

## SRST Splice/Tee Kit

### installation instructions

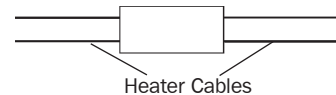
#### DESCRIPTION

The SRST Splice/Tee Kit is for use with Easy Heat's SR heater cables for pipe tracing applications. This kit provides (a double set of) materials to splice two cables together OR to splice a new section of cable into an existing cable (tee splice), including end seal material for the new section of cable.

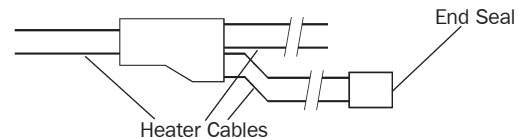
#### KIT CONTENTS

- |   |  |   |                               |
|---|--|---|-------------------------------|
| 2 | Wire Ties  | 2 | Uninsulated Splice Connectors |
| 2 | Mastic Strips                                      | 4 | Insulated Splice Connectors   |
| 2 | Shrink Tubes, 0.5" (13mm) dia., 2" (51mm) length   |   |                               |
| 2 | Shrink Tubes, 0.63" (16mm) dia., 3" (76mm) length  |   |                               |
| 2 | Shrink Tubes, 0.5" (13mm) dia., 6" (152mm) length  |   |                               |
| 2 | Shrink Tubes, 0.63" (16mm) dia., 9" (229mm) length |   |                               |

#### SPLICE



#### TEE SPLICE



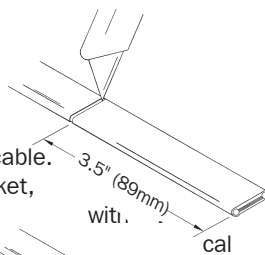
#### CABLE STRIPPING PROCEDURE

- Lightly cut around heater overjacket 3.5" (89mm) from the end. Bend cable to break overjacket.

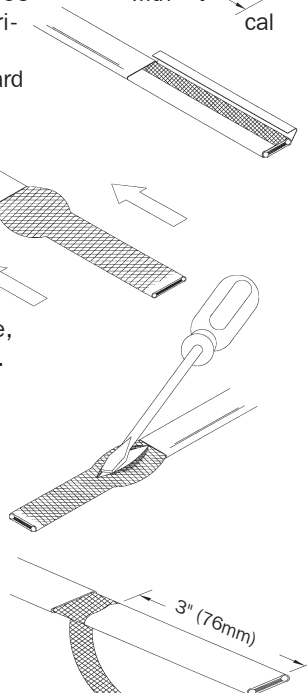
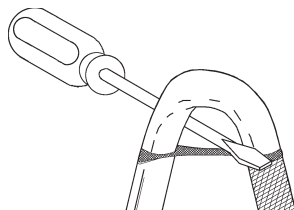
- Lightly cut overjacket up the center between first cut mark and the cable end. Bend cable to break the overjacket.

- Remove overjacket from the heater cable.

- Move braid back toward the overjacket, creating a bulge. For cables overjacket, apply ring of electri-tape 3.5" (89mm) from end of cable; then move braid back toward tape, creating a bulge.



- At the bulge, separate the braid to make an opening.
- While bending the heater cable, work it through the braid opening.
- Pull the braid tight
- Proceed to step 9.



- With braid prepared as shown at right, lightly cut around heater jacket 2" (51mm) from the end. Bend cable to break outer jacket.

- Lightly cut the outer jacket up the center between the first cut mark and the cable end. Bend cable to break outer jacket.

- Remove the jacket from the heater cable.

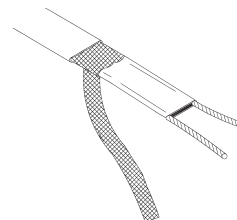
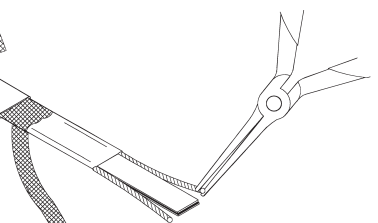
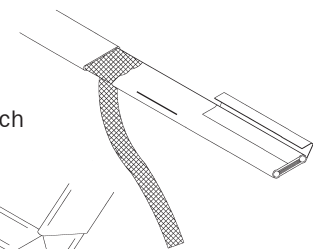
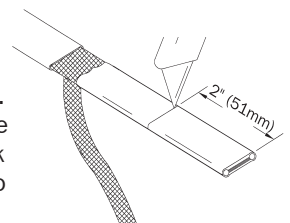
- Shave the core material from the outside of each bus wire.

