Power Connection Kit Installation Instructions

Terminator DP-L

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

Terminator DP-S

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

For Power Connection (1-3 Cables), In-Line Splice Connection, T-Splice Connection, or End Termination (1 Cable) Applications

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

Item	Qty	Description
1	1	**Expediter Assembly** Support Cap w/ O-ring Threaded Grommet Compressor Grommet Support Base w/ O-ring
2	1	**Junction Box Lid**
3	1	**Junction Box Base w/ O-ring**
4	1	**Nut**
5	1	**Banding**
6	1	**RTV Tube**
7	3	**Power Connection Boots**
8	1	**Banding Guide**
9	1	**Terminal Blocks w/ DIN Rail** (Refer to terminal specifications for maximum allowable wire size)
10	1	**Junction Box Cord**

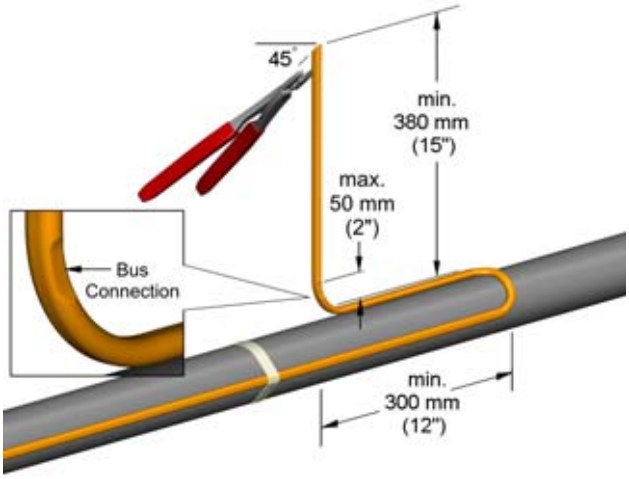
Tools Required

Certifications/Approvals

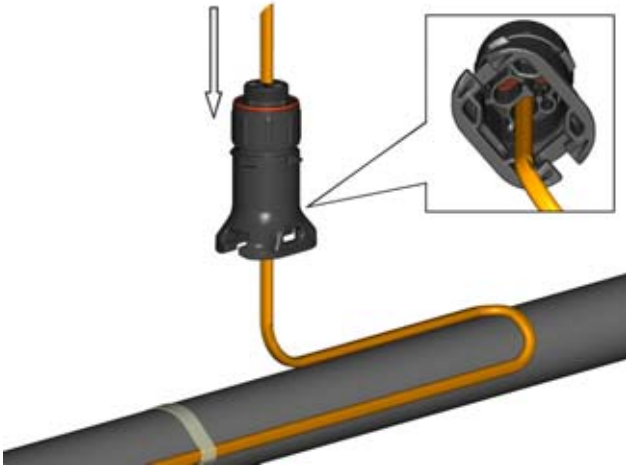
IP66 NEMA/Type 4X -60°C ≤ Ta ≤ +55°C
Ordinary & Hazardous Locations
Class I, Division 2, Groups A, B, C, & D, Zone 2 IIC
Class II, Division 2, Groups F & G, Class III
Listed Heat Tracing Cable System 137M

Warnings

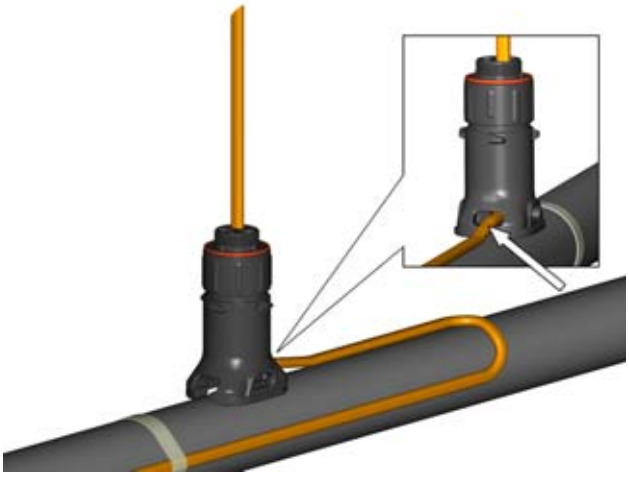
- Due to the risk of electrical shock, arcing and fire caused by product damage or improper usage, installation or maintenance, a ground-fault protection device is required.
- Installation must comply with Thermon requirements and be installed in accordance with the NEC, CEC, or any other applicable national and local codes.
- Component approvals and performance ratings are based on the use of Thermon specified parts only. User supplied power connection fittings must be UL Listed or certified for intended use.
- 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 pages 9-10 for multiple cable installation tips.**

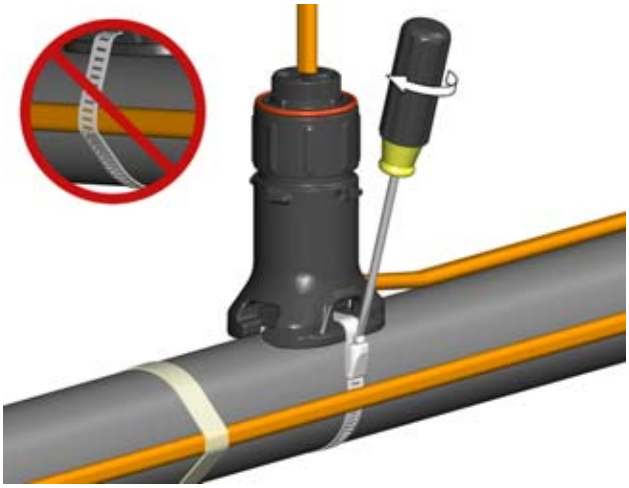


2. **Insert cable into expediter. If mounted on bottom of pipe, punch out weep hole.**

