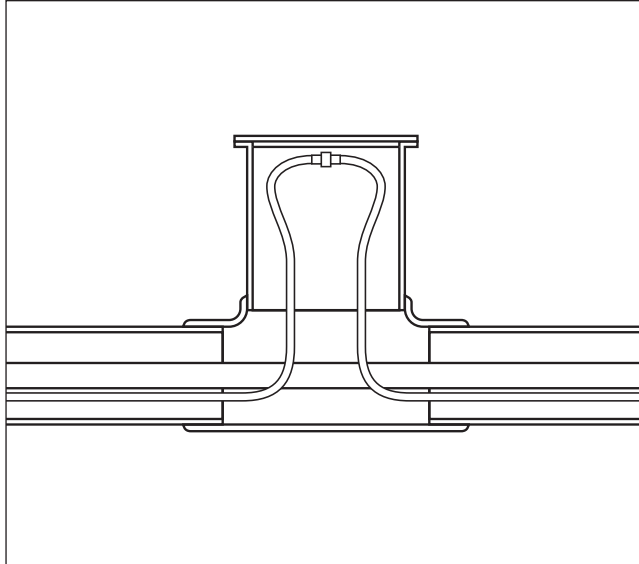




TT-3000-CK-MC-M/F

Field Installed Connectors for TraceTek® 3000 Sensing Cable

Installation Instructions



Description

This kit contains parts to install 5 pairs of connectors on TT3000 sensing cable.

For technical support, call Tyco Thermal Controls at (800) 545-6258.

Tools Required

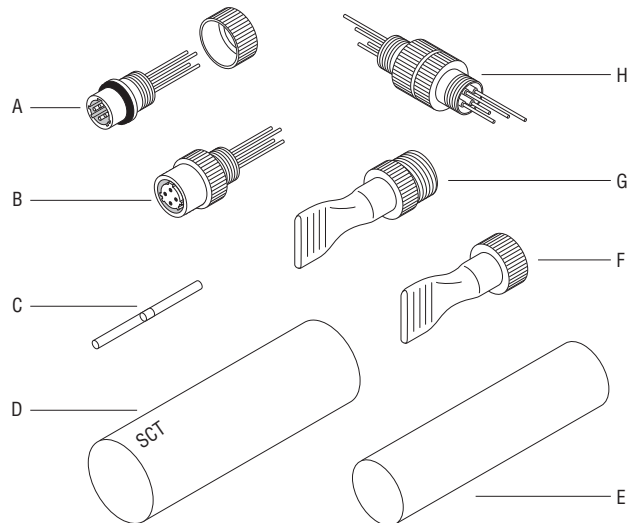
- Needle nose pliers
- Flameless heating tool (Ultratorch 200)
- High impedance ohm-meter (Fluke 87 or equivalent; meter must be capable of measuring to at least 20 MΩ)
- Greenlee strippers (1917 or 1918)
- TT-CT-SCT (crimping tool)
- Masking tape

Notes

- Do not use an open flame heating tool.
- The pin connector should always be installed on the cable end pointed towards the alarm and locator module.
- Use with TT3000 sensing cable only. This kit is not compatible with other TraceTek cables.

Kit Contents:

Item Qty	Description
A 5	TT-CK-MC-M pin connectors
B 5	TT-CK-MC-F socket connectors
C 45	SolderSleeve® splices (5 extra)
D 11	Heat-shrinkable tubing, labeled SCT (1 extra)
E 11	Heat-shrinkable tubing, unlabeled (1 extra)
F 1	TT-MET-MC Pin end termination
G 1	TT-FET-MC Socket end termination
H 1	Pin and socket test tool



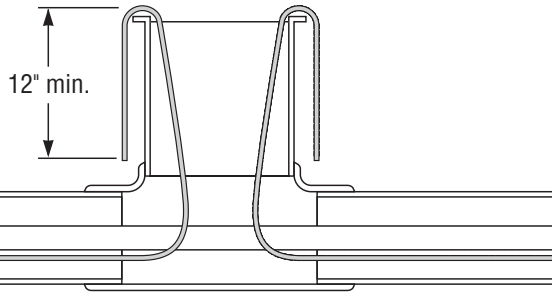
⚠ WARNING:

Fire Hazard. Heat guns and flameless heating tools can cause fire or explosion in hazardous areas. Be sure there are no flammable materials or vapors in the area before using these tools. Follow all site safety guidelines when working in hazardous areas.