- Starting at the end, pull each bus wire away from the core material.

- Cut and remove exposed core material.

- Cut 0.25" (6mm) off the end of each bus wire.

- Proceed with Cable Termination.

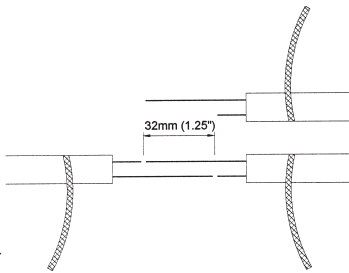


**WARNING!**  
DO NOT CUT OR NICK BRAID

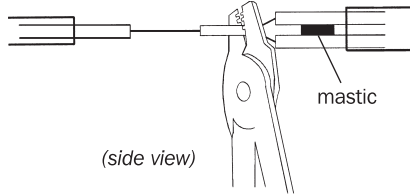
**WARNING!**  
DO NOT CUT OR NICK WIRES

**TEE SPLICE**

1. Position the three heater cables with ground braid on the same side. Remove 1.25" (32mm) of one bus wire from each heater cable, creating an offset for the insulated splice connectors.

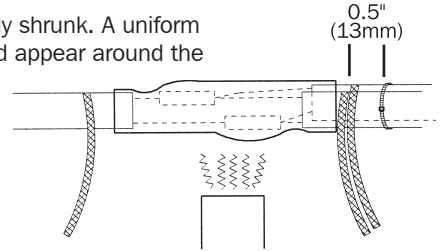


2. Slide one 0.63" (12mm) dia., 9" (229mm) length shrink tube over the pair of heater cables. Slide one 0.5" (13mm) dia., 6" (152mm) length shrink tube over the remaining single heater cable. Twist one bus wire, each, from the pair of heater cables together, insert into insulated splice connector and crimp. Repeat for the remaining bus wire of each heater cable. Insert a bus wire of the single heater cable into each insulated splice connector and crimp. Place a mastic strip between the pair of heater cables forming a moisture barrier.

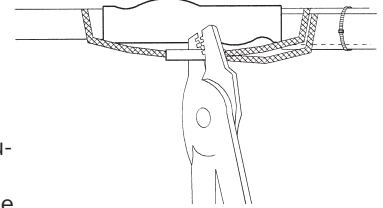


3. Center the 0.5" (13mm) dia., 6" (152mm) length shrink tube over the connectors leaving the braid straps exposed. Make sure the shrink tube covers the mastic strip. Shrink with heat

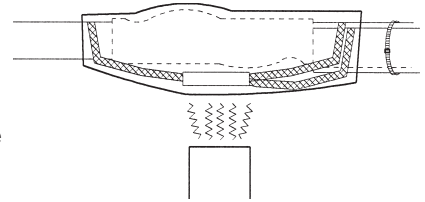
gun until completely shrunk. A uniform bead of glue should appear around the ends of the shrink tube. Fasten a wire tie around the two heater cables 0.5" (13mm) from braid.



4. Shorten (cut) each braid strap until they butt at the splice centerline and tightly twist each braid strap. Crimp the braid straps together into an uninsulated splice connector. Secure connector at the indented area with one and a half wraps of fiberglass tape (not included in kit).

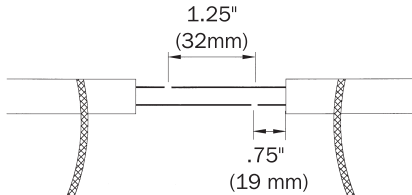


5. Center the 0.63" (16mm) dia., 9" (229mm) length shrink tube over the splice. Shrink with heat gun until completely shrunk. A uniform bead of glue should appear around the ends of the shrink tube.

