

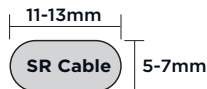


Heat Cable Repair Kit

CMK-319 Installation

The following instructions describe the proper repair procedure for self regulating heat cable

For Use On:



Description

CMK-319 is a repair kit for self-regulating heating cables from 5-7mm thick and 11-13mm wide. This kit includes materials for one repair.

IMPORTANT: Test the heating cable before and after repair to verify the cable has not been damaged during installation. Refer to the current Heat Tape PRO Spool Cable Installation Manual for recommended continuity, insulation resistance and electrical testing procedures.

Scan this QR code to get
the most current manuals



Installation Instructions

P.1

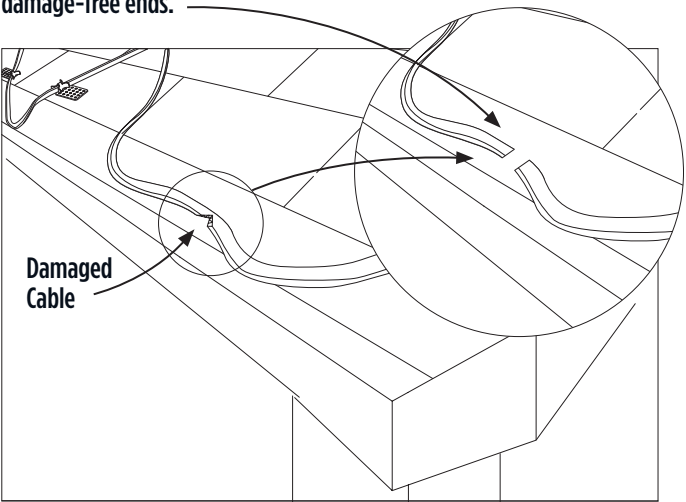
Tools Required

- Ratcheting Crimp tool
- Utility knife or heavy duty scissors
- Needle nose pliers
- Heat gun
- Wire stripper
- Tape measure or ruler
- Screw driver

BEFORE YOU BEGIN

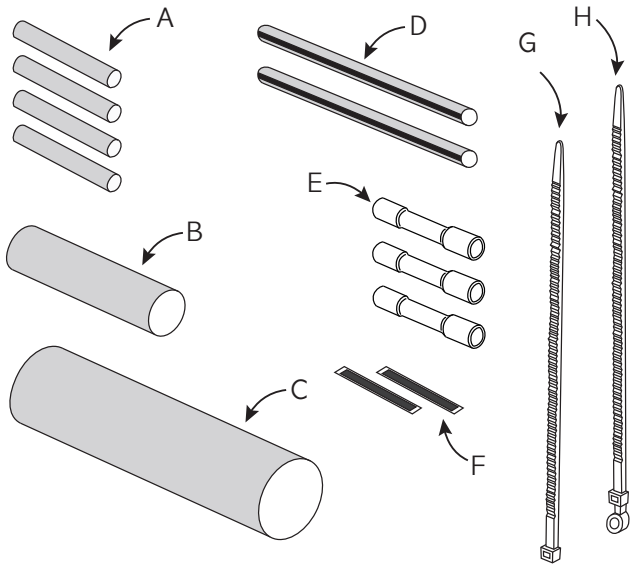
WARNING: ALWAYS DISCONNECT POWER BEFORE REPAIRING THE CABLE

Cut out the damaged section of cable so you end up with two, clean damage-free ends.



Kit Contents

P.2



Item	Description	Dimension	Qty.
A	Heat shrink tube (Black)	0.16 x 1.5 in.	4
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 (Yellow)	0.19 x 2.4 in.	2
E	Heat shrink butt splice (Blue)	0.11 x 1.5 in.	3
F	Mastic tape	0.40 x 2 in.	2
G	Cable tie	0.18 x 7.91 in.	1
H	Cable tie	0.19 x 8 in.	1

