

Shielded Ceiling Connector Assembly Installation

860656301

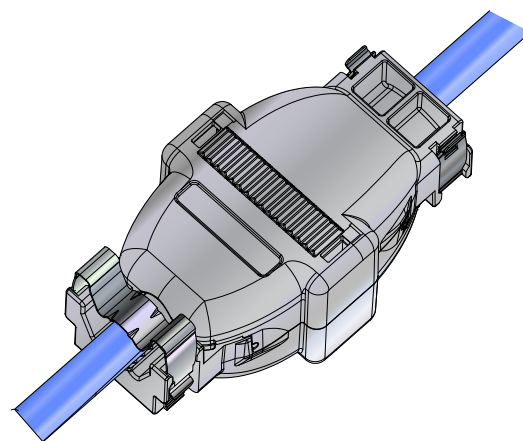
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General

These instructions provide the installation procedure for the Shielded Ceiling Connector (760250028, Package of 5) and cable assemblies incorporating the Shielded Ceiling Connector Assembly. See the **CommScope** Product Catalog for available cord configurations.

The Ceiling Connector is a straight through wired connector. Be sure to confirm end connections have the same wiring configurations before termination, i.e. TIA 568B or TIA 568A wiring.



**Shielded
Ceiling Connector**

How to Contact Us

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- For technical assistance, customer service, or to report any missing/damaged parts, visit us at <http://www.commscope.com/SupportCenter>

Tools Required

- Cable jacket scoring tool (such as Xcelite® 2CSKY or JOKARI® No.1-Cat)
- Flush-cutting wire cutters (such as Xcelite MS545JV)
- Tongue-and-groove pliers (optional)
- Flat-blade screwdriver (only required for removal)

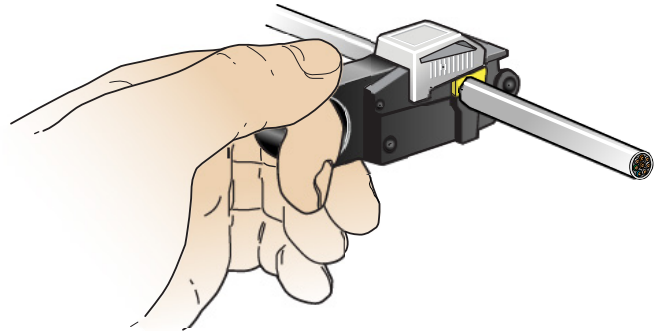
Parts List

Verify parts against the parts list below:

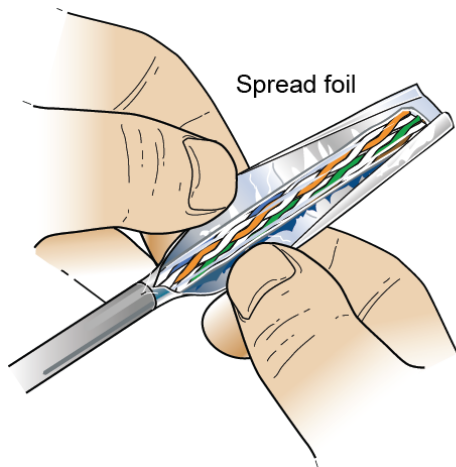
Quantity	Description
1	Ceiling connector housing assembly
2	Ceiling connector cap (one pre-installed in cable assemblies)
2	Ceiling Connector Shield
2	Contact Spring

Preparation of F/UTP and F/FTP Cables for Termination

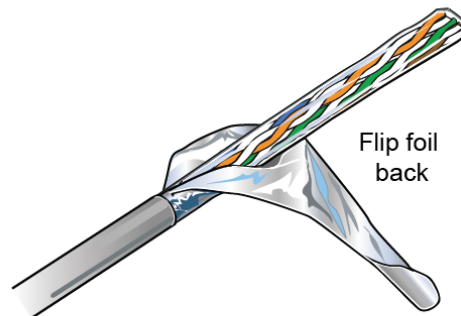
1. Score cable jacket approximately 75 mm (3 inches) from the cable end using a precision jacket scoring tool that has fine adjustment settings, such as the **Xcelite 2CSKY** (shown) or **JOKARI No.1-Cat**.