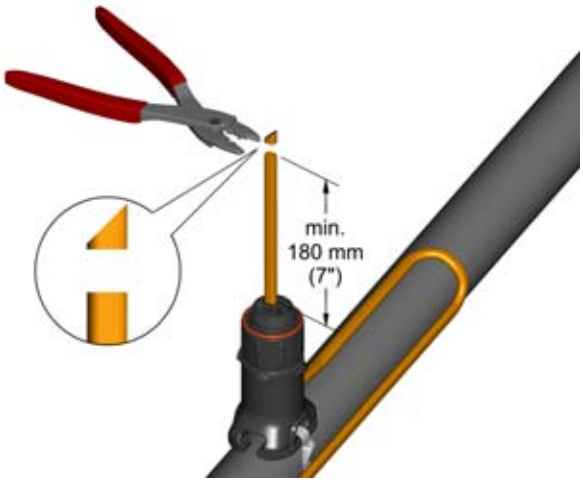


3. **Slide expediter toward pipe and route cable through support base entry.**

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

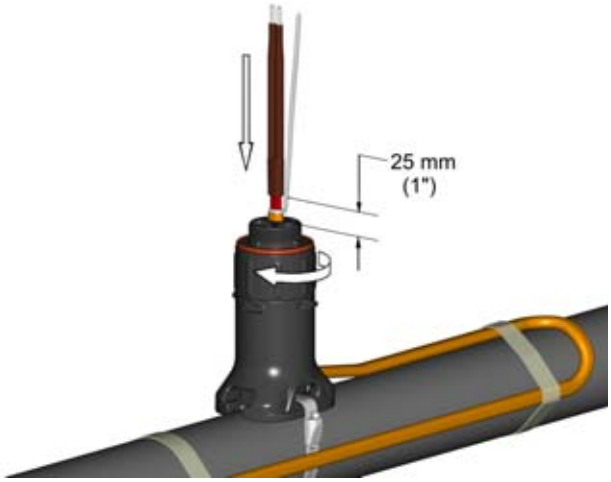


5. **Mount expediter to pipe using pipe band. Do not band over cable.**



6. **Cut off end of cable.**

7. **Terminate cable using cable termination (for BSX, HTSX, KSX, RSX, TSX, and VSX) on pages 11-14 or cable termination (for HPT and FP) on pages 15-18.**

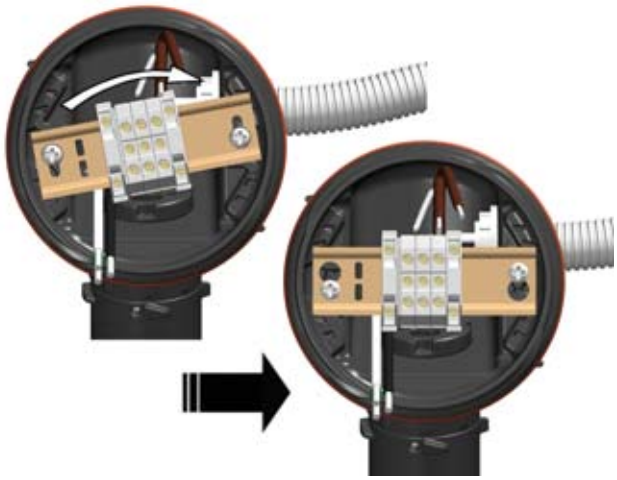


8. **Push excess cable back through expediter. Tighten cap securely. Tape cable expansion loop to pipe.**

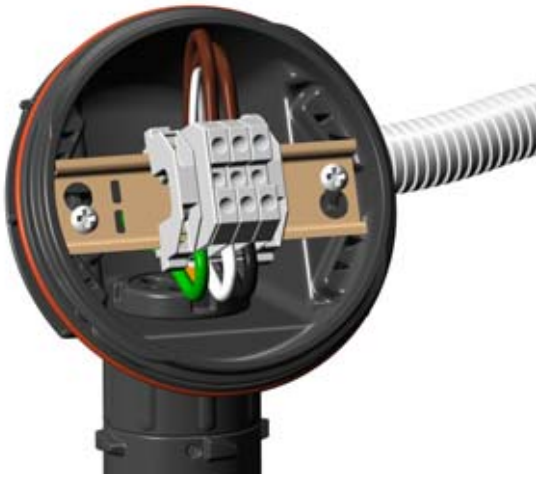
9. **Using dimple molded into side of junction box base to locate center of hole, drill for user supplied power connection fittings per manufacturer's recommendations (if necessary).**

10. **Mount junction box base on expediter. Make sure to align slots to properly orient junction box base.**

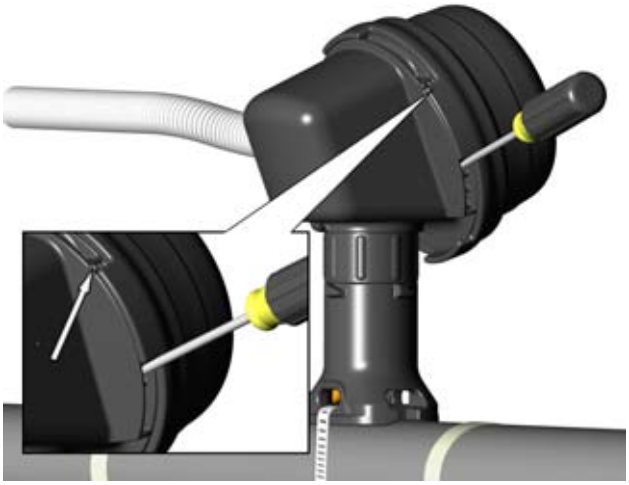
11. **Install power connection fittings (user supplied) and pull in power and ground wires (if necessary).**



