

HEAT SHRINK SPLICE/TEE CONNECTION

EQUIPMENT REQUIRED:

- Utility knife
- Wire cutter
- Wire stripper — *optional*
- Measuring tape
- Crimp tool
- Heat gun
- Needle-nose pliers

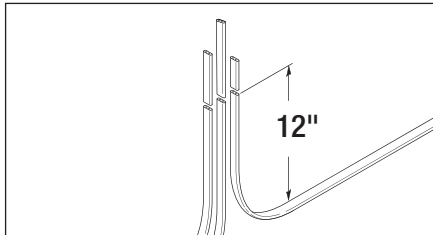
KIT CONTAINS:

- 6 – Mastic strips
- 3 – Cable ties
- 3 – End seal heat shrink caps
- 2 – 1" black heat shrink tubes
- 2 – Insulated bus wire crimps
- 2 – Caution labels (End seal & Splice/Tee)
- 1 – Un-insulated braid crimp (copper)
- 1 – Over-jacket heat shrink tube (6" long)
- 1 – Black cloth tape (6" long)

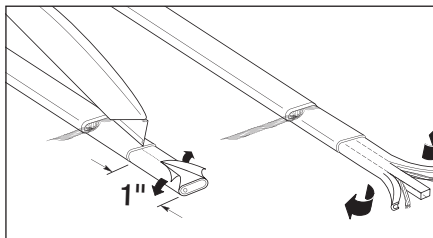
HOW TO CREATE A TEE / SPLICE:

NOTE: All illustrations show a tee connection. To perform a splice, follow all instructions using only 2 heating cables.

1. Allow 12" of extra heating cable. Trim cables evenly.

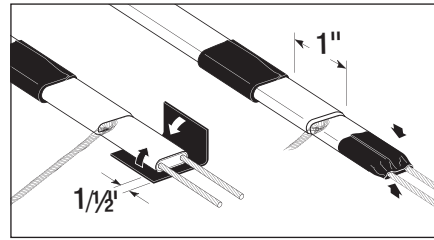


2. At the end of the cable, strip away 2" of outer jacket. **Do not cut into inner jacket.**
3. Unravel the braid back to outer jacket. Position braid to one side of the heating cable section.
4. At the end of the cable, strip away 1" of inner jacket and remove conductive core, exposing bus wires.

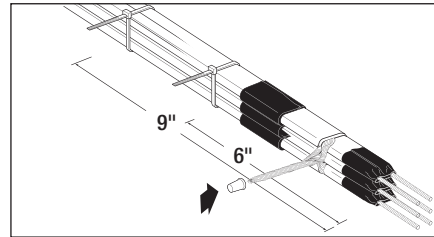


NOTE: Repeat steps 1 to 4 for each cable section.

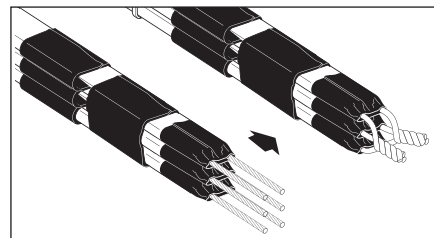
5. Stretch and wrap a mastic strip around the outer jacket on each heating cable section, 1" from inner jacket cut.
6. Wrap a mastic strip around the heating cable extending ¼" past the end.



7. Align the heating cable sections together; ensure all braids are on the same side of the cables. Press mastic strips firmly together and fasten cable ties 6" and 9" from end.
8. Twist together braid pigtails and slide un-insulated braid crimp to within ¼" of cable. Compress the un-insulated braid crimp and remove excess pigtail.

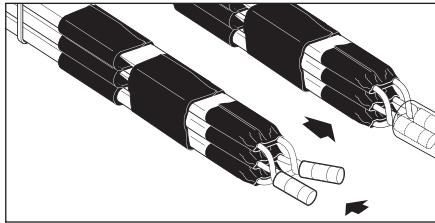


9. Fold the crimped braid back against the heating cables. Wrap cloth tape evenly around un-insulated braid crimp and heating cables covering crimp completely.
10. Select one bus wire from each cable and twist together. Repeat with remaining bus wires (do not twist bus wires from the same cable together).

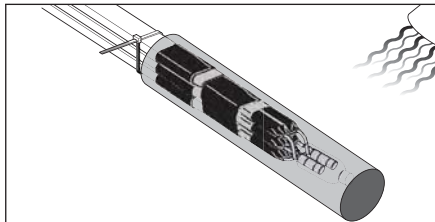


NOTE: HeaterZone recommends doing continuity testing at this point of the installation.

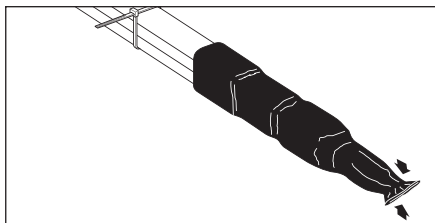
11. Use insulated bus wire crimps to connect each set of bus wires together. Slide heat shrink cap over bus wire crimps. It is not necessary to heat shrink the cap.



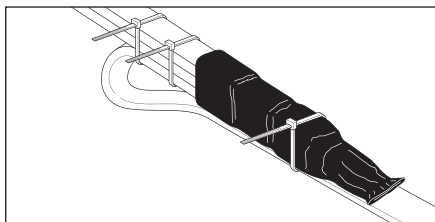
12. Position the 6" heat shrink tube over the entire tee or splice connection, aligning the back edge of the tube with the mastic strip applied in step 5. Heat shrink down until the inner sealant starts to appear.



13. Crimp and hold end of tube closed while still hot and hold for 15 seconds to ensure seal.



14. **For straight through splice only:** To avoid the risk of serious burns, wait until the 6" heat shrink tube has cooled completely. Once the 6" tube is cool to the touch, fold back one cable against heat shrunk tube and attach with third cable tie.



NOTE: Complete heat shrink end seal at the opposite end of the heating cable by following the Heat Shrink End Seal instructions included in this booklet.

WARNING: Electrical Device

In order to ensure proper operation and prevent shock or fire, all products must be installed correctly. Read all warnings and follow all installation instructions.

Ground-fault equipment protection must be used to minimize the danger of fire from sustained electrical arcing if the heating cable is damaged or improperly installed and to comply with manufacturer requirements, agency certifications and national electrical codes. Conventional circuit breakers may not stop arcing.

Do not substitute parts or use electrical tape. Component approvals and performance characteristics are based on manufacturer specific parts only. Substitution will void approvals, warranties and performance claims.

The heating cable core is conductive and can short if not properly insulated and kept dry.

Heating cable core bus wires can overheat and short when damaged. When cutting the cable jacket or core, do not break bus wire strands.

Component and heating cable ends must be kept dry before and during installation.

Fire-resistant thermal insulation materials should be used.

BEFORE YOU START:

- Read through entire installation instructions prior to beginning installation.
- DO NOT install Freeze Protection products in direct contact with combustible surfaces or materials.
- DO NOT rest a hot heat gun on any Freeze Protection Products.
- DO NOT make any modifications to Freeze Protection Products while connected to power.
- THIS HEATING PRODUCT SHOULD ONLY BE INSTALLED BY QUALIFIED PERSONNEL WHO ARE FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE APPARATUS AND RISKS INVOLVED.
- THE INSTALLATION OF THIS HEATING PRODUCT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND REGULATIONS OF THE AUTHORITY HAVING JURISDICTION