2. Carefully spread foil from around twisted pairs and flip opened foil back over cable jacket.

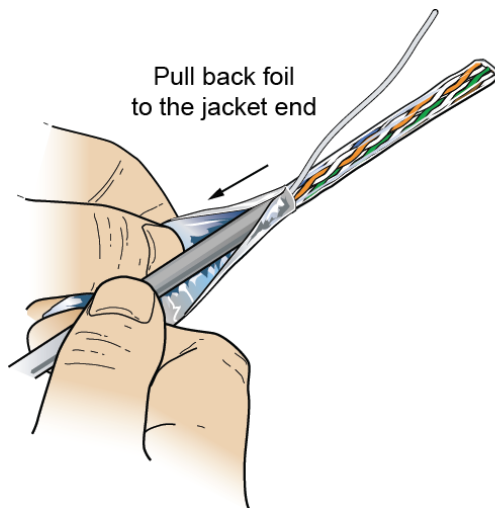


Spread foil

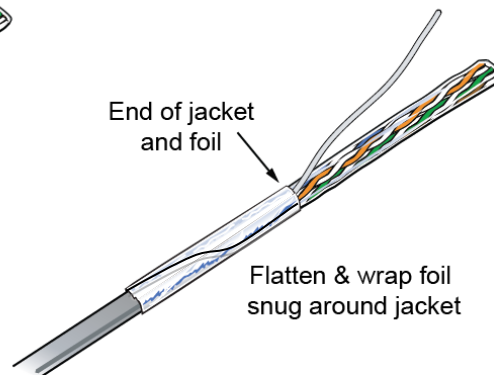


Flip foil back

3. Leaving drain wire extended, pull foil back over cable jacket, then flatten it and wrap snug around jacket. If necessary, twist foil slightly around cable to get complete coverage around the cable jacket. **Ensure that the foil is not cut or damaged.**