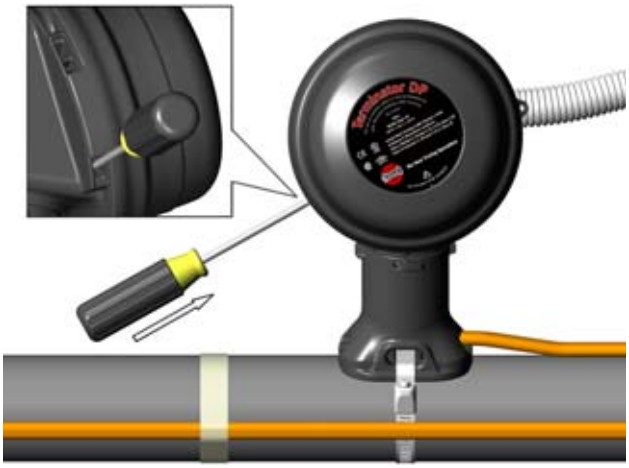
12. **Install quick mount terminal blocks.**



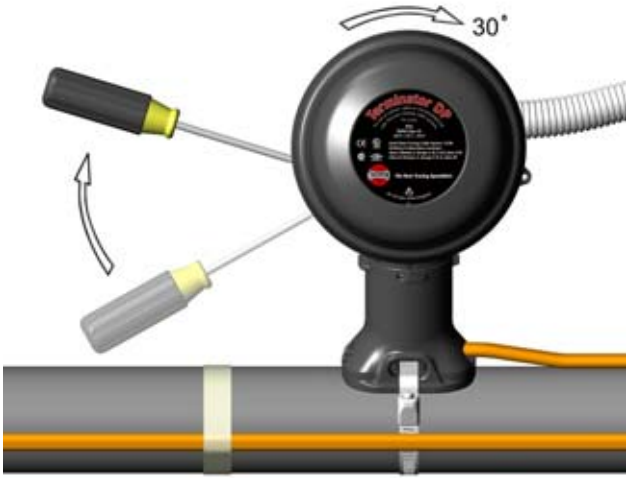
13. **Complete system wiring. See page 20 for wiring details.**



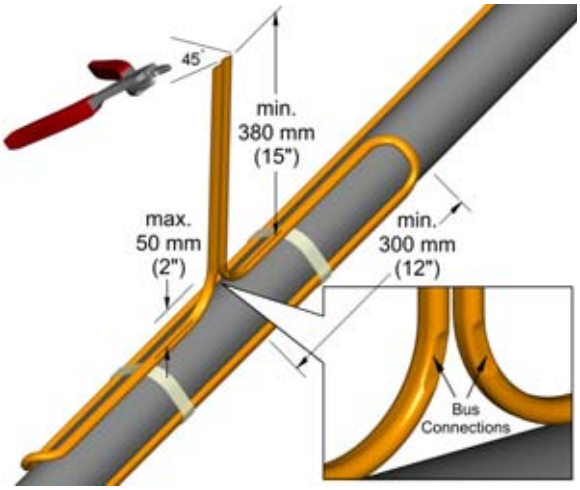
16. **Lid latch mechanism fully engaged. To remove lid, repeat steps 14 and 15 but in the opposite direction.**



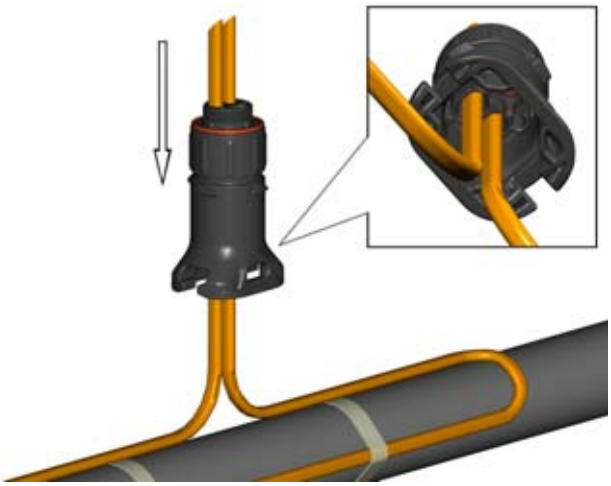
14. **Install junction box lid and twist hand tight. Insert screwdriver into ratchet slots located on side of junction box base.**



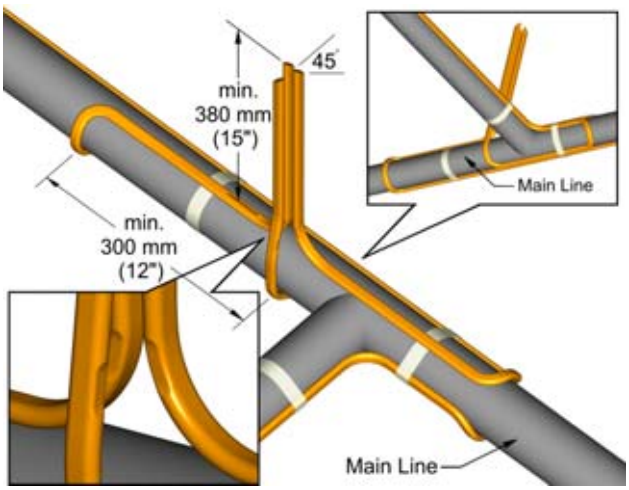
15. **Use screwdriver to ratchet on junction box lid. Lid will rotate 30 degrees.**



