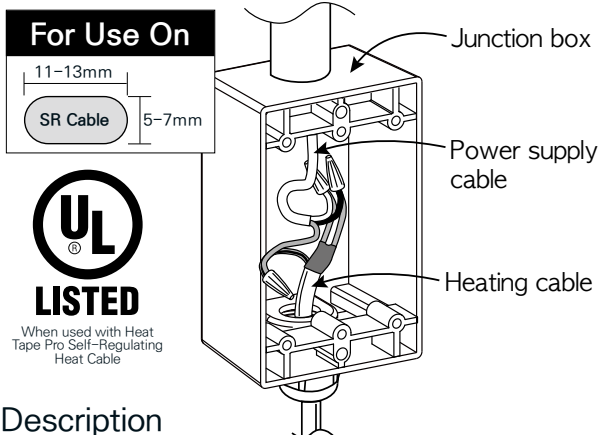


# Hardwire Connection Kit

## HCK-M-1 Installation Instructions



### Description

- HCK-M-1 is a hard-wired power connection kit for use with self-regulating heating cables from 5-7mm x 11-13mm.
- The enclosed kit includes materials for one power connection.
- HCK-M-1 is used to connect heating cable into an electrical junction box for direct wiring and allows a maximum circuit breaker size up to 40A.

# Installation Instructions

## Tools Required

- Utility knife
- Heavy duty scissors
- Needle nose pliers
- Heat gun
- Screwdriver
- Ruler/Tape measure

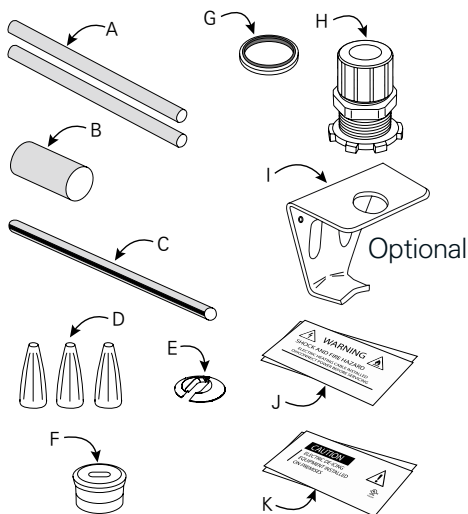
## Additional Materials Required

Junction box:

- All components must be listed for the US and certified for Canada
- 120/240 volt with suitable approval for the specific location.
- 1/2 inch NPT thread compatible.
- Rated for outdoor use.
- If the junction box is metal it is required to be bonded to ground per NEC and/or CEC.

# Kit Contents

3

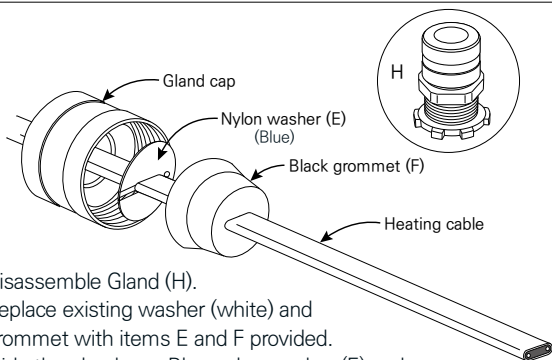


Item	Description	Dimension	Qty.
A	Heat shrink tubes (Black)	0.15×5.5 in.	2
B	Heat shrink tube (Black)	0.47×1.5 in.	1
C	Heat shrink tube (Green/Yellow)	0.16×6.5 in.	1
D	Wire nuts		3
E	Nylon washer (Blue)		1
F	Black grommet (Silicon)		1
G	Sealing ring		1
H	1/2" NPT Metal gland with lock nut and gland cap		1
I	Pipe mount bracket – Not Included		1
J	Warning label for pipe installations		2
K	Caution label for roof installations		2

# Installation Instructions

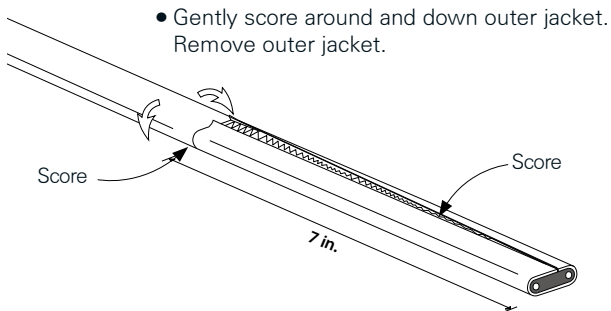
4

1



- Disassemble Gland (H).
- Replace existing washer (white) and grommet with items E and F provided.
- Slide the gland cap, Blue nylon washer (E) and Black grommet (F) onto heating cable as shown.

