

# In-Line / T-Splice Kit Installation Instructions

## Terminator ZS-L

for use with RSX, TSX, VSX self-regulating heating cables

## Terminator ZS-S

for use with BSX\*, HTSX, KSX self-regulating, HPT power-limiting,  
and FP constant watt heating cables



For In-Line Splice Connection or T-Splice Connection Applications

\* BSX self-regulating heating cables may also be used with Terminator ZS-L






Item	Qty	Description
1	1	<b>Splice Cap</b>
2	1	<b>Expediter Assembly</b> Grommet Compressor Grommet Support Base w/ O-ring
3	1	<b>Banding</b>
4	1	<b>Banding Guide</b>
5	1	<b>RTV Tube</b>
6	3	<b>Splice Connection Boots</b>
7	2	<b>Small Crimps</b>
8	1	<b>Large Crimp</b>
9	2	<b>Small Crimp Insulators</b>
10	2	<b>Silicone Caps</b>
11	3	<b>Ground Sleeves</b>

Tools Required



Ideal 30-429 Crimp Tool  
(or factory approved alternate crimping tool)

Certifications/Approvals

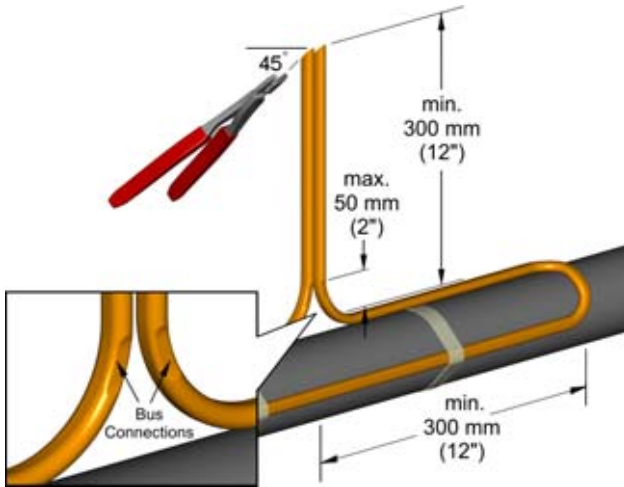
-  IP66 NEMA/Type 4X -60°C ≤ Ta ≤ +55°C  
Listed Heat Tracing Cable System 137M  
Ordinary & Hazardous Locations
-  Class I, Division 2, Groups A, B, C & D  
Class II, Division 2, Groups F & G, Class III
-  Class I, Zone 1, AEx e II T4-T6  
Ex e II T4-T6
-  0539  II 2 G & D Ex e II T4-T6 DEMKO 01ATEX0021995

Warnings

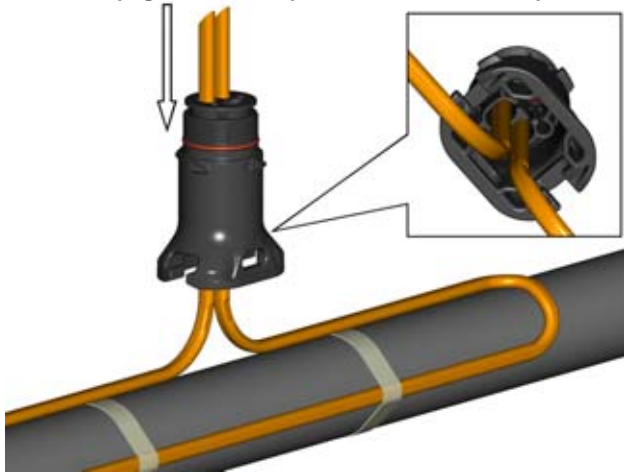
- Due to the risk of electrical shock, arcing and fire caused by product damage or improper usage, installation or maintenance, a ground-fault protection device is required.
- Installation must comply with Thermon requirements and be installed in accordance with the NEC, CEC, or any other applicable national and local codes.



- Component approvals and performance ratings are based on the use of Thermon specified parts only.
- De-energize all power sources before opening enclosure.
- Keep ends of heating cable and kit components dry before and during installation.



1. Locate bus connection (HPT and FP only) and cable as shown. Cut end of cable at angle to aid in piercing grommet. Leave additional cable for expansion loop. See page 8 for multiple cable installation tips.



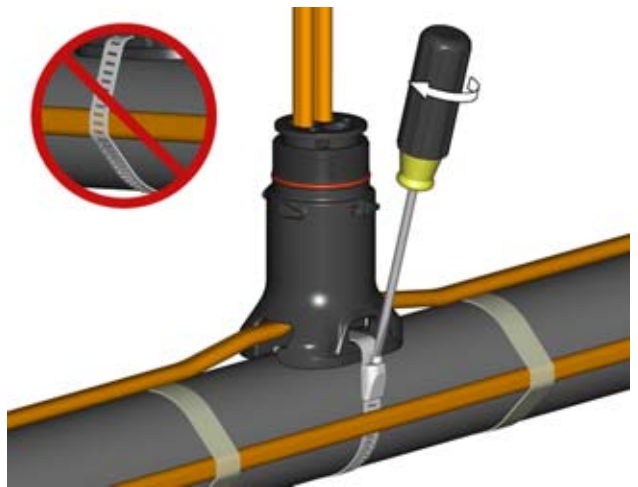
2. Insert cable into expediter. If mounted on bottom of pipe, punch out weep hole.



