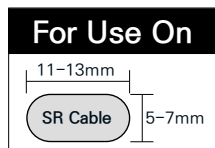
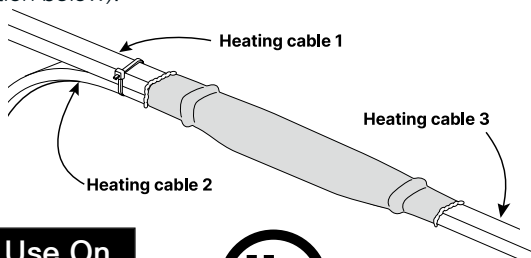


R **RADIANT** SOLUTIONS COMPANY

Tee and Splice Connection Kit

TSK-723 Installation Instructions

The following instructions illustrate a tee connection of three heat cables. A splice connection is identical but includes only two heat cables (Cables 1 and 3 in the illustration below).



When used with Heat
Tape Pro Self-Regulating
Heat Cable

Description

- TSK-723 is a tee or splice connection kit for self-regulating heating cables from 5-7mm thick x 11-13mm wide. This kit includes materials for one tee or one splice connection.

Installation Instructions

Tools Required

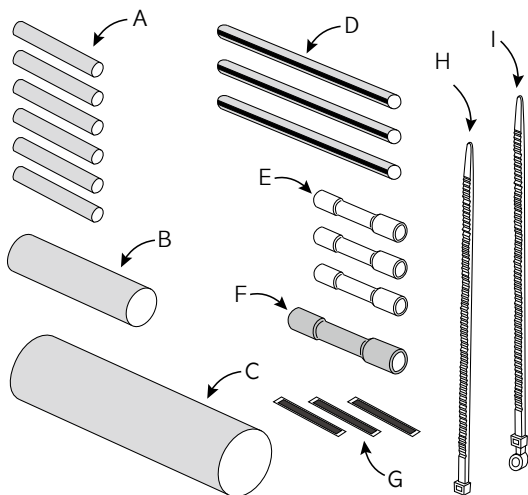
- Ratcheting Crimp tool, Klein 3005CR
- Utility knife
- Heavy duty scissors
- Needle nose pliers
- Heat gun
- Wire stripper
- Tape measure or ruler
- Screw driver

Additional Materials Required

- Additional RADIANT SOLUTIONS COMPANY accessories may be required for roof and gutter applications, including roof clips and downspout hangers.

Kit Contents

3



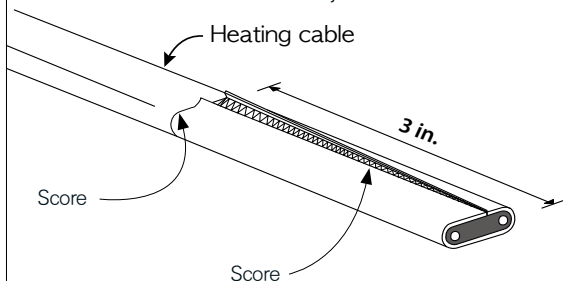
Item	Description	Dimension	Qty.
A	Heat shrink tube (Black)	0.16 x 1.5 in.	6
B	Heat shrink tube (Black)	0.63 x 6.3 in.	1
C	Heat shrink tube (Black)	0.79 x 12 in.	1
D	Heat shrink tube (Green/Yellow)		3
E	Heat shrink butt splice (Yellow)		3
F	Heat shrink butt splice (pink)		1
G	Mastic tape		3
H	Cable tie	0.18 x 7.91 in.	1
I	Cable tie	0.19 x 8 in.	1

Installation Instructions

4

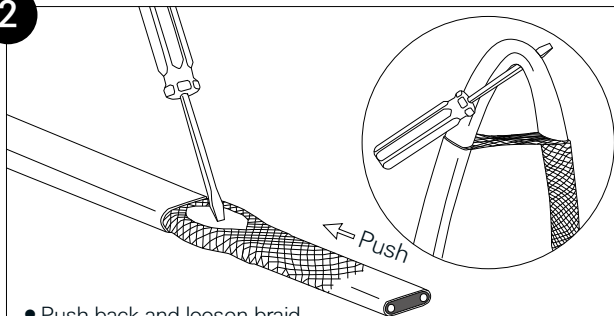
1

- Gently score around and down outer jacket.
- Remove outer jacket.



