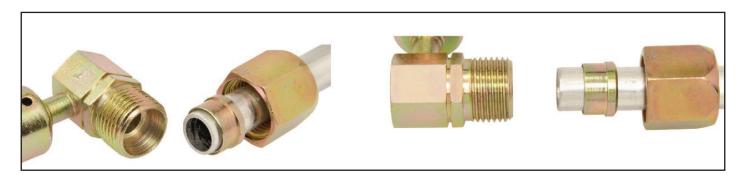
TECH TIP

COMPRESSION TYPE FITTING INSTALLATION

Compression type fittings are made two different ways and the installation is very specific. Some are made with an o-ring and some are made without the o-ring.

To install either type, first make sure that your spacing and position is correct. Also make sure that you have the correct size. Clean the line where the ferrule will fit and make sure that the line is not crushed or bent out of shape. Make sure the tube fits all the way into the nut.

The fitting type that does not use an o-ring uses a steel ferrule. This ferrule fits with the taper towards the fitting and the shoulder towards the nut. This type of compression fitting requires that the ferrule be crushed completely onto the line to seal properly. Tighten the nut finger tight and make sure that the tube is bottomed out in the nut. Turn the nut 1 $\frac{1}{2}$ turns (approximately 50 ft-lb.) to set the ferrule (sometimes called the lock-ring or cut-ring) into the tubing. Test the fitting for leaks. If there is a slight seepage, turn the nut little by little until the leak stops.



The fitting that uses an o-ring uses a shorter brass ferrule. The taper of the ferrule goes into the nut so that the flat portion of the shoulder fits against the o-ring as it fits into a groove in the fitting. Do not install the o-ring until the ferrule has been set. The ferrule must be set in place on the tube in the same manner as the steel ferrule. Install the o-ring, tightening as you would any o-ring fitting and leak test.

