PrimeLock® Fitting  
Hot-air Gun Technique

*Insert installation instructions for 1/2", 3/4" and 1" sizes*

**INSTRUCTIONS**

PrimeLock® Fitting

The hot air gun installation technique is useful when space restrictions prevent the use of the handheld and benchtop insertion tools.

1. Slide the insert onto the mandrel as shown.

2. Verify the insert has been properly placed onto the mandrel. The installation indication lines on the insert are closest to the shoulder of the mandrel.

3. Insert the cut end of the tubing through the PrimeLock nut.

4. If using an Entegris hot air gun, set the hot air gun on “high.” Hold 1/2” to 3/4” of the PFA tubing 1/2” to 3/4” above the heater and continually rotate the tubing 360° for 25–60 seconds, depending on the heater.

**NOTE:** It is very important to fully rotate the tubing over the heat source so all surface areas receive an equal amount of heat. Uniform heating is essential to correctly installing the insert.

Correct installation of insert.

Incorrect installation of insert.
If using an Entegris infrared heating tool, turn on the heating tool. Center 1⁄2” to 3⁄4” of the PFA tubing between the heat rings. While slowly rotating the PFA tubing back and forth between your forefinger and thumb, heat for 60–90 seconds, depending on the heater.

NOTE: To insert 1” tubing with an Entegris infrared heating tool, a larger heat ring (part number 213-91 or 213-92) is needed.

NOTE: It is very important to rotate the tubing through the heat source so all surface areas receive an equal amount of heat. Uniform heating is essential to correctly installing the insert.

5. Immediately push the tube onto the mandrel until the tube contacts the mandrel shoulder.

6. Wait 3–4 seconds, then remove the tubing assembly from the mandrel.

7. Verify the insert has been properly installed into the end of the tube. The insert has molded indication lines for gauging proper installation in the tube. For correct installation, the tubing will cover all or at least a portion of the indication lines. The insert does not need to be pushed fully into the tube.

8. Slide the tubing assembly onto the fitting.

9. Start by hand-tightening the nut.

10. Place the PrimeLock wrench over the ribs of the fitting nut and rotate clockwise. Tighten the nut until the connection verification ring creates audible clicks and the leading edge of the nut travels under the connection verification ring.

NOTE: Do not overtighten to the point where the nut bottoms out on the fitting body.
11. If there is excessive background noise, the connection can be verified by looking at the position of the connection verification ring relative to the nut.

Incorrect tightening of the fitting — additional tightening required.

Correct tightening of the fitting.

Initial tightening of the fitting – nut travels underneath connection verification ring.

Maximum tightening limit – nut bottoms out on the fitting body.

⚠️ CAUTION: Do not retighten the fitting while the fitting assembly is above 30°C (86°F) or in a pressurized condition.

When reassembling the fitting, tighten the nut an additional ¼- to ½-turn beyond the initial tightening position, or until a leak-free seal is made.
FITTING DISASSEMBLY

Care must be taken when disassembling PrimeLock fittings. Follow these instructions precisely to avoid fitting disassembly issues.

As shown in the example below, rotate the tube in a circular motion and slowly extract the tube with the insert from the nose of the PrimeLock fitting. If the tube is not rotated, the insert may disengage from the inside of the tubing and remain on the nose of the fitting.

Follow these steps to properly remove the tube from a fully installed PrimeLock fitting:

- Loosen the fitting nut from the fitting body
- Rotate the tube in a circular motion, gradually making the circular motions larger. This will help dislodge the tubing and insert from the fitting body
- Fully extract the tube with the insert staying in the tube
- A properly tightened fitting

If the insert remains on the nose of the PrimeLock fitting, carefully remove the insert without damaging the fitting nose and discard. Install a new insert into the tube. Reusing a PrimeLock insert may cause sealing issues.

PRIMELOCK INSERT INSTALLATION TOOLS

A complete set of tools is available on our website. Please visit PrimeLock Accessories on www.entegris.com.
FOR MORE INFORMATION
Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit entegris.com and select the Contact Us link to find the customer service center nearest you.

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