WARNING: DO NOT DAMAGE BRAIDING

2



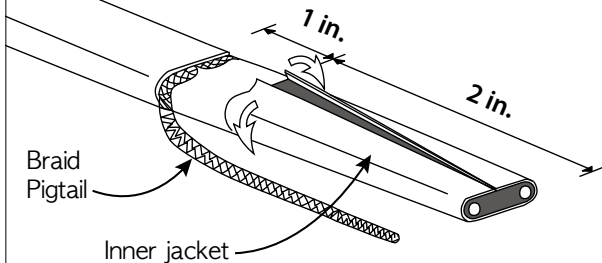
- Push back and loosen braid.
- Gently spread apart braid as shown.
- Bend and pull out heating cable through the opening in the braid.

Installation Instructions

5

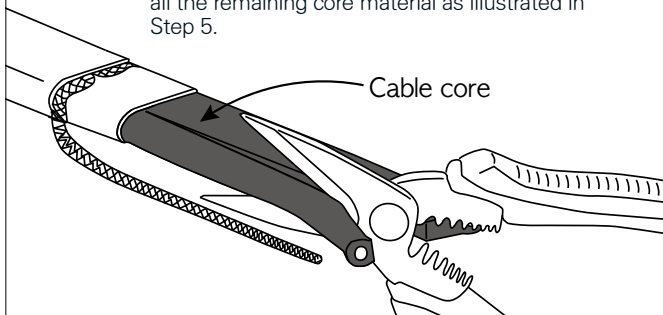
3

- Twist braid into pigtail on one side of heating cable.
- Gently score down and around the inner jacket.
- Bend and break jacket at score; peel off inner jacket.



4

- Using scissors or knife, carefully remove cable core between the two main bus wires. Remove all the remaining core material as illustrated in Step 5.

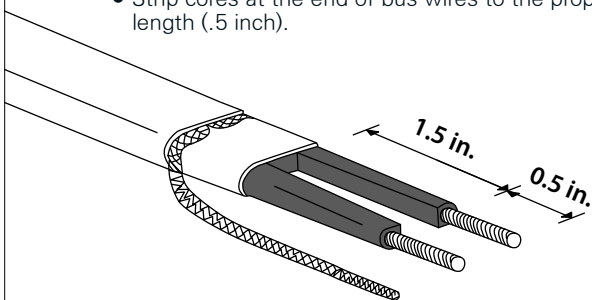


Installation Instructions

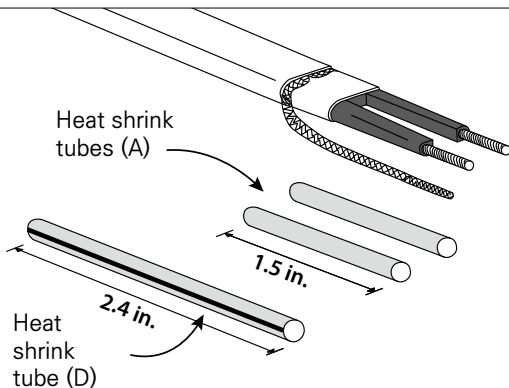
6

5

- Strip cores at the end of bus wires to the proper length (.5 inch).



6

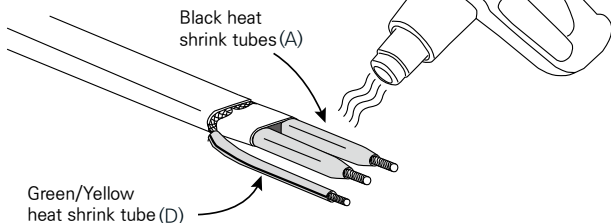


Installation Instructions

7

7

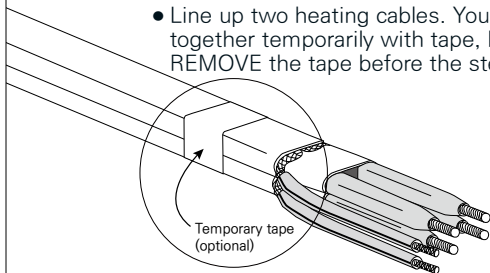
- Slip Black tubes (A) over bus wires.
- Slip Green/Yellow tube (D) over braid pigtail.
- Shrink all three tubes by using heat gun continuously from side to side.



