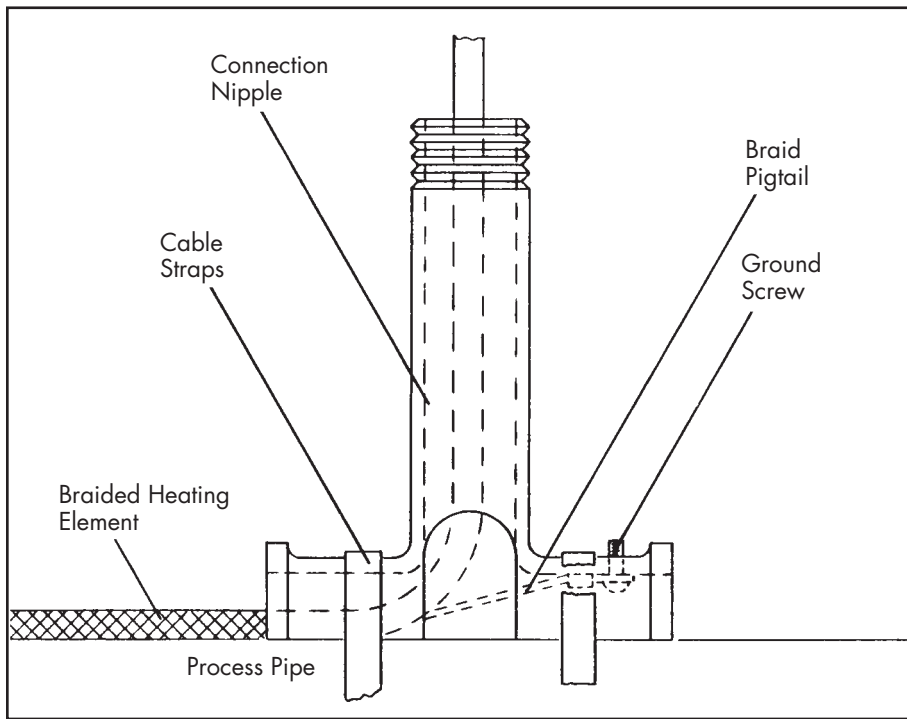


1548-40000

Electric Connection Kit



Input Power Connection Procedure

1. Insert the heating element through the connection nipple allowing 6" to extend beyond the top of the connection nipple (for braided heater grounding on back page).
2. Place the connection nipple on the pipe surface at the point where the conduit will connect into the system. Fasten the connection nipple to the pipe using the metal cable straps.
3. Screw the appropriately sized connection box (not supplied) onto the connection nipple. Connect the conduit into the connection box.
4. Separate the heater conductors as outlined in the stripping procedure (see back page).
5. Slide the shrink tube onto the heater. Pull appropriate size input power wires (not supplied) through the conduit and connect them to the heating element conductors using the small gauge insulated crimp connectors.
6. Cover the entire splice area with end sealant. Slide the shrink tube over splice so it is centered over the crimp connection and shrink into place with an appropriate heat gun.
7. Fill the connection nipple from the top using end sealant until sealant flows out of the top or bottom of the connection nipple.
8. Push the splice and input power wires into the connection box and attach the gasket and cover.
9. Attach the caution label to the connection box cover.

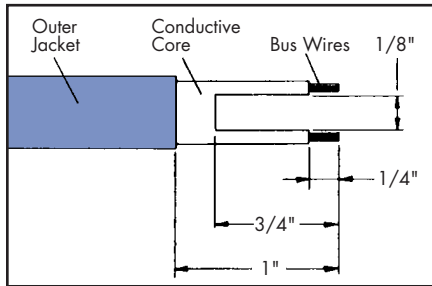
Kit Contents

- 1 Pipe Standoff
- 2 Ring Terminals
- 4 Crimp Connectors, large
- 2 Crimp Connectors, small
- 2 Pipe Straps
- 2 Heat Shrink End Caps
- 1 Sealant, 3 oz.
- 1 Roll Fiberglass Tape
- 1 Caution Label
- 1 Ground Screw
- 1 6" Shrink Sleeve

Conduit Box NOT Included

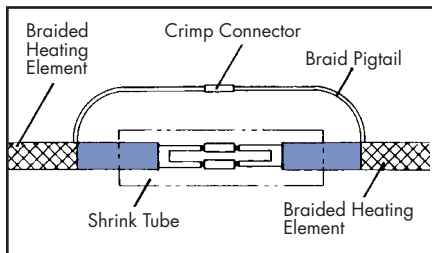
Connection Kit 1548-40000

1548-40000 electrical connection kits are a universal all-in-one connection kit for making the electrical connections for 2700 Series self-regulating heating elements. The kit contains the necessary components (except conduit box) to make **one input connection** or **one splice connection** or **one input power splice connection** as well as **two termination connections**. The connection kit fits pipes up to 6" IPS. For larger pipes, use additional cable ties end-to-end (1591-11041 not included). The 1548-40000 kits are approved by Factory Mutual approved for use in Class 1, Division 2, Groups B, C and D; Class II, Division 2; Class III, Division 2 areas.