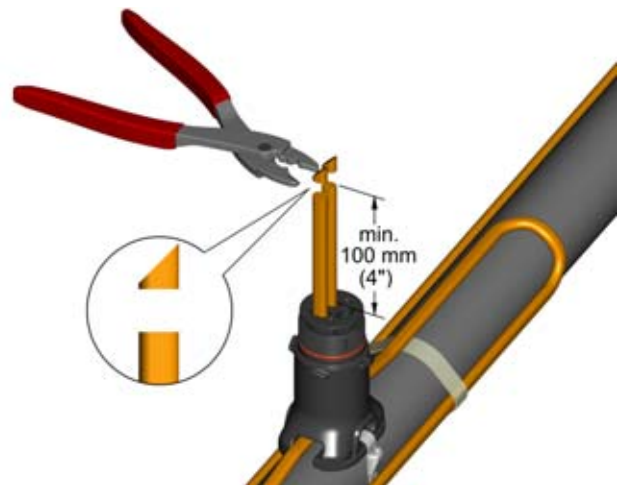
3. Slide expediter toward pipe and route cable through support base entry.



4. Insert banding guide into expediter and snap into place.



5. Mount expediter to pipe using pipe band. Do not band over cable.



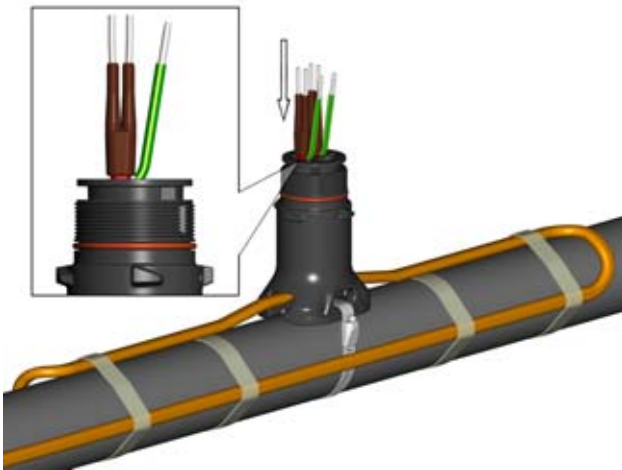
6. Cut off end of cable.



7. Terminate cable using cable termination (for BSX, HTSX, KSX, RSX, TSX, and VSX) on pages 9-12 or cable termination (for HPT and FP) on pages 13-16.



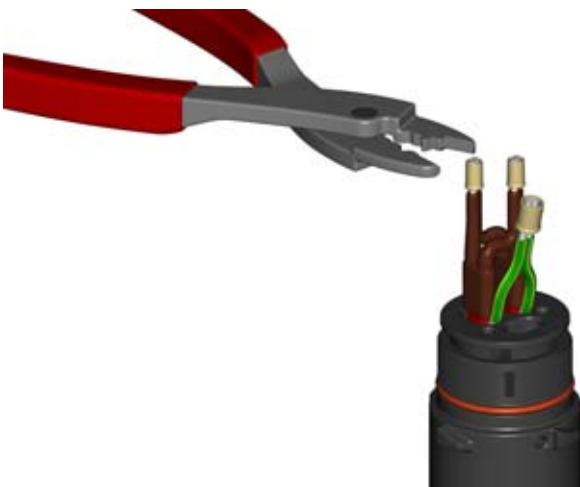
10. Snap on crimp insulators.



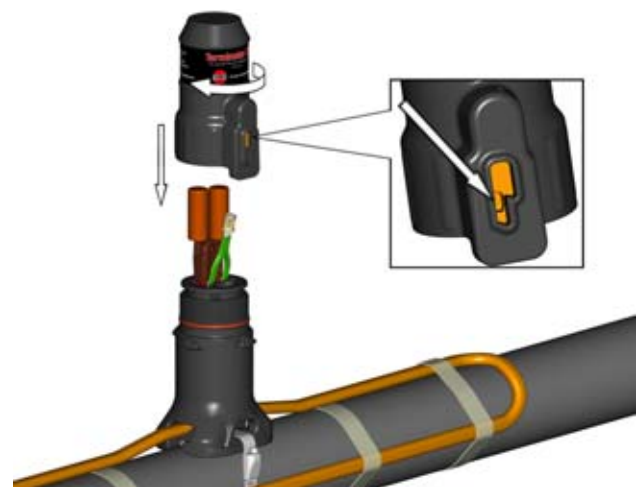
8. Push excess cable back through expediter.



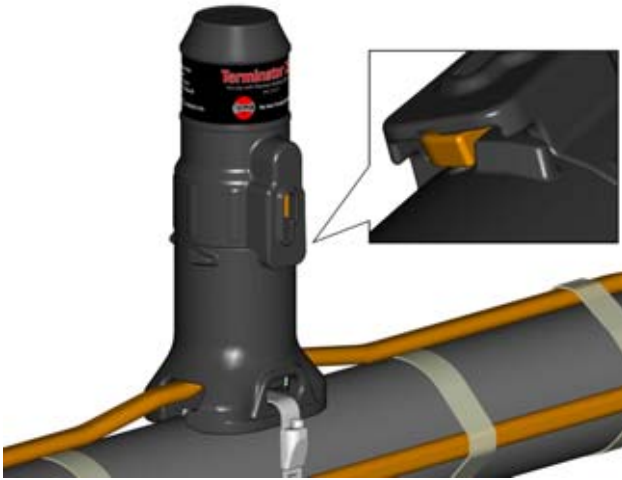
11. Slide silicone caps over crimp insulators.