2

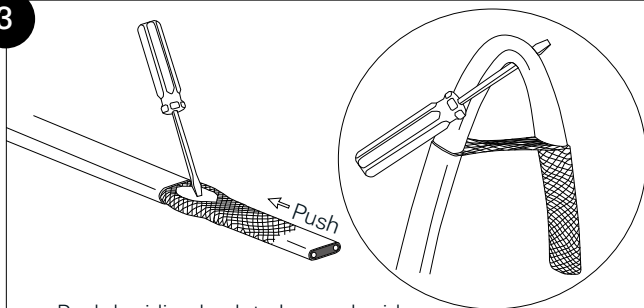


**WARNING: DO NOT DAMAGE BRAIDING**

# Installation Instructions

5

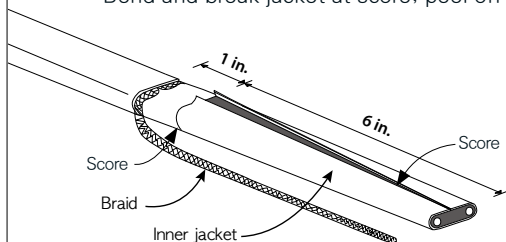
3



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

4

- 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.

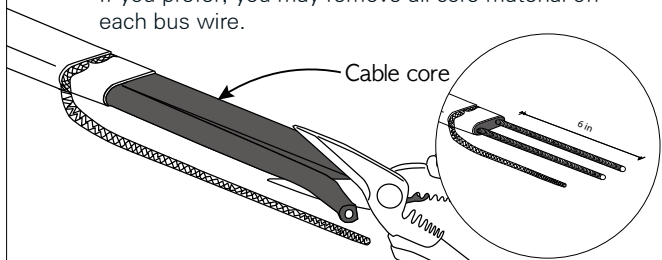


# Installation Instructions

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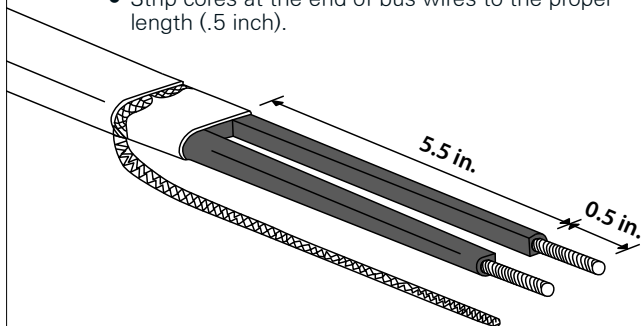
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- Using scissors or knife, carefully remove cable core between the two main bus wires. Remove core material as illustrated in Step 6.
- If you prefer, you may remove all core material off each bus wire.



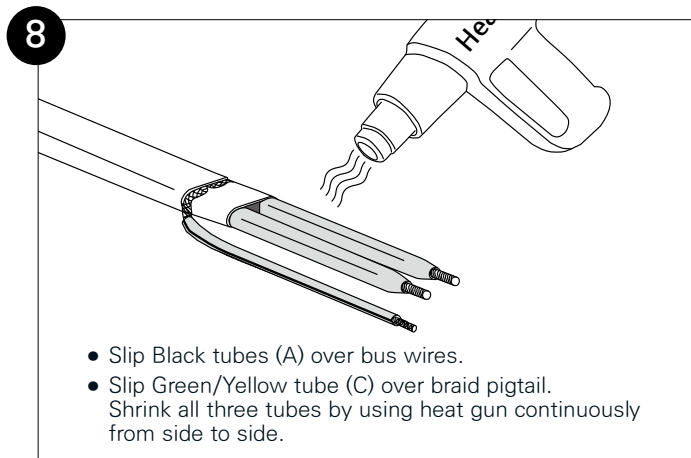
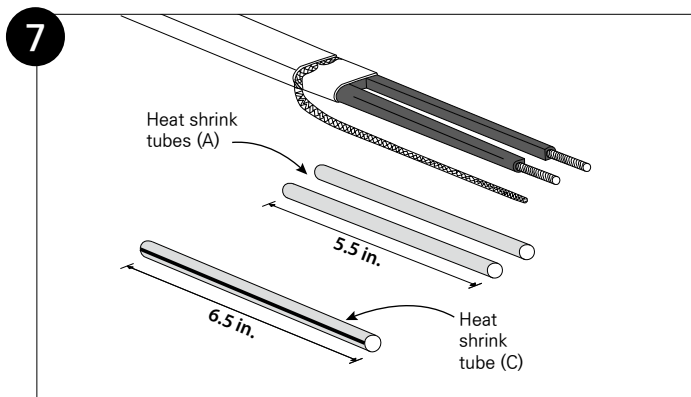
6