8

IMPORTANT:

- For tee connection, repeat steps 1 through 7 for second and third heating cables. For a splice, the third heating cable is not used.
- Line up two heating cables. You may hold them together temporarily with tape, but you **MUST REMOVE** the tape before the step 14.

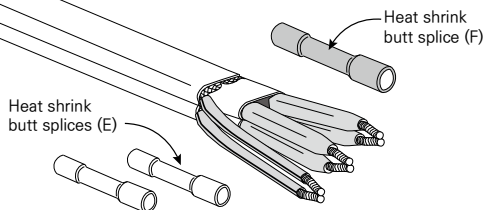


Installation Instructions

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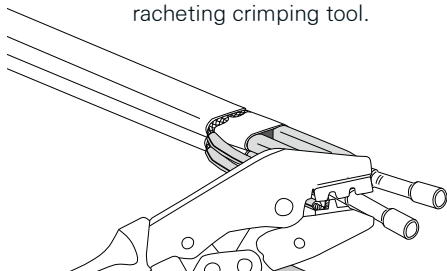
- Hold each section of bus wires and braids together as shown. Prepare Heat shrink butt splices (E) and (F).



WARNING: Make sure bus wires from the same heating cable are not twisted together.

10

- Crimp each set of bus wires with butt splices (E) and the set of braids with butt splice (F) using a ratcheting crimping tool.

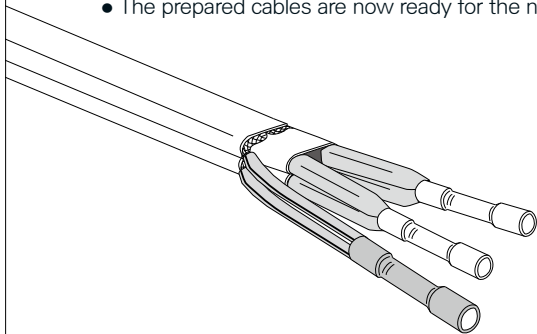


As with a tee connection, use butt splices (E) to connect bus wires of heating cables.

Installation Instructions

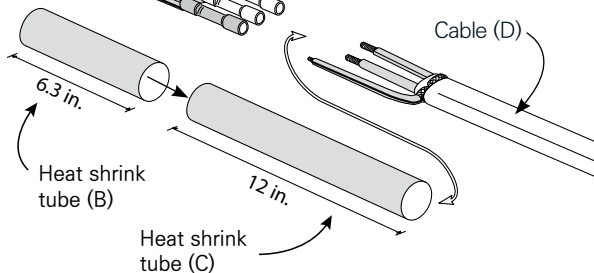
11

- The prepared cables are now ready for the next step.



12

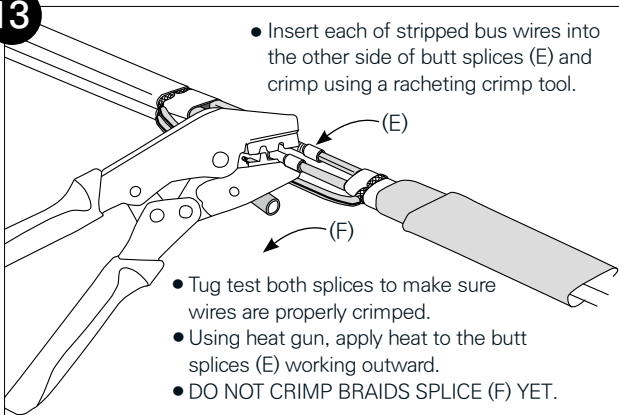
- Slide shrink tubes (B) and (C) onto the heating cable (D).
- Tube (B) slides into Tube (C).



