

30 Making SWAGELOK Connections

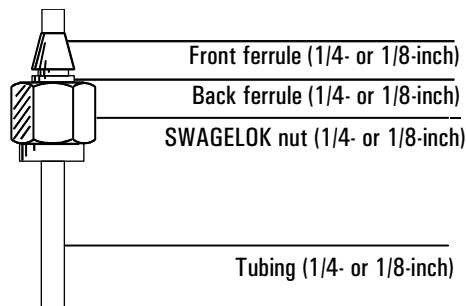
SWAGELOK Connections

The gas supply tubing is attached with SWAGELOK fittings. If you are not familiar with making SWAGELOK connections, review the following procedure. The procedure explains how to connect tubing to a fitting, such as inlet and detector manifolds or the gas supply tank.

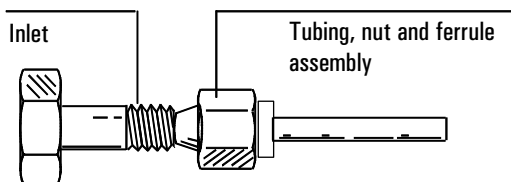
Materials needed:

- 1/8-inch (or 1/4-inch, if used) preconditioned copper tubing
- 1/8-inch (or 1/4-inch, if used) SWAGELOK nuts, and front and back ferrules
- Two 7/16-inch wrenches

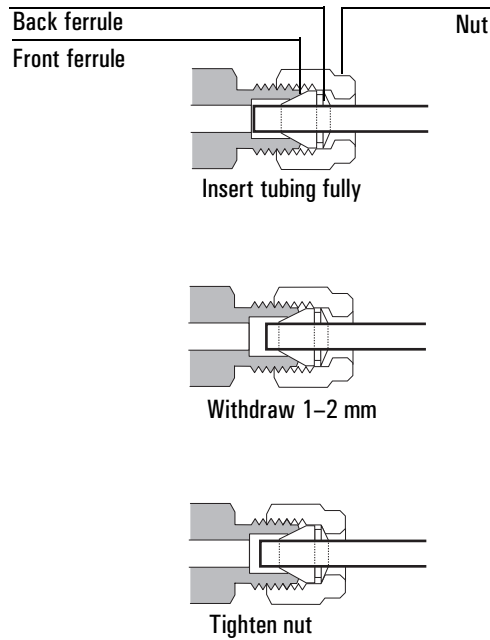
1. Attach a 1/8-inch SWAGELOK nut, back ferrule, and front ferrule to the tubing.



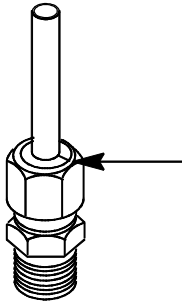
2. Make sure that the front ferrule is touching the inlet, and then slide the SWAGELOK nut over the ferrule and tighten it finger-tight.



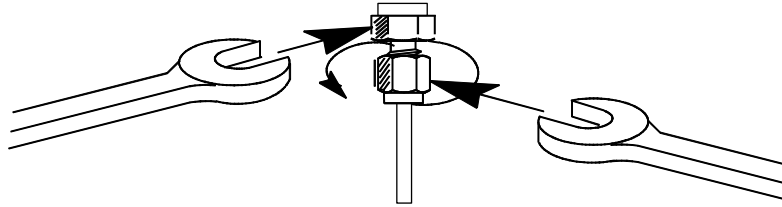
3. Push the tube fully into the female fitting, then withdraw it approximately 1–2 mm.



4. Mark the SWAGELOK fitting with a pencil line.



5. If you are using 1/8-inch SWAGELOK fittings, while holding the fitting steady with the other 7/16-inch wrench, tighten the fitting 3/4 of a turn. If you are using 1/4-inch fittings, tighten them 1 1/4 turn.



Tightening SWAGELOK nuts by this procedure provides a leak-proof, torque-free seal at all tubing connections.