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



# Installation Instructions

7

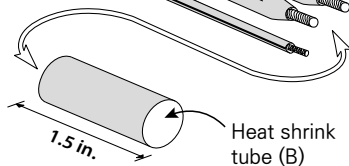


# Installation Instructions

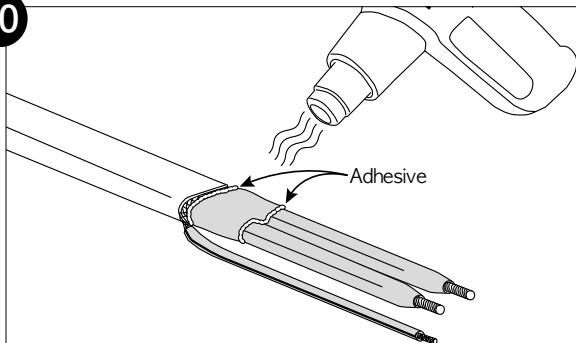
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9

- Slip shrink tube (B) over the end of heating cable as shown.



10



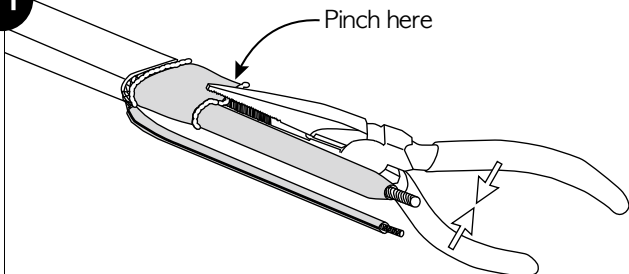
- Using heat gun, shrink tube (B) evenly until adhesive flows out from both ends.



# Installation Instructions

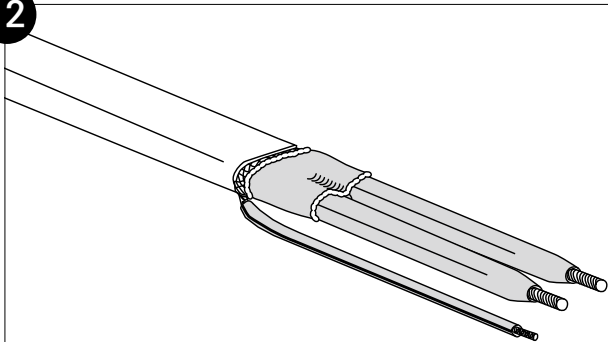
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11



- Using needle-nose pliers, immediately pinch the tube between the bus wires for 10 seconds until sealed.

12

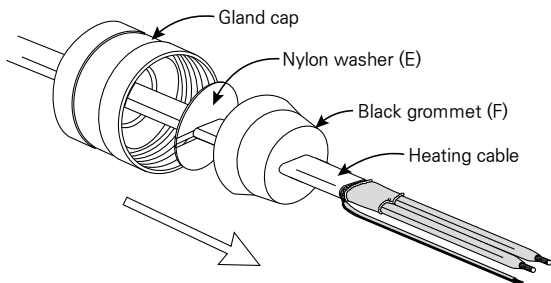


- Heating cable is now prepared for connection.

# Installation Instructions

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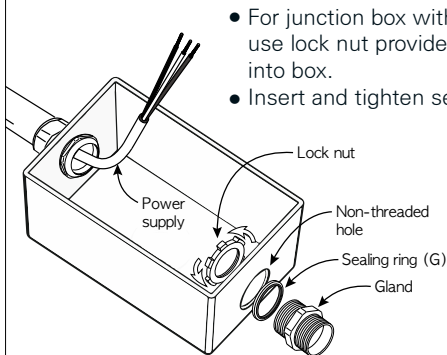
13



- Slide parts to the prepared end of the cable as shown.

14a

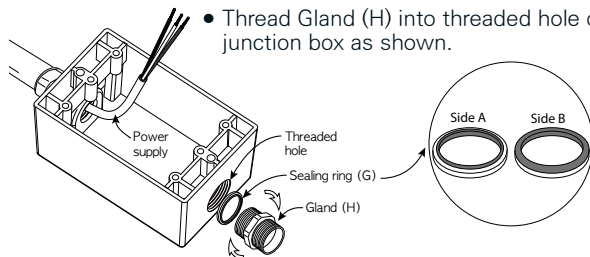
## Junction box without threaded hole



- For junction box without threaded hole, use lock nut provided to secure gland into box.
- Insert and tighten sealing fitting.

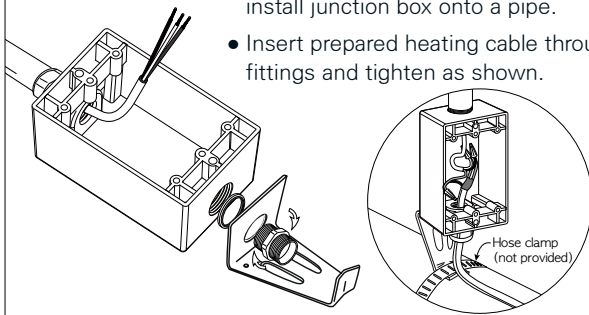
## 14b Junction box with 1/2" NPT threaded hole

- Place 'B' side of Sealing ring (G) against junction box as shown below.
- Thread Gland (H) into threaded hole of junction box as shown.



