

Installation Instructions

DREX0016 HS-TSPICE

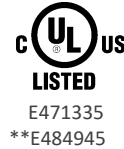
HeatShrink Tee / Splice c/w End Seal

APPROVALS*



Class I, Div. 2, Groups A, B, C, D
Class II, Div. 2, Groups F, G
Class III

231572



*This kit is not UL Listed for use with HotTape products
** General Purpose/Ordinary Location UL File

This kit is only for use with the following Drexan HeatTracer Self-Regulating heater products:

PipeGuard® Warm (PGW), MultiTrace® (MT) and HotTape® (HT).

HEATING CABLE RATINGS

120 – 277 Volt, 3–10 W/ft., maximum 32A.

Maximum continuous exposure temperature 150°F/65°C.

Minimum bend radius: 1.9 in. (50 mm) @ 68°F/20°C.

This kit may be installed in temperatures as low as -40°F/°C.

CAUTION: A ground fault protection device must be used with this heating device.

ATTENTION: Ce produit doit être utilisé avec une protection de mise à la terre.



WARNING: This is an electrical device and in order to ensure proper operation and prevent shock or fire it must be installed correctly. Read these important warnings. Follow all installation instructions.

The person(s) responsible for installation shall verify that the installation and inspection are performed by personnel who are trained, qualified, and knowledgeable in trace heating systems when using the Division method of area classification. The installation and inspection shall be in accordance with the system manufacturer's design documents, product recommendations, and installation instructions

CAUTION: Ground-fault equipment protection shall be provided to de-energize all normally ungrounded conductors of electrical heating cable sets, with ground fault settings sufficient to allow normal operation of the heater unless applicable codes permit otherwise, and to minimize the danger of fire from sustained electrical arcing if the heating cable is damaged or improperly installed and to comply with Drexan requirements, agency certifications and National Electrical codes. Conventional circuit breakers may not stop arcing. Each heating device branch circuit or each heating device shall have ground fault equipment protection.

The heating cable core is conductive and can short if not properly insulated and kept dry. Component and heating cable ends must be kept dry before and during installation. Fire-resistant thermal insulation materials should be used.

Heating cable core bus wires can overheat and short when damaged. When cutting the cable jacket or core do not break bus wire strands. Bond the metallic braid of the self-regulating heating cable to a suitable grounding (earth) terminal. De-energize before installation or servicing.

Where equipment may be installed in locations where it may be subject to damage, or exposed to excessive external stresses (e.g. vibration, heat, impact) or aggressive substances, it must be protected by additional means. Any repairs or parts replacement must be done by Drexan or appointed agents. Substitution of parts, or utilization in a manner not specified by Drexan may impair equipment protection and void warranty, approvals and performance claims. Do not use substitute parts or the use of electrical tape. Component approvals and performance characteristics are based on Drexan specific parts only.

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Kelowna, BC, Canada, V4V 1S5

KIT CONTENTS

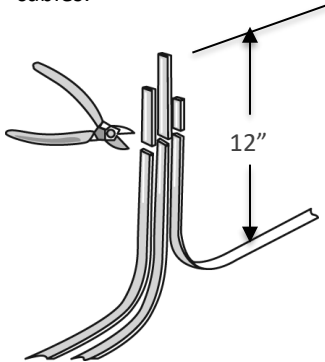
- (2) Insulated Crimp Splices
- (3) Cable Ties
- (2) Heat Shrink Caps
- Heat Shrink Tube 8" (20 mm)
- (3) Warning Labels
- Un-insulated Braid Crimp
- (6) Mastic Strips
- Black Cloth Tape 6" (15 cm)
- Heat Shrink Tube 1" (25 mm)
- Installation Instructions

REQUIRED BUT NOT PROVIDED

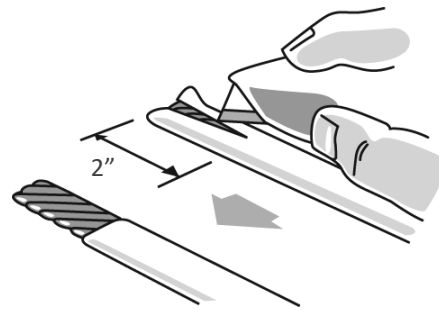
- Utility Knife
- Wire Cutter
- Multi-head Screwdriver
- Heat Gun
- Wire Stripper
- Crimp Tool
- Needle Nose Pliers
- Pipe Wrench

