Assembly of GigaREACH™ Extended Length cable with RJ45 UTP Plug

1. General product information

These instructions provide the termination procedure of Commscope RJ45 UTP plug kits to GigaREACH™ extended distance cable. The modular plug specified in this document is intended for use with the GigaREACH XL cable family (1073, 2073, 3073, and 1573). Wiring schemes, T-568B and T-568A are shown in these instructions.

This instruction sheet is for terminating:

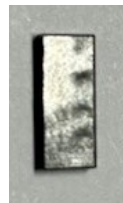| Material ID	Product	Description
760258800	Plug Kit, 100pcs	Plug, Load Bar and Wire Manager
760259000	Plug Kit, 25pcs	Plug, Load Bar and Wire Manager
1933943-2	Plug Boot, Gray, 100pcs	Boot with AntiSnag feature*
		*Boot is not part of the Plug Kit and is ordered separately. Boot component is optional but required when routing cable assembly in areas that pose risks of the plug latch to be snagged and damaged.

Component Descriptions

Plug   **Load Bar**   **Wire Manager**

Plug Kit   **Plug Kit showing the components in detail**   **Boot**

2. Tools and accessories required

- Hand crimp tool 760252606
- Cable scoring tool
- Wire cutters
- Wire strippers
- Isopropyl alcohol (OSP cable installations)
- B Sealant (OSP cable installations), MID 700010911
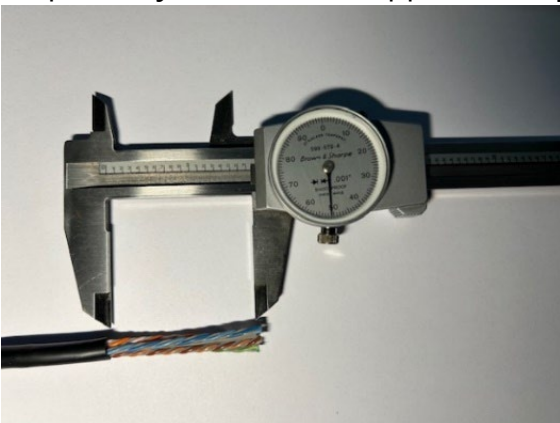

Hand crimp tool

3. Installation steps

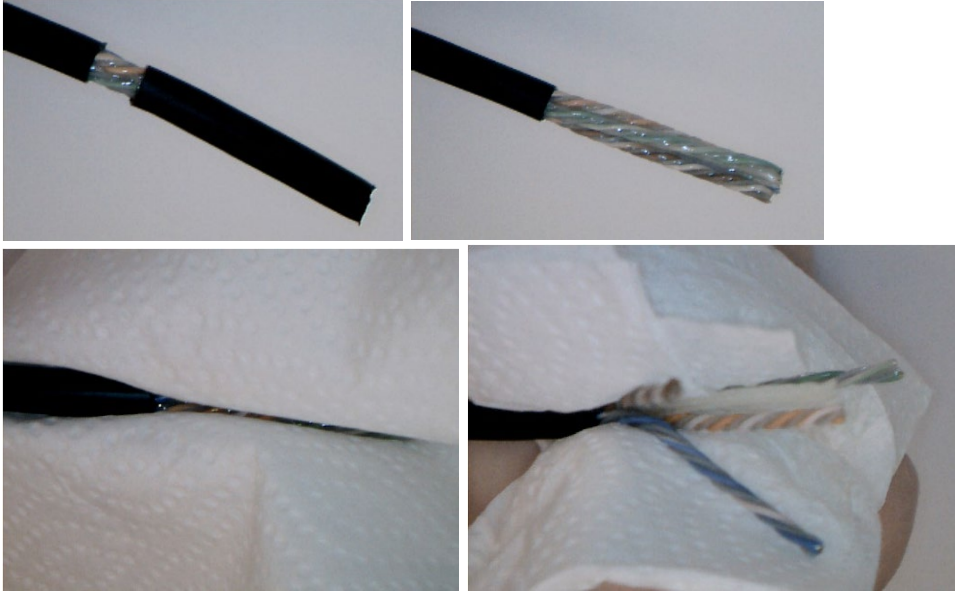### Step 1 – Preparation of GigaREACH Cable and RJ45 plug for Termination
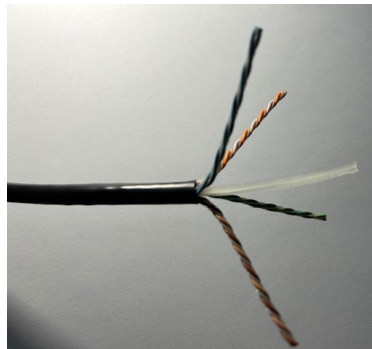
1.1   Slide Boot component onto the cable

