



AI85114-02

Assembly Instruction

EL OCHITO BLUE CONTACTS

SuperSpeed USB

TYPE I: PIN 858-028-01/SKT 858-029-01

CABLE: 963-118

Revision History

Rev	Date	Initiated By	Approved
1	07/16/18	WLL	GH

1.0 Tools

Tools are to be suitable for the purpose intended and shall not cause damage to the parts. Examine all elements of tools and equipment.

1.1 Related Tools and Equipment

- M22520/2-01 AFM8 Crimper & Positioner or Equivalent.
- M22520/5-01 Hex Crimp Tool w/ Y143 Die



Figure 1



Figure 2

- 600-235 & 600-236 Alignment Tools



Figure 3

- 600-242 Insert Tool



Figure 4

- Cable Cutter, Exacto Knife, Tweezer, Wire Cutter, Caliper



Figure 5

- Hot Tweezers



Figure 6

- **Pin Contact Part Number 858-028-01**

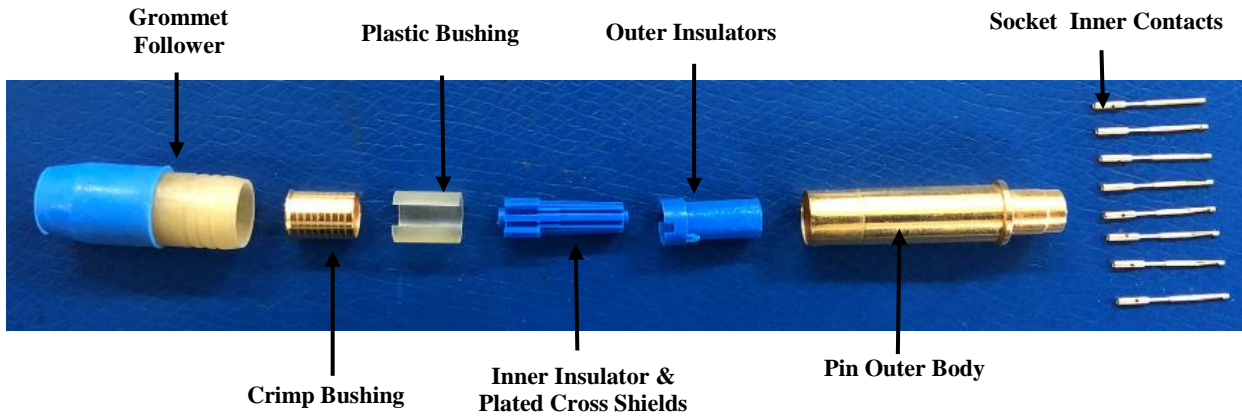


Figure 10

- **Socket Contact Part Number 858-029-01**

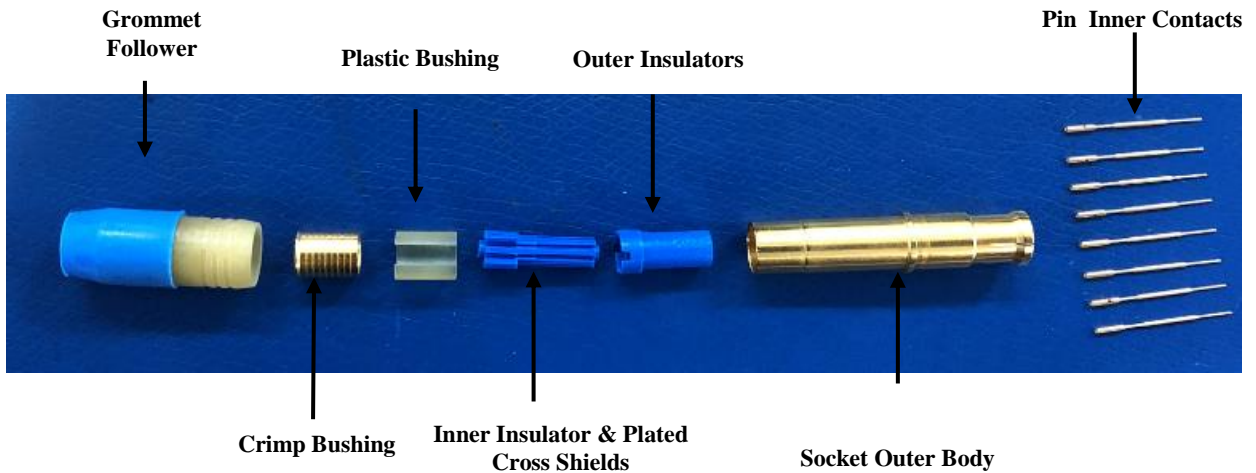


Figure 11

2.0 Procedure

Step 1: Cable Jacket Removed

Cut cable end cleanly at right angle to the cable axis with circular cable cutter. Remove cable jacket (0.720") to expose the braid shield.



Figure 12

Step 2: Remove Filler

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.

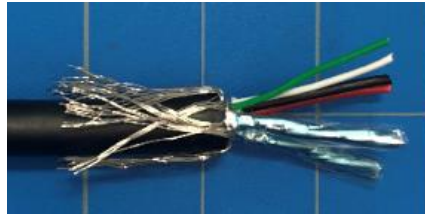


Figure 13

Step 3: Crimp Conductors

Fold foil around both twisted pairs down. Remove insulation of conductors to (0.115") per **Figure 14**. **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 per **Figure 15**.