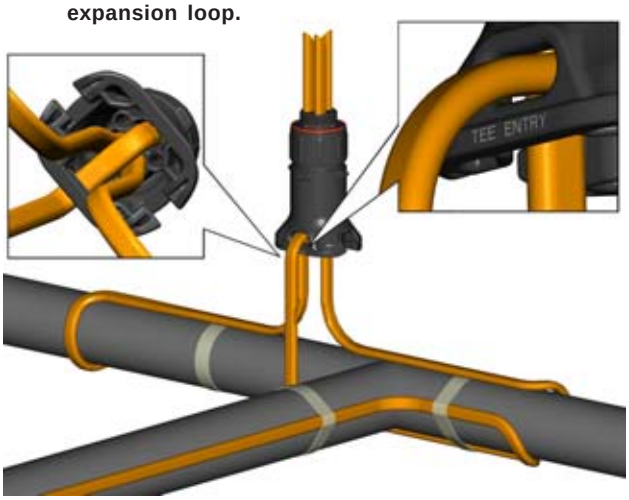
A1. **Locate bus connection (HPT and FP only) and cable as shown. Cut end of cable at angle to aid in piercing grommet. Leave additional cable for expansion loop.**



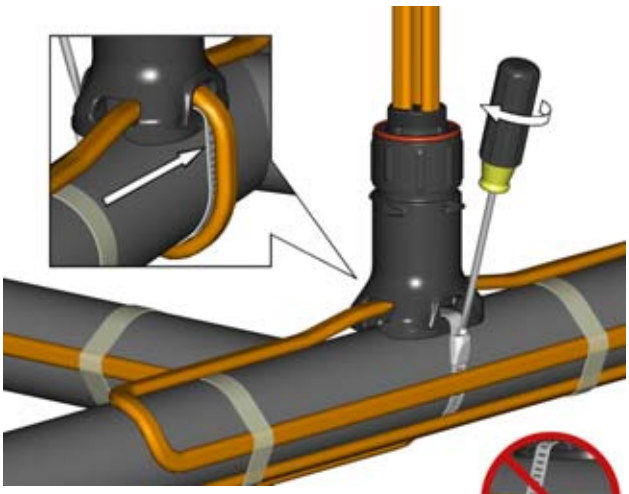
A2. **Insert two cables into expediter.**



B1. **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.**

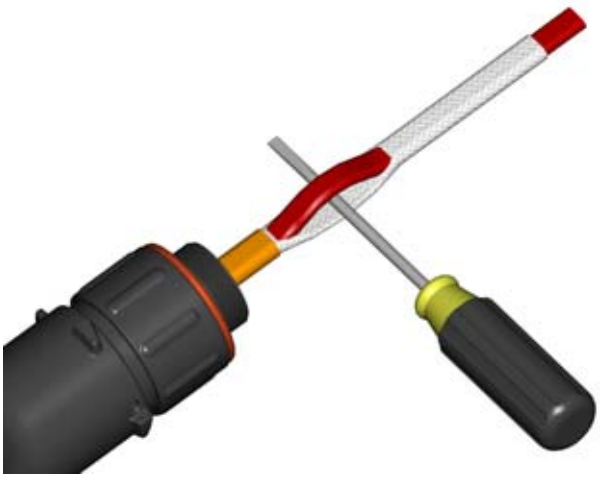


B2. **Insert three cables into expediter.**



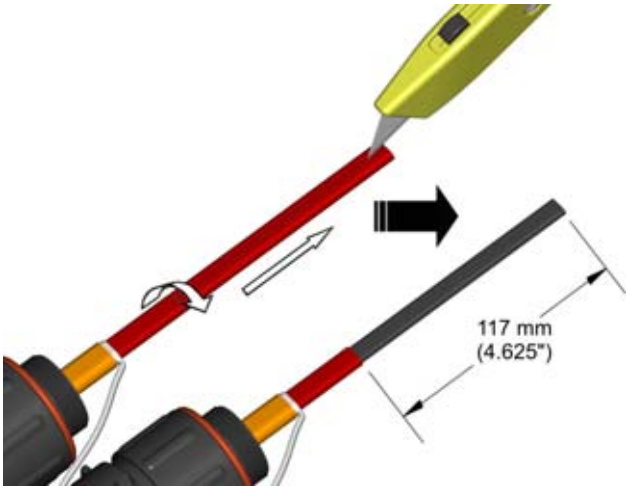
B3. **Mount expediter with three cables. Do not band over cable.**

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



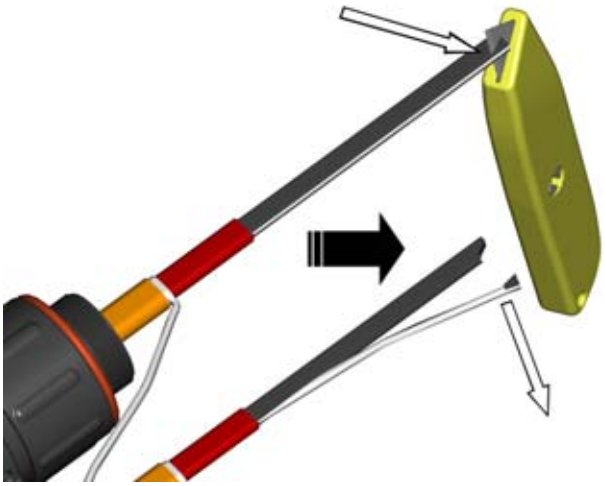
C2. **Separate braid strands at edge of overjacket and pull cable through opening in braid.**

C3. **Twist braid into a pigtail. Trim ends of braid.**

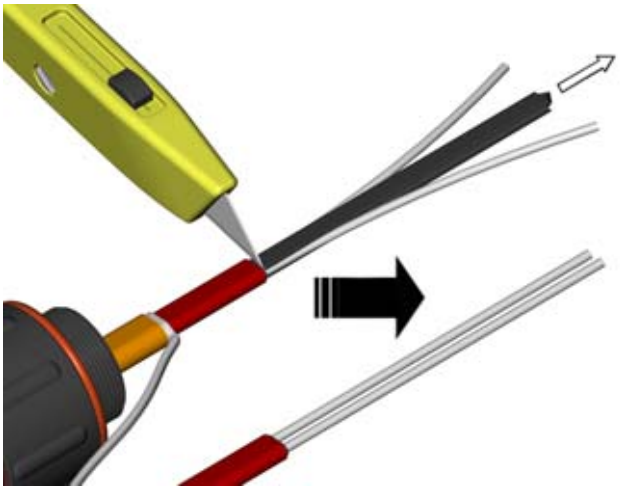


C4. **Cut and remove primary insulation jacket. Omit this step for KSX, HTSX, and VSX cables.**