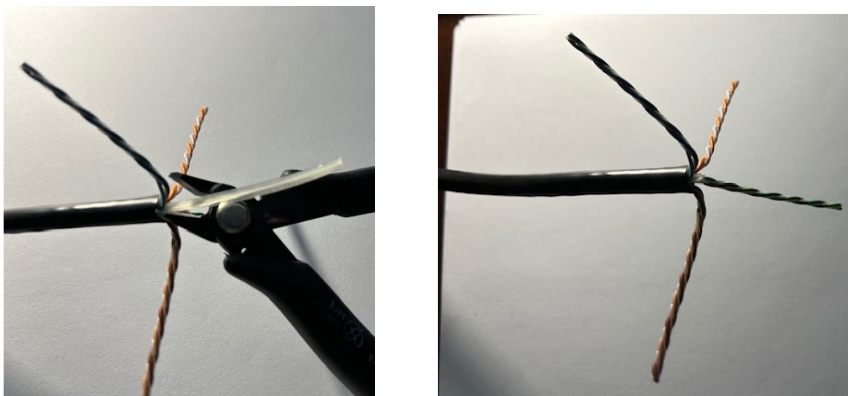1.2   Strip outer jacket of cable approximately 1.750 inches [44.45mm].

1.2.1　For OSP cable that contains waterproof gel, remove jacket and wipe gel from conductors with disposable cloth and isopropyl alcohol:
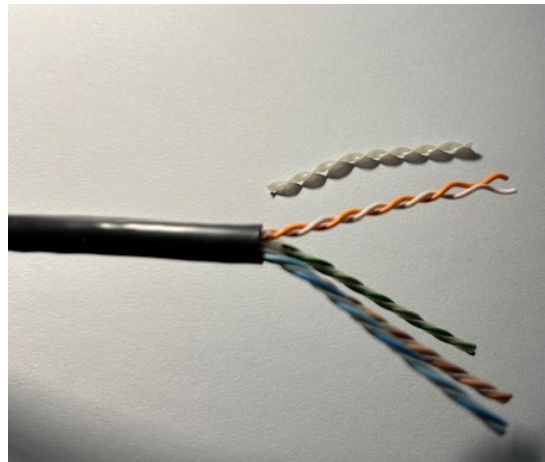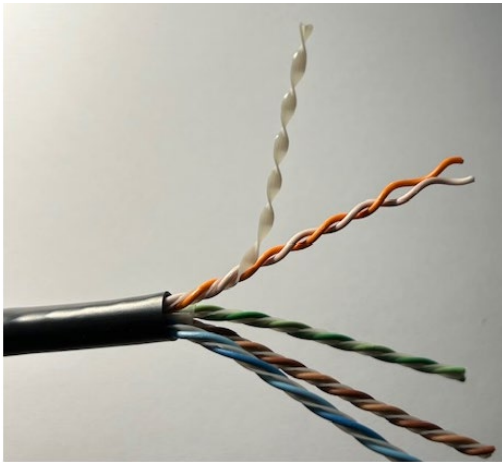

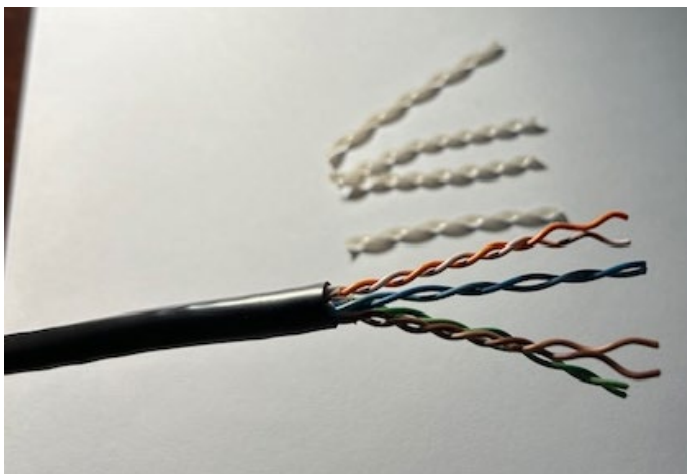1.3　Separate the twisted pairs and expose center core:
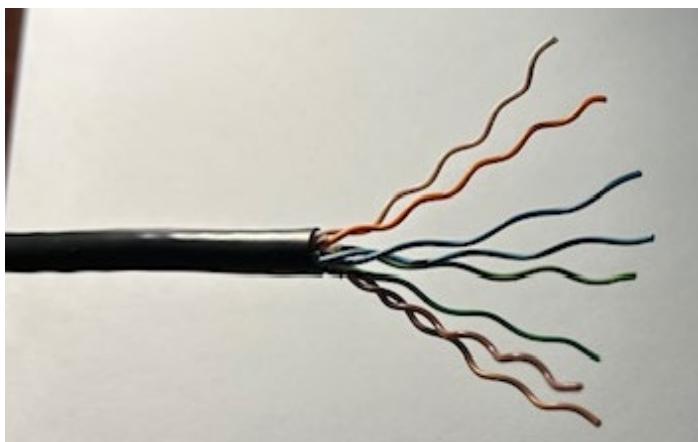