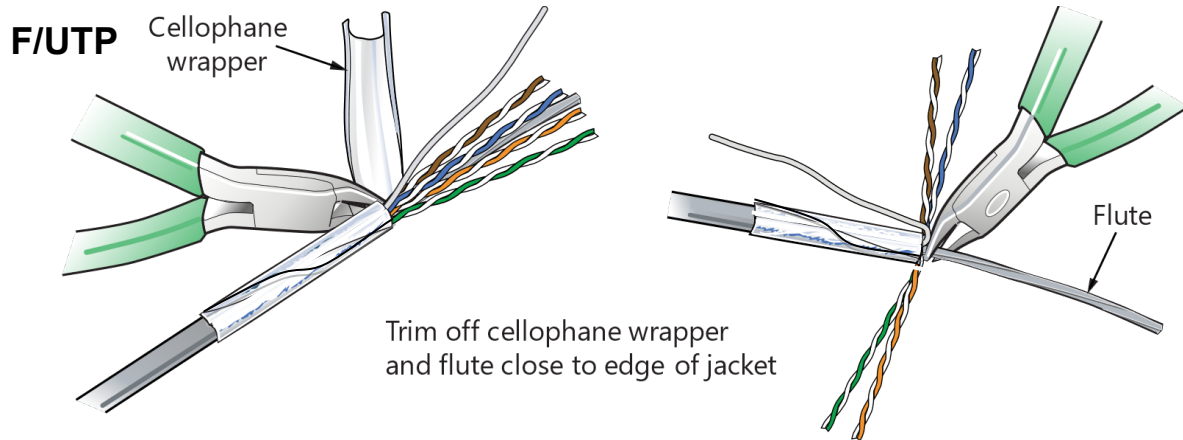


Pull back foil to the jacket end



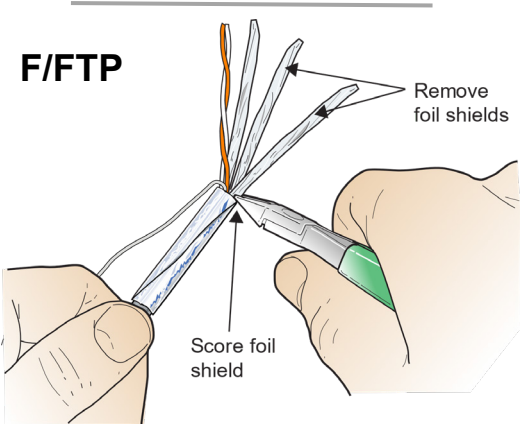
End of jacket and foil

Flatten & wrap foil snug around jacket



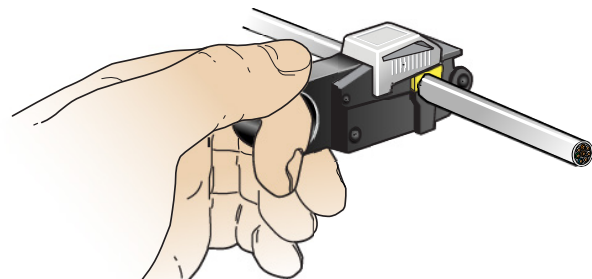
4. For F/UTP cables, using a flush cutting, tapered head wire cutter (such as **Xcelite MS545JV**), trim off clear cellophane wrapping and then separate pairs to trim off flute close to edge of cable jacket.

For F/FTP cables, remove foil shield from each pair. Foil shields may be removed by nicking each one with side cutters (shown) or scoring with a suitable stripping tool. **Ensure that the conductor insulation is not damaged.**

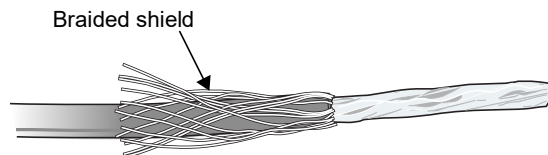


Preparation of S/FTP Cable for Termination

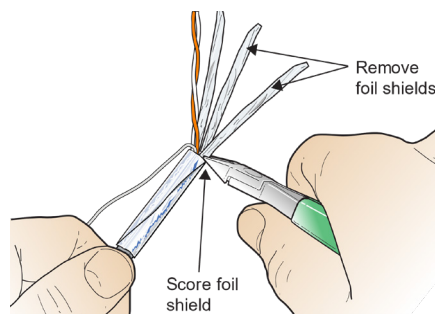
1. Score cable jacket using a precision jacket scoring tool that has fine adjustment settings, such as the **Xcelite 2CSKY** (shown) or **JOKARI No.1-Cat**.