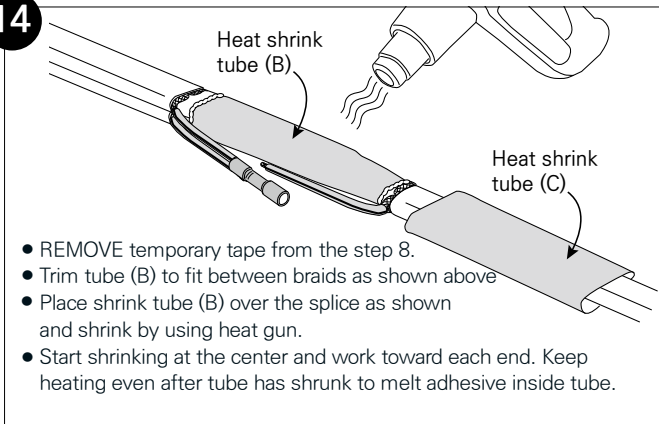
Installation Instructions

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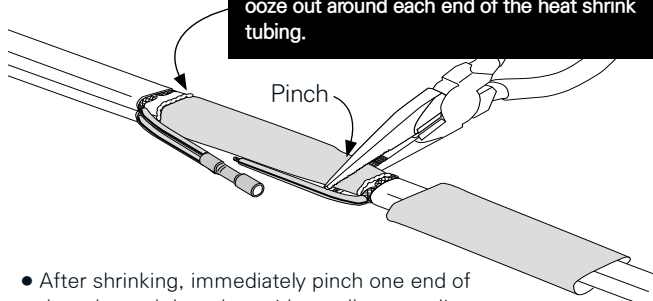


Installation Instructions

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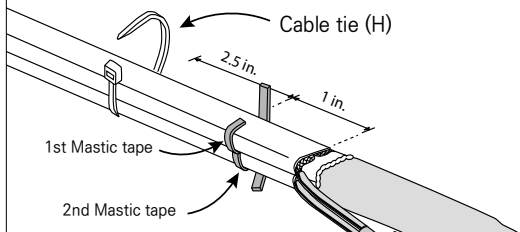
NOTE: A small amount of adhesive should ooze out around each end of the heat shrink tubing.



- After shrinking, immediately pinch one end of the tube and the other with needle nose pliers until sealed.

16

- Align a piece of mastic tape (G) 1 inch from the end of outer jacket and wrap around each cable as shown.
- Press cables firmly together so that mastic strips between cables bond together.
- Use cable tie (H) 3.5 inches from the stripped end of heating cables as shown.

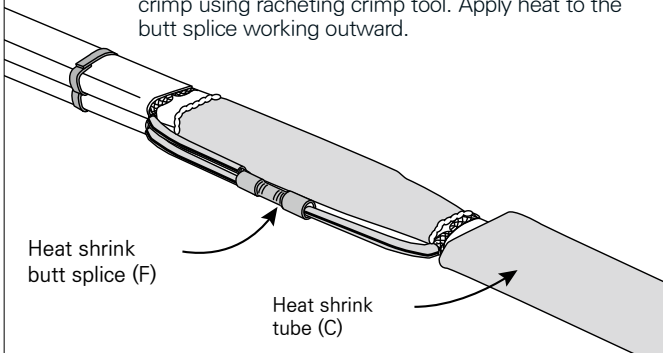


Installation Instructions

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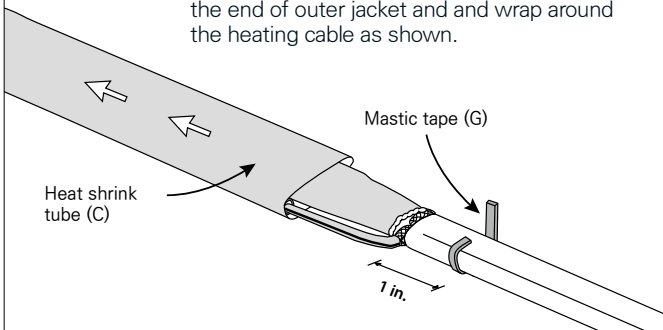
17

- Connect the braids using butt splice (F) and properly crimp using ratcheting crimp tool. Apply heat to the butt splice working outward.



18

- Slide shrink tube (C) over splice as shown.
- Align one piece of mastic tape (G) 1 inch from the end of outer jacket and wrap around the heating cable as shown.