1.4　Cut center core and remove:

1.5   Locate the separator tape to expose. Clip separator tape and remove.
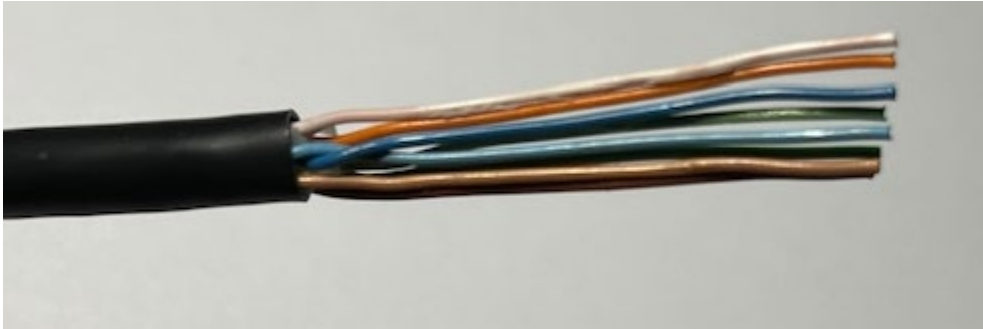

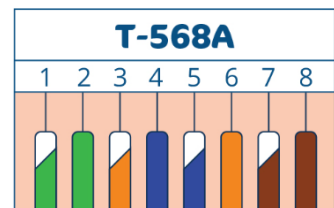1.6   Clip and remove the separator tape from all four pairs:
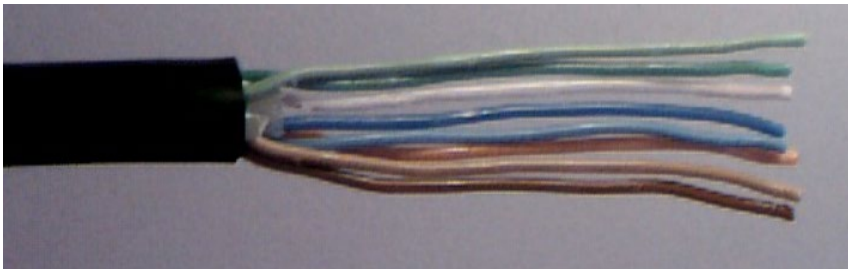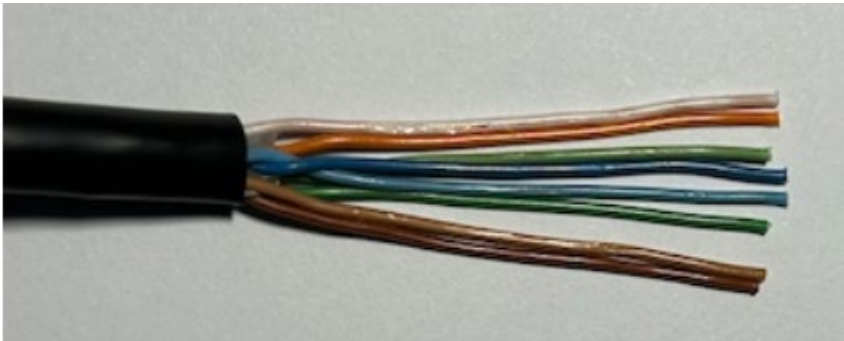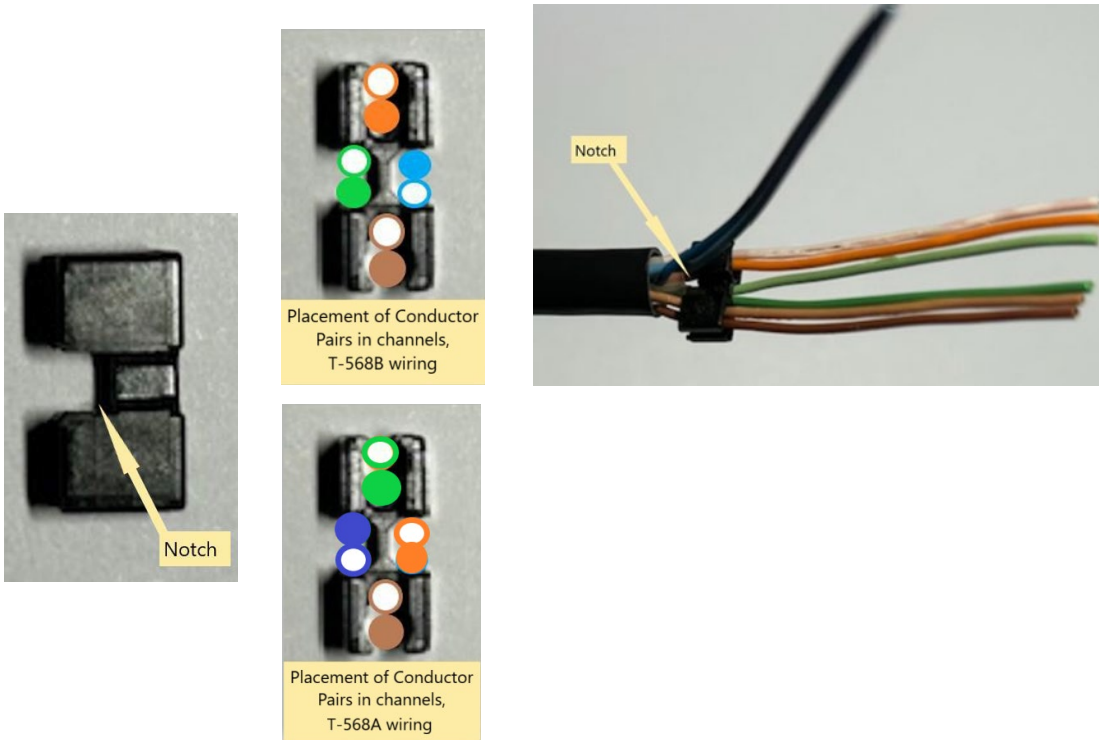

1.7   Separate the twist pairs:

1.8   Remove the twist from the conductors, making them at straight as possible.
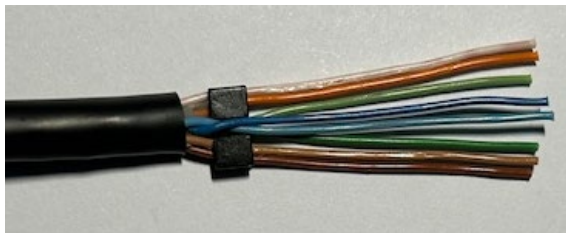

1.9   Arrange the twisted pairs in T-568B wiring pattern.