2. Push braided shield straight back and fold it over cable jacket.

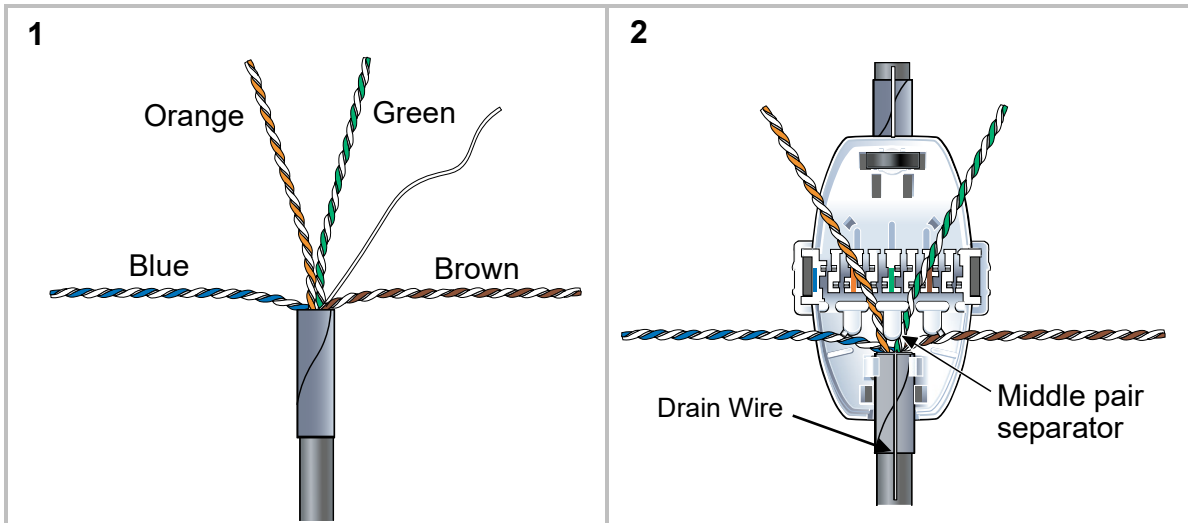


3. Remove the foil shields from each pair. Foil shields may be removed by nicking each one with side cutters (shown) or scoring with a suitable stripping tool. **Ensure that the conductor insulation is not damaged.**



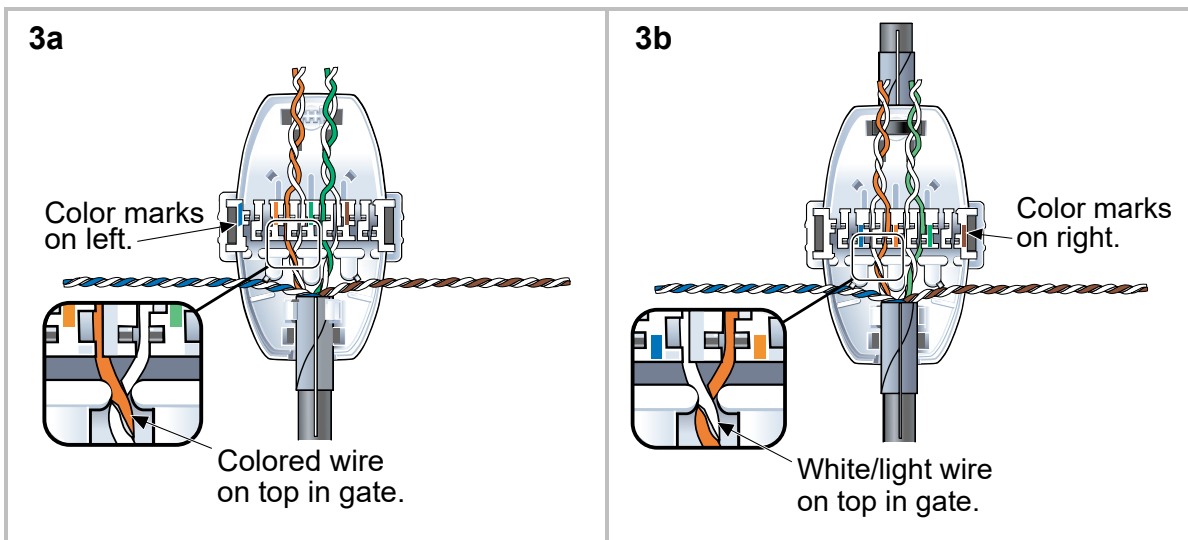
Cable Termination

1. Arrange the wires in order – BLUE, ORANGE, GREEN, BROWN – with the blue and brown pairs bent 90° in opposite directions, as shown in image 1, below.
2. Orient cable with connector. For FTP cables fold drain wire back on top of cable over foil. Insert the cable into the connector and push it tight against the middle pair separator, shown in image 2



