

# Instruction Sheet

No. 412573  
Rev. B  
ECO 12401

## Connector Assembly for HCA 214-50J Coaxial Cable

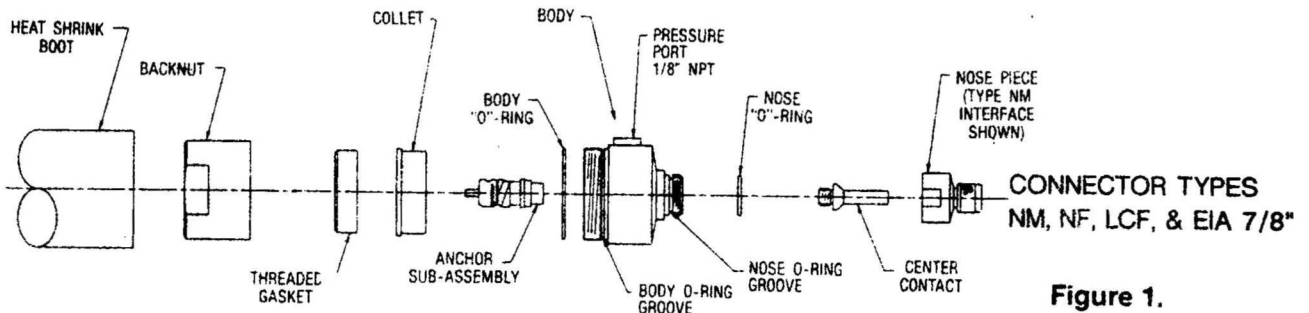
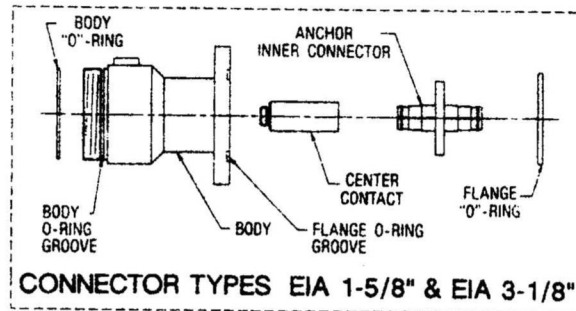


Figure 1.

### Tools Required - one each

1. Fine Toothed Hacksaw
2. Tubing Cutter (Rigid 205)
3. Rule, 6 inch
4. Knife
5. Light Metal Snips
6. Long Nose Pliers
7. Small Ball Peen Hammer
8. Flat File
9. Heat Gun or Torch
10. Allen Wrench, 5/32" (anchor sub-assembly - all connectors)
11. Allen Wrench, 3/16" (EIA 7/8", NM, NF, & LC)
12. Allen Wrench, 1/4" (EIA 1-5/8" only)
13. Allen Wrench, 3/8" (EIA 3-1/8" only)
14. Open End Wrench, 3/4" (anchor sub-assembly - all connectors)
15. Open End Wrench, 1-1/8" (EIA 7/8", NM, NF, & LC)
16. Open End Wrench, 2-5/8" (EIA 7/8", NM, NF, & LC) - (EIA 1-5/8" & EIA 3-1/8" require two wrenches)



1. Disassemble the connector and identify all parts as shown in Figure 1. Gasket grease (Part No. 515121) not shown.
2. Cut the cable even with a hacksaw. Position the cable end downward while cutting to prevent metal chips from entering the cable.
3. Trim the cable jacket with a knife to the 1-3/4 inch dimension shown in Figure 2. The connector backnut may be used as a trim guide to insure an even cut. Use care not to score the copper outer conductor.

### Preparation

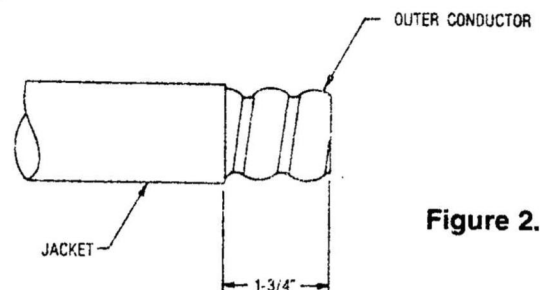


Figure 2.

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## Assembly

- Slide the heat shrink boot followed by the connector backnut onto the cable and out of the way.
- Apply a light film of grease to the threaded gasket then screw the gasket onto the cable up to the trimmed jacket. The chamfered end of the threaded gasket must face the backnut. Thread the collet onto the cable to the 3/16 inch dimension shown in Figure 3.