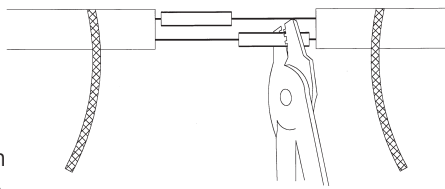


**SPLICE**

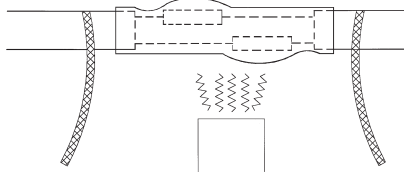
1. Position both heater cables with ground braid on the same side. Remove 1.25" (32mm) of one bus wire from each heater cable, creating an offset for insulated splice connectors.



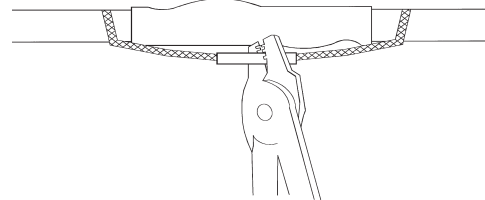
2. Slide one 0.63" (16mm) dia., 9" (229mm) length shrink tube over one heater cable. Slide one 0.5" (13mm) dia., 6" (152mm) length shrink tube over the other heater cables. Crimp an insulated splice connector to each bus wire connecting the two heater cables together.



3. Center the 0.5" (13mm) dia., 6" (152mm) length shrink tube over the connectors leaving the braid straps exposed. Shrink with heat gun until completely shrunk. A uniform bead of glue should appear around the ends of the shrink tube.

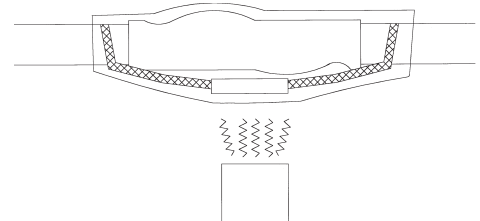


4. Shorten (cut) each braid strap until they butt at the splice centerline and tightly twist each braid strap. Crimp the braid



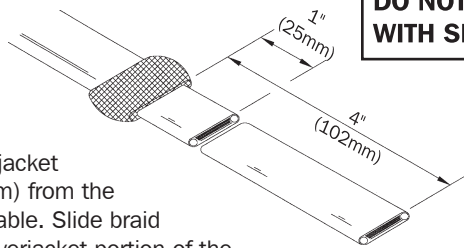
straps together into an uninsulated splice connector. Secure connector at the indented area with one and a half wraps of fiberglass tape (not included in kit).

5. Center the 0.63" (16mm) dia., 9" (229mm) length shrink tube over the splice. Shrink with heat gun until completely shrunk. A uniform bead of glue should appear around the ends of the shrink tube.



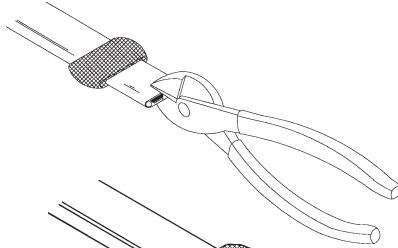
**END SEAL**

1. Cut heater cable off at required length. Being careful not to sever or nick ground braid, strip overjacket back 4" (102mm) from the end of heater cable. Slide braid back over the overjacket portion of the heater cable.

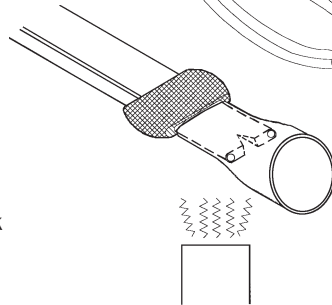


**WARNING!**  
DO NOT OVERLAP BRAID WITH SHRINK TUBE

2. Cut off excess heater cable leaving 1" (25mm), as above.



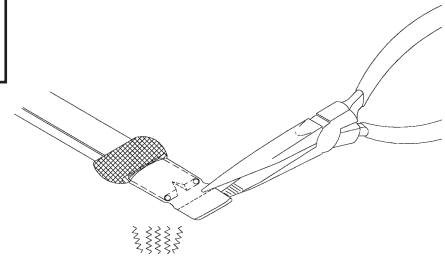
3. As above, slit the web separating the bus wires 0.4" (10mm) in from cable end. Slightly spread wires apart.