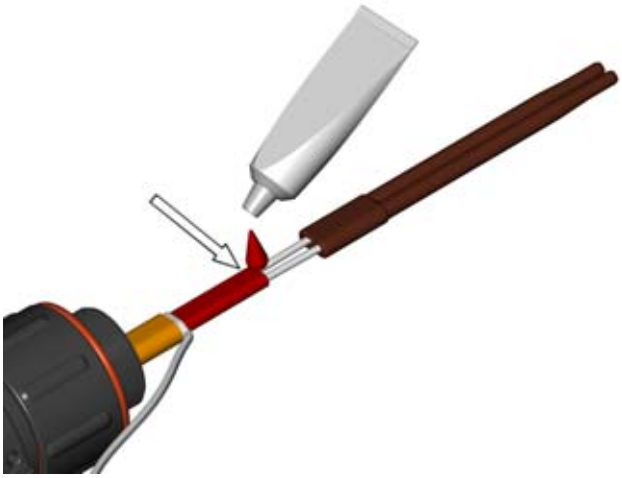
C5. **Skive outside edges of black matrix. Do not cut bus wire strands. See page 19 for TSX cable matrix removal tips.**



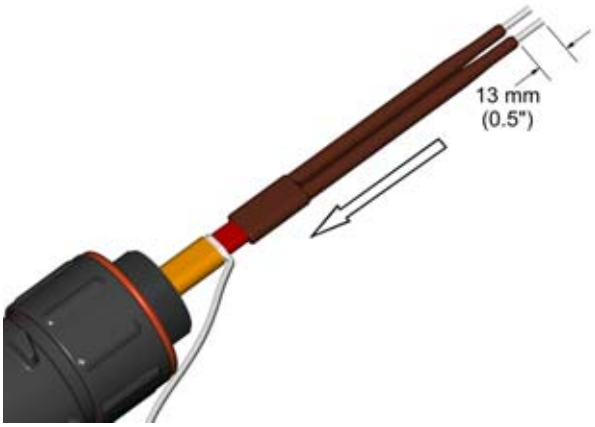
C6. **Cut V-notch in matrix and pull bus wires from matrix.**



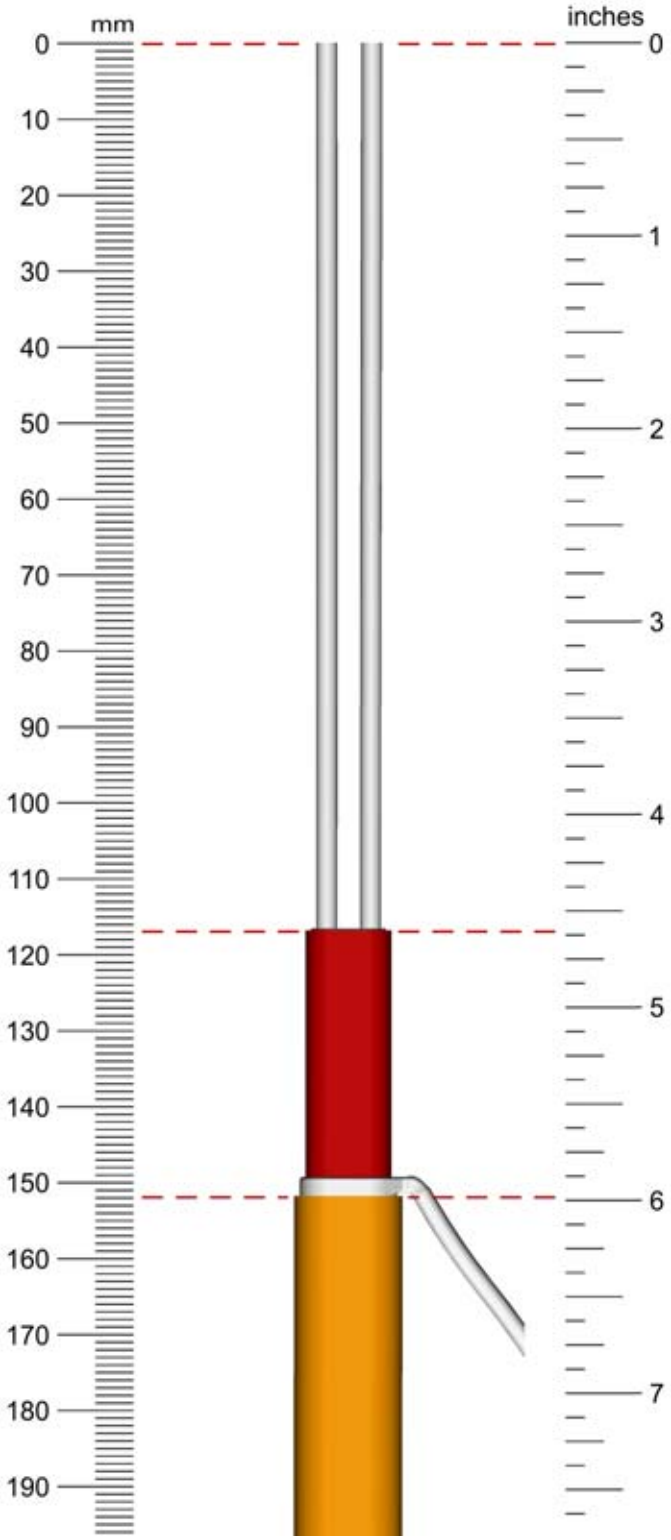
C7. **Cut and remove remaining center core of matrix.**