9. Connect bus wires using small crimps and connect ground wires using large crimp. See page 18 for wiring details. Trim excess wire if necessary.



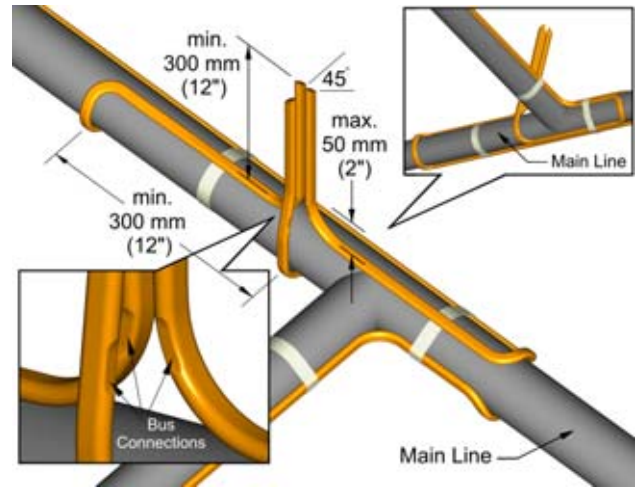
12. Tighten cap securely.



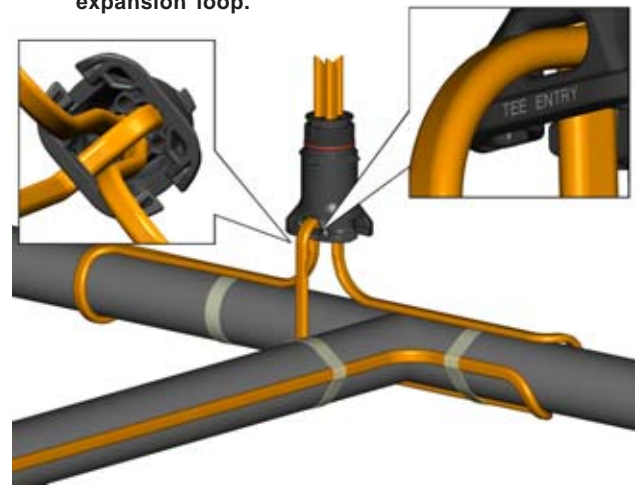
13. Completed splice/tee kit. Make sure latch mechanism is in the locked position.



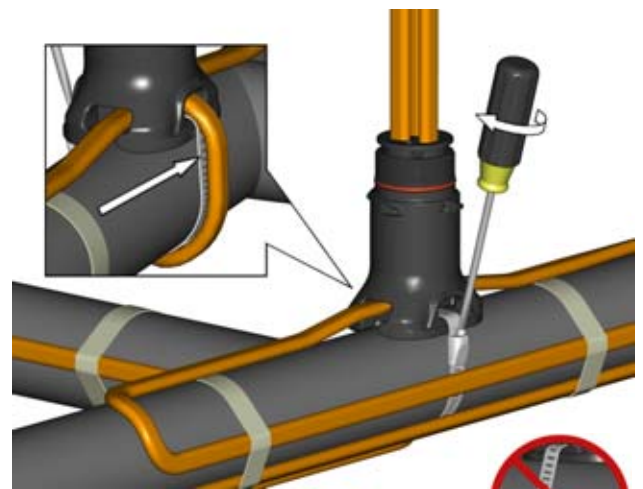
14. To remove cap, lift latch mechanism and unscrew cap.



A1. Locate bus connection (HPT and FP only) and cable as shown. Cut end of cable at angle to aid in piercing grommet. Leave additional cable for expansion loop.

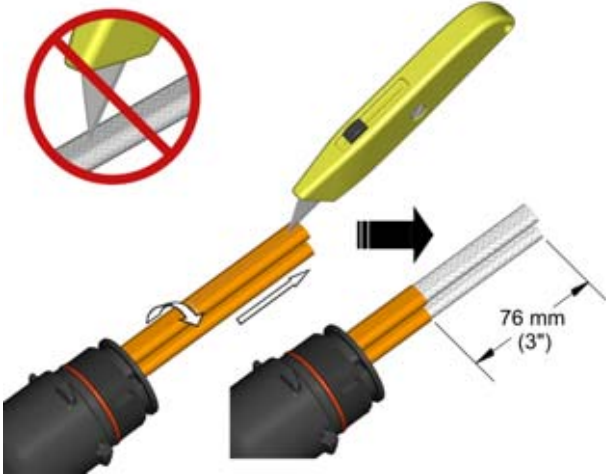


A2. Insert three cables into expediter.

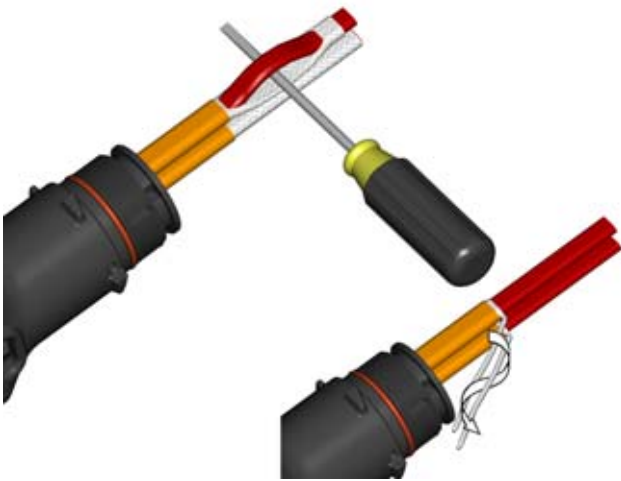


A3. Mount expediter with three cables. Do not band over cable.

