AI85134-05

Revision History

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

Tools needed:

- M22520/2-01 AFM8 w/K1906 Crimper & Positioner
- 600-235 & 600-274 Alignment Tool
- 600-242 Insert Tool

Twisted Pair Color Orientation of Cable

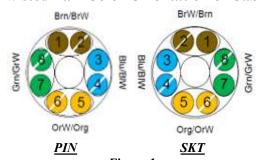
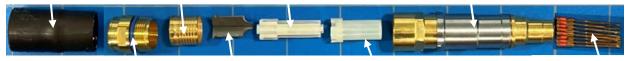


Figure 1
Cable Layout for Pin Contact 858-043-05

Shrink Tubing Inner Ferrule Inner Insulator & Pin Outer Body

Pin Outer Body



Retaining Nut & O-Ring

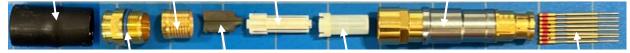
Cross Spacer

Outer Insulators

Socket Inner Contacts

Cable Layout for Socket Contact 858-042-05

Shrink Tubing Inner Ferrule Inner Insulator & Socket Outer Plated Cross Shields Body



Retaining Nut & O-Ring

Cross Spacer

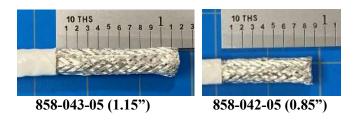
Outer Insulators

Pin Inner Contacts

Procedure

Step 1:

For **858-043-05** remove cable jacket (1.15") to expose the braid shield. For **858-042-05** remove cable jacket (0.85") to expose the braid shield.



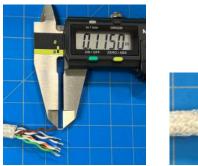
Step 2:

Flare, fold, and comb braid straight. Remove foil, wrap, and spline.



Step 3:

Identify cable twisted pair color orientation to match <u>Figure 1</u> 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.** Insert cross spacer between pairs.



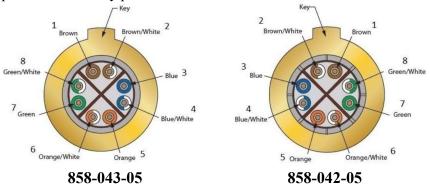




Step 5:

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**. Slide the 'Retaining Nut' and 'Inner Ferrule' up until the cross spacer contacts the inner insulator. Trim braid at ferrule knuckle.



Step 7:

Install outer shell body (858-043-05) in tool 600-274 or (858-042-05) 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 <u>Figure 2</u>. Use insert tool 600-242 to slide cable assembly into shell body using 600-235 or 600-274 as a guide per <u>Figure 3</u>. Ensure the assembly is fully inserted in the body. Use adjustable wrench to tighten 'Retaining Nut' in outer shell body slighly more than hand tight per <u>Figure 4</u>. Remove body and finish torquing to 5-8 inch-lbs.

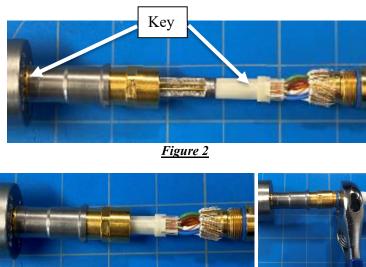
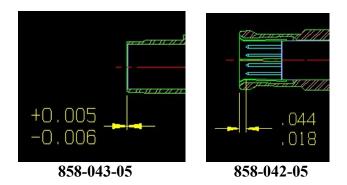


Figure 3

Figure 4

Step 8:

For 858-043-05 ensure insulator face is +0.005"/-0.006" away from outer contact face. For 858-042-05 ensure inner contacts are -0.018"/-0.044" away from outer contact face.



Step 9: "When applicable"

Slide heat shrink tubing over outer body contact. Shrink tubing just below the retaining nut thread seam.