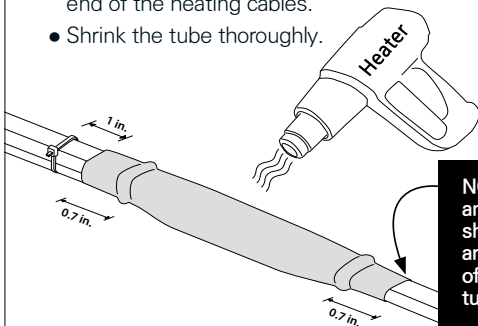


Installation Instructions

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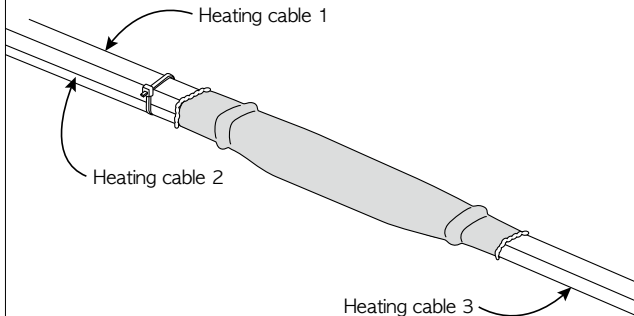
- Move heat shrink tube (C) over the splice as shown and shrink by using heat gun. Check to see the tube extends over the end of the heating cables.
- Shrink the tube thoroughly.



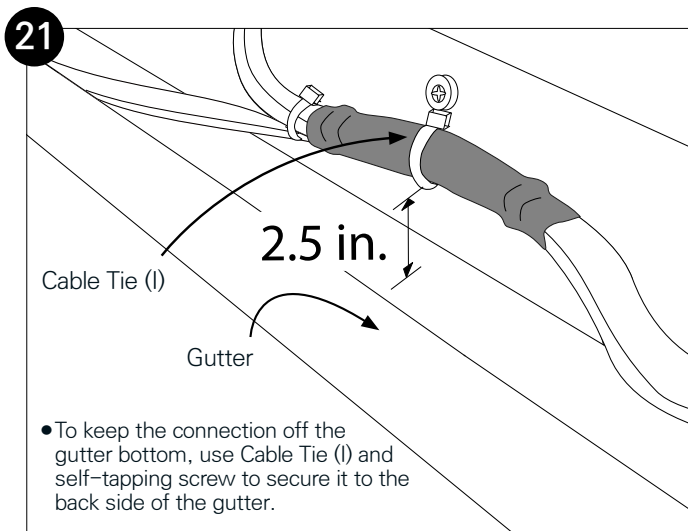
NOTE: A small amount of adhesive should ooze out around each end of the heat shrink tubing.

20

- The completed tee connection should look like this.



Attachment Method for Inside Gutters



Warranty Information

Radiant Solutions Company (the Company) warrants its products to be free from defects in materials and workmanship for a period of **5 years** to the first owner and/or original purchaser of the product. You must register your warranty with the company at www.radiantsolutionscompany.com within 60 days of purchase to qualify for warranty coverage. Under this Limited Warranty, the Company will provide the following: If the product is determined by the Company to be defective in materials and workmanship and has not been damaged as a result of abuse, misapplication or modification, the Company will refund all or part of the manufacturer's published list price of the Product at the time of purchase. Radiant Solutions Company's maximum liability shall not in any case exceed the list price for the product claimed to be defective. Warranty requires the installation be performed in strict accordance with the details outlined in this manual. Failure to do so voids the warranty completely. Radiant Solutions Company is not responsible for damage to product it deems the result of neglect, abuse or lack of maintenance. Purchaser is responsible for the costs associated with the installation, removal and reinstallation of the products including both labor and shipping costs incurred to return the product to Radiant Solutions Company. In order to make a claim, you must: (a) Within thirty (30) days after discovery of an alleged warranty issuer, provide the Company in writing with sufficient details relating to the nature of the defect, the installation, the history of operation and any repairs that may have been made, (b) At the Company's discretion and at the owner's expense, ship the Product to the Company or the Company's local distributor, (c) Provide proof that the Product was installed in accordance with the applicable Product Installation Manual and any special written design or installation guidelines by Radiant Solutions Company for this project, (d) Provide proof that the Product was installed in accordance with the National Electrical Code (NEC) or the Canadian Electrical Code, or all applicable local building and electrical codes, (e) Provide a retail sales receipt or proof of purchase, (f) Make a record of your cable inspection on a bi-annual basis and keep on file. The following are not covered by this Limited Warranty: (a) Any incidental or consequential damage, including inconvenience, loss of time or loss of income, (b) Any labor or materials required to repair or replace the Product or controls, (c) Any freight or delivery costs related to the Product to or from our facility, (d) Any costs associated with the analysis needed to discover or diagnose a potential problem with the cable system.