

AI85090-01S

Revision History

Rev	Date	Initiated By	Approved
2	2/27/20	WLL	GH

Tools needed:

- M22520/2-01 AFM8 w/K1906 Crimper & Positioner
- GS206 w/859-184-1, 859-184-2 Positioners
- 600-236 Alignment Tool
- 600-242 Insert Tool

Twisted Pair Color Orientation of Cable

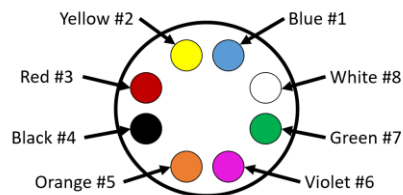
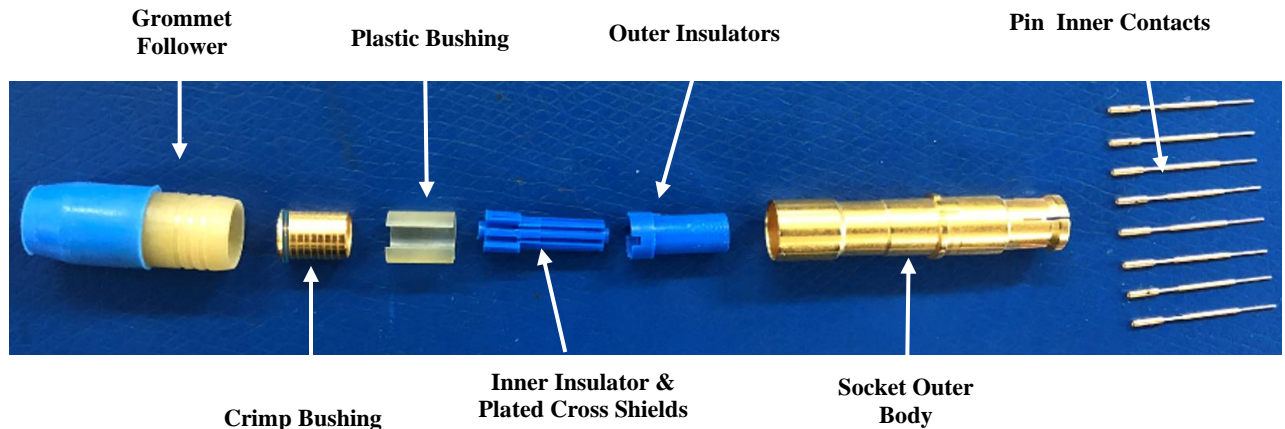


Figure 1

- **Cable Layout for Socket Contact 858-029-02**



Procedure

Step 1:

Cut cable end cleanly at right angle to the cable axis with circular cable cutter. Remove cable jacket (1.00") to expose the braid shield.



Step 2:

Fold cable braid back and remove outer Teflon wrap.



Step 3:

Mark Teflon wrapped pairs (0.450") away from jacket. Trim Teflon and braid to mark. **Do not** cut the drain wire inside of braid.



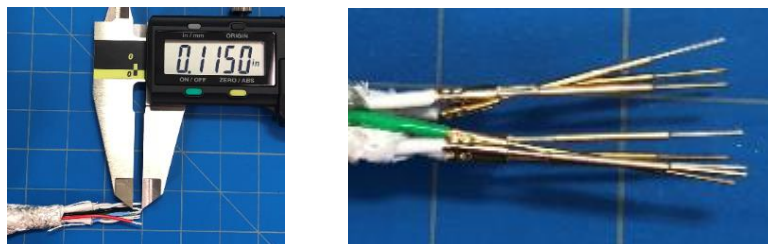
Step 4:

Trim conductors (0.720") away from jacket. **Do not** trim drain wires from twisted pairs.



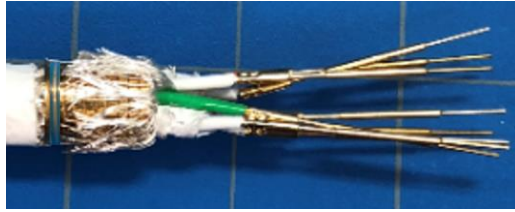
Step 5:

Identify cable twisted pair color orientation to match **Figure 1**. 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**, Setting #4 for 24 AWG. Crimp the other inner contacts using crimp tool **M22520/2-01** and positioner **Daniels P/N K1906**, Setting #3 for 26 AWG.