## 14c Installation using optional pipe bracket

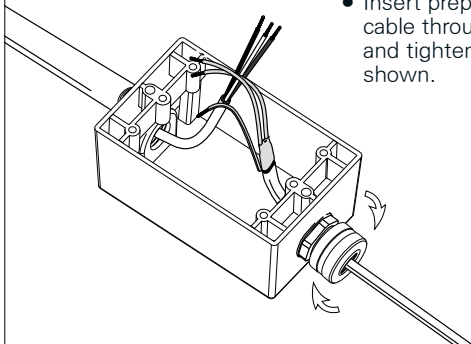
- Use optional metal bracket (I) to install junction box onto a pipe.
- Insert prepared heating cable through fittings and tighten as shown.



# Installation Instructions

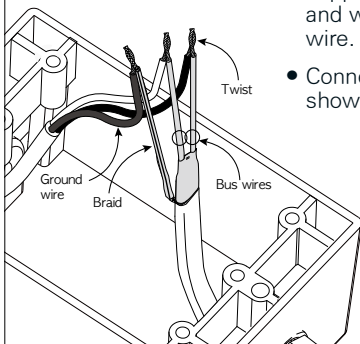
12

15



- Insert prepared heating cable through Gland (H) and tighten gland cap as shown.

16

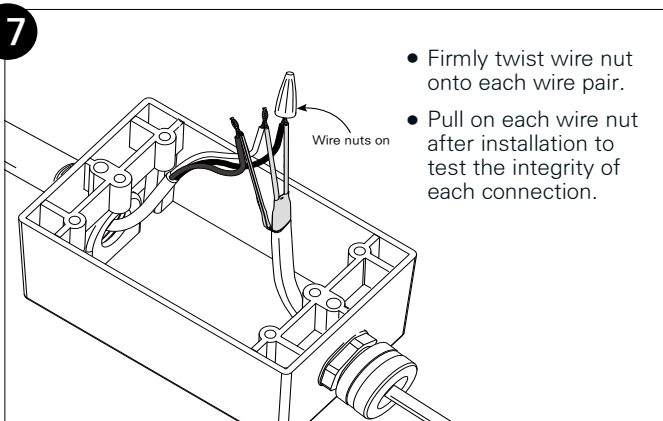


- Connect and twist black power supply wire to one bus wire and white wire to the other bus wire. Polarity does not matter.
- Connect ground wire to braid as shown.

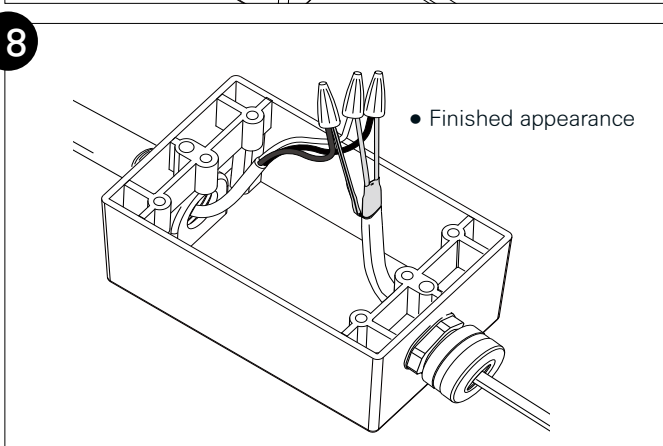
# Installation Instructions

13

17



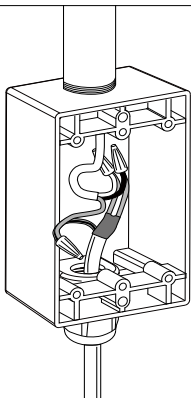
18



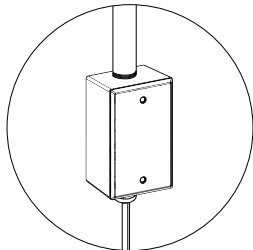
# Installation Instructions

14

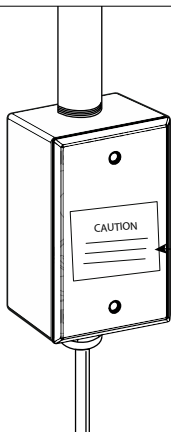
19



- Secure junction box in suitable location.
- Seal the junction box with approved cover per manufacturers instructions.



20



- Attach an appropriate marking label (J or K) on the junction box.

# 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](http://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.

