AI85114-02S

Revision History

Rev	Date	Initiated By	Approved
A	12/20/22	WLL	GH

Tools needed:

- M22520/2-01 AFM8 w/K1906 Crimper & Positioner
- GS206 w/859-184-1, 859-184-2 Positioners
- 600-235 Alignment Tool
- 600-242 Insert Tool

Twisted Pair Color Orientation of Cable

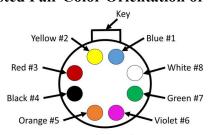


Figure 1

Cable Layout for Socket Contact 858-029-02

Grommet Follower Plastic Bushing Outer Insulators Pin Inner Contacts

Crimp Bushing Inner Insulator & Socket Outer Plated Cross Shields Body

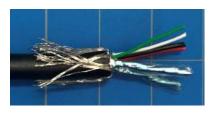
Procedure

Step 1:

Cut cable end cleanly at right angle to the cable axis with circular cable cutter. Remove cable jacket (0.72") to expose the braid shield.

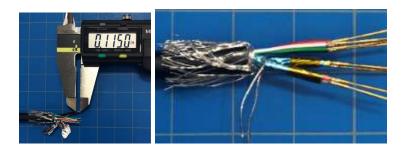
Step 2:

Fold cable braid back and remove outer aluminum wrap, middle filler, and clear Milar wrap around foil wrapped twisted pairs. Do not remove aluminum wrap around twisted pairs.



Step 3:

Fold foil around both twisted pairs down. Remove insulation of conductors to (0.115"). Red and black conductors are 24 awg and use the larger inner contacts. Install larger inner contacts over the red and black conductors. Install remaining inner contacts over other conductors. Make sure the conductor is visible through the inspection hole. Crimp the red and black inner contacts using crimp tool M22520/2-01 and positioner Daniels P/N K1906 (Glenair P/N 859-101), Setting #4 for 24 AWG. Crimp the other inner contacts using crimp tool M22520/2-01 and positioner Daniels P/N K1906 (Glenair P/N 859-101), Setting #2 for 28 AWG. Re-wrap foil tightly around the two foil wrapped pairs making sure drain wire exits the base of the foil. Use Kapton tape to hold the foil in place. Trim excess tape and foil to expose wire insulator. No more than 0.100" of insulator should be exposed. Ensure foil does not cover base of contact.



Step 4:

Slide crimp ferrule over all braid, conductors, and drain wires until it bottoms out on cable jacket. Fold braid and drain wires back over ferrule and trim excess.



Step 5:

Identify the wire colors. Slide the inner insulator into middle of inner contacts. Pay attention to the orientation of the wires. Snap the contacts in place of the insulator slot cavities.



Step 6:

Slide outer insulator over inner insulator. Place the outer insulator such as its key is in orientation with color code as shown above. Push the outer insulator in until outer and inner tabs nest together.

Step 7:

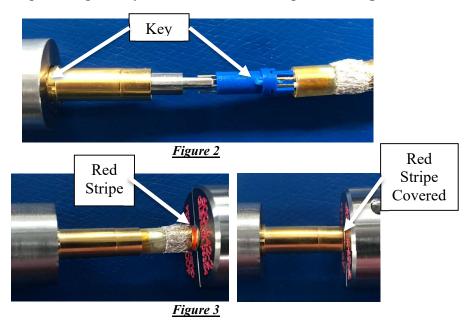
Slide plastic bushing over outer insulator. Squeeze the plastic bushing down below the 4 tabs of inner insulator. Push the crimp bushing forward such that the plastic bushing has a very tight space against the inner insulator and crimp bushing.



<u>Inspection step</u>: the gap between the plastic bushing and the adjacent component shall be less than 0.010".

Step 8:

Install outer shell body in tool **600-235**. Ensure the male polarization key of the shell is engaged into the female key locator on the tool. Mate tool into cable assembly. Ensure the polarization key of the outer insulator is lined up with the polarization key of the shell body per <u>Figure 2</u>. Use insert tool **600-242** to slide cable assembly into shell body using **600-235** as a guide per <u>Figure 3</u>. Ensure crimp bushing is fully seated and the blue stripe is **no longer visible**.



Step 9:

Use crimp tool **Daniels HX4 M22520/5-01** with die **Y143.** Load contact assembly into side A. Locate the step at the back of the contact. Ensure the step is flush with the top face of the die, crimp contact.

