

N and TNC Connectors

for HELIAX® LDF1-50 Coaxial Cable
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CommScope Infrastructure Academy offers installation training.

Description

These connectors are designed for self-flaring of the outer conductor and soldering of the inner connector to the inner conductor of the coaxial cable.

Tools and Materials Required for Assembly

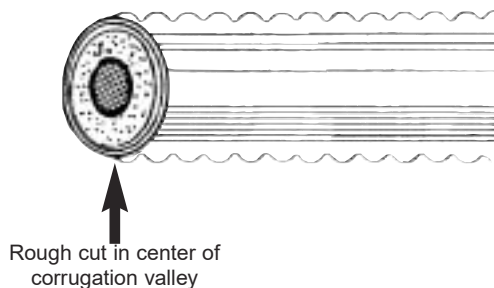
- Scale
- Silicone grease (supplied)
- Knife
- Soldering iron (150 W)
- Flat file
- Trim gauge (supplied)
- Spacing gauge (supplied)
- Pliers
- Hacksaw: fine-toothed blade
- Soft solder: (63/37 RMA flux core)
- Wrenches: (2) 1/2"
- Wire brush
- Leather strap

Notice

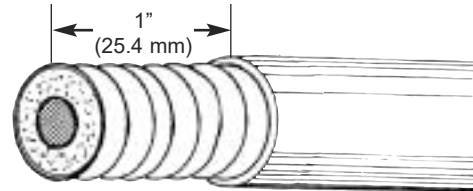
The installation, maintenance or removal of antenna systems requires qualified, experienced personnel. Andrew installation instructions have been written for such personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment.

Andrew disclaims any liability or responsibility for the results of improper or unsafe installation practices.

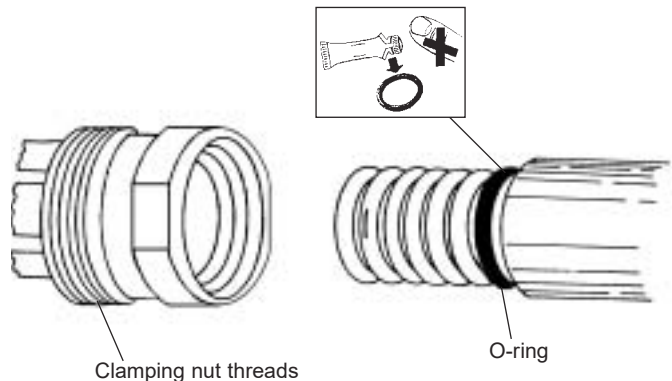
1 Prepare Cable. Rough cut the cable in the center of a corrugation valley. Straighten the end of the cable for at least 6 inches (152 mm).



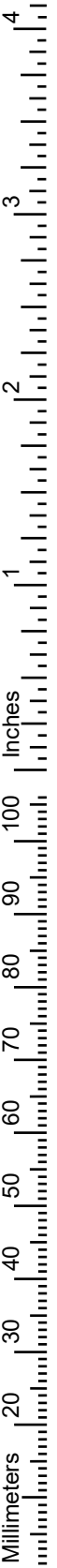
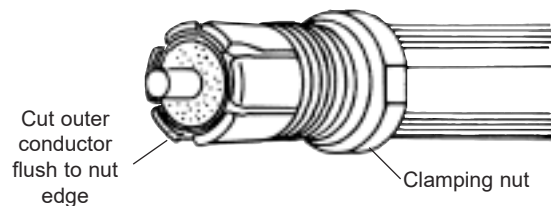
2 Remove Jacket. Measure 1" (25.4 mm) back from the end of the cable and remove the jacket as shown below.



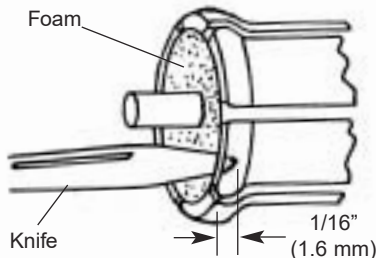
3 Add O-ring. Add the small O-ring gasket to the first, fully-exposed corrugation valley from the jacket. Use the silicone grease packet supplied to apply a thin coating of silicone grease to the outer surface of the O-ring.



4 Add Clamping Nut and Cut Cable. Push the clamping nut fully onto the cable with a twisting motion so that the spring contacts snap into the second outer conductor corrugation valley and the O-ring seats properly against the inside surface of the clamping nut. Tightly grip the clamping nut and carefully cut through the outer conductor with a fine-toothed saw. The cut must be shallow so that the inner conductor is not damaged. Then pull off the outer conductor with pliers. Carefully clean all foam from the inner conductor with a knife.

