

Terminator™ ZL

Lighted Power Connection/End Termination Kit

INSTALLATION PROCEDURES

For Power Connection or End Termination Applications



The Heat Tracing Specialists®

Terminator™ ZL

The following installation procedures are suggested guidelines for the installation of termination connection systems. They are not intended to preclude the use of other methods and good engineering or field construction practices.

Receiving, Storing and Handling . . .

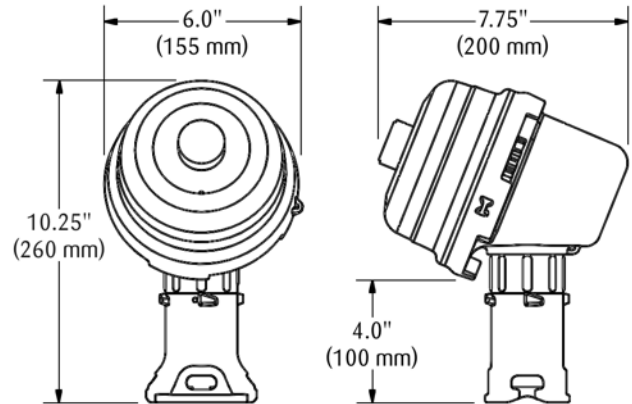
1. Inspect materials for damage incurred during shipping.
2. Report damages to the carrier for settlement.
3. Identify parts against the packing list to ensure the proper type and quantity has been received.

Kit Contents . . .



Item	Quantity	Description
1	1	Expediter Assembly Support Cap with O-Ring Threaded Grommet Compressor Grommet Support Base with O-Ring
2	1	Junction Box Lid with Lens
3	1	Junction Box Base with O-Ring
4	1	Nut
5	1	Banding
6	1	Banding Guide
7	1	Lamp Terminal Blocks with DIN Rail (22-8 AWG, 600 Vac, 50 Amp)
8	1	Junction Box Cord
9	1	RTV Sealant
10	1	Ground Sleeve
11	1	Power Connection Boot

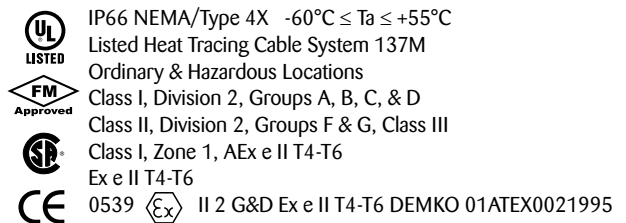
Dimensions . . .



Installation Precautions . . .

- To minimize the potential for arcing and fire caused by product damage or improper installation use ground-fault protection. The National Electrical Code (NEC) and Canadian Electrical Code (CEC) require ground-fault protection of equipment for each branch circuit supplying electric heat tracing.
- 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 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.

Certifications/Approvals . . .

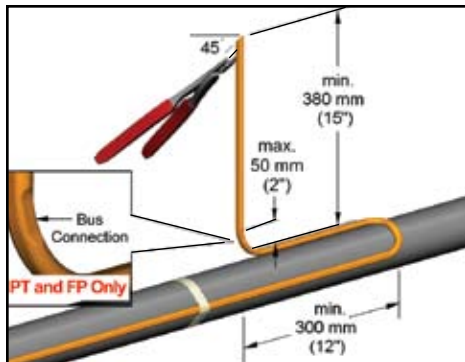


Tools Required . . .

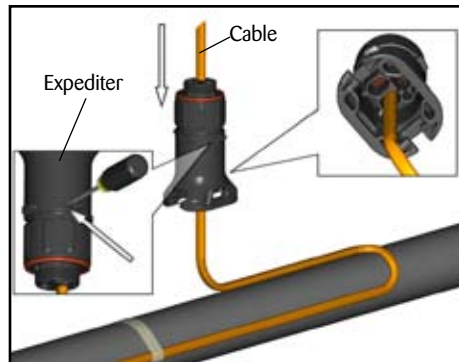


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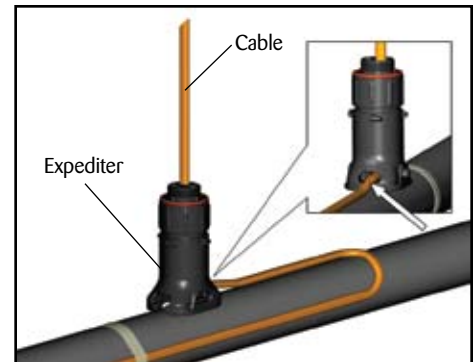
Terminator™ ZL



