

AI85097-05

Revision History

Rev	Date	Initiated By	Approved
1	3/9/20	WLL	GH

Tools needed:

- M22520/2-01 AFM8 w/K1906 Crimper & Positioner
- 600-235 & 600-236 Alignment Tool
- 600-242 Insert Tool

Twisted Pair Color Orientation of Cable

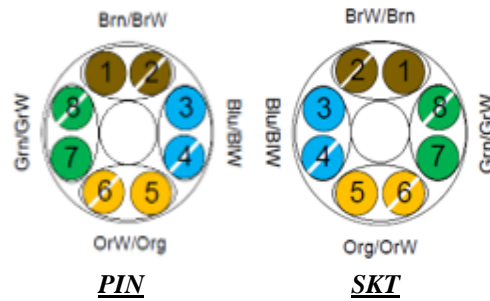
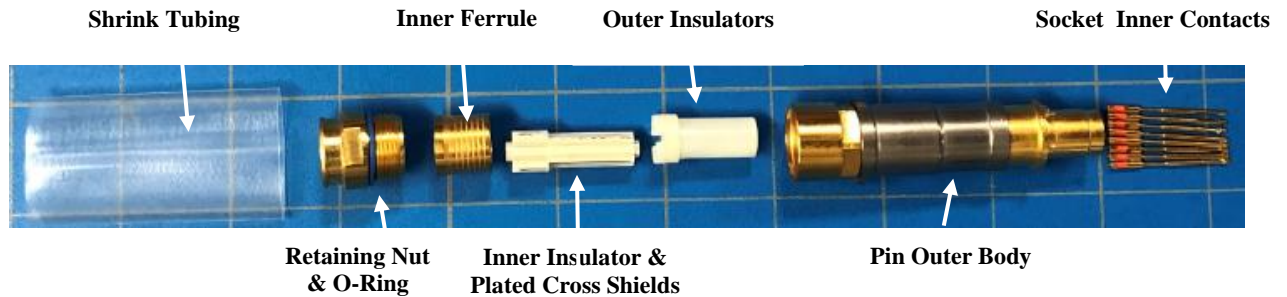
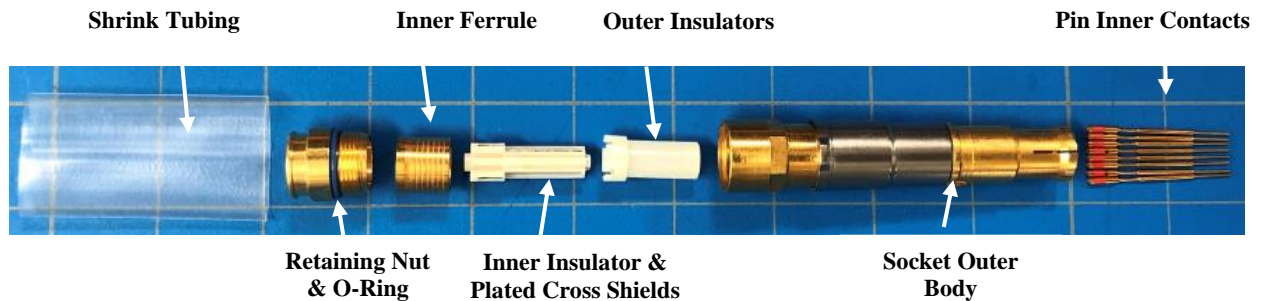


Figure 1

Cable Layout for Pin Contact 858-005-05



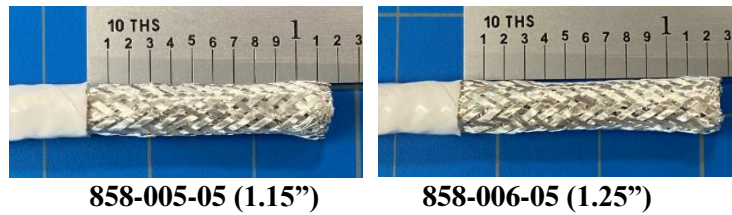
Cable Layout for Socket Contact 858-006-05



Procedure

Step 1:

For **858-005-05** remove cable jacket (**1.15"**) to expose the braid shield. For **858-006-05** remove cable jacket (**1.25"**) to expose the braid shield.



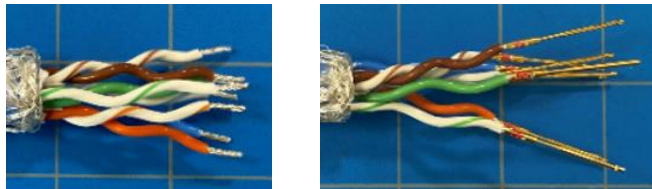
Step 2:

Flare, fold, and comb braid straight. Remove all foil, wrap, and inner spine.



Step 3:

Identify cable twisted pair color orientation to match **Figure 1** for Pin or Socket contacts. Remove insulation of the conductors to (**0.115"**). Install inner contacts (8X) over conductor until fully seated. Make sure the conductor is visible through the inspection hole. Crimp the inner contacts using crimp tool **M22520/2-01** and positioner **Daniels P/N K1906**, Setting **#4** for **24 AWG**.