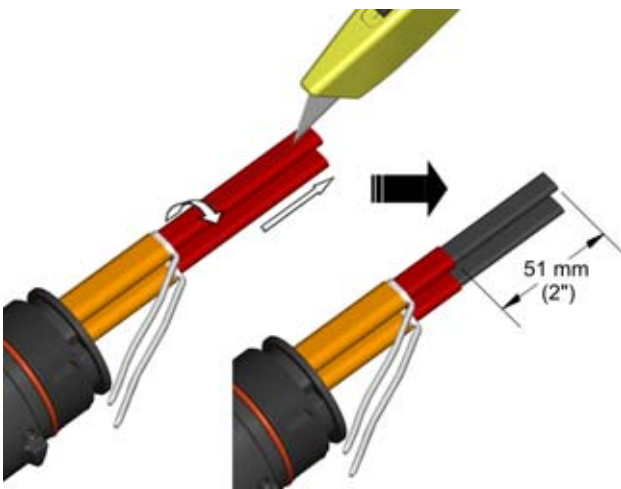




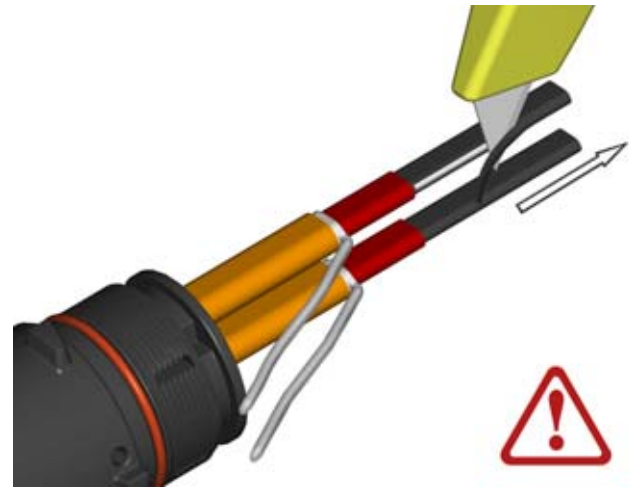
**B1.** Cut and remove overjacket. Do not cut metallic braid.



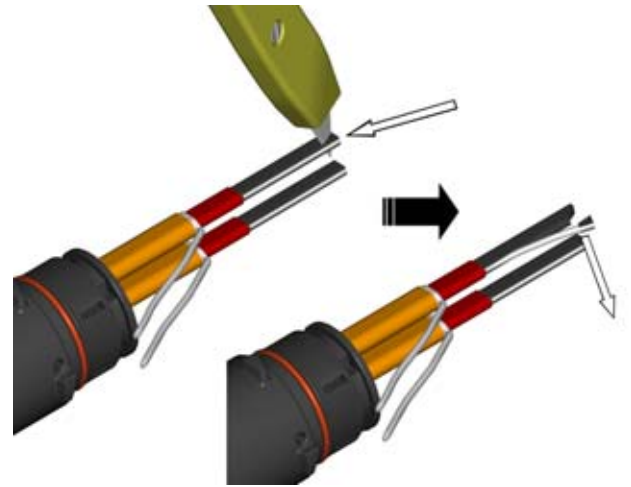
**B2.** Separate braid strands at edge of overjacket and pull cable through opening in braid. Twist braid into a pigtail. Trim ends of braid.



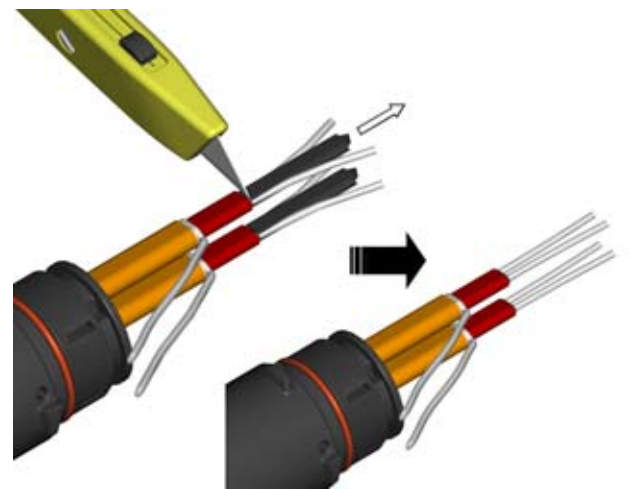
**B3.** Cut and remove primary insulation jacket. Omit this step for KSX, HTSX, and VSX cables.