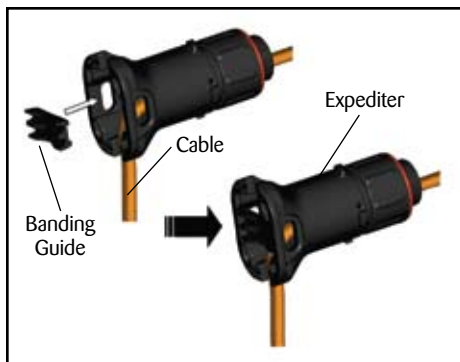
1. Locate bus connection (HPT and FP only) and cable as shown. Cut end of cable at angle to aid in piercing grommet. Leave additional cable for expansion loop.



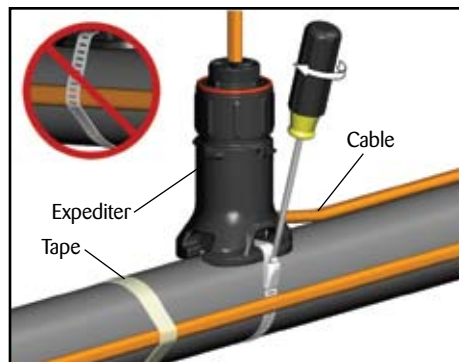
2. Insert cable into expediter. If mounted on bottom of pipe, punch out weep hole.



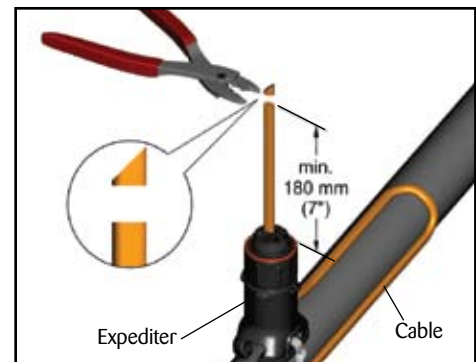
3. Slide expediter toward pipe and route cable through support base entry.



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



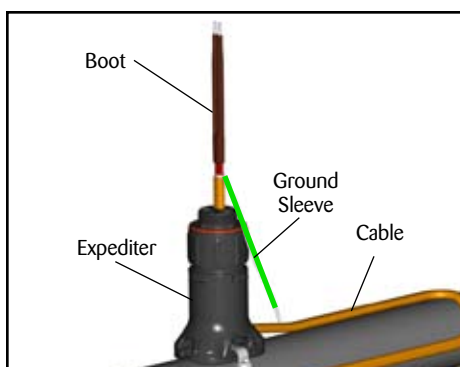
5. Mount expediter to pipe using pipe band.



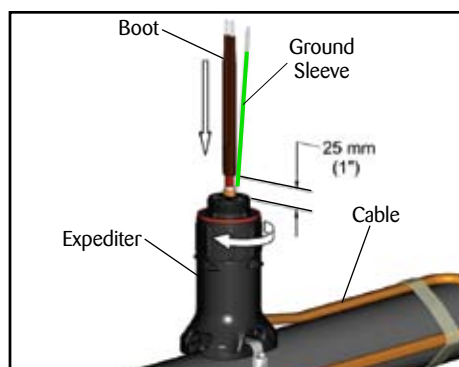
6. Cut off end of cable.



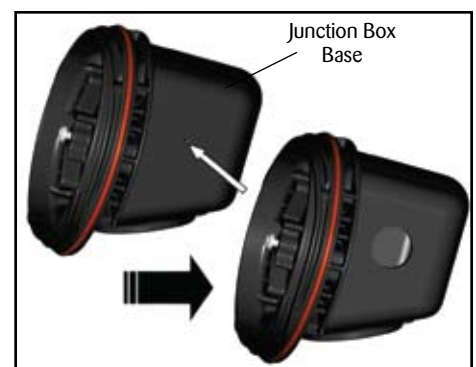
Do not band over cable.