ASSEMBLY INSTRUCTION DETAILS – SPLICE / TEE

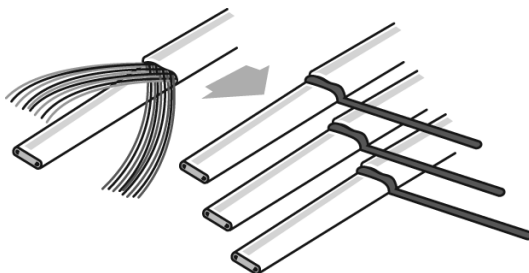
1. Allow 12" (30.5 cm) of extra heating cable as shown. If necessary, trim cables evenly. **Note:** all illustrations show a Tee connection. Perform splice the same way using only 2 heating cables.



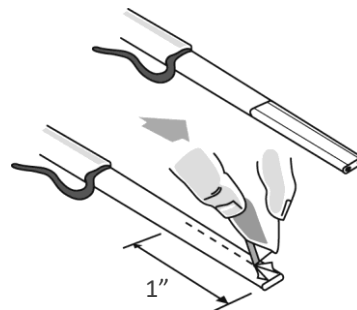
2. Strip outer jacket as shown 2" (51 mm). Do not cut into inner jacket.



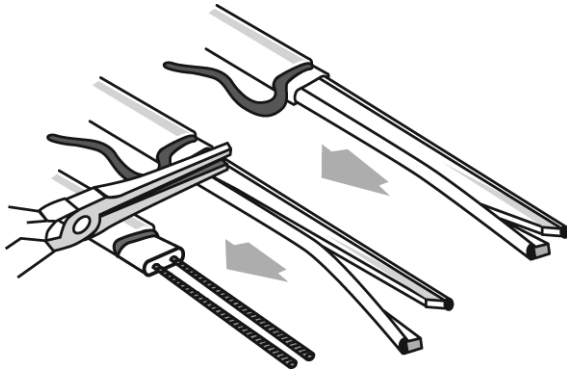
3. Unravel the Braid back to outer jacket. Position Braid on same side of each heating cable section. Straighten Braid and form into pigtail.



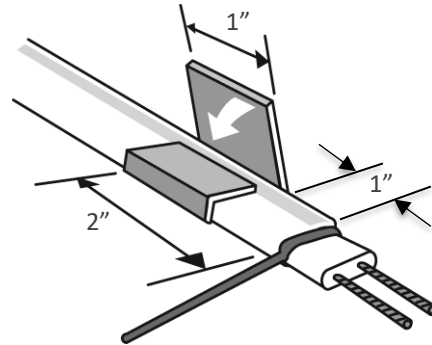
4. Strip back inner jacket and clear membrane 1" (25 mm) from end of heating cable.



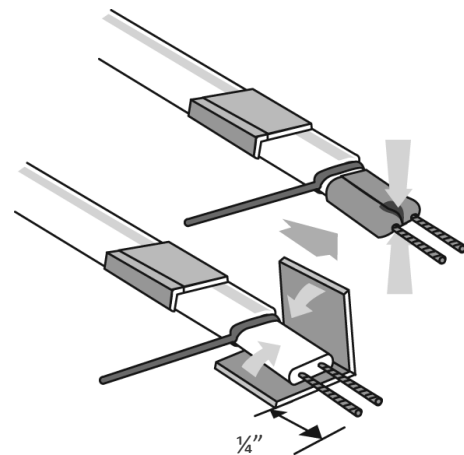
- Score between bus wires at base of jacket. Peel core and any remaining material from bus wires. Repeat steps 1 to 5 for each of the other cable sections.



