



AI85122-01

Assembly Instruction

EL OCHITO RED CONTACTS

HDMI & DisplayPort

TYPE I: PIN 858-030-01/SKT 858-031-01

CABLE: 963-033-26 S/FTP

Revision History

Rev	Date	Initiated By	Approved
1	07/05/18	WLL	GH
2	09/03/19	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 Tool and Equipment

- M22520/2-01 AFM8 Crimper & Positioner or Equivalent.
- GS206 Round Crimp Tool



Figure 1



Figure 2

- Depth Positioner 859-184-1
- Depth Positioner 859-184-2



Figure 3



Figure 4

- Depth Positioner 859-184-3



Figure 5

- 600-235 & 600-236 Alignment Tools



Figure 6

- 600-242 Insert Tool



Figure 7

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



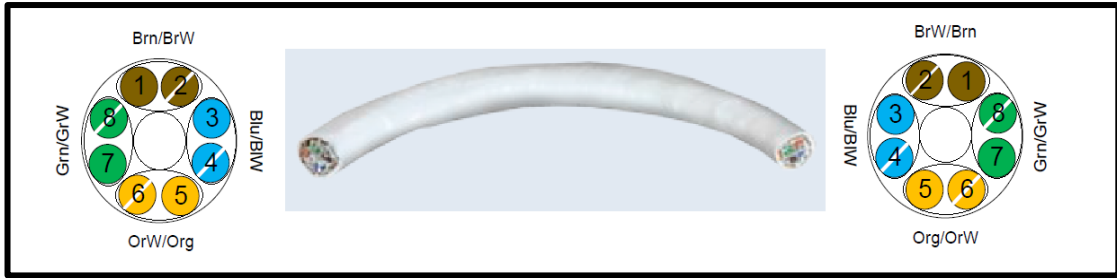
Figure 8

- Hot Tweezers



Figure 9

- **Twisted Pair Color Orientation of Cable**



**Cable Layout for Pin Contact
858-030-01**

**Cable Layout for Socket Contact
858-031-01**

Figure 10

- **Pin Contact Part Number 858-030-01**

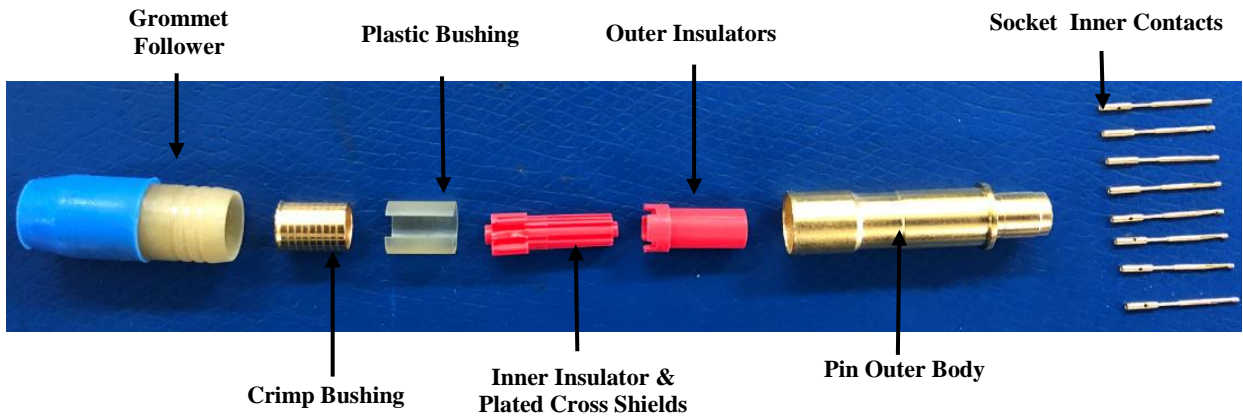


Figure 11

- **Socket Contact Part Number 858-031-01**

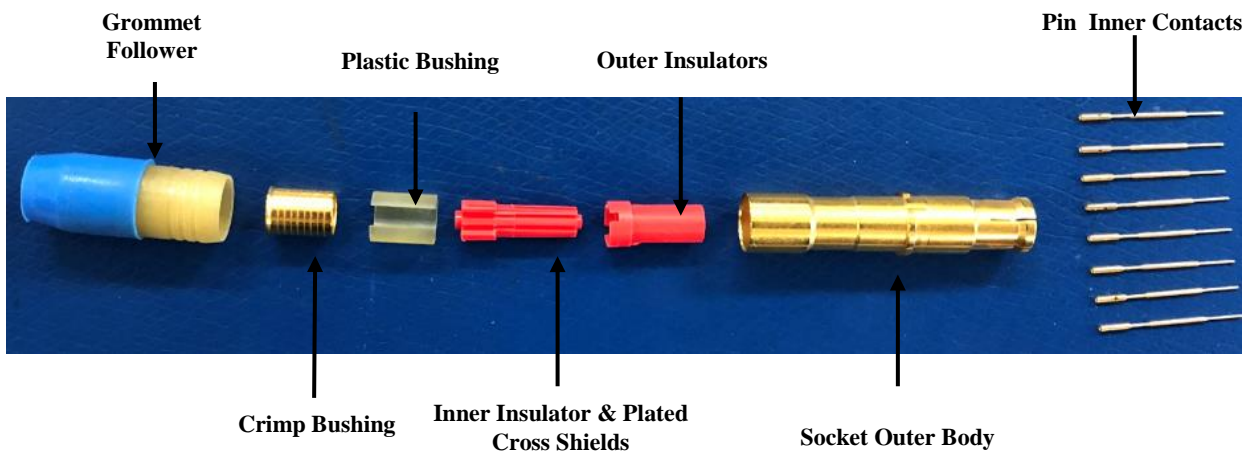


Figure 12

2.0 Procedure

Step 1: Grommet Follower and Crimp Ferrule

Slide grommet follower onto cable per **Figure 13**. Cable ends must be cut cleanly and at right angle to the cable axis with circular cable cutter. Slide crimp bushing over jacket per **Figure 14**.



Figure 13

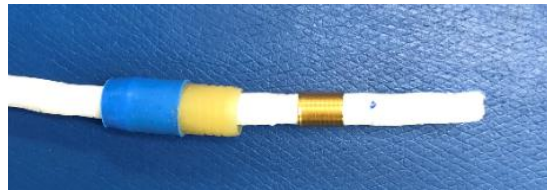


Figure 14

Step 2: Cable Jacket Removed

Remove cable jacket (0.720") to expose the braid shield.



Figure 15

Step 3: Center Filler Removed

Flare cable braid to expose the twisted pair wires with aluminum foil shields. Flare wire bundle with aluminum foil shields and trim the middle filler as close to the jacket as possible.