7. Terminate cable using cable termination on pages 5-6 or 7-8 depending on cable type.

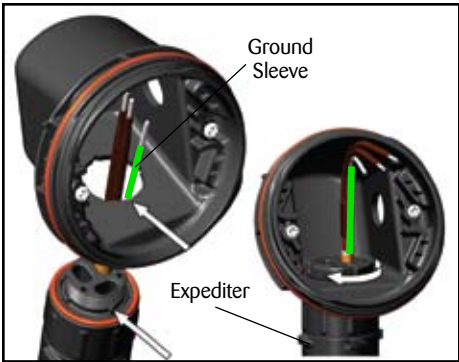


8. Push excess cable back through expediter. Tighten cap securely. Tape cable expansion loop to pipe.

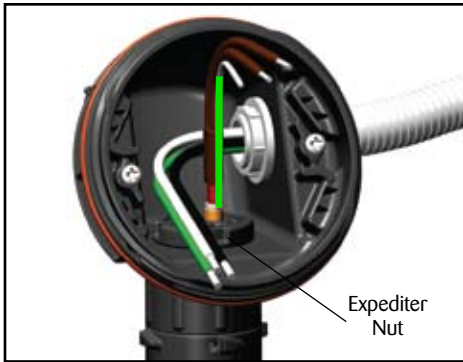


9. For power connection applications: Use dimple molded into side of junction box base to locate center of hole, drill for user supplied power connection fittings per manufacturer's recommendations.

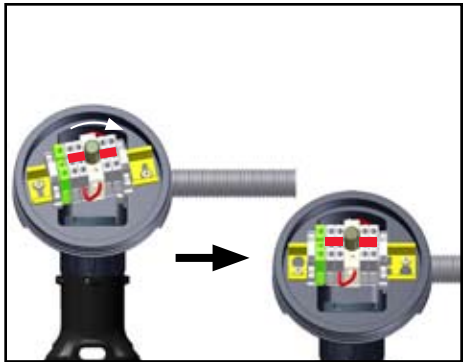
INSTALLATION PROCEDURES



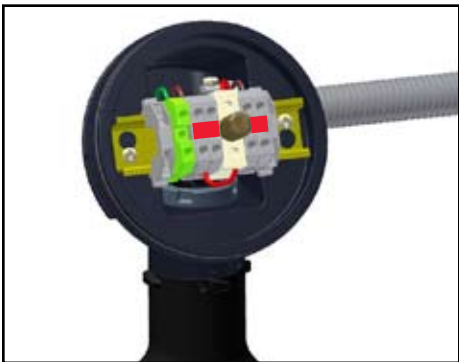
10. Mount junction box base on expediter. Make sure to align slots to properly orient junction box base. Tighten nut securely.



11. For power connection applications: Install power connection fittings (user supplied) and pull in power and ground wires.

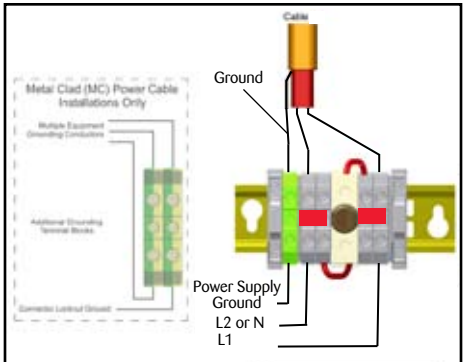


12. Install quick mount terminal blocks.

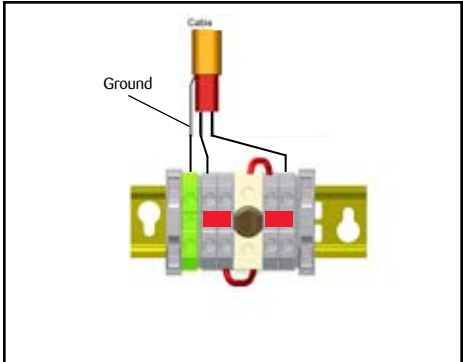


13. Complete system wiring. Refer to typical wiring details.

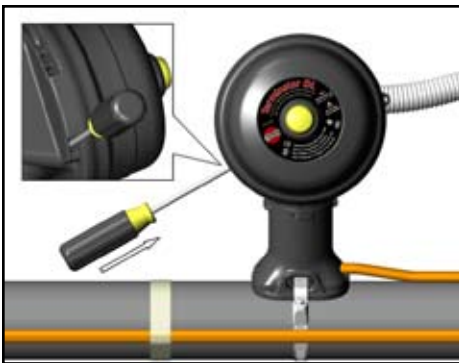
Typical Wiring Details



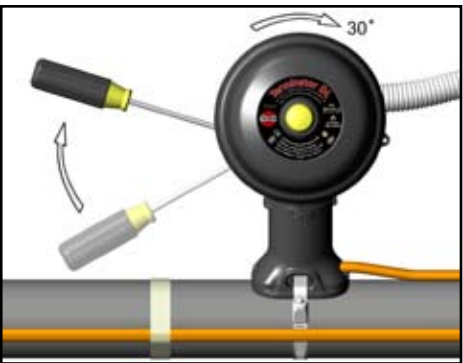
Power Connection (1 cable only). When using 10mm² (#8 AWG) power supply wiring, additional terminal blocks will be required.