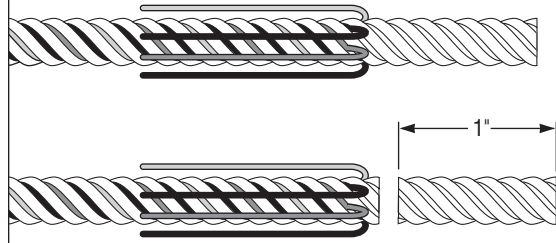
- Overheating heat-shrinkable tubing or solder sleeves will produce fumes that may cause irritation. Use adequate ventilation and avoid charring or burning. Consult MSDS RAY3122 and RAY5104 for further information.

- Component approvals and performance are based on the use of specified parts only.

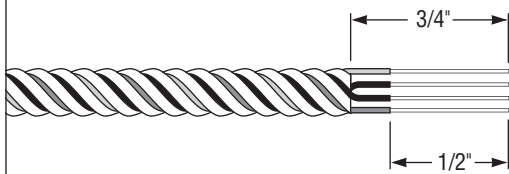
TT-3000-CK-MC-M/F Installation Instructions

1 Prepare the cable ends

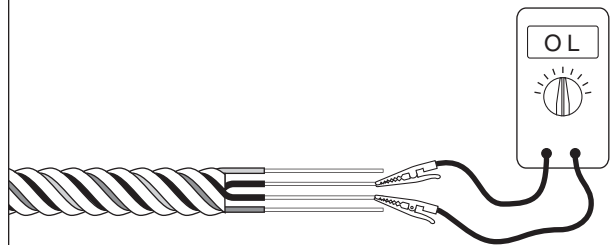
- Ensure sufficient sensing cable to make a service loop at the access point.

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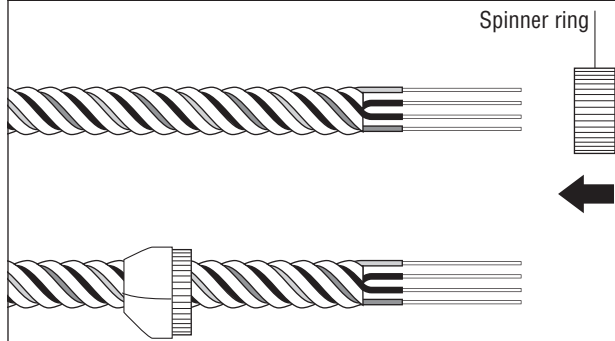
- Using the needle nose pliers, pull the four wires from their grooves exposing 1 1/8" of wireless core.
- Cut off 1" of the core without damaging the wires.

3

- Grasp the wire tips with the needle nose pliers.
- Pull the wires into their grooves and lightly tug to straighten without stretching.
- Cut the wires to leave 3/4" protruding from the cable end.
- Carefully strip 1/2" of insulation from each of the wires (use 26 awg slot).

4

- Use the ohmmeter to measure the resistance between the black wires. The resistance must be greater than 20 MΩ (meter may read: ∞ O.L., etc.).
- If the measurement is less than 20 MΩ, the cable is wet or contaminated and must be removed, inspected and cleaned and/or dried.

5 Install the connectors

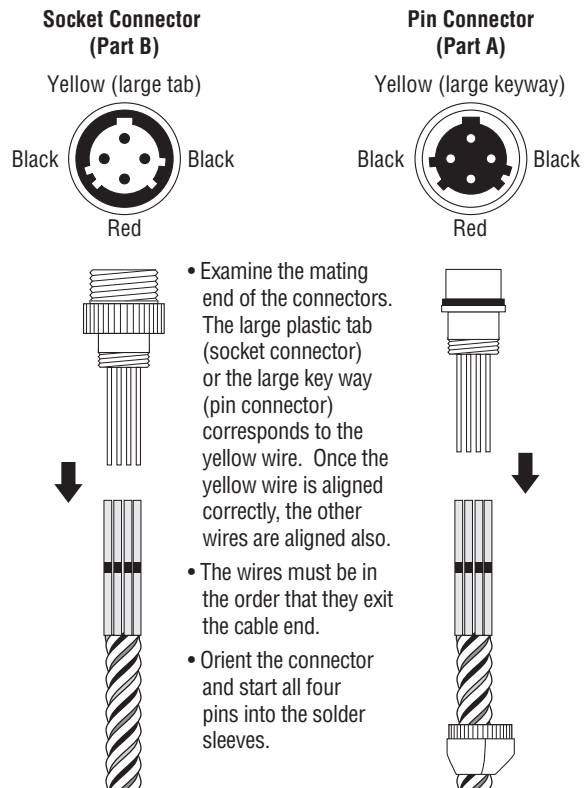
- Ensure that the wires are in their grooves and are straight.
- For the pin connector only, slip the spinner ring (small hole first) onto the cable and secure with tape to avoid losing it into the access point.