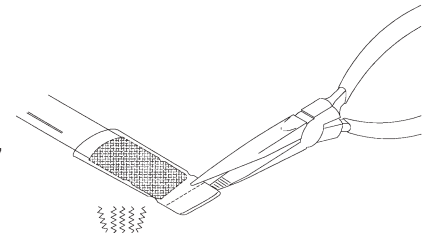
4. Slide a 0.5" (13mm) dia., 2" (51mm) length shrink tube over the heater cable leaving 1" (25mm) of shrink tube past the heater cable. Shrink with heat gun until

completely shrunk.

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



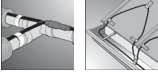


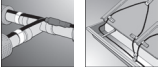




6. As illustrated at right, fold twisted braid back upon itself and slide a 0.63" (16mm) dia., 3" (76mm) length shrink tube over the braid leaving 0.5" (13mm) of



7. While still warm, squeeze the entire width of shrink tube closed.

# SR SELF-REGULATING CABLE TRACE<sup>®</sup>

## Always use genuine Easy Heat SR Trace connection kits

PRODUCT	DESCRIPTION
SRP	 The CSA Approved Power Connection Kit. Provides termination materials for both power supply and tail end of one heater cable, and includes a pipe stand-off and junction box entry seal. For pipe tracing applications or Easy Heat's SR51J and SR52J heating cables for roof & gutter deicing applications. This kit provides <i>The junction box is not included in this kit.</i>
SRPCK	 UL Listed and CSA Approved Power/Splice Connection Kit. Provides heat shrink tubing based power connection of one or two cables into customer supplied junction box. Also provides heat shrinkable end seals. Can also be used for heating cable to heating cable splice using a customer supplied junction box.
SRST	 UL Listed and CSA Approved In-line Splice Connection Kit. Provides heat shrink tubing based in-line splice connection of two or three heating cables. Junction box is not required. Each kit performs two sets of splices.
SRES	 UL Listed and CSA Approved End Seal Kit. Provides materials necessary to perform a moisture proof end seal of the heating cable circuit. Each kit contains 5 end seals.
SRPCRG	 UL Listed and CSA Approved Power Connection Kit. Provides materials necessary to perform a water-tight power connection into a customer supplied junction box. Also provides heat-shrinkable moisture proof end seal of the heating cable circuit. One SRPCRG is required per cable to J-Box connection.
SRSRG	 UL Listed and CSA Approved Roof and Gutter In-line Splice Kit. Provides materials necessary to perform a splice of two roof and gutter heating cables. Each kit contains one splice.
ZH-C	 Roof Clips and Spacers. Used to attach heating cable to roof and also to maintain cable spacing in gutters and down spouts. Each kit consists of 50 roof clips or 25 cable spacers.
DSH	 Down Spout Hanger. Used to support heating cable where it enters and exits a down spout. Each kit contains two hangers.



**Pipe Tracing Applications**



**Roof & Gutter De-Icing Applications**

### Easy Heat SR Trace General Notes

- 1) Circuit breakers are sized per article 427-4 of NEC and CSA/CEC 62-114.
- 2) To operate 240 volt cables at 208, 220 or 270 volts, use the circuit adjustment factors shown in the Voltage Adjustment Tables.
- 3) When using two (2) or more heating cables of different wattage ratings in parallel on a single circuit breaker, use the 15A column amperage of 15 amps, divide it by the maximum footage to arrive at an amps/foot figure for each cable. Then calculate circuit breaker size for the combined loads. These amps/foot factors include the sizing factor in (1) above.
- 4) The use of ground fault protection equipment for some heating cable applications is required by NEC and CSA/CEC. It is the customer's responsibility to ensure compliance of the complete installation with all appropriate electrical, building, etc., codes.

### PRODUCT INSTALLATION

All Easy Heat SR Trace self-regulating heating cables must be installed with appropriate connection kits. These connection kits are available from Easy Heat and contain detailed instructions for connecting the cable to the power supply and/or other heating cables. Agency approvals (UL or CSA) are only valid when appropriate kits are used to install the heating cable for the appropriate heating application.

**WARNING! FAILURE TO INSTALL EASY HEAT SR TRACE WITH APPROPRIATE CONNECTION KITS MAY RESULT IN FIRE, ELECTRIC SHOCK, PIPE FREEZE-UP OR OTHER DANGEROUS CONDITIONS.**