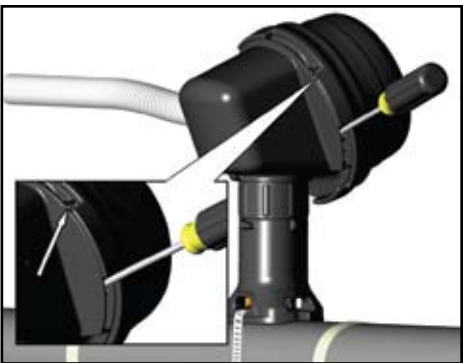
End Termination (1 Cable Only)



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.



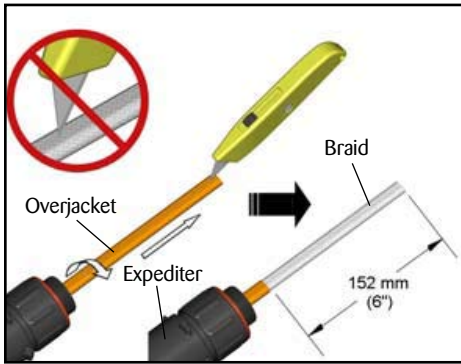
16. Lid latch mechanism fully engaged. To remove lid, repeat steps 14 and 15 but in the opposite direction.



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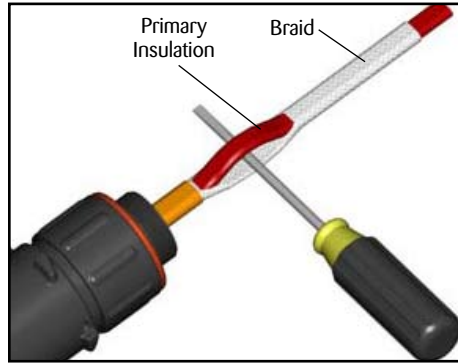
Cable Termination for BSX, HTSX, KSX, RSX, TSX, VSX (See Page 8 for Cable Take-Off)



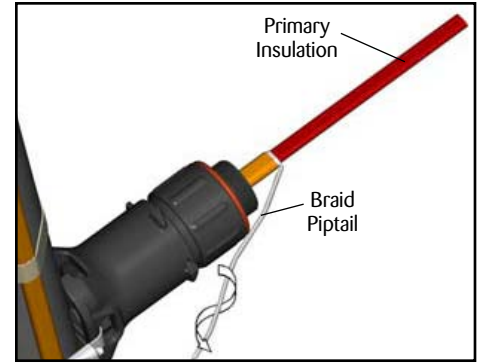
1. Cut and remove overjacket.



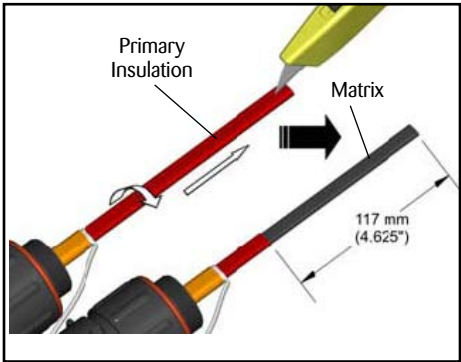
Do not cut metallic braid.



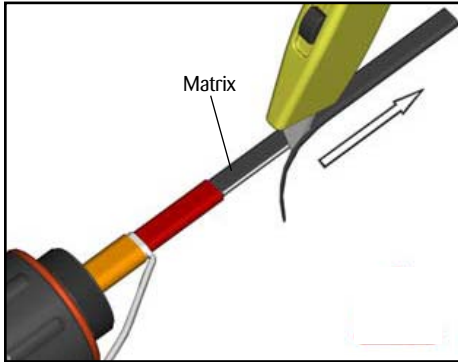
2. Separate braid strands at edge of overjacket and pull through opening in braid.