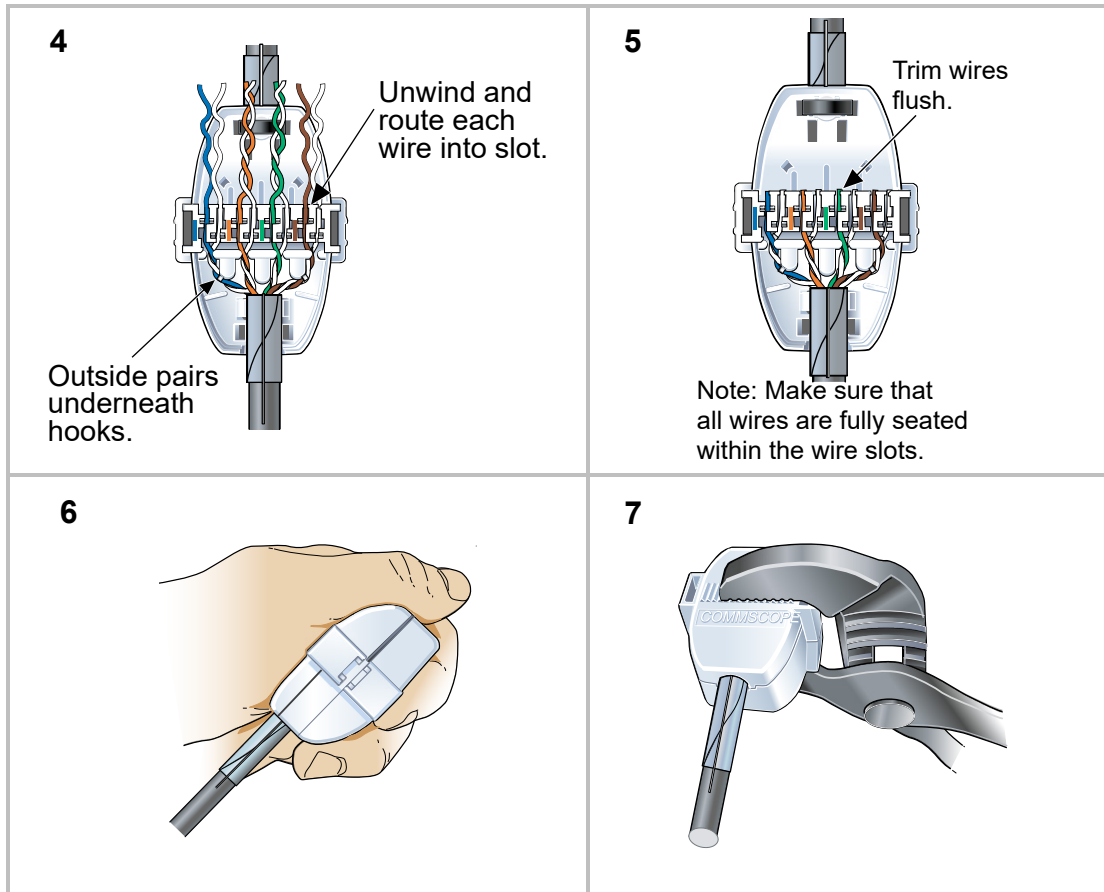
3. Add twist to each pair so that the proper wire is on top over the pair gate and place it into the gate.

IMPORTANT: The two sides of the connector are color marked differently. The colored wire must be on top in the gate with the color markings positioned to the left as shown in 3a. On the side with the color markings positioned to the right (3b), the white/light wire must be on top in the gate.



Note: For cables with larger 22 AWG wires, the wire pairs may need to be untwist past the gate and each wire laid into the vertical gate one at a time.

- Unwind and route each wire into its respective slot (colored wire by color marking), pulling the wire underneath the retention barbs at the end of each slot. Start with the center pairs and keep the cable tight against the middle pair separator. Route the outside pairs underneath the hooks as shown in image 4.
- Trim wires flush with the end of the wire slots, image 5.