Installation Instructions

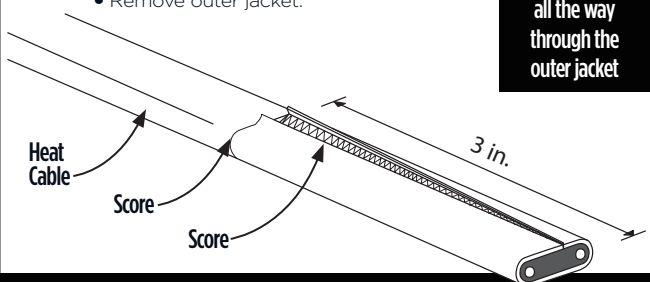
P.3

1

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

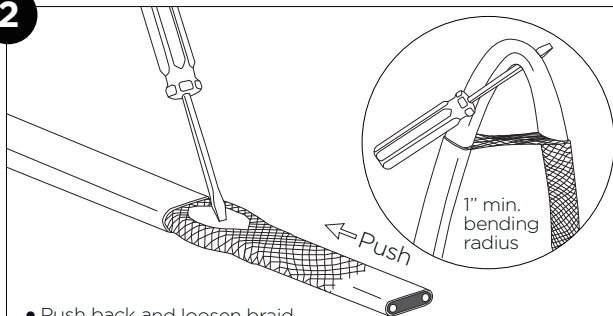
Pro Tip:

Do not score all the way through the outer jacket



WARNING: DO NOT DAMAGE BRAIDING

2



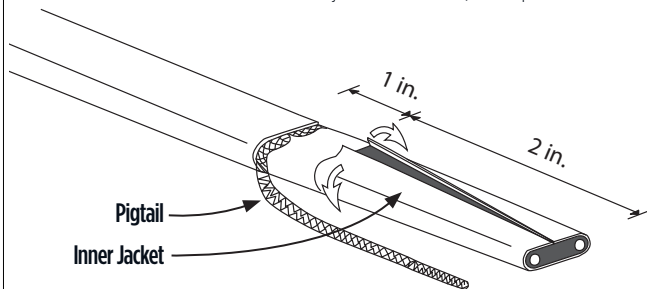
- Push back and loosen braid.
- Gently spread braid apart as shown.
- Bend and pull out heating cable through the opening in the braid.

Installation Instructions

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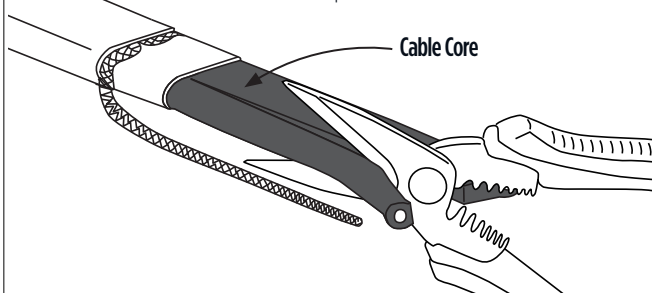
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- Twist braid into pigtail on one side of heating cable.
- Gently score down and around the inner jacket.
- Bend and break inner jacket at score; then peel it off.



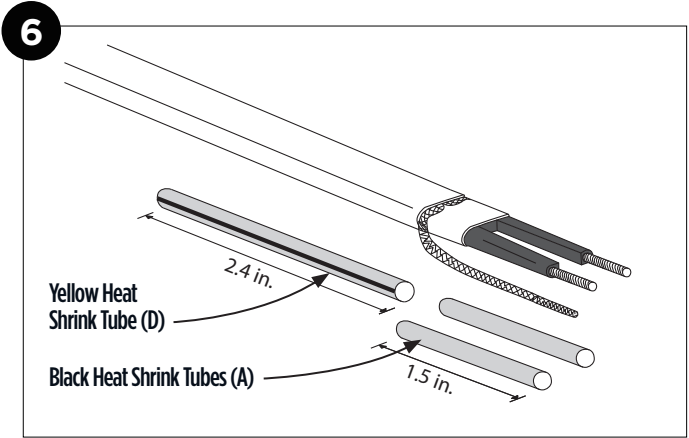
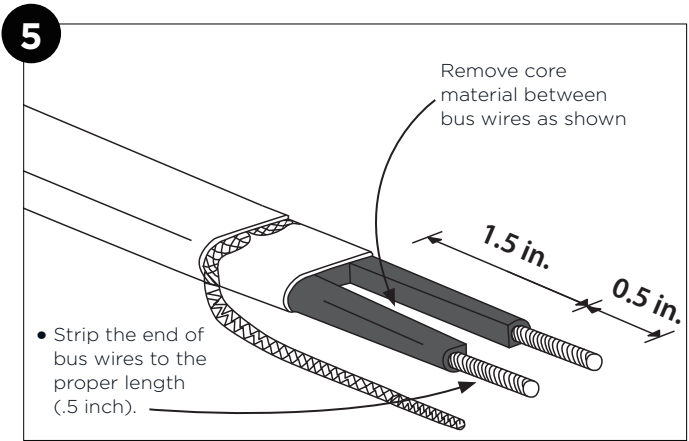
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- Using scissors or knife, carefully remove cable core between the two main bus wires. Remove all the remaining core material as illustrated in Step 5.