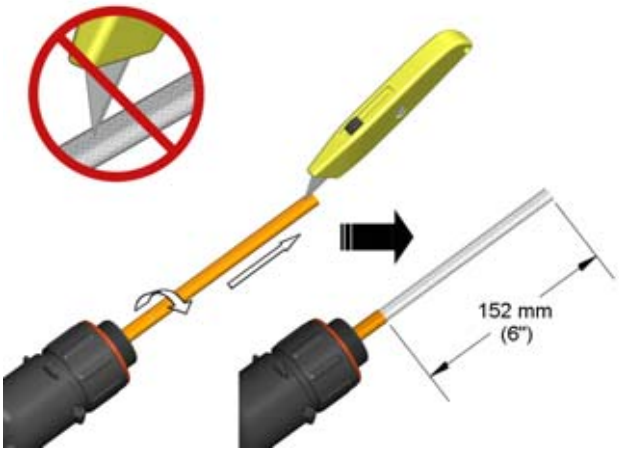


C8. **Apply a liberal amount of RTV sealant to cable.**

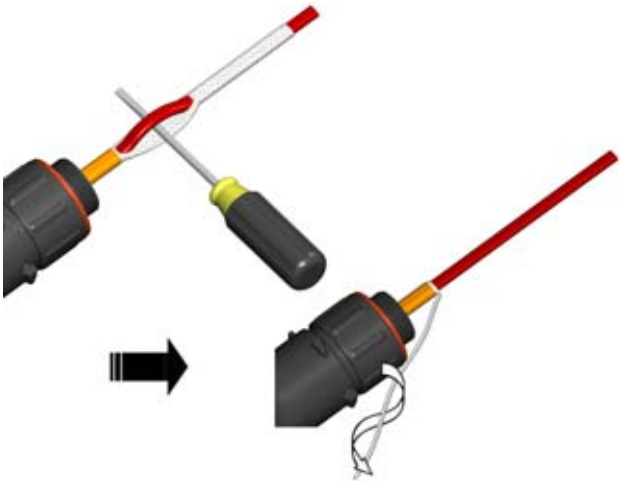


C9. **Slide boot onto the end of the cable.**

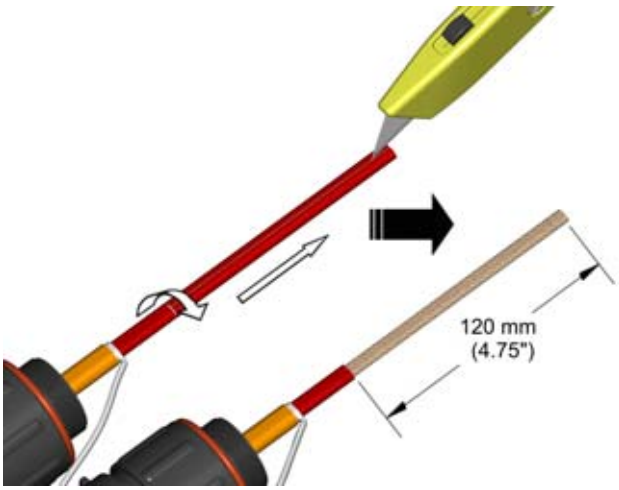




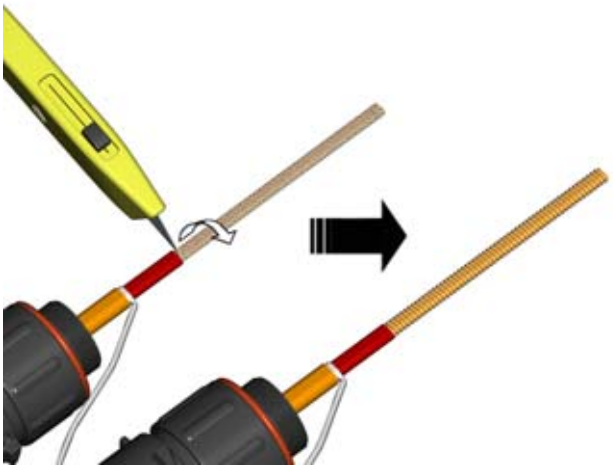
D1. **Cut and remove overjacket. Do not cut metallic braid.**



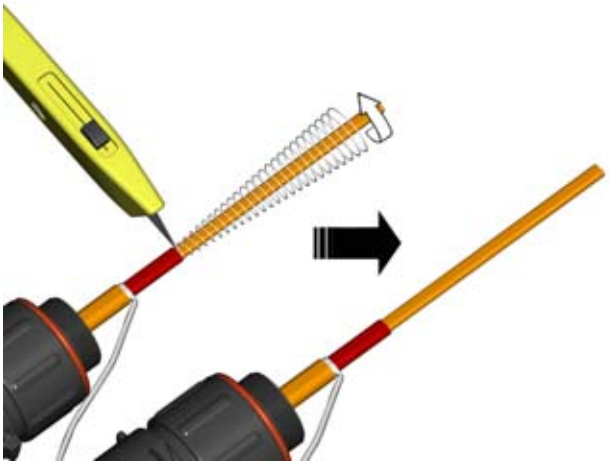
D2. **Separate braid strands at edge of overjacket and pull cable through opening in braid. Twist braid into a pigtail. Trim ends of braid.**