6

- Slide the Solder Sleeve® splice onto each wire, flared end first. Slide it all the way to the cable end.
- The solder band must lie over bare conductor, not insulation.

Spinner ring is for pin connector only.

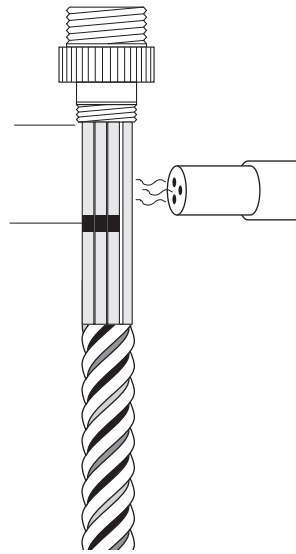
7 Align connector



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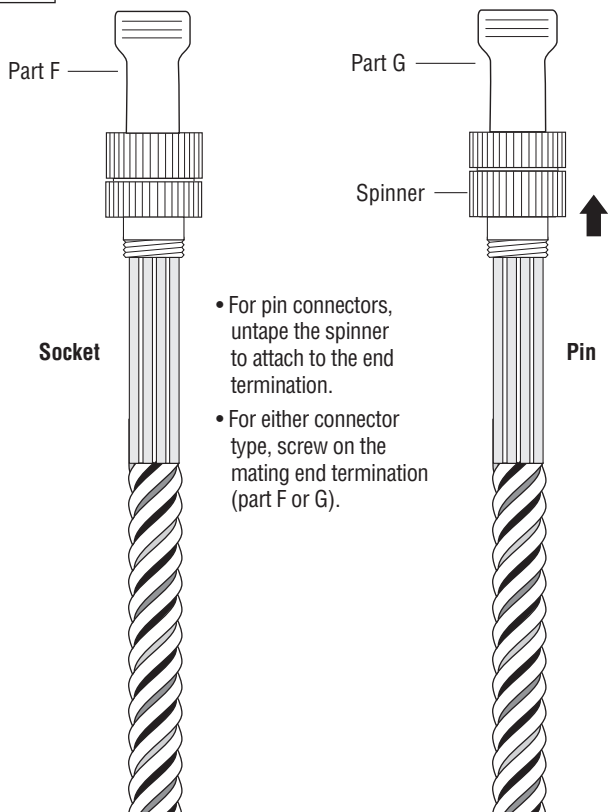
SolderSleeve® ends must be inside the connector.

Solder bands must melt and flow onto the wires and pins.

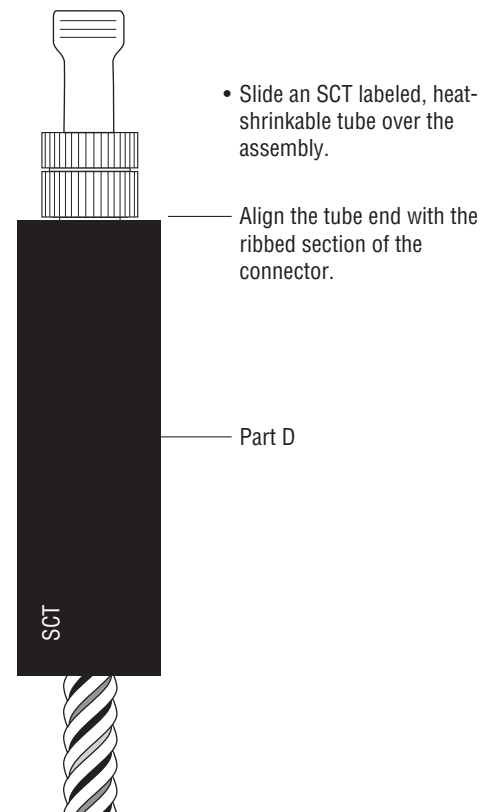


- Push the connector all the way into the splices.
- Push the splice ends inside the back of the connector.
- Heat shrink the splices fully. Keep the heat source moving slowly to avoid charring.
- Make sure the solder bands have fully flowed onto the wires and pins.
- Remove heat and allow the assembly to cool before moving it.

