#### **GRK-P POWER CONNECTION KIT**

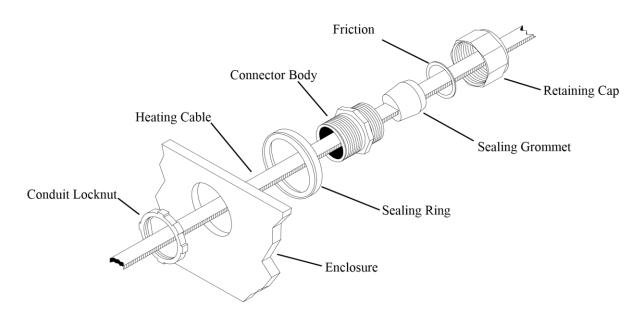
INSTALLATION INSTRUCTIONS

#### **DESCRIPTION**

The GRK-P Entry Seal Kit provides a watertight entry into a junction box suitable for this application. This kit includes cable seals for power and end terminations. The GRK-P kit is designed for use with all versions of SBA Heat Tracing FPS-BT and CCA-BA heater cables.

#### KIT CONTENTS

- 1 Cable connector, .75" NPT thread
- 1 Conduit locknut
- 1 Shrink tube, 12mm (.5") ID, 76mm (3") length
- 2 Shrink tubes,12mm (.5") ID, 51mm (2") length
- 2 Shrink tubes, 3mm (.125") ID, 25mm (1") length
- 1 Sealing ring with stainless steel retainer
- 2 Wire nuts
- 2 Warning labels



Note: This entry seal is suitable for use with any approved enclosure with a maximum wall thickness of 4.75mm (.1875") or conduit outlet/junction box with 19mm (.75") threaded hubs.

- 1. Install connector body on selected enclosure. For enclosures without threaded hubs, install the connector with the sealing ring on the outside and secure with the supplied locknut as shown in the diagram above. Discard these items when using threaded enclosures.
- 2. Slide the retaining cap, friction washer and grommet over the end of cable to be terminated.
- 3. Insert the cable through the connector body and into the junction box allowing enough cable to complete termination of the heating cable.
- 4. Tighten retaining cap securely to connector body. To avoid possible leaks, be careful not to over-tighten.
- 5. Terminate heater cable, see sheets 2-5.
- 6. Connect heater cable to power with supplied wire nuts.

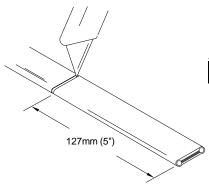


#### **WARNINGS:**

- Article 426 of the National Electric Code requires that all outdoor electric de-icing and snow-melting equipment be provided with branch circuit ground-fault equipment protection.
- If nuisance tripping of ground fault breakers occurs due to condensation in the junction box, electrical
  connections should be moisture proofed by use of a coating or sealant.



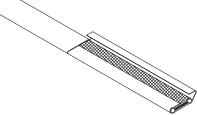
## **OVERJACKET STRIPPING PROCEDURES**



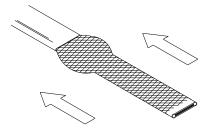




 Lightly cut around heater overjacket 127mm (5") from the end. Bend cable to break the overjacket.

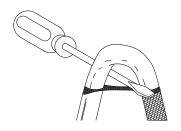


- Lightly cut overjacket up the center between first cut mark and the cable end. Bend cable to break the overjacket.
- 3 Remove overjacket from heater cable.

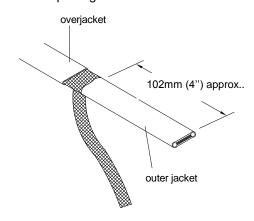


Move braid back toward the overjacket, creating a bulge.

**5** At the bulge, separate the braid to make an opening.



**6** While bending the heater cable, work it through the braid opening.



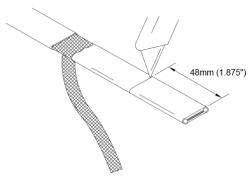
- Pull the braid tight.
- 8 Proceed to "Stripping Instructions", sheet 3 of 5.