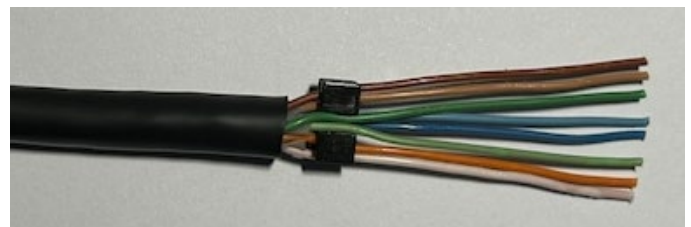(Or arrange pairs in T-568A wiring pattern if system requires):

1.10 Place the Wire Manager onto the conductors. Note the location of the "notch" on the wire manager is to be placed facing the cable. Locate each pair in their respective channels. Slide the Wire Manager as close to the cable jacket as possible:

Placement of Conductor Pairs in channels, T-568B wiring

Notch

Placement of Conductor Pairs in channels, T-568A wiring
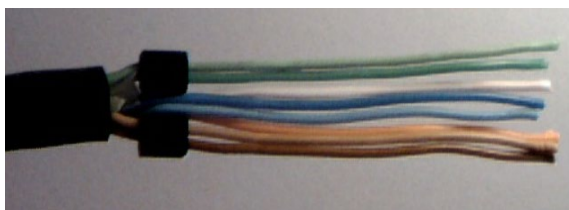
Side Views of conductors laced in the Wire Manager component:
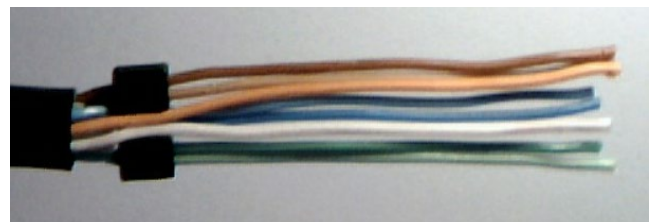