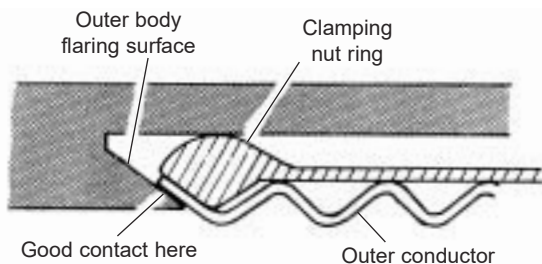


5 Separate Foam from Outer Conductor. Insert the tip of a knife to a depth of 1/16 inch (1.6 mm) between the foam and the outer conductor of the cable and separate them so that the outer conductor can be flared. Move the knife around the entire circumference of the outer conductor. Scrape away any foam clinging to the outer conductor and remove any burrs from the inside edge. Remove copper particles from the foam with a wire brush.

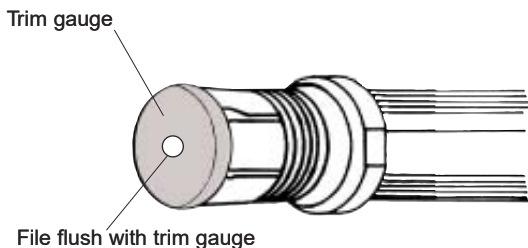


6 Flare Outer Conductor. Thread the connector outer body onto the clamping nut. Before tightening, press the outer body against the cable and rotate several times to start the flare. Tighten the connection by holding the clamping nut and torquing only the outer body to $48 \pm 4 \text{ lb}_f\text{-in}$ ($5.4 \pm 0.5 \text{ N}\cdot\text{m}$). The flaring surface of the outer body will flatten the outer conductor against the clamping nut ring. Disassemble the connection and inspect the flare to ensure good metal-to-metal contact on final assembly.

Internal Flaring Details of Connector Assembly



7 Cut and trim the inner conductor. Place the trim gauge over the inner conductor and against the clamp nut. Cut the inner conductor and file it flush with the surface of the trim gauge. Remove the trim gauge and deburr the inner conductor with a file.

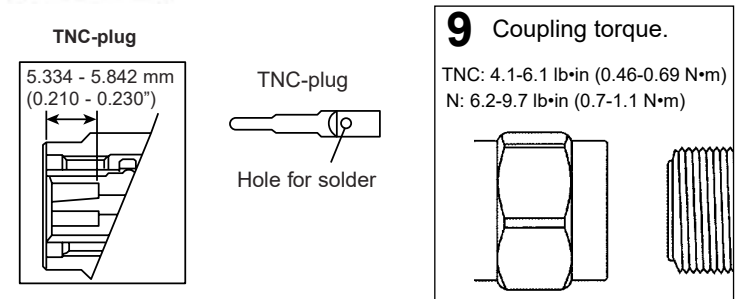
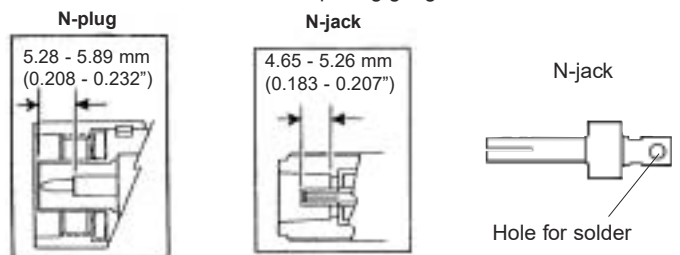
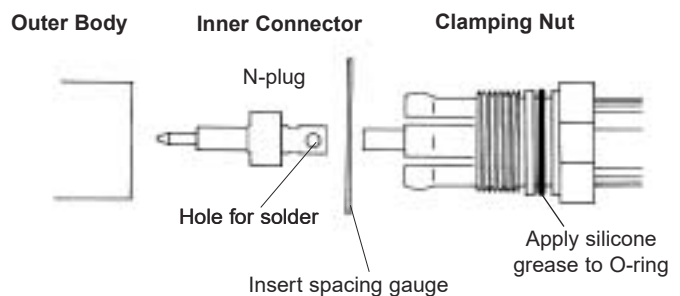


8 Install Inner Connector and Outer Body. Slide the inner connector onto the conductor. Insert the spacing gauge to properly position the inner connector during assembly.

Solder the connector in place using the solder hole provided. Shave off any excess solder or flux residue with a knife or buff it with a leather strap.

The inner connector is different for each type of connector assembly as shown in the following illustration. Differences in outer body details have been deleted to simplify the illustration.

Add the large O-ring to the connector clamping nut. Apply a thin coating of silicone grease to the outer surface of the O-ring. Keep all connector threads free of grease. Thread the outer body onto the clamping nut and tighten the connection with wrenches. Hold the clamping nut and turn only the outer body $48 \pm 4 \text{ lb}_f\text{-in}$ ($5.4 \pm 0.5 \text{ N}\cdot\text{m}$).



部件名称 (Part Name)	有毒有害物质或元素名称及含量标识格式					
	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr6+)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
连接器 (Connector)	X	O	O	O	O	O

O: 表示有毒有害物质在该部件所有的均质材料中的含量均在SJ/T 11363-2006规定的限量要求以下。
X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006规定的限量要求。

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