3. Twist braid into a pigtail Trim ends of braid.



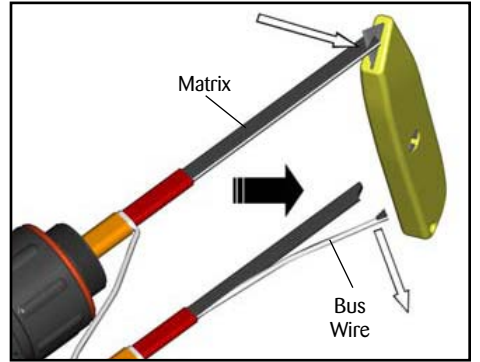
4. Cut and remove primary insulation jacket. Omit this step for KSX, HTSX, and VSX cables.



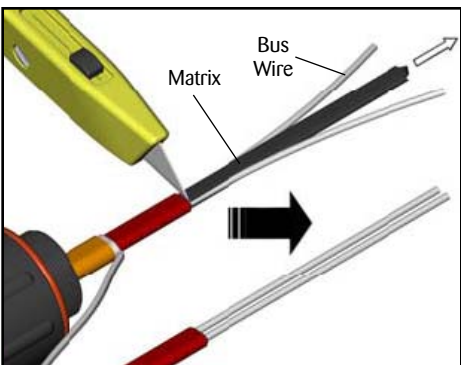
5. Skive outside of black matrix.



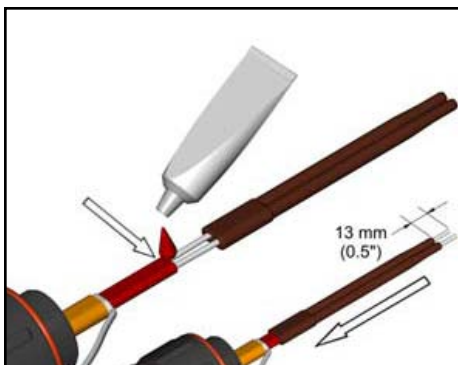
Do not cut bus wire strands.



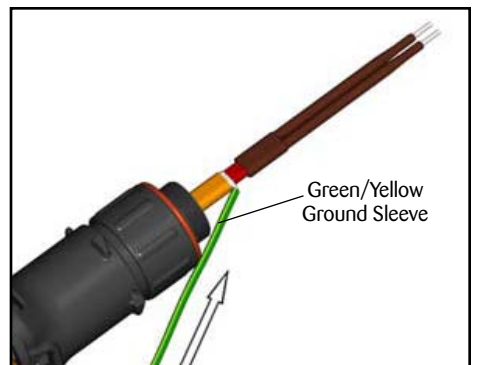
6. Cut V-notch in matrix and pull bus wires from matrix.



7. Cut and remove remaining center core of matrix.

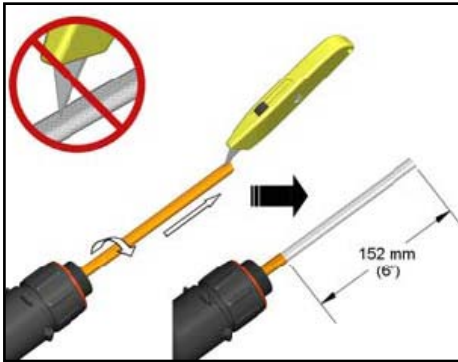


8. Apply a liberal amount of RTV sealant to cable. Slide boot onto the end of the cable.



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

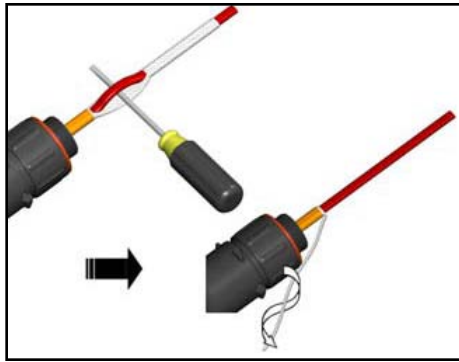
Cable Termination for HPT, FP (See Page 8 for Cable Take-Off)



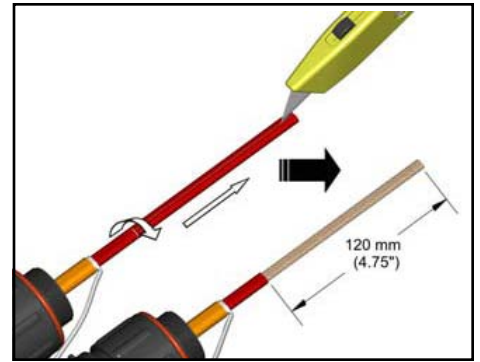
1. Cut and remove overjacket. Bus connection 50mm (2") from pipe.