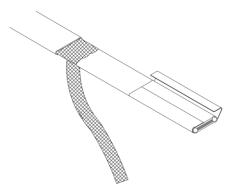
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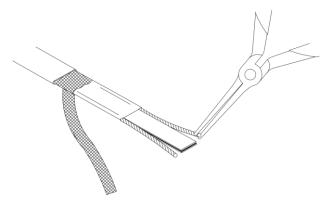
#### STRIPPING INSTRUCTIONS



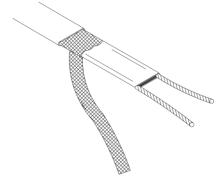
- Lightly cut around heater jacket 48mm (1.875") from the end of cable. Bend cable to break jacket.
- 2 Lightly cut the jacket up the center between the first cut mark and the end of cable. Bend cable to break jacket.



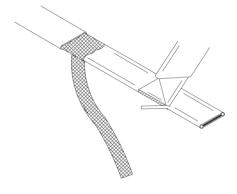
**3** Remove the jacket from the heater cable.



- **5** Starting at the end, pull each bus wire away from the core.
- 6 Remove exposed core material.



- Out 6mm (.25") off the end of each bus wire before installing the power termination.
- **3** Proceed to "Power Feed End Termination", sheet 4 of 5.



Shave the core material from the outside of each bus wire.

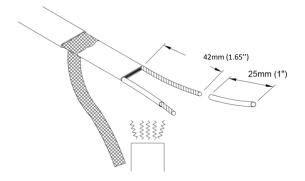




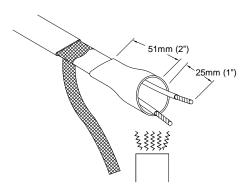
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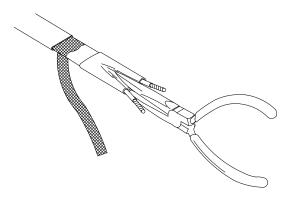
#### POWER FEED END TERMINATION



OSlide a 3mm (.125") ID, 25mm (1") shrink tube over each bare bus wire, leaving 17mm (.6") of each bus wire exposed and shrink with an industrial heat gun or rapidly moving fluffy flame until completely shrunk.



2 Slide the 12mm (0.5") ID, 51mm (2") length shrink tube over both pigtails, 25mm (1") of each bus wire should be exposed. Shrink with an industrial heat gun or rapidly moving fluffy flame until completely shrunk.



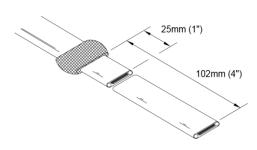
While still warm, spread pigtail wires and squeeze with needle-nose pliers, hold for 5 seconds. Allow power termination to cool before use.



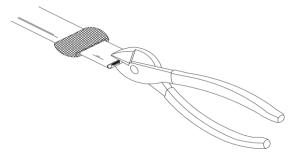
#### **GRK-P POWER CONNECTION KIT**

INSTALLATION INSTRUCTIONS

#### **END SEAL SHRINK TUBE PROCEDURES**



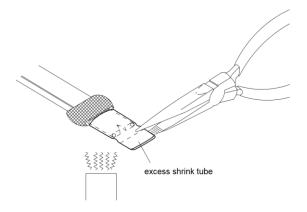
Out heater cable off at required length. Strip overjacket back 102mm (4") from the end of heater cable. Slide braid back over the overjacket portion of the heater cable. Cut off excess heater cable leaving 25mm (1").



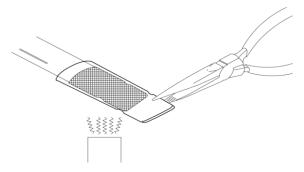
2 At the end of the heater cable, snip a 9.5mm (.375") slit between the bus wires. Slightly spread wires apart.



Slide a 51mm (2") length shrink tube over the heater cable leaving 25mm (1") of shrink tube past the heater cable. Shrink with heat gun until completely shrunk.



- While still warm, squeeze the entire width of shrink tube closed. Cut off excess shrink tube.
- **5** Pull braid over the squeezed shrink tube, covering the entire end seal.



6 Slide a 76mm (3") length shrink tube over the braid leaving 12mm (0.5") of shrink tube past the braid. Shrink with heat gun until completely shrunk. While still warm, squeeze the entire width of shrink tube closed.

Serge Baril Heat Tracing Systems products are supplied with a limited warranty. Complete Terms and Conditions may be found on Serge Baril's website at <a href="www.baril.ca">www.baril.ca</a>.

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