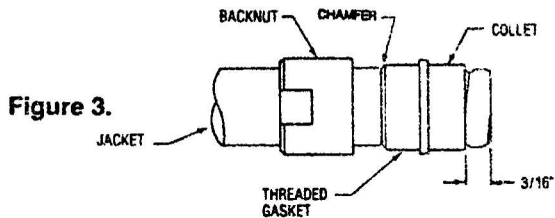


Figure 3.

- Make 1/8 inch deep slits into the copper outer conductor down toward the collet with light metal snips. Space the cuts 1/8 inch apart. See Figure 4.

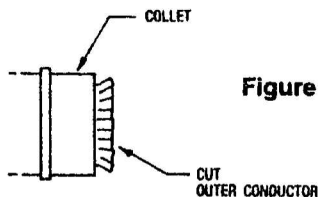


Figure 4.

- Bend the cut outer conductor over the face of the collet with long nose pliers. Flare the cut tabs and the remaining 1/16 inch of outer conductor flat against the collet with a ball peen hammer. Trim any portion of outer conductor that protrudes past the outside diameter of the collet with light metal snips and smooth all edges with a file. See Figure 5.

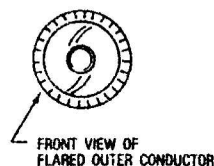


Figure 5.

- Cut the center conductor flush to the flared end with a hacksaw. Remove all burrs from the cut center conductor and make sure no metal chips enter the cable. See Figure 6.

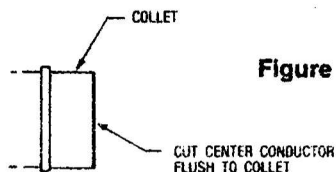


Figure 6.

- Thread the anchor sub-assembly into the center conductor and lightly tighten with a 3/4" open end wrench, then tighten the anchor sub-assembly screw with a 5/32" Allen Wrench. See Figure 7.

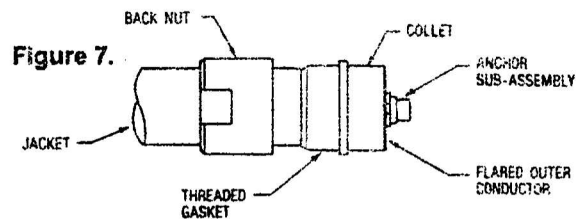


Figure 7.

- Thread the gasket up to the collet. Apply a light film of grease to the threaded gasket. Slide the backnut forward and over the threaded gasket and collet. See Figure 7.
- Apply a light film of grease to the body O-ring and slip it into position on the connector body as shown in Figure 1. Apply a light film of grease to the anchor sub-assembly O-ring located inside the connector body. See Figure 8.

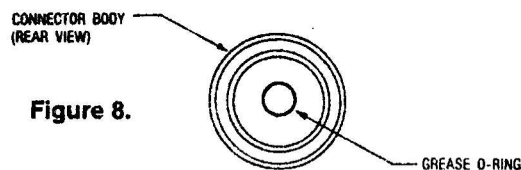


Figure 8.

- Carefully thread the connector body and backnut together. Hold the body stationary and tighten the backnut to approximately 25/30 ft. lbs. with a 2-5/8" wrench.
- Thread the center contact into the anchor sub-assembly and tighten securely with an Allen Wrench. This completes the connector assembly for EIA 1-5/8" & EIA 3-1/8" connectors only.
- For EIA 7/8", NF, NF, & LC connectors: Apply a light film of grease to the nose O-ring and slip it into position on the connector body as shown in Figure 1. Thread the nose piece onto the connector body and tighten securely with a 1-1/8" wrench to complete the connector assembly.
- Slide the heat shrink boot into place over the backnut. Use a heat gun or apply a light flame to the boot until it shrinks smoothly forming a weatherproof seal. See Figure 9.

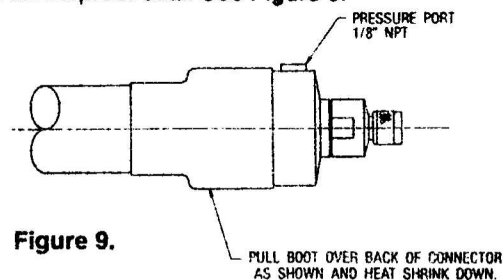


Figure 9.

- The completed cable installation should be purged and then pressurized with dry air or nitrogen to prevent moisture condensation within the cable. Use the 1/8" NPT pressure port located on the connector body to purge and pressurize the cable installation.

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