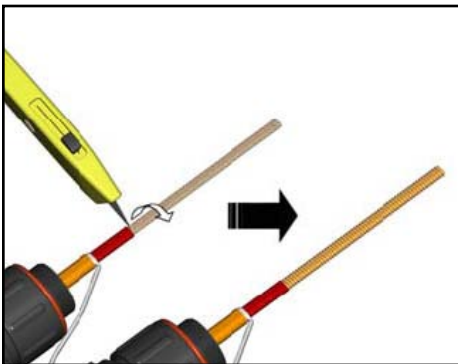
Do not cut metallic braid.



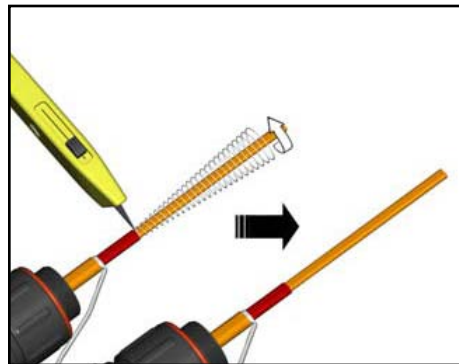
2. Separate braids at edge of overjacket and pull cable through opening in braid. Twist braid into pigtail. Trim ends of braid.



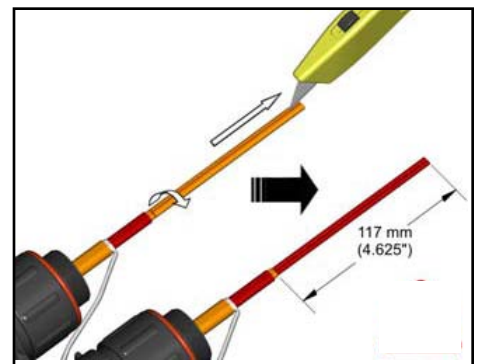
3. Cut and remove primary insulation jacket.



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



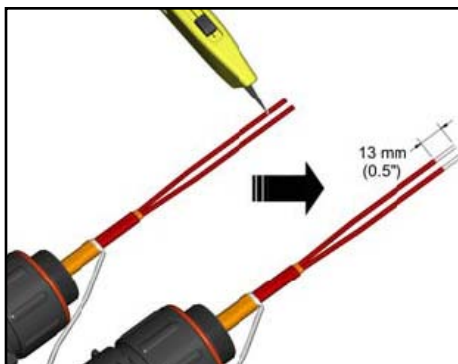
5. Cut and remove heating element and fiberglass overlay (FP cable only). Push any remaining heating element wire under the primary insulation jacket.



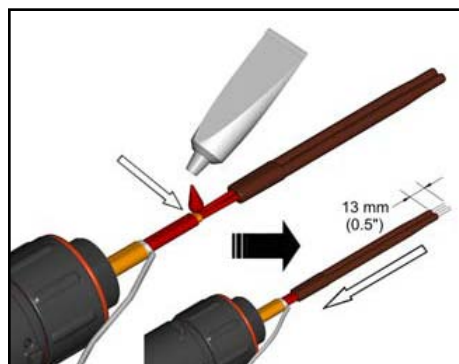
6. Cut and remove pairing jacket.



Do not cut bus wire insulation.