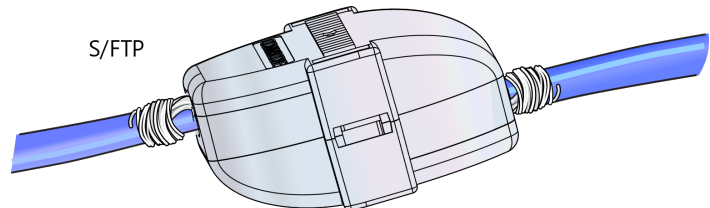
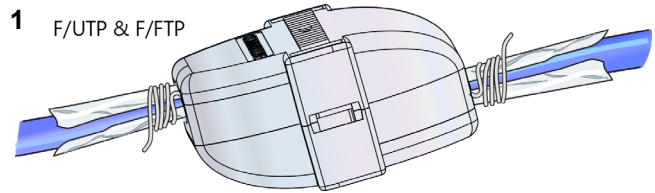


- Install a cap over the wires and squeeze it lightly to partially seat the wires.
Note: Repeat steps 1-6 to terminate the other side of the connector, if necessary.
- Squeeze the caps to engage retention snaps on both sides of each cap as shown in image 7. This may be done by hand or with tongue-and-groove pliers. If using pliers, squeeze along the ribbed surface.

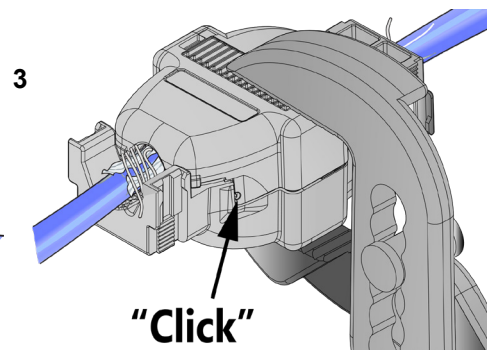
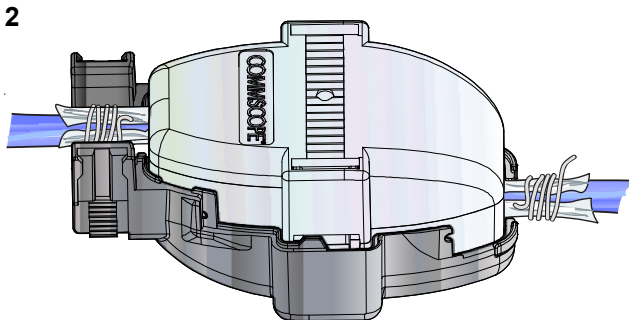
Shield Assembly

1. For F/UTP and F/FTP cables, wrap drain wire around cable jacket and foil shielding. Start wrap approximately 5 mm (3/16 inch) from end of Ceiling Connector and stop wrap 13 mm (1/2 inch) from end of CCA connector. **Do not overlap drain wire when wrapping.**

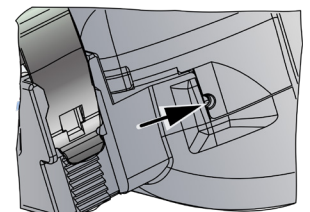
For S/FTP cables, twist and bunch up braiding around cable from as it exits the Ceiling Connector to approximately 13mm (1/2 inch) length.