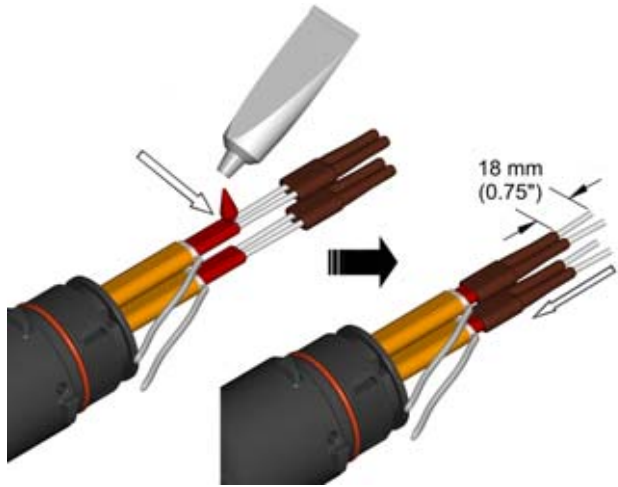
**B4.** Skive outside edges of black matrix. Do not cut bus wire strands. See page 17 for TSX cable matrix removal tips.



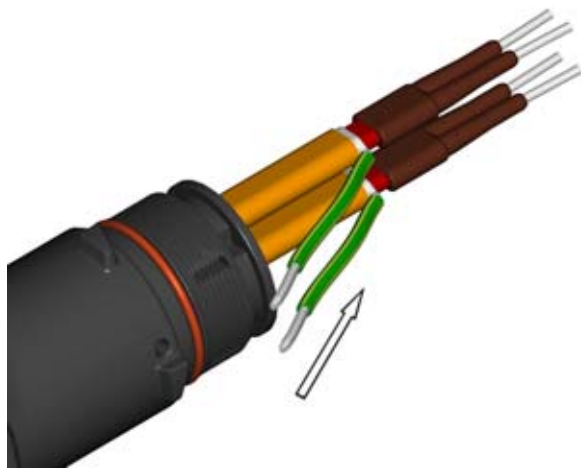
**B5.** Cut V-notch in matrix and pull bus wires from matrix.



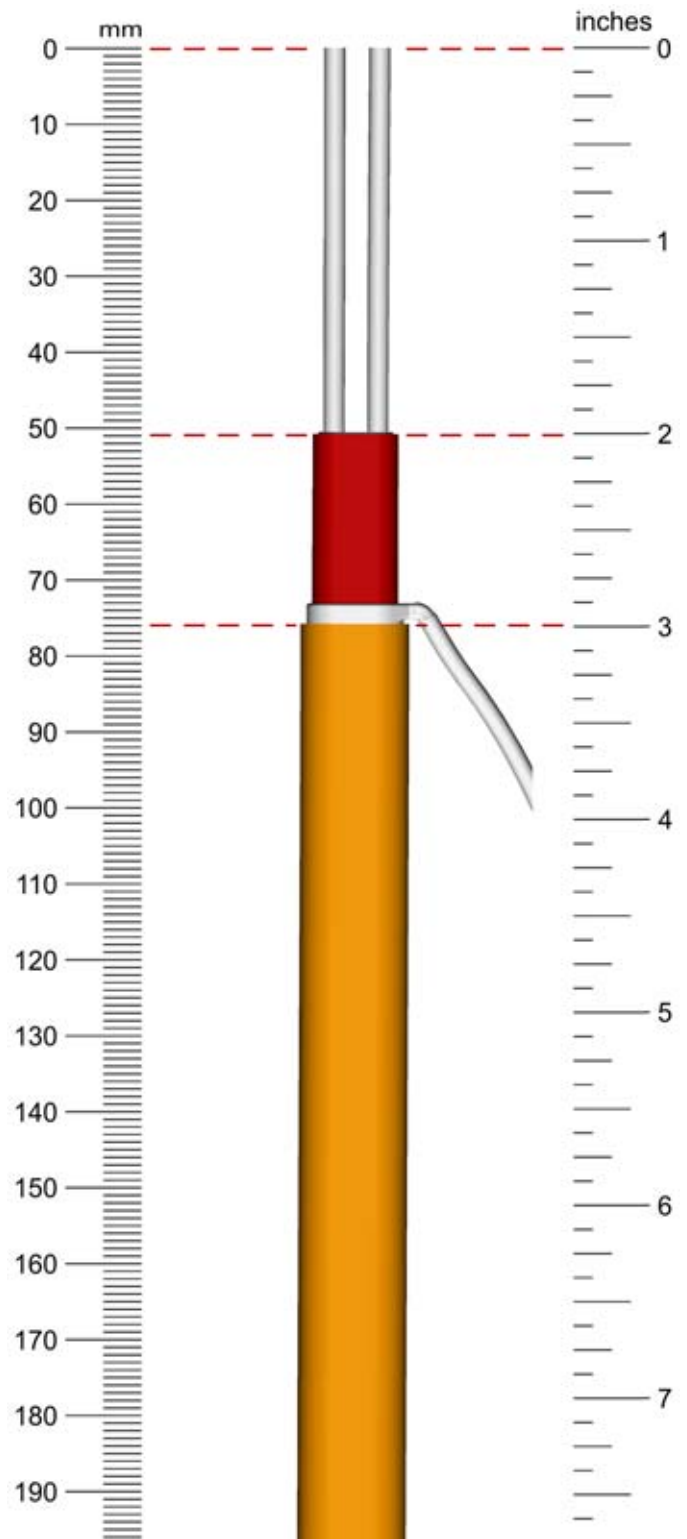
**B6.** Cut and remove remaining center core of matrix.