Figure 16

Step 4: Crimp Conductors

Identify cable twisted pair color orientation to match **Figure 10** for Pin or Socket contacts. Unwrap foil around one pair. Remove insulation of the conductors to (0.115") per **Figure 17**. Install inner contacts over conductor until fully seated. Make sure the conductor is visible through the inspection hole. Crimp the inner contacts per **Figure 18** using crimp tool M22520/2-01 and positioner Daniels P/N K1906 (Glenair P/N 859-101), Setting #3 for 26 AWG. Re-wrap foil tightly around the wire pair. 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 19**. Repeat **Figures 17-19** for all pairs.



Figure 17



Figure 18

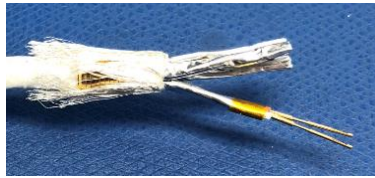


Figure 19



Figure 20

Step 5: Loading Contacts into Insulator for Pin Contact Part Number 858-030-01

Identify the wire colors (See below for recommended color code as shown in **Figure 21**). 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.



Figure 21



Figure 22

Step 6: Loading Contacts into Insulator for Socket Contact Part Number 858-031-01

Identify the wire colors (See below for recommended color code as shown in **Figure 23**). 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.

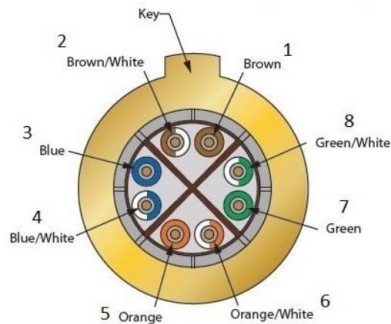


Figure 23

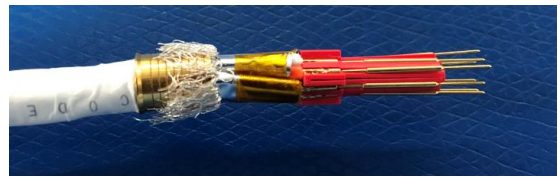


Figure 24

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 21 & Figure 23**. Push the outer insulator in until outer and inner tabs nest together.

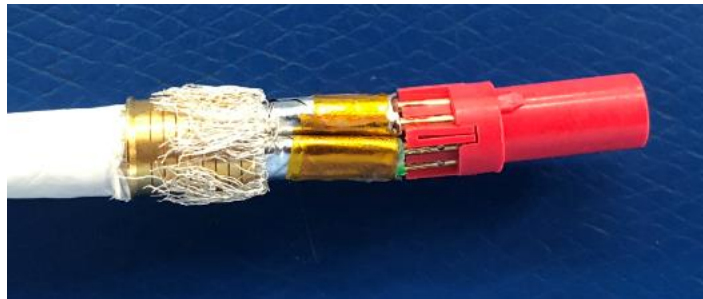


Figure 25

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 26



Figure 27

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 28**. 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 29**.