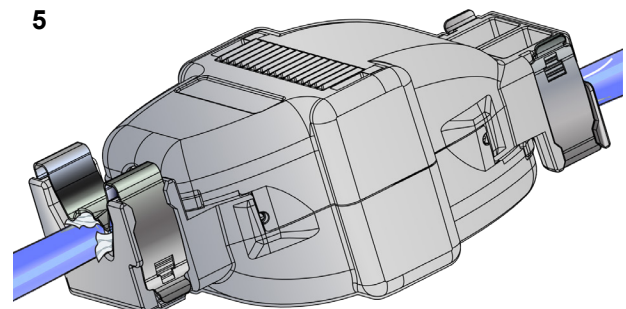
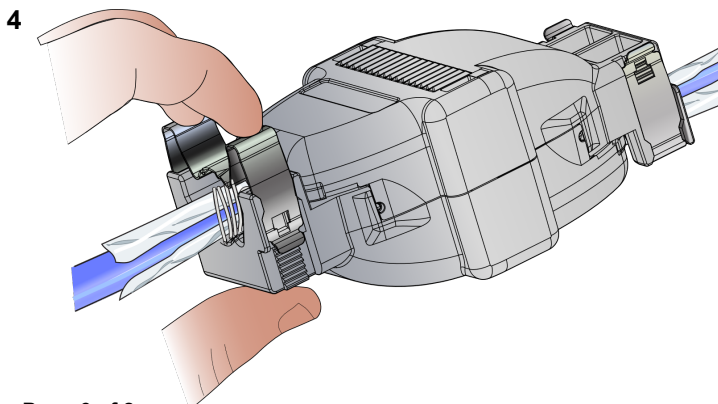
2. Place terminated Ceiling Connector in one of the die cast shield halves.
3. Assemble the second shield half around the Ceiling Connector and snap the two shield halves together. This may be done by hand or tongue-and-groove pliers. **Be sure the shields are fully seated.** There will be an audible click at assembly. Shields will be flush to each other and dimple features will latch into half round openings in all four corners of the shields.



4. Assemble ratcheting contact springs into ratchet slots on either end of shield. Seat contacts tight against cable by hand, clamping foil/drain wire or braiding.
5. For F/UTP and F/FTP cables remove excess foil and drain wire behind contact spring with wire cutters.



Dimple seated in latch



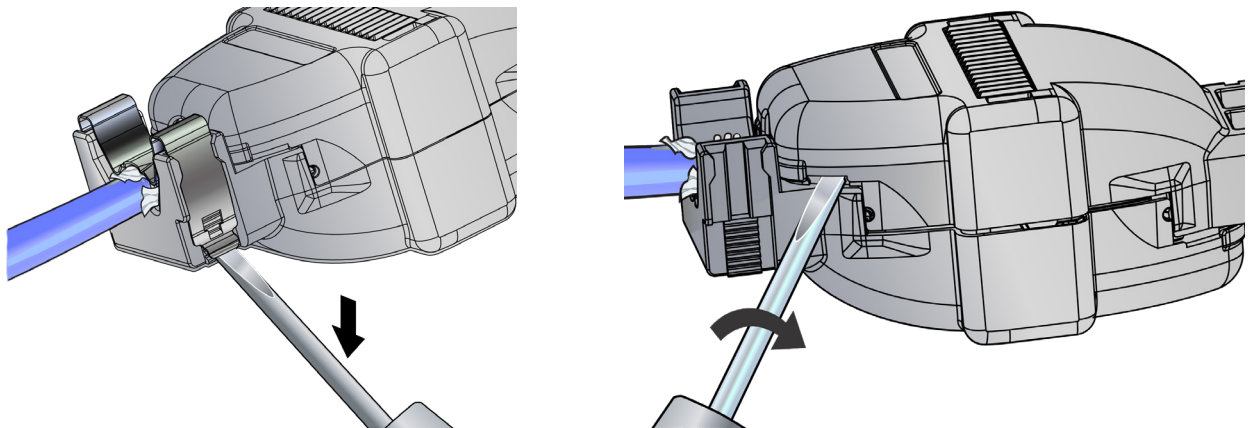
Mount the Connector (Optional)

The shielded ceiling connector can be mounted to nearby objects with a cable tie (not included) inserted through the tunnels on either side of the connector. Multiple connectors can also be tied together side-by-side.

Note: Avoid mounting the connector with constant or steady tension on the attached cables.