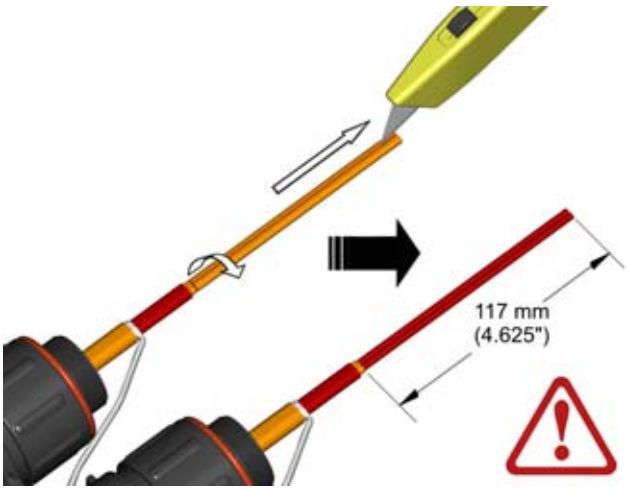
D3. **Cut and remove primary insulation jacket.**



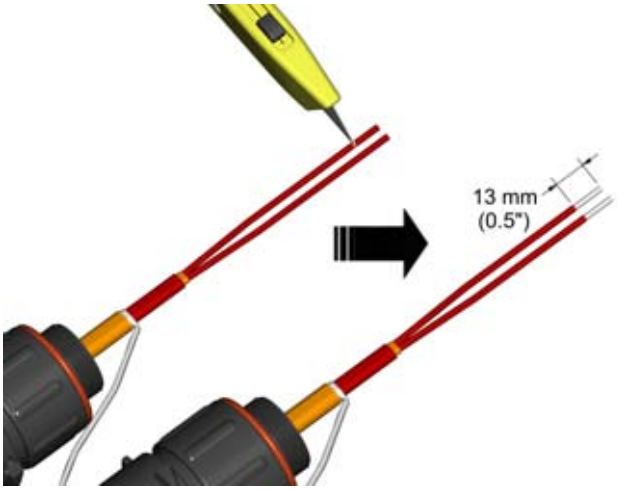
D4. **Cut and remove fiberglass braid. Omit this step for FP cable.**



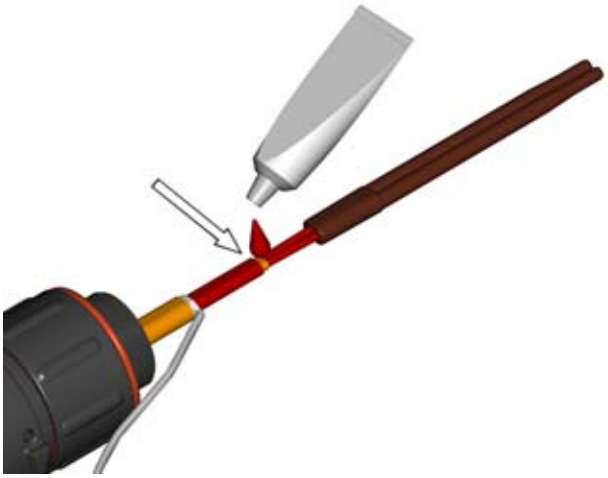
D5. **Cut and remove heating element and fiberglass overlay (FP cable only). Push any remaining heating element wire under the primary insulation jacket.**



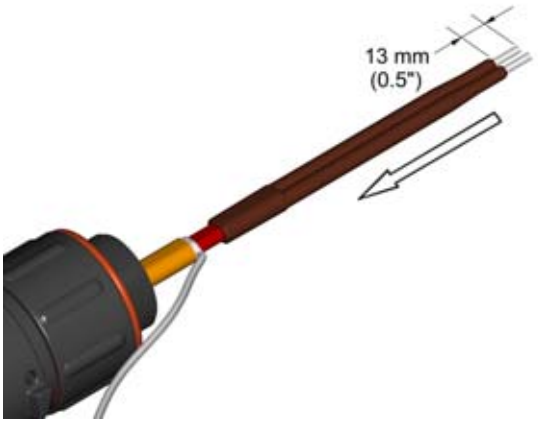
D6. **Cut and remove pairing jacket. Do not cut bus wire insulation.**



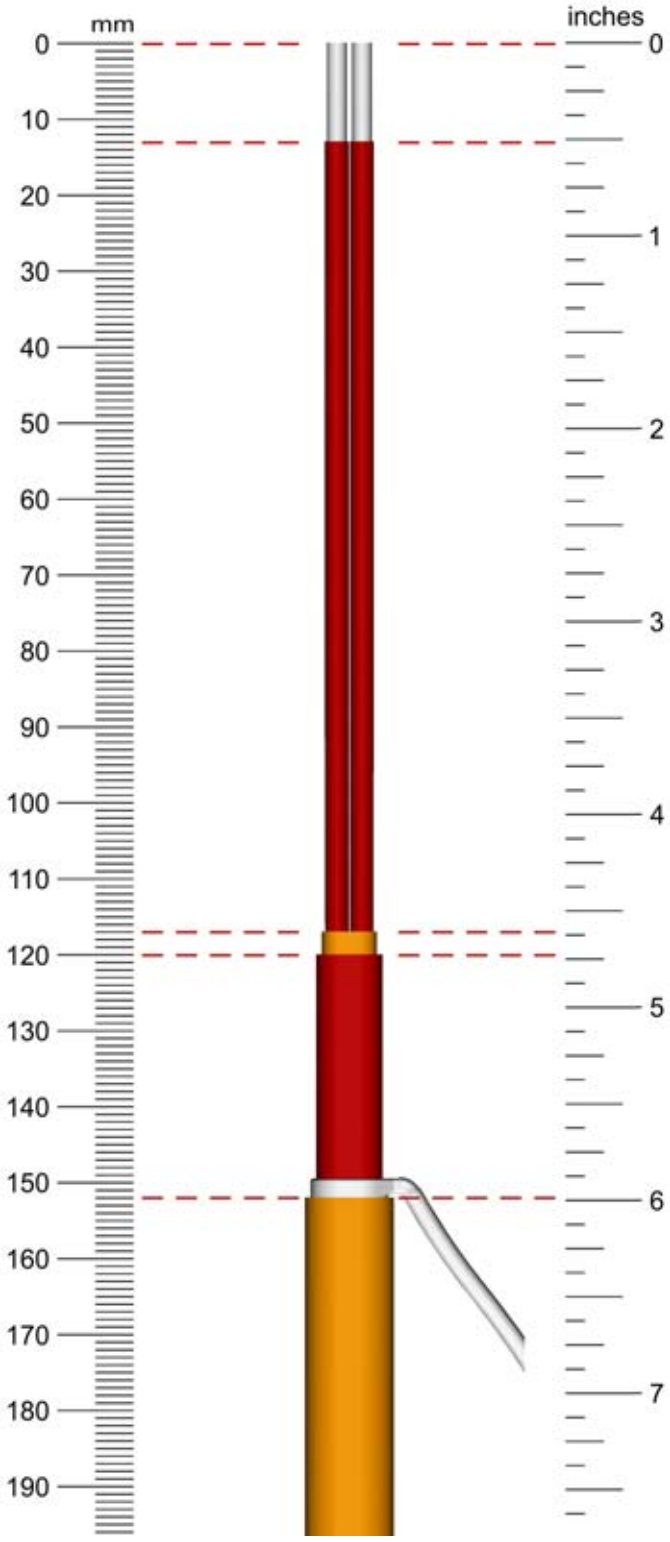
D7. **Remove insulation from ends of bus wires.**