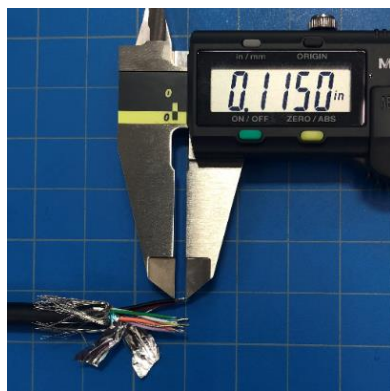


Figure 14

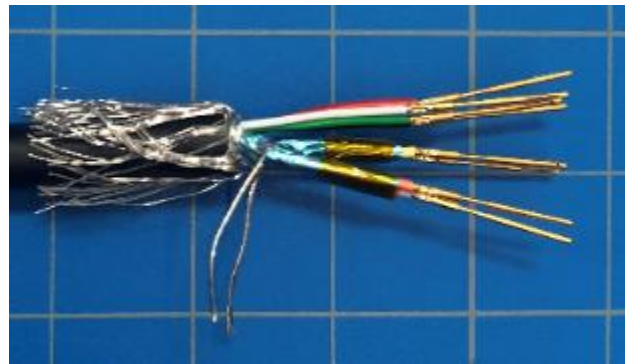


Figure 15

Step 4: Install Crimp Ferrule

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 per **Figure 16**.



Figure 16

Step 5: Loading Contacts into Insulator for Pin Contact Part Number 858-028-01

Identify the wire colors (See below for recommended color code as shown in **Figure 17**). 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.

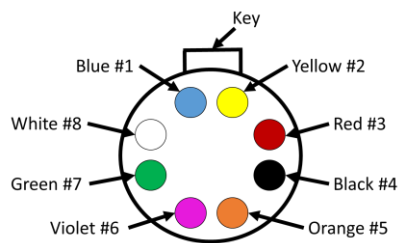


Figure 17

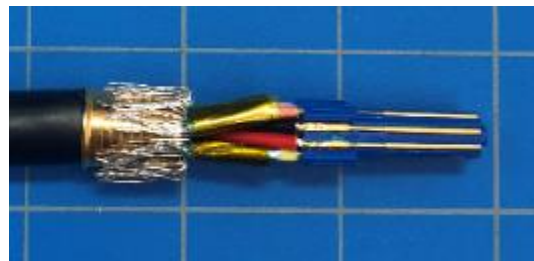


Figure 18

Step 6: Loading Contacts into Insulator for Socket Contact Part Number 858-029-01

Identify the wire colors (See below for recommended color code as shown in **Figure 19**). 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.

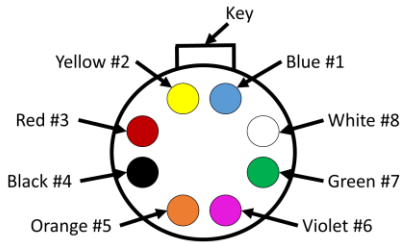


Figure 19



Figure 20

Step 7: Install Outer Insulator

Slide outer insulator over inner insulator. Place the outer insulator such as its key is in orientation with color code as shown in **Figure 17 & Figure 19**. Push the outer insulator in until outer and inner tabs nest together.



Figure 21

Step 8: Plastic Bushing Installed

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.



Figure 22

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

Step 9: Outer Body Installed

Install outer shell body in tool **600-235** or **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 23**. Use insert tool **600-242** to slide cable assembly into shell body using **600-235** or **600-236** as a guide. Ensure crimp bushing is fully seated per **Figure 24**.

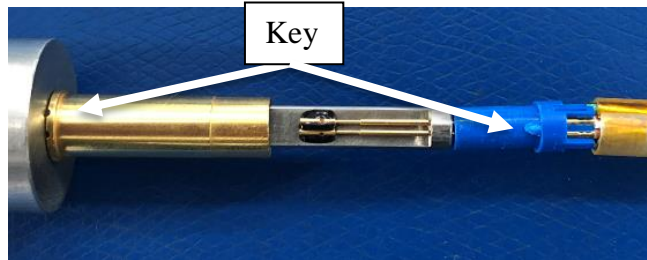


Figure 23

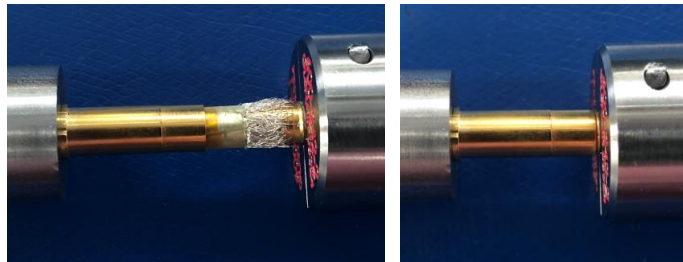


Figure 24

Step 10: Crimp Outer Body

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.

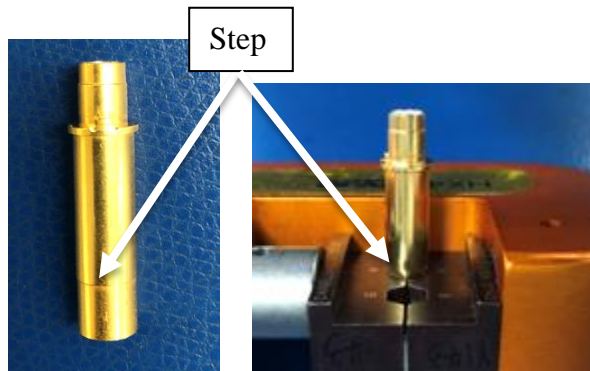


Figure 25