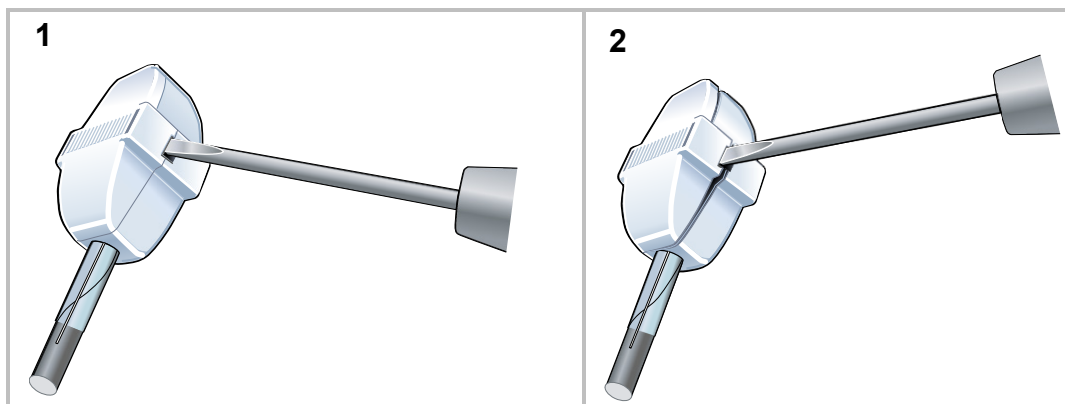
Shield Removal

1. Release each side of contact spring from ratchet and push contact out of ratchet slots. Remove spring contacts from both ends of shield.
2. Place head of flat screw driver in one of the four corner slots between the two shield halves. Turn screwdriver to release shield latching at that corner. Repeat in the other three corner slots to fully separate shield halves.



Cap Removal

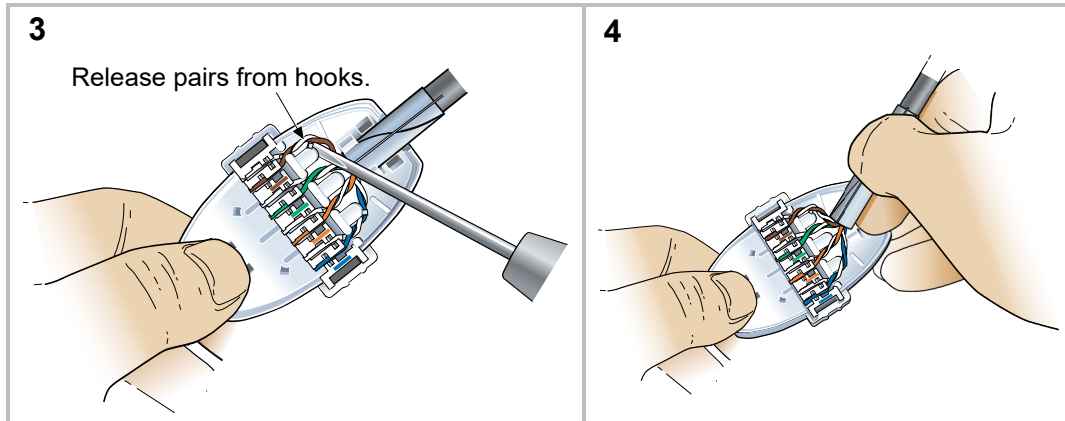
1. To remove a cap, insert screwdriver at a 45° angle, as shown in image 1, and rotate the handle upwards. Repeat to unlatch the opposite side and remove the cap as shown in image 2.



Remove a Terminated Cable

2. Remove the cap as in Step 1 above.

3. Use a small screwdriver or other suitable tool to pull the outside pairs out from underneath the small hooks on the pair separators, as shown in image 3.
4. Rock the cable up and down to pull the wires out of the IDC terminals, image 4.



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