7. Remove insulation from ends of bus wires.



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

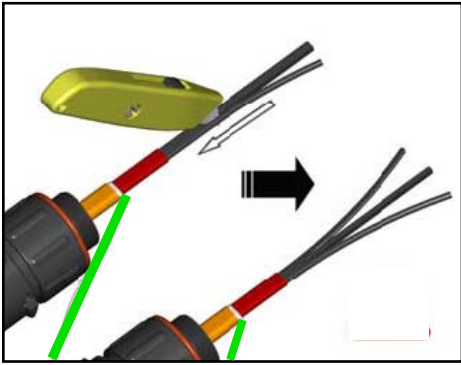


9. Slide green/yellow sleeve over twisted braid.

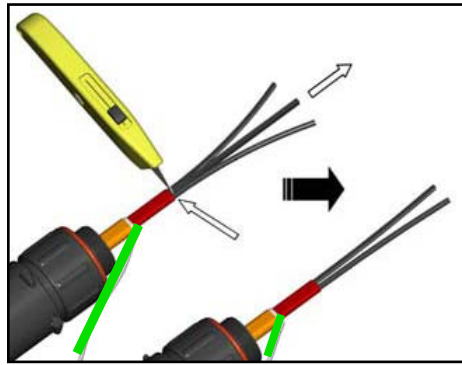


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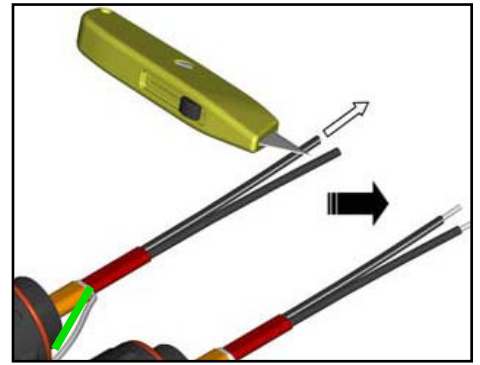
TSX Matrix Removal Tips



1. Cut matrix core between inside edges of conductors.



2. Cut and remove remaining matrix core.



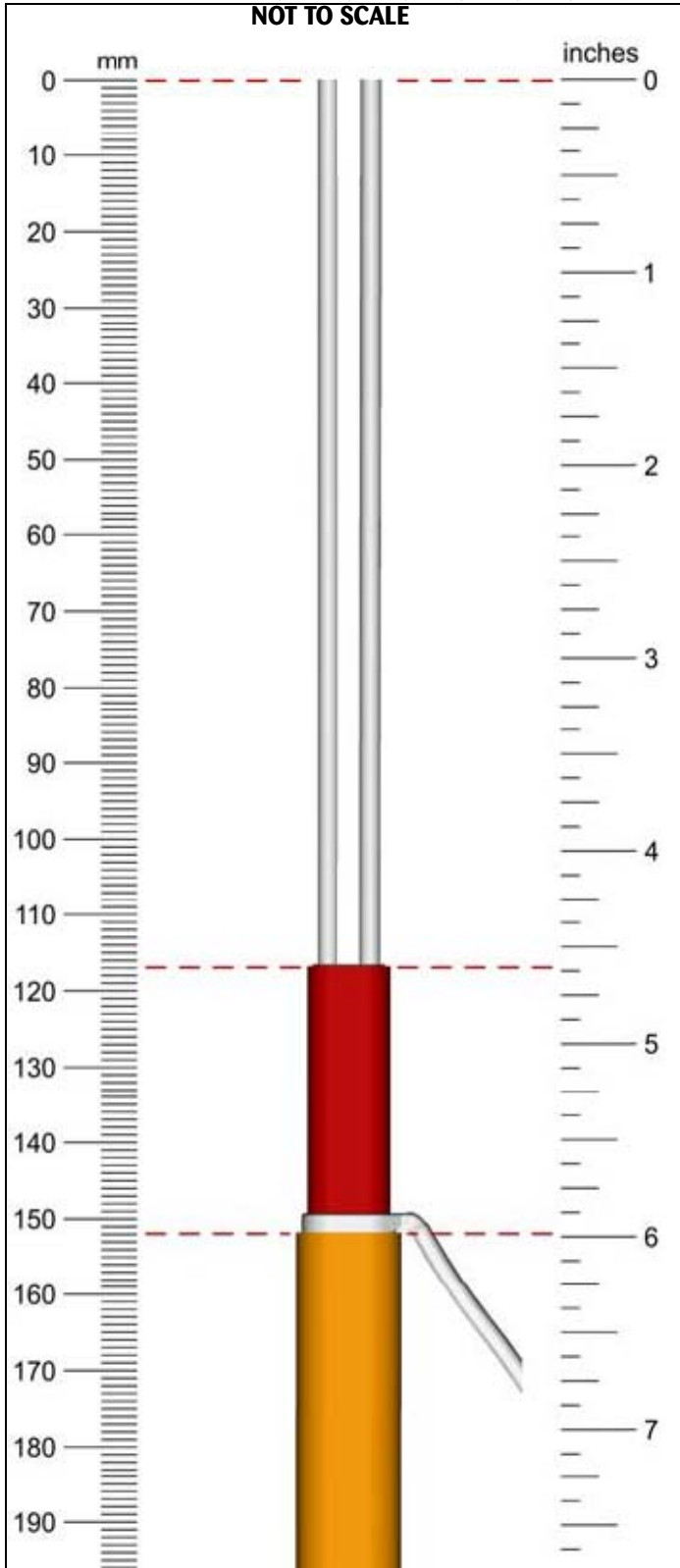
3. Strip off matrix material at end of conductor.



