



## Making Onix™ Field Repairs with SelfTite™ Clamps

**WARNING:** Use this Field Repair Kit only for the repair of Onix damaged in the field. Read complete instructions before beginning repairs. Do not splice together multiple lengths of Onix. See Onix manual for recommended circuit lengths.

Purchase Onix barb-x-barb splices and clamps individually, or purchase field repair kits that contain all the necessary parts in one small package.

**CAUTION:** Use of materials not supplied by Watts Radiant to make a splice or manifold connection may eventually result in leaks. Watts Radiant's Onix and fittings are engineered to work together. Watts Radiant extends no warranty — expressed or implied — to any failure or damage of any kind resulting from use of materials not supplied by Watts Radiant (see Onix warranty for specifics).

**1. Cut the Onix.** Make a straight cut-off on both pieces of Onix to be spliced together.

**2. Select the Correct Brass Splice.** Use only Watts Radiant brass splices and clamps to repair Onix.

**NOTE:** Our research shows that Watts Radiant brass fittings make the best connections to Onix. Off-the-shelf brass fittings are made to different dimensions and tolerances — do not use them.

**3. Choose the Correct Clamp.** Make sure to use the correct SelfTite clamp for making Onix connections. Identify the clamps by the size markings on the clamps. Use 19 mm for 3/8" Onix, 22 mm for 1/2" Onix, 24 mm for 5/8" Onix, and 29 mm for 3/4" Onix. Using a pair of SqueezeTite™ Pliers, open the SelfTite clamp and slide one clamp about 3" onto the length of Onix. SelfTite clamps are designed to compensate for the expansion and contraction of metal fittings associated with the temperature cycling of hydronic equipment.

**4. Make the Connection.** Slide the Onix onto the barbed fitting. Using the SqueezeTite Pliers, slide the clamp back over the barb. The clamp should be applied to the *middle* of the barbed area. When making a buried slab repair, protect the final splice assembly with a double wrap of PVC electrician's tape or shrink wrap.

**CAUTIONS:**

- a. Do not solder near, or overheat, any Onix connection. Extreme temperatures associated with soldering may seriously damage the Onix and will void any warranty.
- b. All Onix and brass branch surfaces must be clean and dry before making the connection.
- c. Whenever possible, avoid making splices in inaccessible locations.
- d. Repairing Onix that has been in service requires special attention, particularly when glycol has been used. Any residual amounts of glycol or any other coating inside the tube must be removed. An alcohol swab or pad must be used to remove the residue(s), then the tube should be allowed to dry prior to connection.

**NOTE:** Field repairs are not covered by any warranty either expressed or implied. See Onix warranty statement.

**WARNING:** When installing SelfTites, the installer and any bystanders within twenty feet should wear approved safety glasses with side shields. A compressed SelfTite clamp contains enough kinetic energy to propel itself several feet into the air. While compressed, the clamp could slip off the pliers or installation tool and cause severe eye damage.



SelfTite Clamps and Onix splice.



Making a splice using SelfTite clamps.



Final assembly.



**SqueezeTite™ Pliers**  
Part No. 669100

**SqueezeTite Pliers** are locking caliper pliers that allow worry-free handling of all sizes of our SelfTite clamps. This uniquely-designed tool prevents the SelfTite clamp from accidentally sliding free, as could happen with a standard pair of pliers or channel locks. With SqueezeTite Pliers, SelfTite clamps can be locked in the open position, freeing both hands to secure the Onix to the barb. SqueezeTite Pliers also open the clamp with no chance of deforming it, as is possible with ordinary pliers.