Installation Instructions
ROOF AND GUTTER COMPONENTS
PCA-RG2 POWER CONNECTION KIT

TOOLS REQUIRED: Diagonal cutters; screwdriver; needle-nose pliers; utility knife; heat gun or propane torch.

(Junction box not included)

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>Grounding screw and nut</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>Grommet</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>Sealing fitting</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>Black heat-shrink tube 1/2&quot; x 1 1/2&quot;</td>
</tr>
<tr>
<td>E</td>
<td>1</td>
<td>Green/Yellow heat-shrink tube 3/8&quot; x 5 1/2&quot;</td>
</tr>
<tr>
<td>F</td>
<td>2</td>
<td>Black heat-shrink tubes 3/8&quot; x 5 1/2&quot;</td>
</tr>
<tr>
<td>G</td>
<td>1</td>
<td>Black heat-shrink tube 3/4&quot; x 1 1/2&quot;</td>
</tr>
<tr>
<td>H</td>
<td>1</td>
<td>Black heat-shrink tube 3/4&quot; x 4&quot;</td>
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</tbody>
</table>

WARNING - The contents of the component kit must be installed correctly to ensure proper operation and to prevent shock or fire. Read these important warnings and carefully follow all the installation instructions.

- To minimize the danger of fire from sustained electrical arcing if the heating cable is damaged or improperly installed use a ground fault protection device. Arcing may not be stopped by conventional circuit breakers.
- Component approvals and performance are based on the use of specified parts only. Do not substitute parts or use vinyl electrical tape.
- The black heating-cable core is conductive and can short. It must be properly insulated and kept dry.
- Damaged bus wires can overheat or short. Do not break bus wire strands when preparing the cable for installation.
- Bus wires will short if they contact each other. Keep bus wires separated.
- Heat-damaged components can short. Use a heat gun or torch with a soft yellow low-heat flame; not a blue focused flame. Keep the flame moving to avoid overheating, blistering, or charring the heat-shrink tubes. Avoid heating other components. Replace any damaged parts.
- Leave these installation instructions with the user for future reference.

WARNING - Overheating heat-shrink tubes will produce fumes that may cause irritation. Use adequate ventilation and avoid charring or burning.
1. Inner jacket
   Conductive core
   Bus wires (16 AWG)
   Outer jacket
   Braid

2. Slide compression ring, grommet ring, and grommet onto heating cable.

3. Strip outer jacket as shown. Do not cut through braid or inner jacket.

4. Work opening through ground braid at jacket, bend back, and pull out inner core. Twist braid into a pigtail.

5. Strip inner jacket as shown. Leave 1/8" inner jacket covering core.

6. Cut inner core at end as shown. Roll back with pliers and separate the bus wires from the core.

7. Remove core material from bus wires. Retwist bus wires.

8. Install the 1/8" x 5 1/2" heat-shrink tubes over bus wires. Heat-shrink the tubes into position, keeping the heat source moving from side to side.
Install black \( \frac{1}{2} \times 1\frac{1}{2} \) heat-shrink tube as shown.

While tube is still hot, pinch with pliers between bus wires to seal, hold for 10 to 15 seconds.

Slip green/yellow tube over braid and shrink.

Slide sealing fitting components to position at core sealer.

Install sealing fitting into junction box.

Insert heating cable through sealing fitting and tighten components into place.

Connect heating cable leads to power wire leads (ground braid pigtail to ground wire).

Install weathertight cover.
End Seal

TOOLS REQUIRED:
Diagonal cutters; needle-nose pliers; utility knife; heat gun or propane torch.

1. Strip outer jacket as shown. Do not cut into inner jacket.

2. Unravel ground braid and trim at outer jacket; cut back.


4. Heat-shrink 4" heat-shrink tube in place with ⅛" over end of smaller heat-shrink tube. Remove heat, resqueeze at end of smaller heat-shrink tube, then squeeze at end of outer heat-shrink tube. Hold for 10 to 15 seconds.