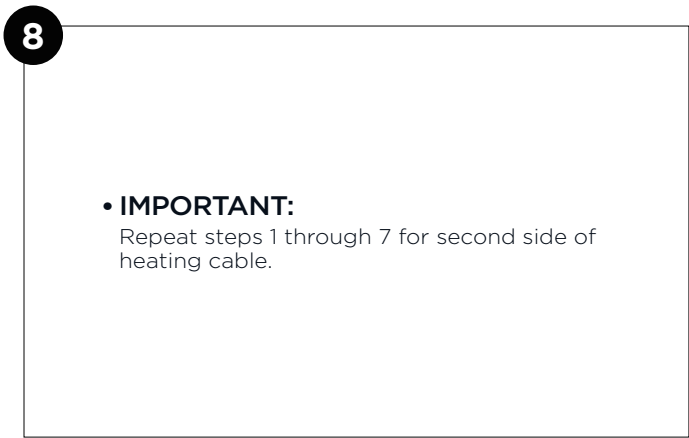
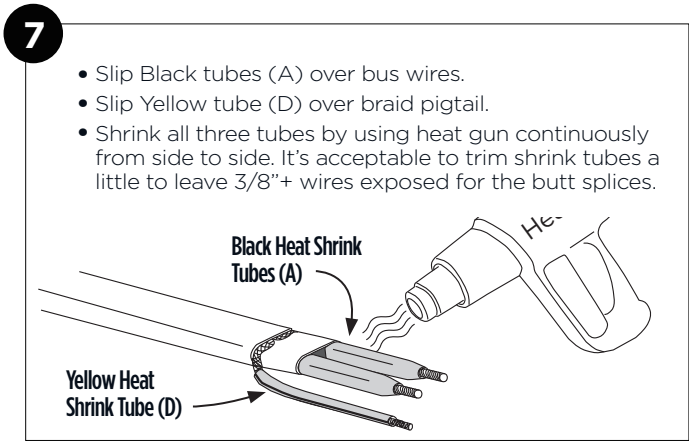
Installation Instructions

P.5



Installation Instructions

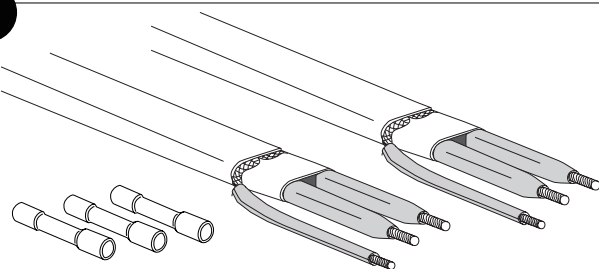
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Installation Instructions

P.7

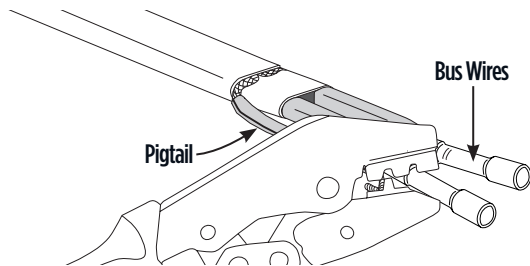
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Both ends of the cable are now prepared for installation of heat shrink butt splices

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- Crimp butt splices (E) onto bus wires using a ratcheting crimping tool



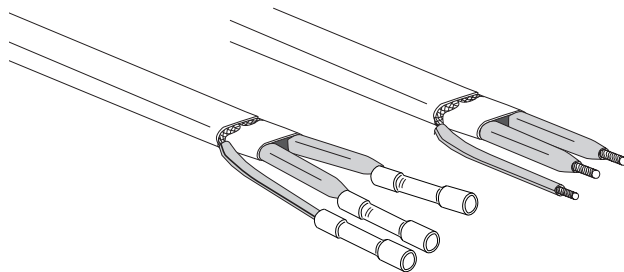
Perform a quick pull test on the butt splices to make sure they are crimped properly

Installation Instructions

P.8

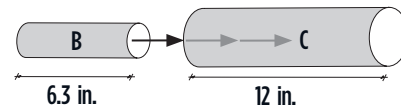
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- Both sides of the cable are now ready for the next step.