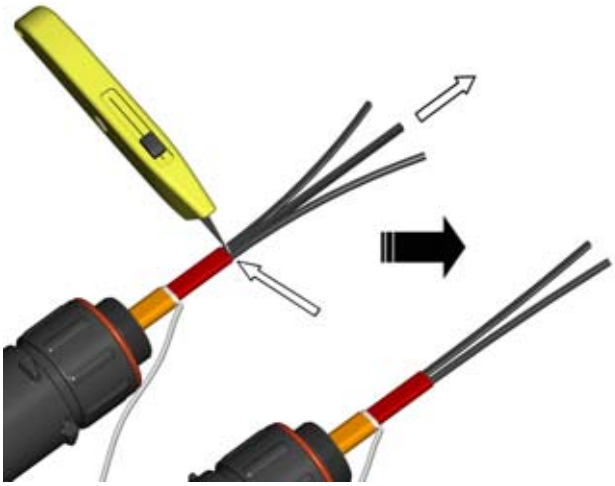
D8. **Apply a liberal amount of RTV sealant to cable.**



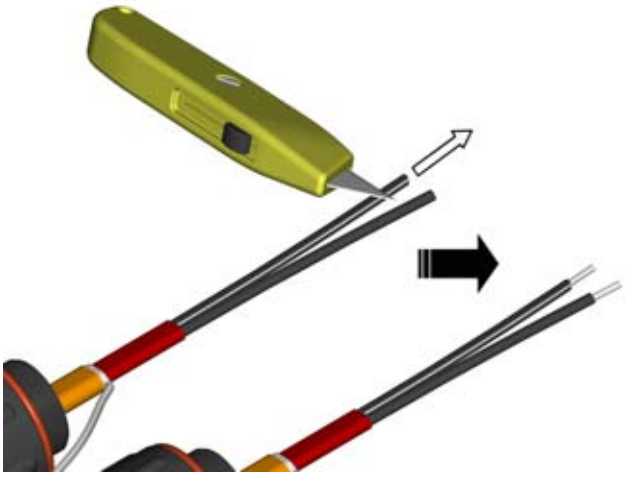
D9. **Slide boot onto the end of the cable.**



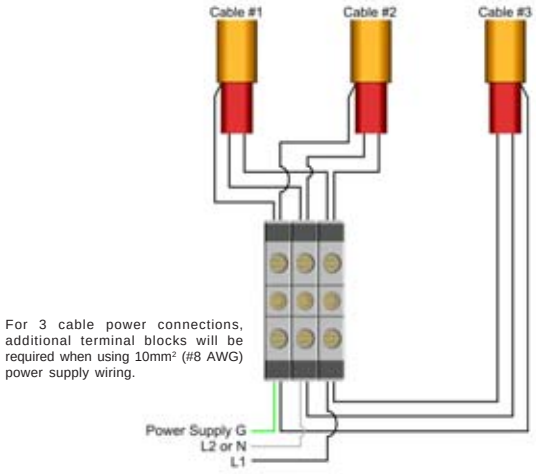
E1. **Cut matrix core between inside edges of conductors. Do not cut bus wire strands.**



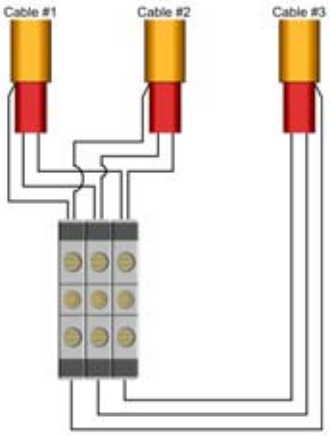
E2. **Cut and remove remaining matrix core.**



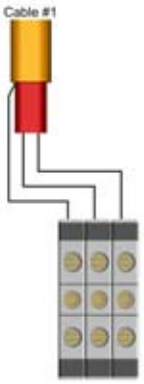
E3. **Strip off matrix material at end of conductors.**



F1. **Power Connection (1 to 3* Cables)**



F2. **In-Line Splice and T-Splice**



F3. **End Termination (1 Cable Only)**

Form No. 50808 (04/28/05)

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