Do not cut bus wire strands.

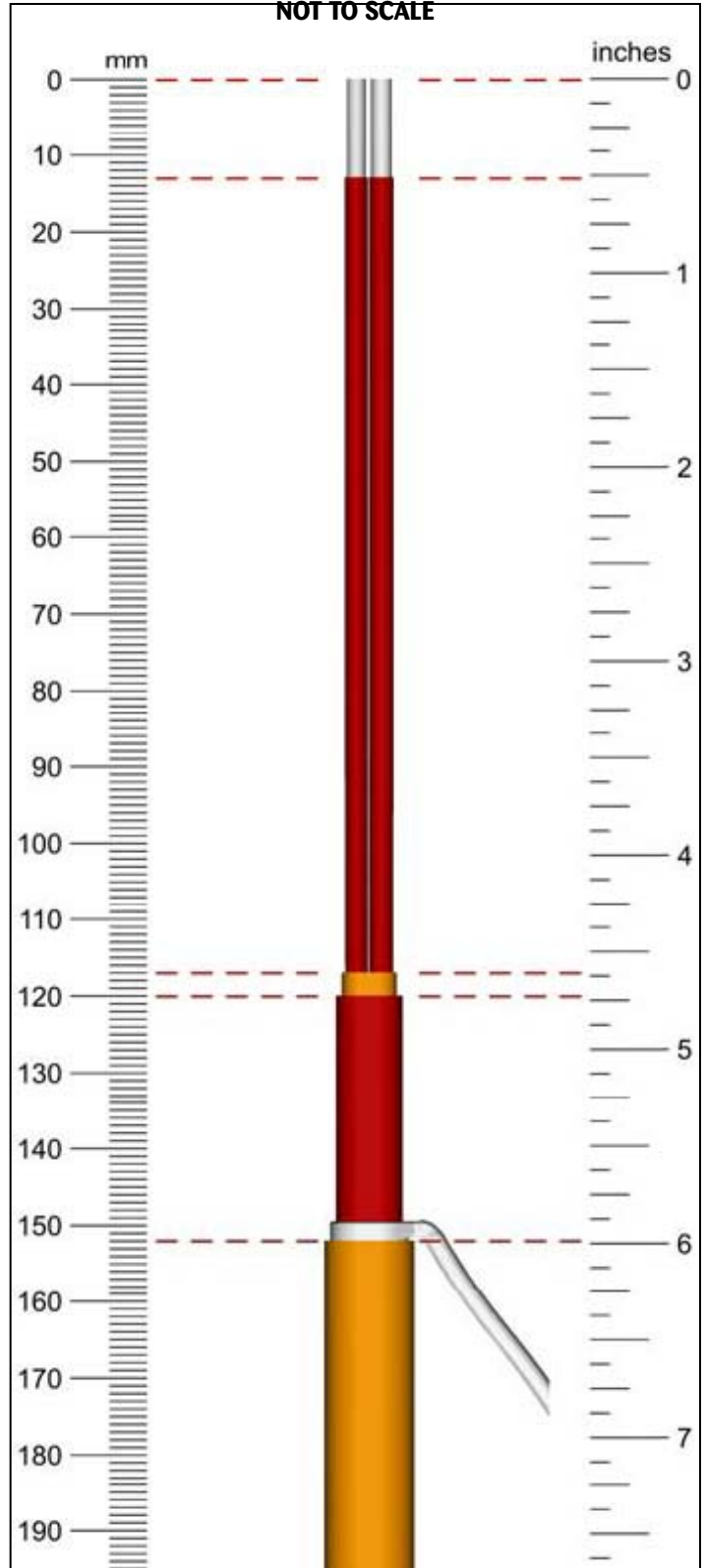
Cable Take-off (for BSX, HTSX, KSX, KXS, RSX, TSX, VSX)

NOT TO SCALE



Cable Take-off (for HPT, FP)

NOT TO SCALE



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