**B7.** Apply a liberal amount of RTV sealant to cable. Slide boot onto the end of the cable.

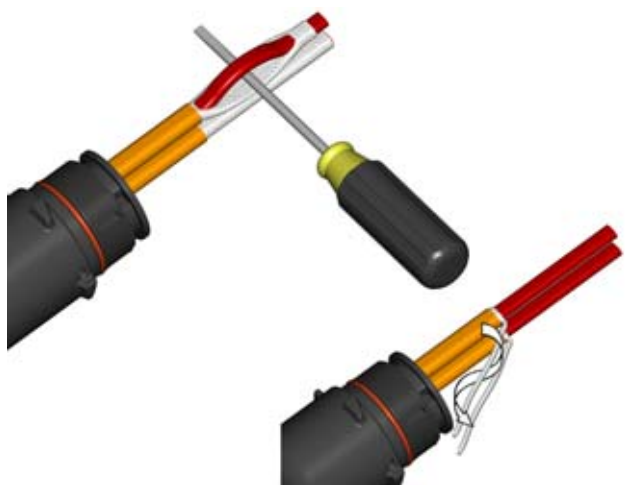


**B8.** Slide green/yellow ground sleeve over twisted braid.

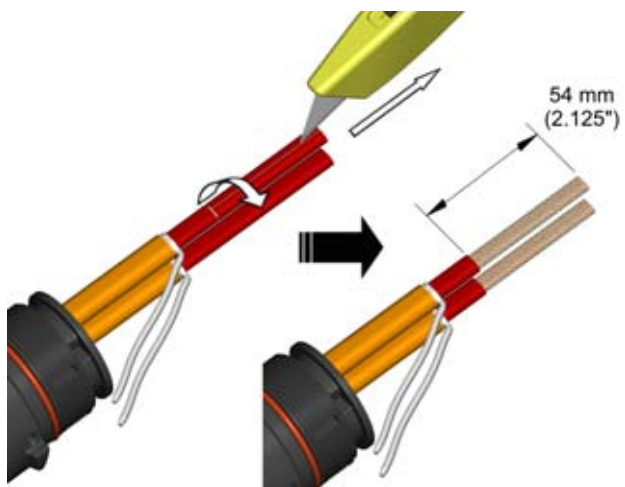




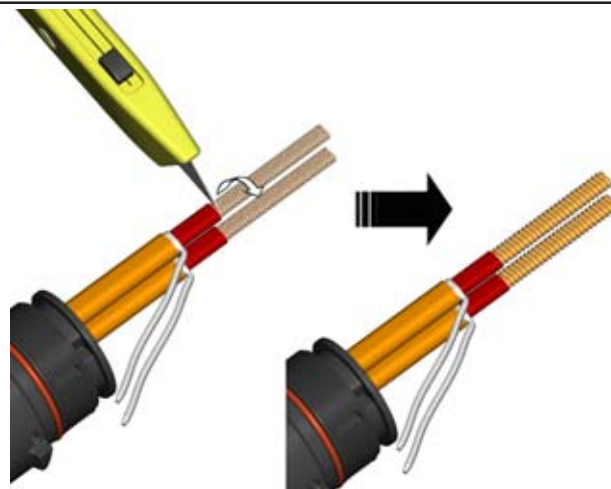
C1. Cut and remove overjacket. Do not cut metallic braid.



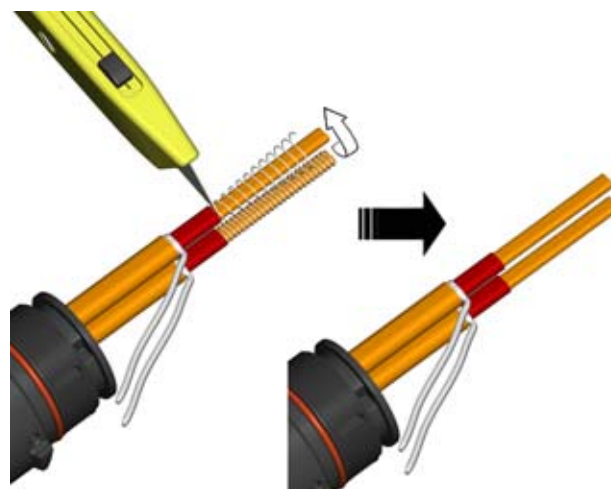
C2. Separate braid strands at edge of overjacket and pull cable through opening in braid. Twist braid into a pigtail. Trim ends of braid.



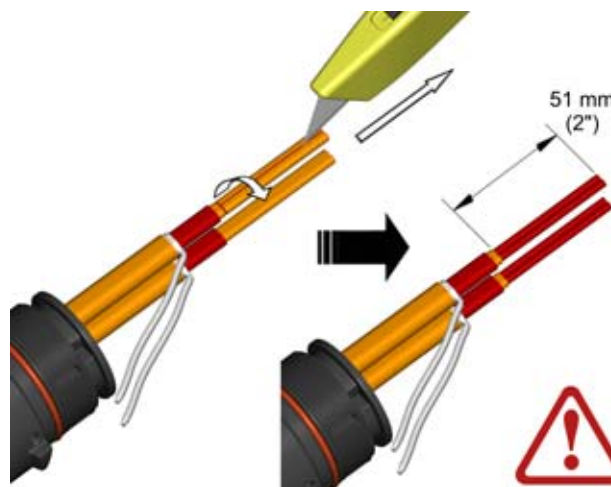
C3. Cut and remove primary insulation jacket.