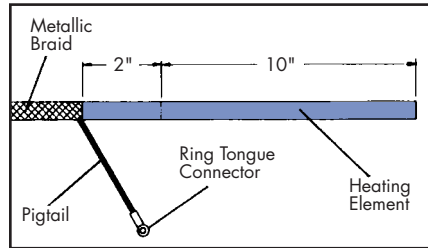
Stripping Procedure

1. Remove the outer jacket approximately 1" from the end of the heater, exposing the core.
2. Cut out the web of core material 1/8" wide x 3/4" long.
3. Strip conductive core 1/4" from the end of each bus wire, using wire strippers.



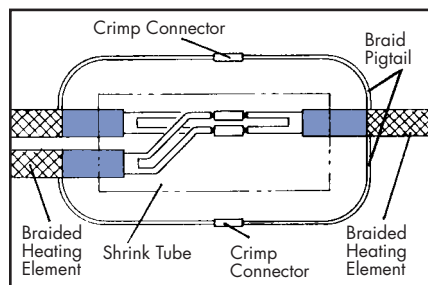
Splice Connection Procedure

1. Bring the heating elements together allowing approximately 1/4" gap between them.
- 1A. For braided heater — unravel braid 4" from end of each heater and twist braid into pigtail. Trim the pigtail to remove the tapered end.
2. Separate the heater conductors following the stripping procedure.
3. Slide the shrink tube over one of the heating element ends.
4. Connect the heaters together using the small insulated crimp connectors.
5. Cover the entire splice area with end sealant. Slide the shrink tube over the splice so it is centered over the crimp connection and shrink into place.
- 5A. When splicing braided heater, braid must not be covered by the shrink sleeve.
- 5B. Connect the two braid pigtails formed in 1A using a large insulated crimp terminal.
6. Secure the spliced area to the pipe with high-temperature tape.



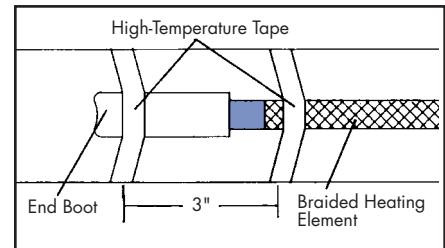
Braided Heater Grounding for Class I, Division 2 Areas

1. Remove 10" of metallic braid from the end of the heating element.
2. Unravel the next 2" of metallic braid and twist into a pigtail. Attach the ring tongue connector to the pigtail.
3. Connect the ring tongue connector to the connection nipple using ground screw.



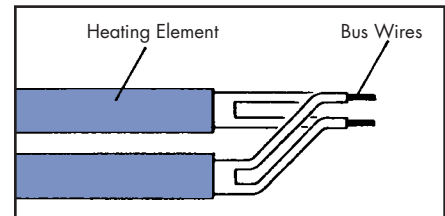
Tee Splice Connection Procedure

1. Follow steps 1 and 2 in splicing instructions.
- 1A. For braided heater unravel the braid 4" from the end of each heater.
2. For the tee connection, twist together one bus wire from each of two heaters, connecting the heaters in parallel.
3. Slide the shrink tube over the single heater.
4. Connect the three heaters using the large insulated crimp connectors.
5. Seal the splice area with end sealant. Seal the ends of the heaters and any part where the jacket has been removed.
6. Center the shrink tube over the splice and shrink into place.
- 6A. If braided heater is used, braid must not be covered by shrink tube.
- 6B. Separate the braid on the single heater into two equal strands. Twist the braid to form two pigtails on the single heater and one pigtail each on the other heaters.
- 6C. Connect the braid pigtails as shown in the diagram, using two large insulated crimp connectors.



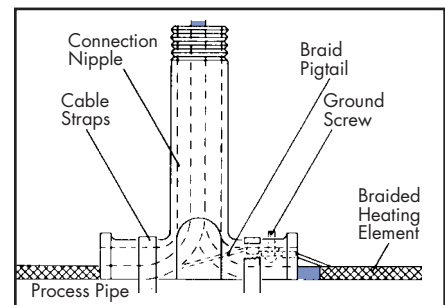
Termination Procedure

1. Remove the metallic braid 3" from end.
2. Trim the end of the heating element so that one bus wire is 1/4" shorter than the other.
3. Slide the termination shrink cap over the end of the heater and shrink into place.
4. Anchor the heating element and end cap onto pipe with high-temperature tape.



Input Power Splice

1. Follow steps 1 through 4 of input power connection procedures (see front page).
2. Twist one bus wire from each heater together with a bus wire from each heater together with a bus wire from the other heater connecting the heaters in parallel (see diagram).



3. Slide the shrink tube onto the heater. Pull the input power wires (not supplied) through the conduit and into the connection box.
4. Connect the input power wires to the pairs of heater bus wires using the large insulated crimp connectors. Follow steps 6 through 9 on input power connection procedure (see front page).

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