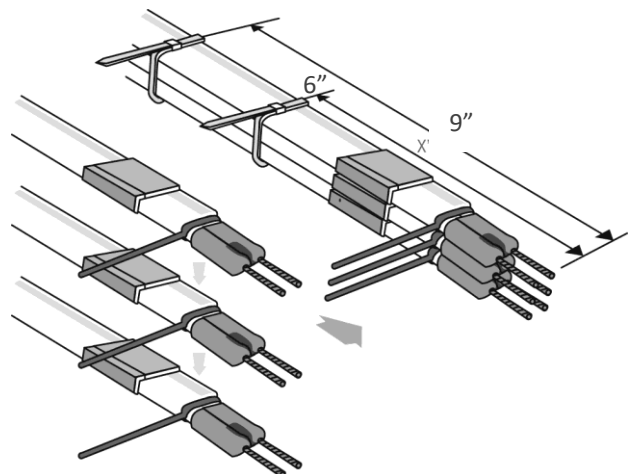
- Press, stretch and wrap a 1" (25 mm) wide piece of mastic around the outer jacket on each heating cable section, leaving 1" (25 mm) space for taping in later step.



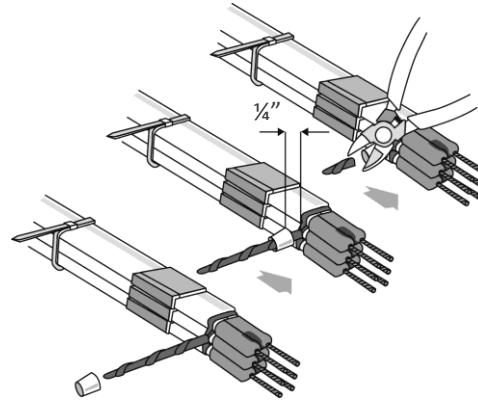
- Wrap a piece of mastic around the end ($\frac{1}{4}$ " / 6 mm) of each heating cable section and position as shown. Pinch the mastic in the center to completely seal the core end of each heating cable.



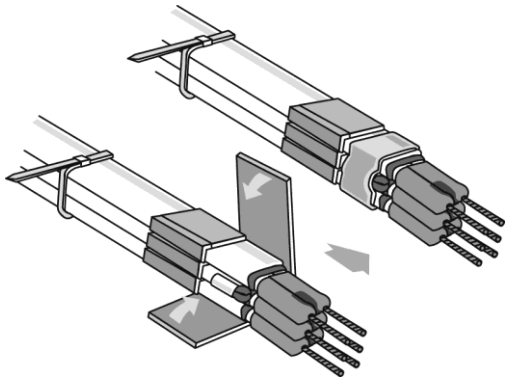
- Carefully align the heating cable sections together and press the mastic strips firmly together. Fasten with a cable tie at each of the two positions shown (9" / 23 cm and 6" / 15 cm from end).



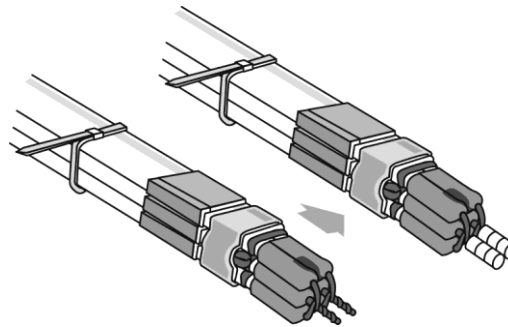
9. Twist the braided pig tails together. Slide un-insulated crimp connector over Braid to within $\frac{1}{4}$ " (6 mm) of heating cable as shown. Crimp the Braid using the crimp tool. Cut off extra Braid.



10. Fold the crimped Braid back against the heating cables. Wrap cloth tape evenly around crimp and heating cables. Cover crimp completely.

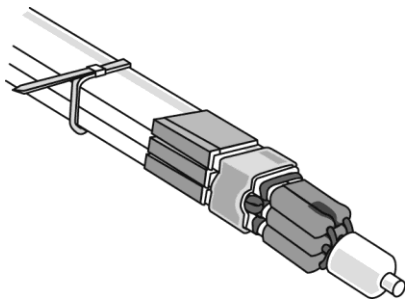


11. Select one bus wire from each cable and twist the wires together. Repeat with remaining bus wires (do not twist bus wires together from the same cable). Use insulated crimp connectors to crimp each set of bus wires together.