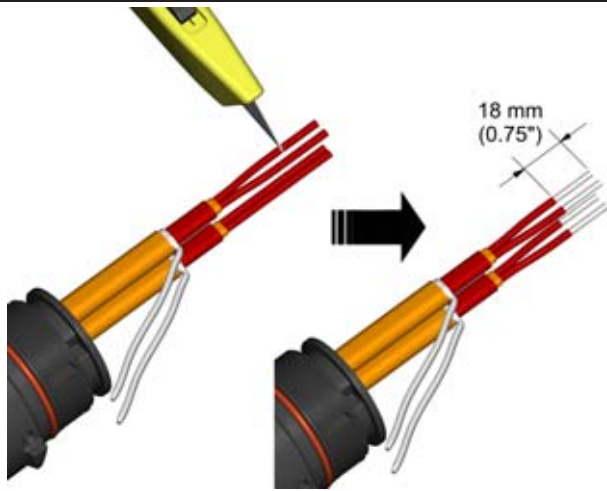
C4. Cut and remove fiberglass braid. Omit this step for FP cable.



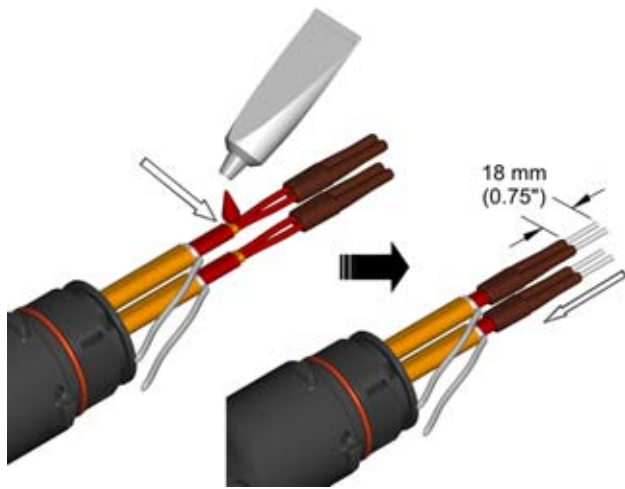
C5. Cut and remove heating element and fiberglass overlay (FP cable only). Push any remaining heating element wire under the primary insulation jacket.



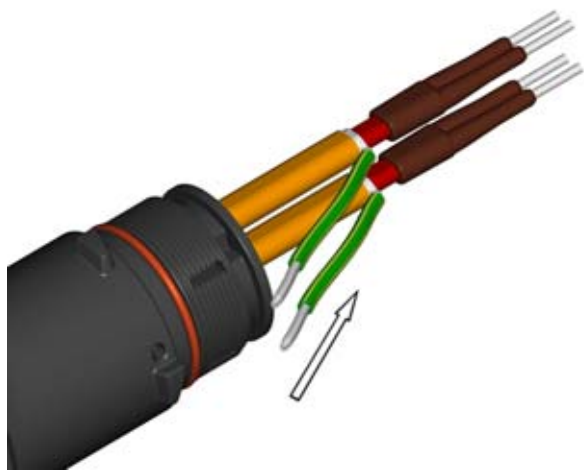
C6. Cut and remove pairing jacket. Do not cut bus wire insulation.



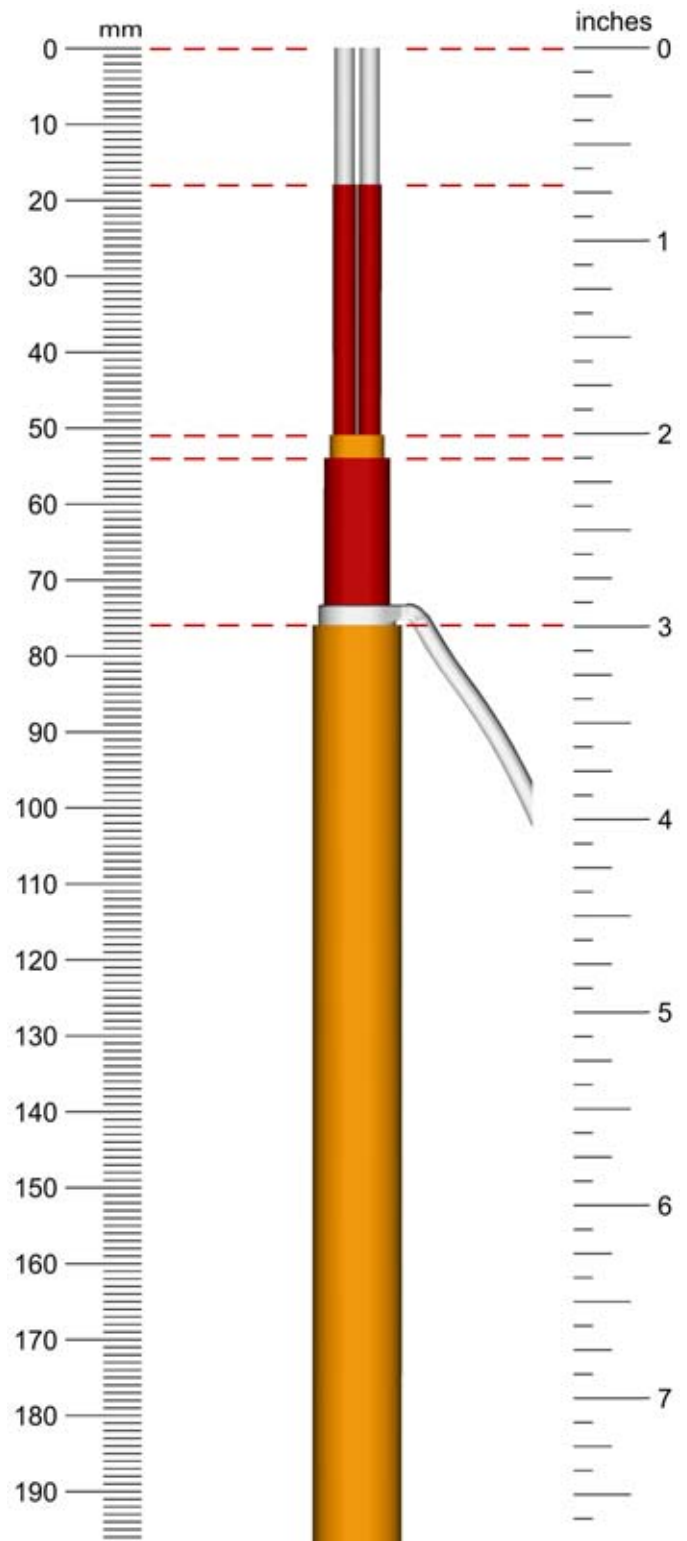
C7. Remove insulation from ends of bus wires.