Step 4:

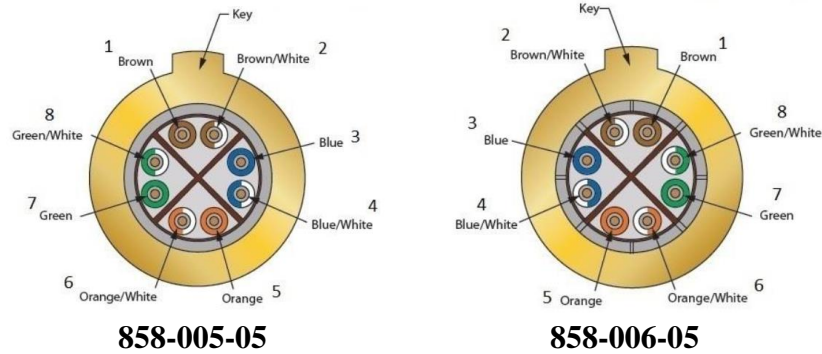
Slide the 'Retaining Nut' and 'Inner Ferrule' over the braid shield. Fold braid over ferrule but **do not trim**.



Step 5:

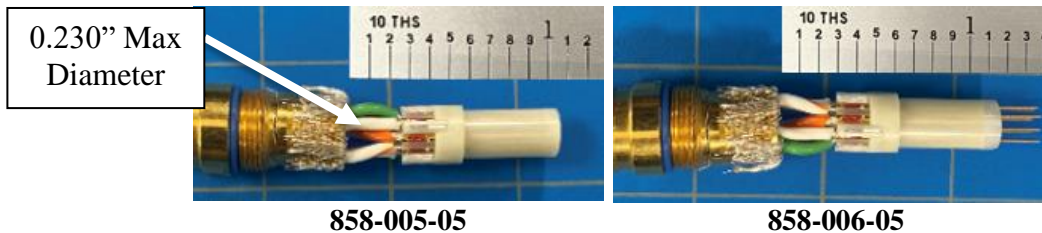
Slide the inner insulator (with cross shields) into middle of inner contacts. Pay attention to the orientation of the wires. Snap the contacts in place of the insulator slot cavities.

Note: The twisted pairs are essentially parallel to the axis of the bundle with no crossover.



Step 6:

Slide outer insulator over inner insulator. Push the outer insulator in until outer and inner tabs nest together. Verify the key is in the right orientation per **Step 5**. For **858-005-05** expose (1.05") from ferrule to insulator end. For **858-006-05** expose (1.15") from ferrule to insulator end. Trim braid at ferrule knuckle. The wire bundle diameter should not be over (0.230").



Step 7:

Install outer shell body (**858-005-05**) in tool **600-236** or (**858-006-05**) in tool **600-235**. Ensure the male polarization key of the shell is engaged into the female key locator on the tool. Ensure the polarization key of the outer insulator is lined up with the polarization key of the shell body per **Figure 2**. Use insert tool **600-242** to slide cable assembly into shell body using **600-235** or **600-236** as a guide per **Figure 3**. Ensure the assembly is fully inserted in the body. Use adjustable wrench to tighten 'Retaining Nut' in outer shell body per **Figure 4**. Torque shall be 20-25 inch-lbs.

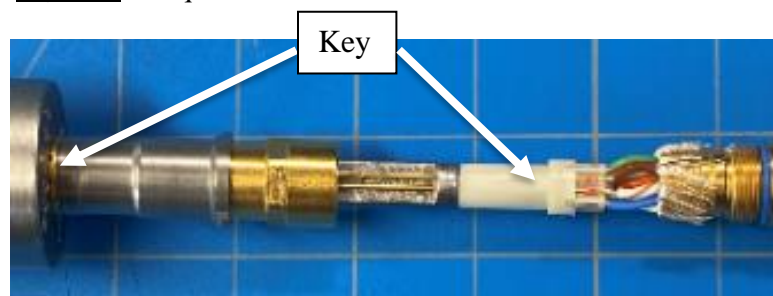


Figure 2

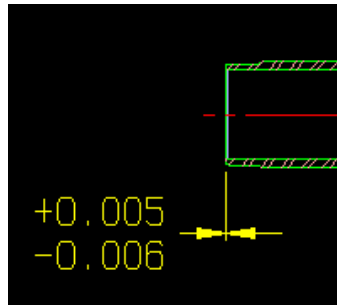


Figure 3

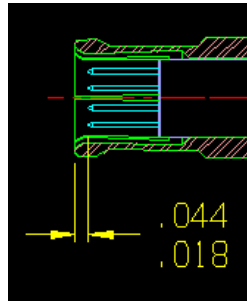
Figure 4

Step 7:

For **858-005-05** ensure insulator face is **+0.005”/-0.006”** away from outer contact face. For **858-006-05** ensure inner contacts are **-0.018”/-0.044”** away from outer contact face.



858-005-05



858-006-05

Step 8:

Slide heat shrink tubing over outer body contact. Ensure tubing covers retaining nut banding platform, then shrink tubing.