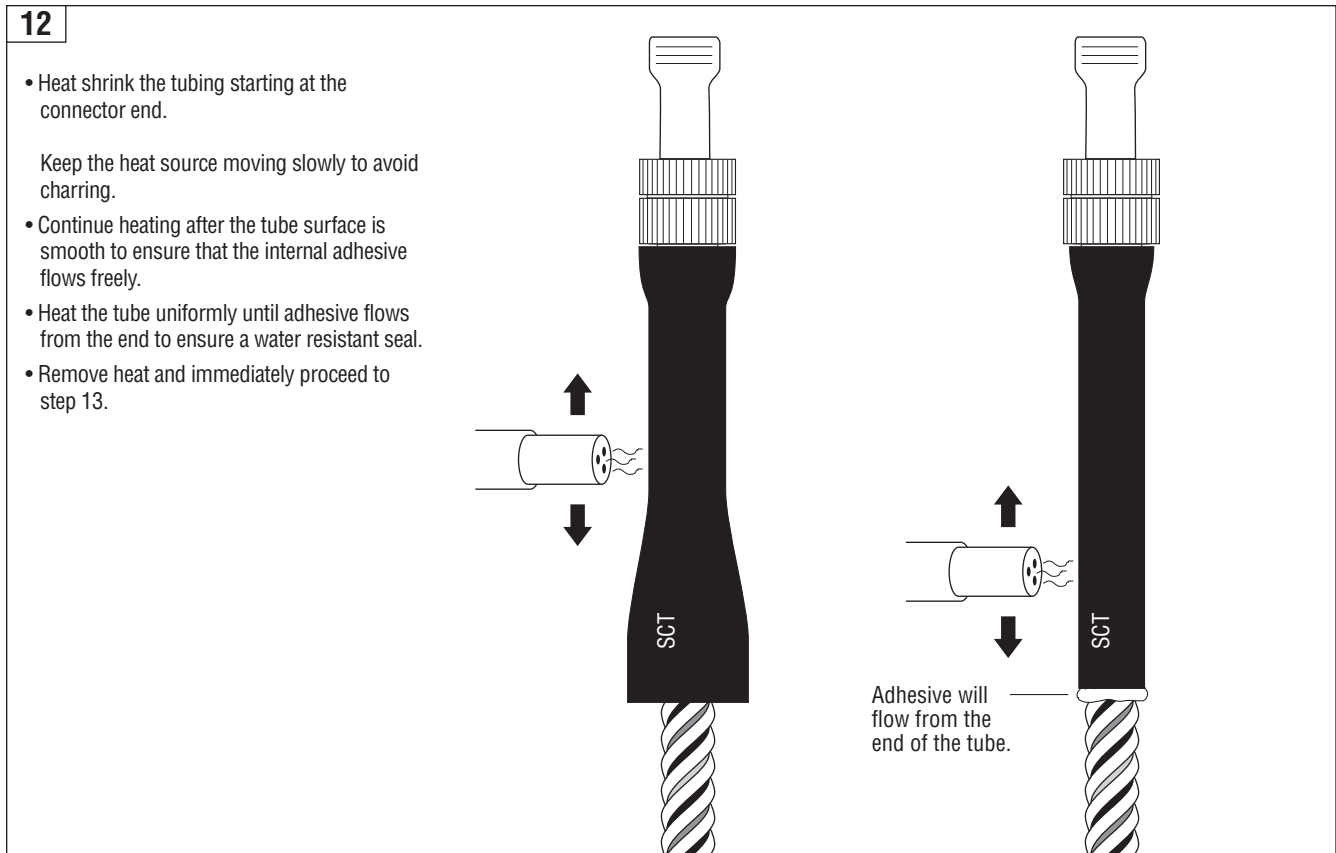
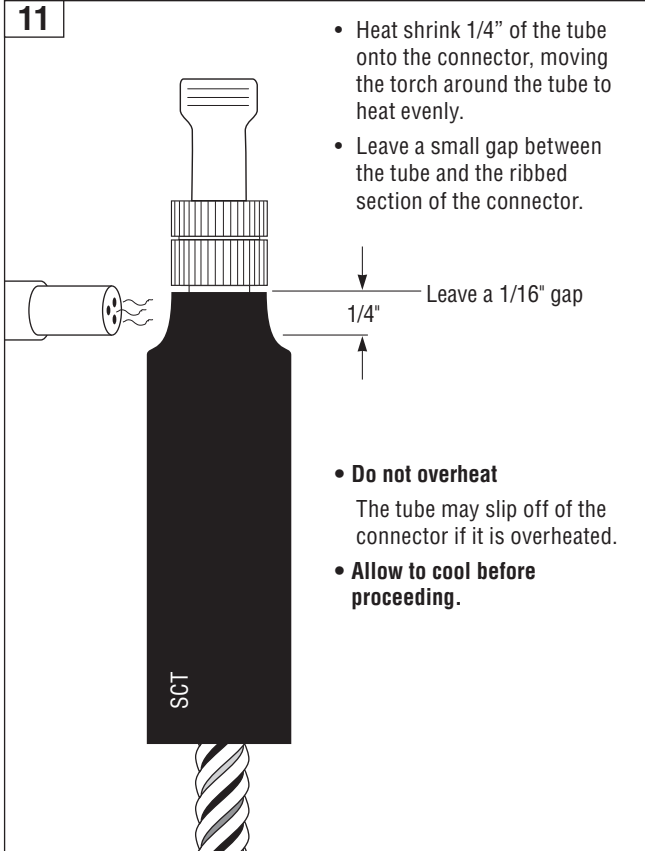
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