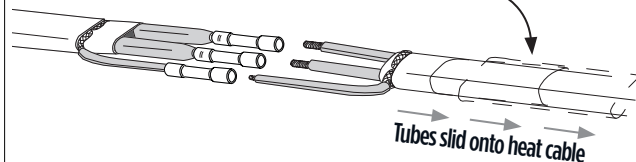


12

- Slide Tube (B) into Tube (C).



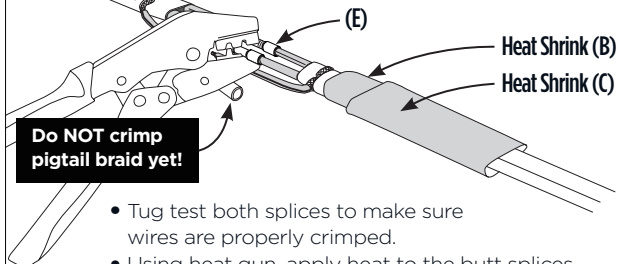
- Slide shrink tubes (B) and (C) onto the heating cable (represented as dashed lines).



Installation Instructions P.9

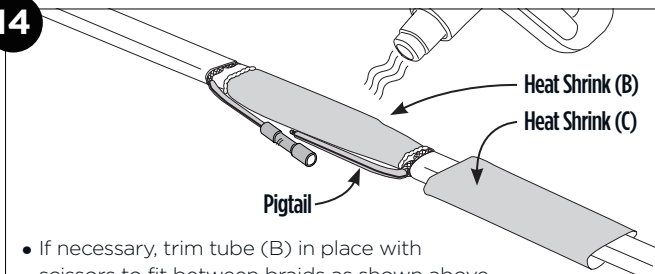
13

- Insert the stripped bus wires into the open ends of butt splices (E) and crimp using a ratcheting crimp tool.



- Tug test both splices to make sure wires are properly crimped.
- Using heat gun, apply heat to the butt splices (E) working outward.

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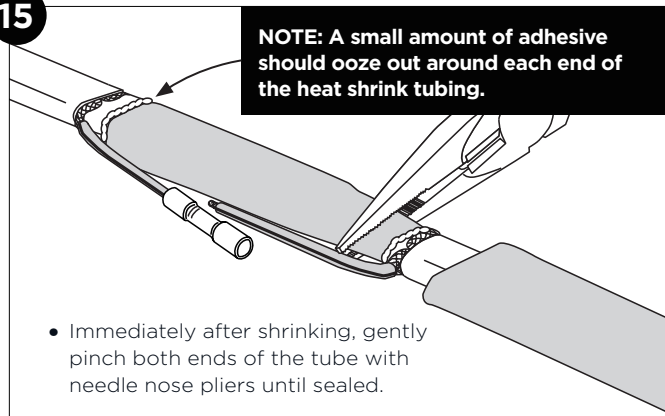


- If necessary, trim tube (B) in place with scissors to fit between braids as shown above.
- Slide shrink tube (B) over the splice (and between the pigtails) as shown, then shrink by using a heat gun.
- Start shrinking at the center and work toward each end. Keep heating even after tube has shrunk to melt adhesive inside tube. Apply heat around all sides of the tube.

Installation Instructions P.10

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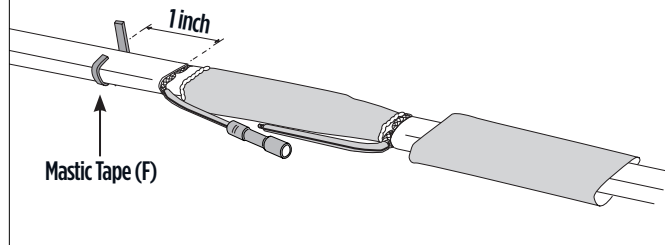
NOTE: A small amount of adhesive should ooze out around each end of the heat shrink tubing.



- Immediately after shrinking, gently pinch both ends of the tube with needle nose pliers until sealed.

16

- Align a piece of mastic tape (F) 1 inch from the end of outer jacket and wrap around the cable as shown.
- Gently press mastic onto cable on all sides.