Step 6:

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 7:

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.

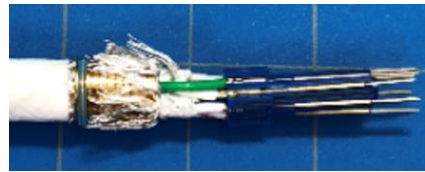
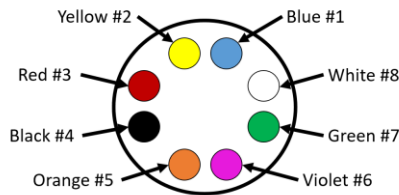
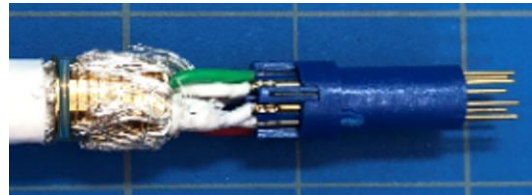


Figure 2

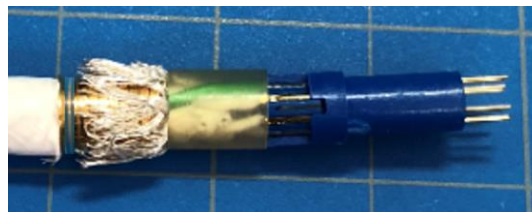
Step 8:

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 9:

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.



Inspection step: the gap between the plastic bushing and the adjacent component shall be less than 0.010”.

Step 10:

Install outer shell body in tool **600-236**. 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 **Figure 3**. Use insert tool **600-242** to slide cable assembly into shell body using **600-236** as a guide per **Figure 4**. Ensure crimp bushing is fully seated and the blue stripe is **no longer visible**.

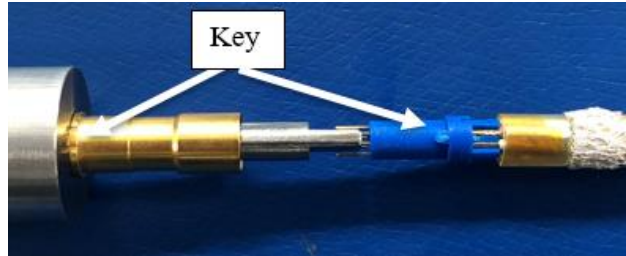


Figure 3

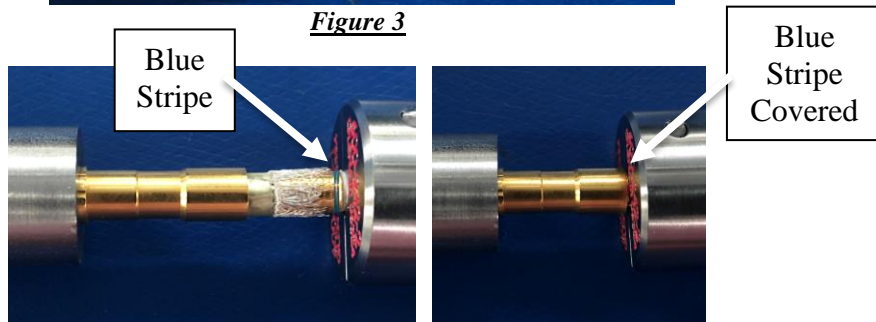


Figure 4

Step 11:

Install depth locator **859-184-2** on crimp tool **GS206**. Load the contact assembly into the crimp tool Daniels **GS206** until it bottoms out. Crimp the barrel first per **Figure 5 & 6**. Remove depth locator **859-184-2** and install **859-184-1**. Rotate the contact assembly 45° and repeat crimping process per **Figure 7 & 8**. After crimping, the diameter of crimped barrel must not be greater than .270”.

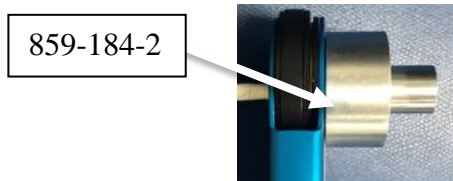


Figure 5



Figure 6

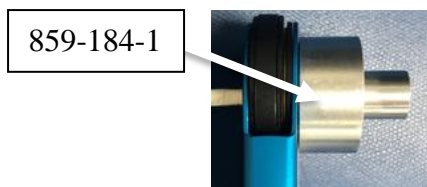


Figure 7



Figure 8