Side A view (T-568B wire)

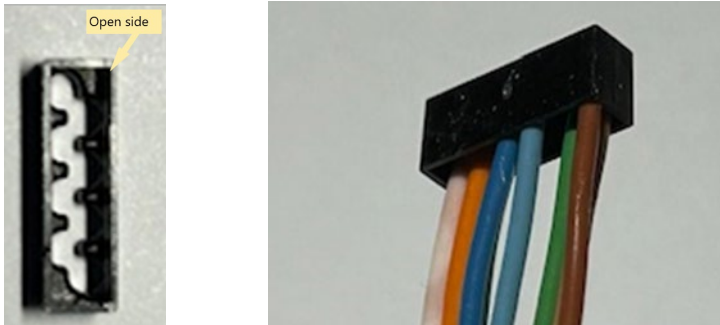Side B view (T-568B wire)

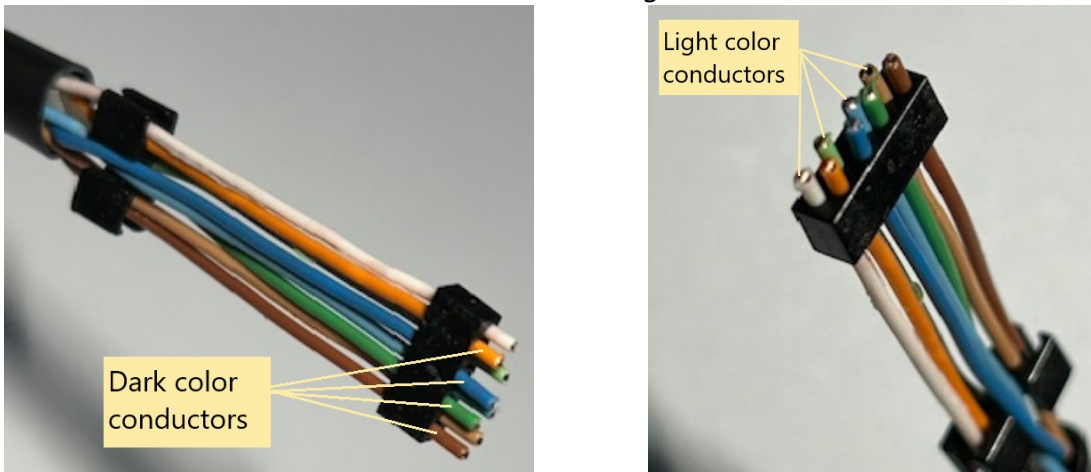Side A view (T-568A wire)

Side B view (T-568A wire)

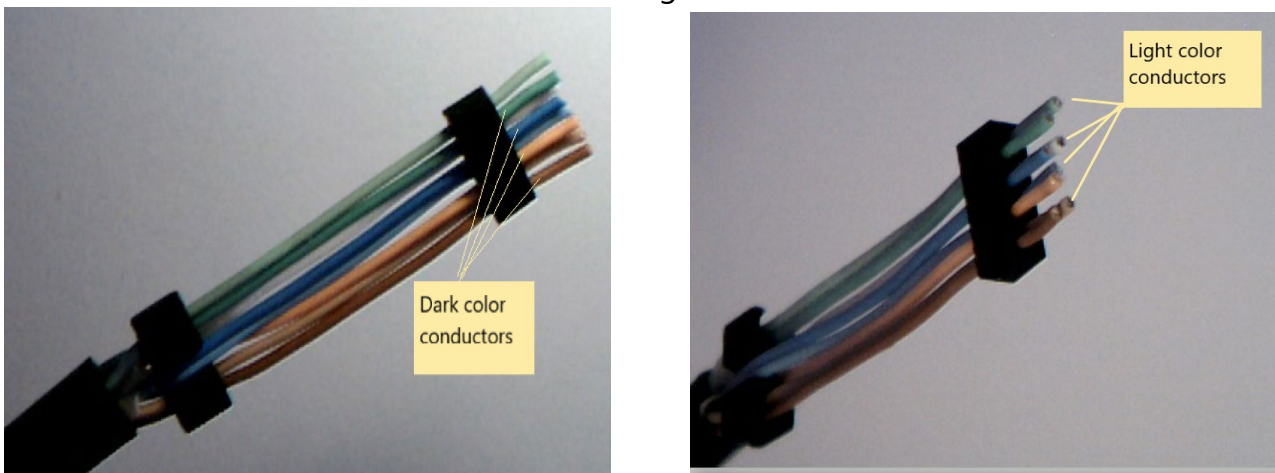1.11 Take the Load Bar and place onto the conductors in the "Open side":