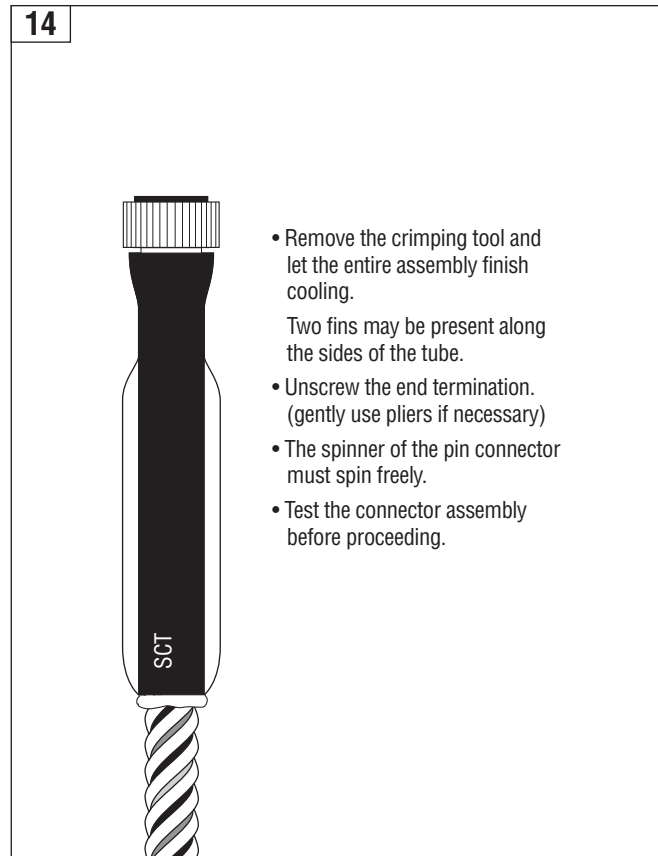
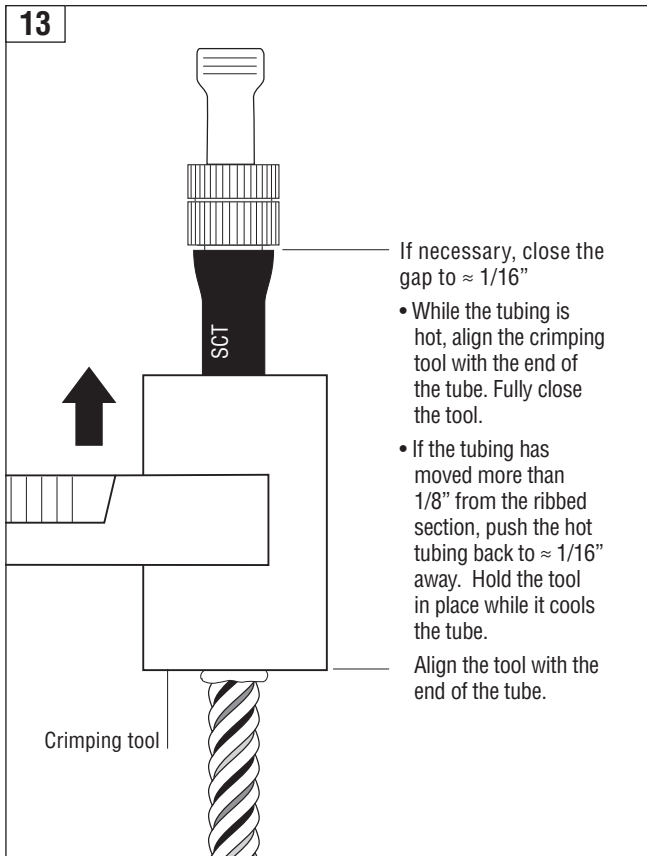