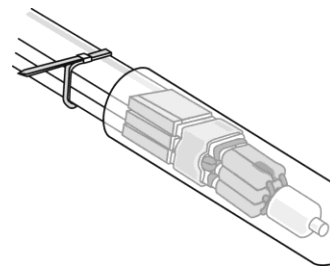


12. Slide heat shrink cap over bus wire crimps.

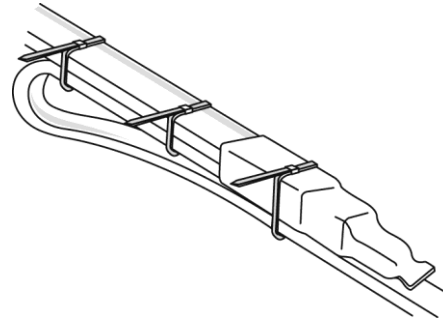
Note: it is not necessary to heat shrink down the cap.



13. Position the heat shrink tube (6" / 15 cm long) over the entire connection and heat shrink down until the inner sealant starts to appear. Crimp and hold end of tube closed for approximately 15 seconds while it cools.



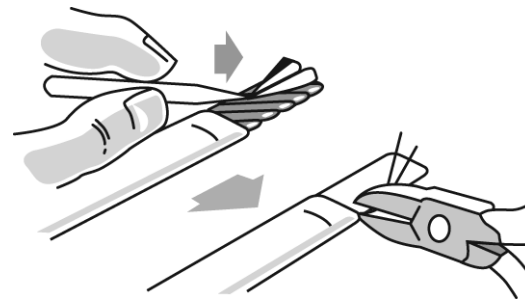
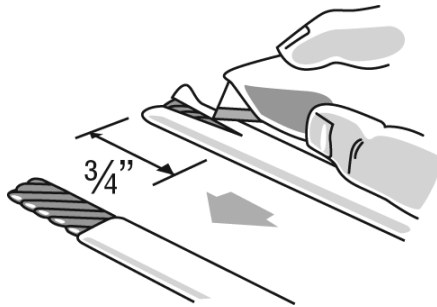
14. For Straight Through Splice Only:
Fold over the connection and fasten
with the third cable tie.



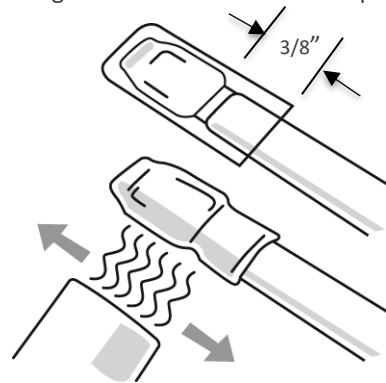
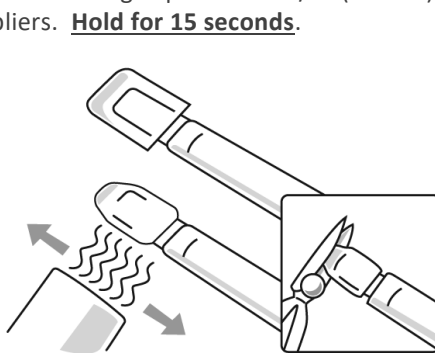
15. Find a suitable location and affix the Electrical Warning Label. The presence of the trace heaters shall be made evident by the posting of caution signs or markings at appropriate locations and/or at frequent intervals along the circuit.

ASSEMBLY INSTRUCTION DETAILS – END SEAL

1. Strip outer jacket $\frac{3}{4}$ " (19 mm) as shown. **Do not cut into inner jacket.**
2. Unravel ground braid and trim outer jacket cut back.



3. Heat shrink tubing in place with $\frac{3}{8}$ " (10 mm) over end of heating cable. Remove heat and squeeze with needle-nose pliers. **Hold for 15 seconds.**



4. Heat shrink cap in place over smaller heat shrink tube until inner sealant starts to appear out from the boot edge.