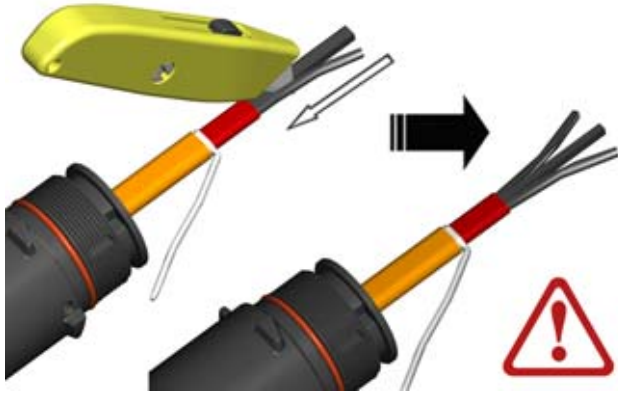


C8. Apply a liberal amount of RTV sealant to cable. Slide boot onto the end of the cable.

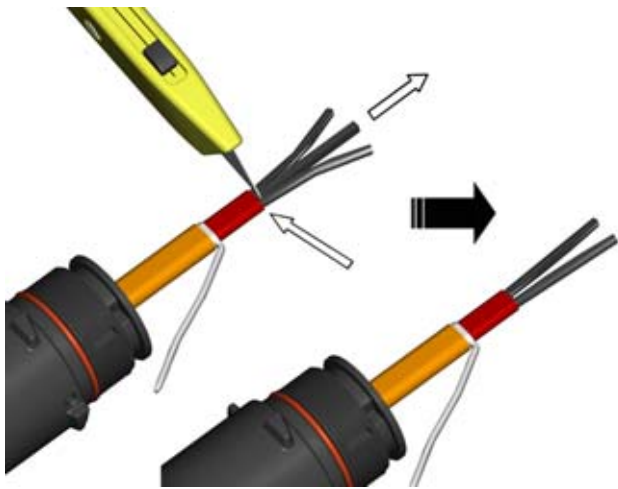


C9. Slide green/yellow ground sleeve over twisted braid.

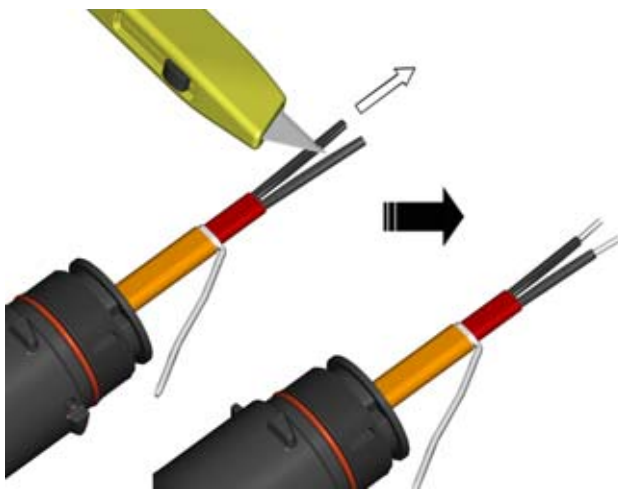




D1. Cut matrix core between inside edges of conductors. Do not cut bus wire strands.



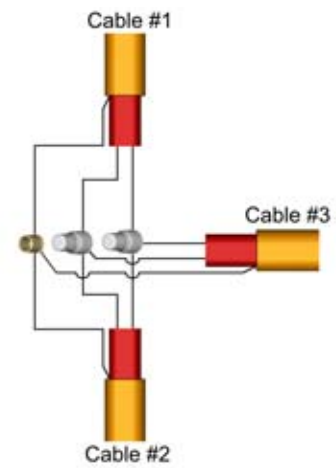
D2. Cut and remove remaining matrix core.



D3. Strip off matrix material at end of conductors.



E1. In-Line Splice



E2. T-Splice

Form No. 50814 (04/28/05)



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