1.12 Slide the Load Bar onto the conductors making certain that the dark color conductors are on one row and the light colors are on the other row of the Load Bar:
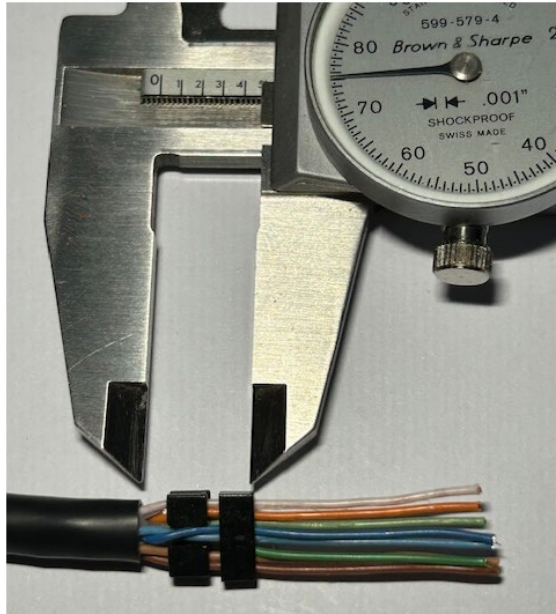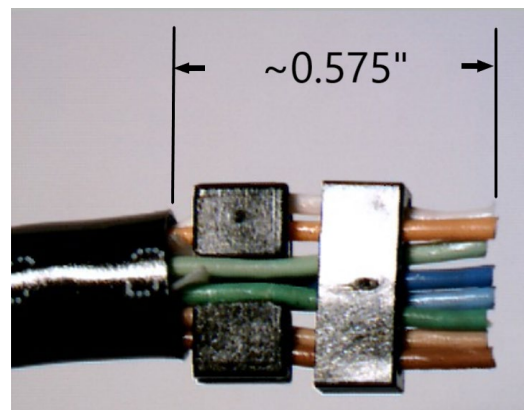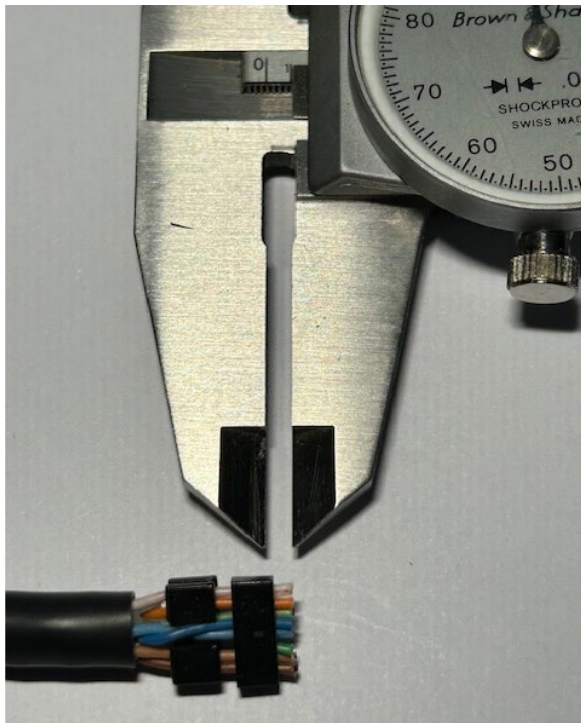
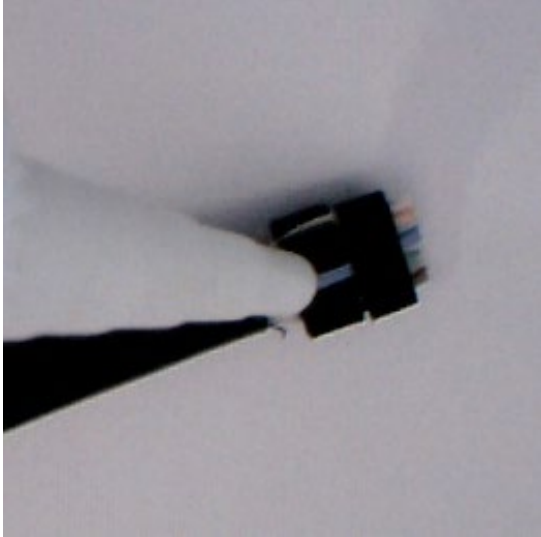T568B Wiring:

T568A Wiring:

1.13 Slide the Load Bar toward the Wire Manger and locate approximately 0.475"[12mm] from cable jacket:

1.14 Trim the ends of the conductors approximately 0.100 inches [2.54mm] from edge of the Load Bar:

~0.575"

1.15 For OSP cable containing the gel filler silicone, B-Sealant is required on both sides of the plug, apply approximately 'Pencil Eraser" size amount of sealant on both sides of cable jacket end:
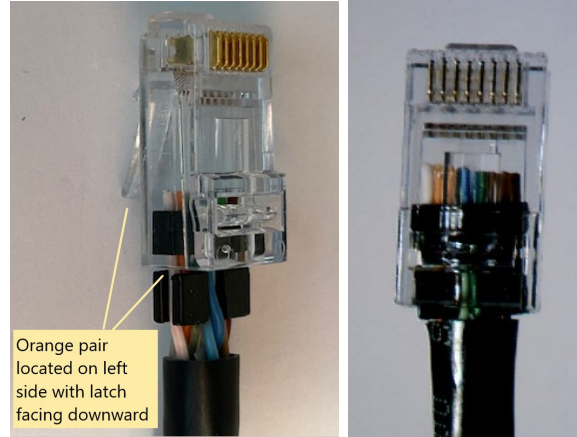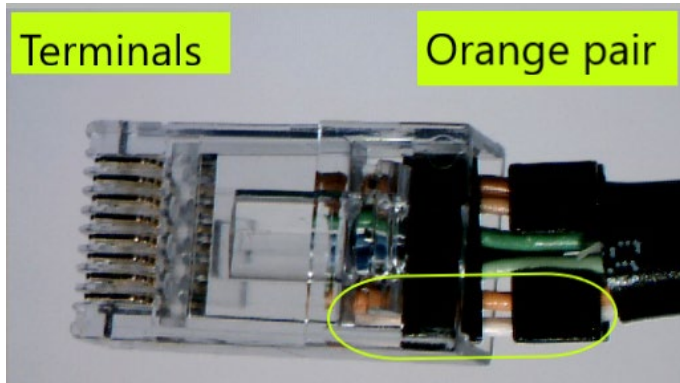

Side A

Side B

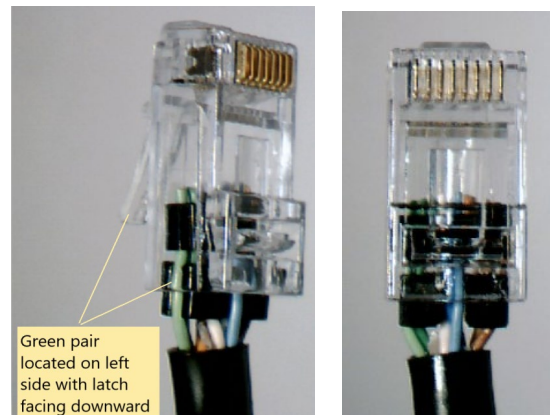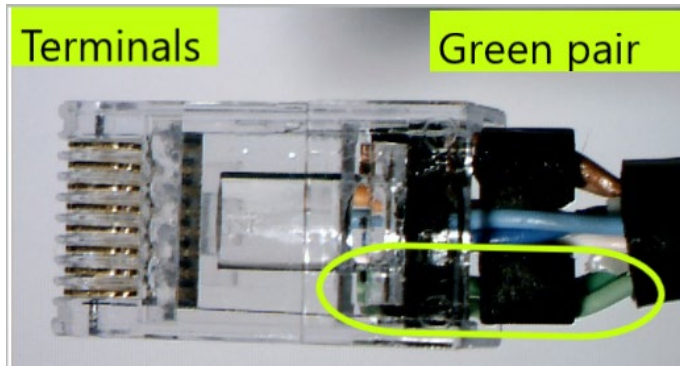1.16 Fully covered after application:

1.17 Insert the prepared conductors into plug. Make certain to align the cable with Orange pair to left as the plug latch is facing downward:
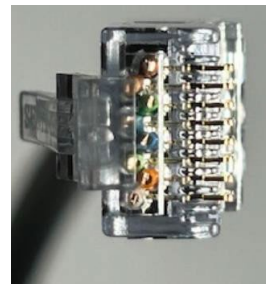
T-568B wiring

Terminals   Orange pair

Orange pair located on left side with latch facing downward

T-568A wiring

Terminals   Green pair

Green pair located on left side with latch facing downward

1.18 Fully insert the cable into the plug assembly making certain the copper ends are against the inside of the plug:

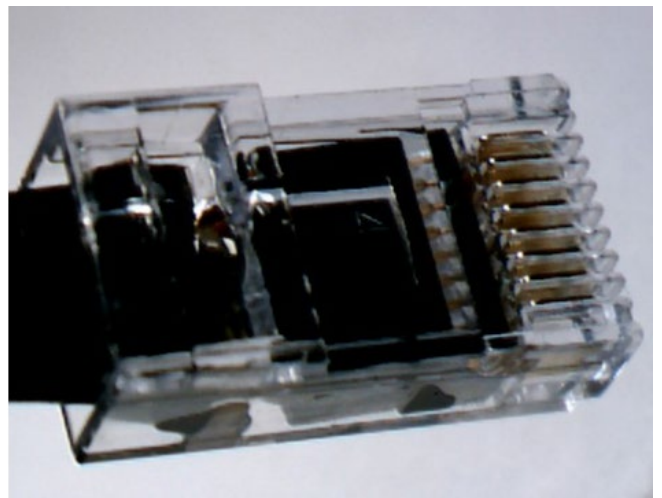Fully inserted   Copper ends of conductors fully inserted
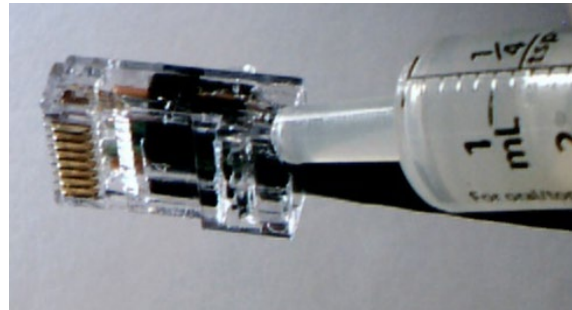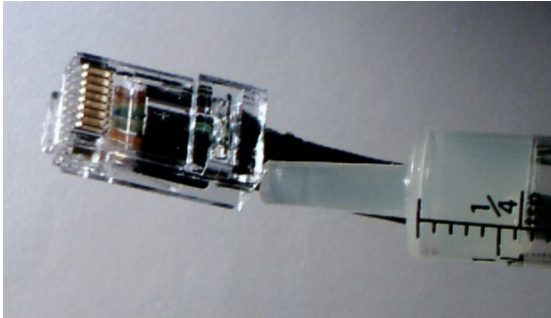
Step 3 – Termination of plug
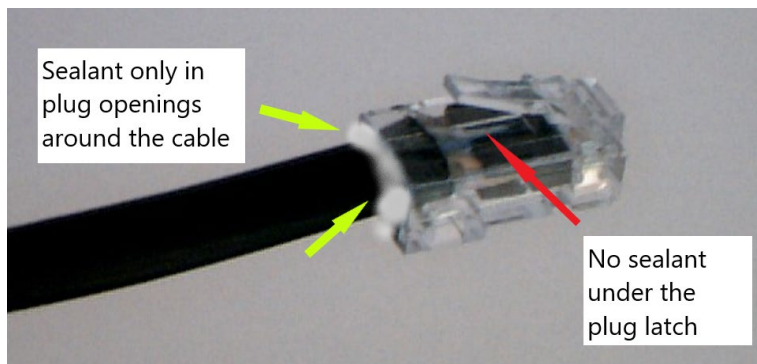
3.1   Insert into Crimp tool and actuate tool:

3.2   Remove plug from hand tool and make certain all eight (8) terminals are seated:

3.3 For OSP cable only, insert B-sealant (700010911) liberally into all openings around the back of plug cavity:

Make certain no sealant is under the plug latch:

Sealant only in plug openings around the cable

No sealant under the plug latch

3.4 Slide the Boot until the anti-snag feature covers the end of the latch (where applicable):

4. Revision history

- Rev. A – Initial release.
- Rev. B – Add OSP cable and T-568A wiring scheme.
- Rev. C – List applicable cables in section 1, General product information

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