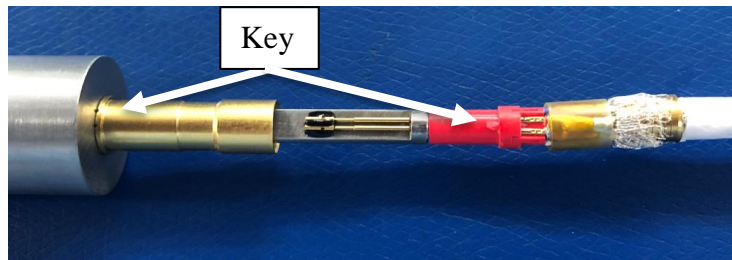


Figure 28

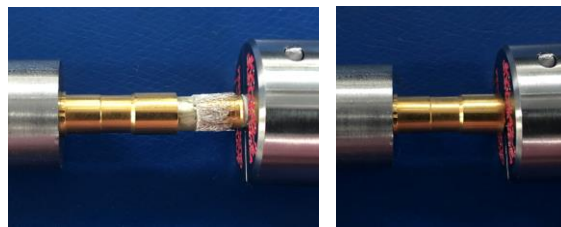


Figure 29

Step 10: Crimp Pin Outer Body Contact Part Number 858-030-01

Install depth locator **859-184-3** on crimp tool **GS206**. Load the contact assembly into the crimp tool Daniels **GS206**. Crimp the end of crimp barrel first per **Figure 30 & 31**. Remove depth locator **859-184-3** and install **859-184-2**. Rotate the contact assembly 45° and repeat crimping process per **Figure 32 & 33**. After crimping, the diameter of crimped barrel must not be greater than .270”.

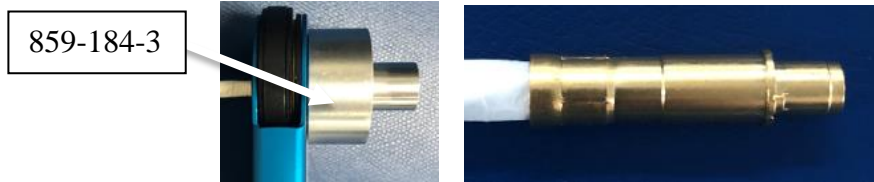


Figure 30

Figure 31

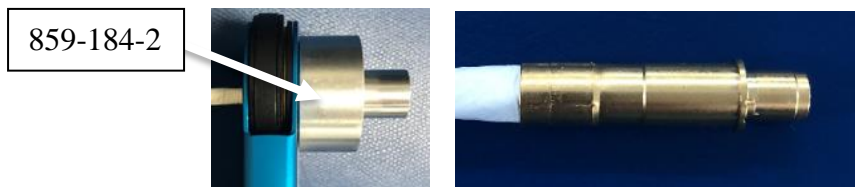


Figure 32

Figure 33

Step 11: Crimp Socket Outer Body Contact Part Number 858-031-01

Install depth locator **859-184-2** on crimp tool **GS206**. Load the contact assembly into the crimp tool Daniels **GS206**. Crimp the end of crimp barrel first per **Figure 34 & 35**. Remove depth locator **859-184-2** and install **859-184-1**. Rotate the contact assembly 45° and repeat crimping process per **Figure 36 & 37**. After crimping, the diameter of crimped barrel must not be greater than .270”.

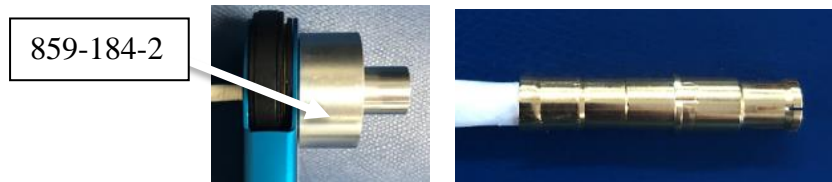


Figure 34

Figure 35

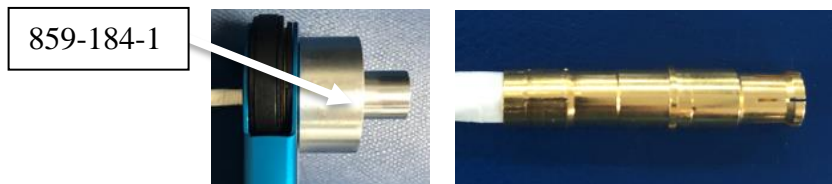


Figure 36

Figure 37