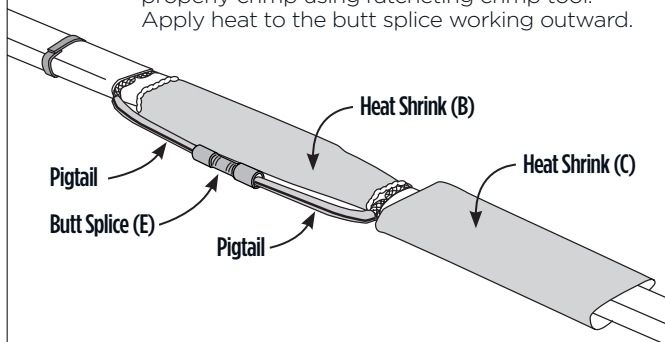


Installation Instructions

P.11

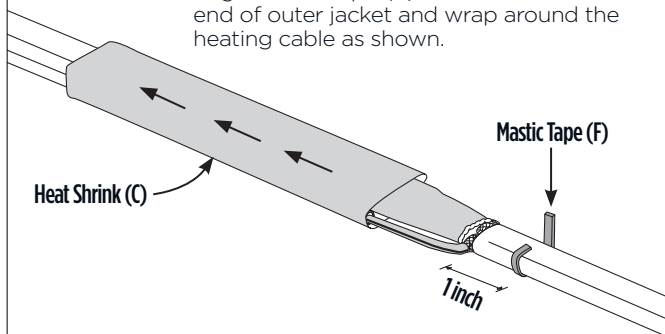
17

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



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

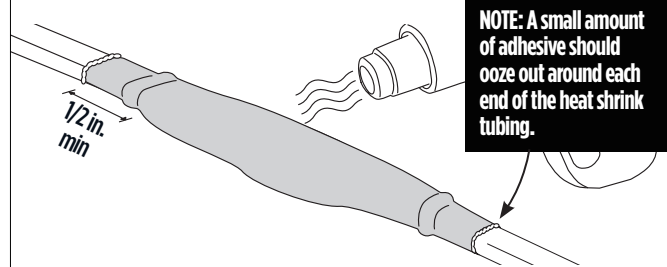


Installation Instructions

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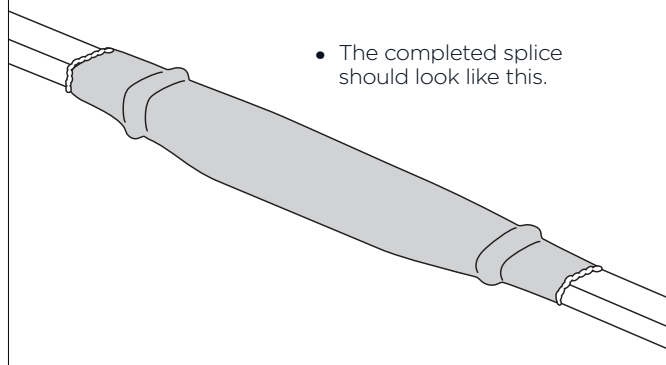
19

- Center the heat shrink tube (C) over the splice area as shown and shrink by using heat gun. Check to see the tube extends over the mastic tape on each side.
- Shrink the tube thoroughly.



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- The completed splice should look like this.

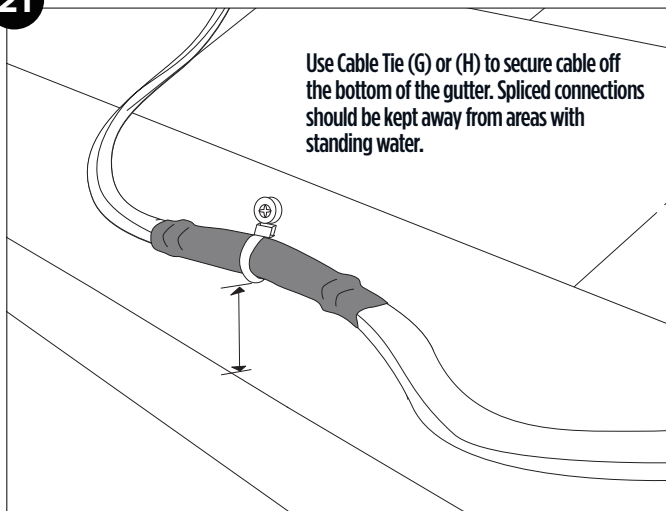


Installation Instructions

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Attachment Method for Inside Gutters

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Cable Tie (H) can be used with a screw to secure the cable repair area to a surface while Cable Tie (G) can be used to secure the cable repair area directly to things, such as a gutter bracket.

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 issue, 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.



Questions? Please contact us at 1-877-387-4218 or email to info@radiantsolutionscompany.com

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