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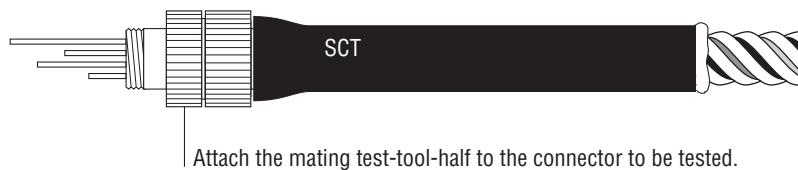


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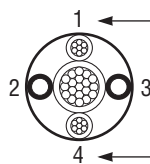




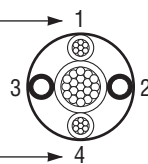
15 Test the connector assembly



Cable end opposite socket connector



Cable end opposite pin connector

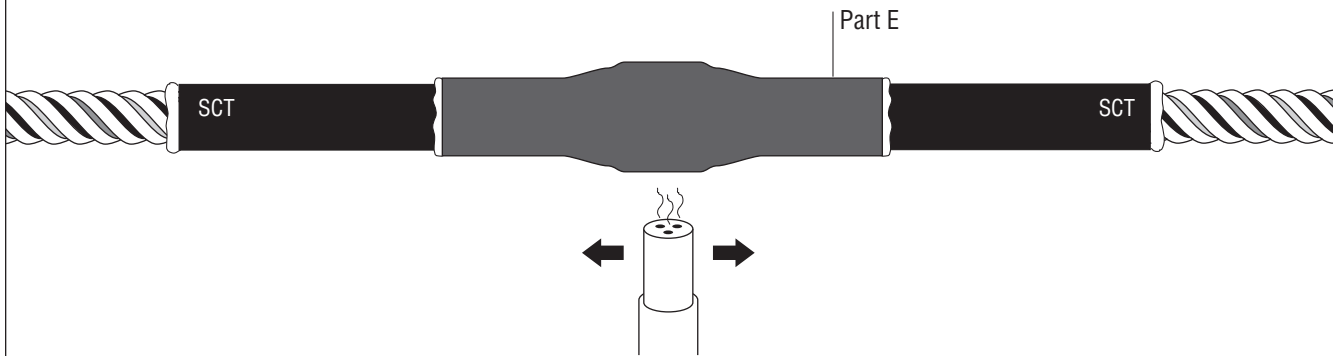


yellow

red

- Attach the mating test-tool-half to the connector to be tested.
- If both cable ends have connectors, attach a mating end termination at the opposite end. If there is no connector on the opposite cable end, prepare it according to steps 2 and 3. Then twist together wires 1 & 2 and wires 3 & 4.
- Use an ohmmeter to measure the resistance between the test tool pins.
- The resistance between the 2 longest pins or the 2 shortest pins should be $\approx 4x$ cable length (ft.) (i.e. A 100 ft. cable should measure $\approx 400 \Omega$ between the two longest pins and $\approx 400 \Omega$ between the two shortest pins.)
- The resistance between the 2 intermediate length pins should be greater than $20 M\Omega$.
- If the assembly fails any of the resistance tests;
 - 1) Check that the 2 black wires are not touching at the opposite cable end.
 - 2) If necessary, cut off and discard the connector and install a new one.

16 Apply environmental seal



- Before mating the connector assemblies, slide the unlabeled tube onto one of the cables. Connect the pin and socket connectors together firmly. Center the unlabeled tube over the pin/socket connection. Heat shrink the tube over the connection, beginning in the center and shrinking towards the ends until the tube fully conforms to the shape of the connection and adhesive flows from each end of the tube.
- Avoid overheating part E. The thin wall tubing requires less heat than the SCT cable tubing.
- **Let the entire connector area cool before handling the cable.**

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