RT-TST Splice & Tee Kit for Constant Wattage Rapid-Trace Heating Cable

RT-TST Splice & Tee Kit Parts:
- 5 - 7” Long Large Heat Shrink Tubes
- 10 - 1-1/2” Long Small Heat Shrink Tubes
- 5 - 10” Lengths of Sealant Tape
- 15 - Uninsulated Barrel Connectors
- 1 - Tube RTV Sealant

GENERAL

**WARNING**

**ELECTRIC SHOCK HAZARD.** Disconnect all power before installing or servicing heating cable and accessories. A qualified person must perform installation and service of heating cable and accessories. Heating cable must be effectively grounded in accordance with the National Electrical Code. Failure to comply can result in personal injury or property damage.

Electrical connections must be in accordance with national and local codes by a qualified person. Ground fault protection is required. Verify with codes whether personnel protection, GFCI or equipment protection, EPD is required.

The RT-TST Kit is used to make straight and tee splices for base, braided (-C) and overcoated (-CT) cables in ordinary locations. **Consult factory for installation of braided cable in hazardous locations.** Check the kit label to insure you have the proper kit for the cable you are installing. This kit contains enough parts to make five (5) splices. Materials required include: sharp utility knife, standard electrical cutters, propane torch or heat gun, needle nose pliers, crimping tool for uninsulated barrel connectors and fiberglass tape (Chromalox FT-1 or equal).
1. FOR ALL CABLES:
Cut all cables as shown. (Two for splices, three for tees). See Figure 1.

2. FOR OVERCOATED (-CT) CABLES:
Score the outer jacket 3-1/2 inches from the end of each cable. Remove the jacket to expose the braid. See Figure 2.

3. FOR BRAIDED (-C) AND OVERCOATED CABLES:
Unravel 2-1/2 inches of braid then pigtail the strands together. For straight splices, arrange the pigtails on top of both cables. For tee splices, arrange the pigtails on the corresponding sides of all three cables. See Figure 3.

4. FOR ALL CABLES:
Strip all cables as shown. If nichrome wire is showing, cut it off and push any remainder back under sheath. NOTE: Cutting the cable between module points (indentations in the cable) creates a non-heating cold lead. See Figure 4.

5. FOR TEE SPLICES ONLY:
Tape two of the heating cables together using the fiberglass tape five inches from the end of the conductors. Twist the corresponding conductors of each cable together. Fold over the bare conductors of the single cable. See Figure 5.

6. FOR ALL CABLES:
Slide an uninsulated barrel connector over the bare portion of each conductor of one of the cables (or paired cable). Crimp the connector onto the bare portion of the conductors using the crimping tool. See Figure 6.

7. FOR BRAIDED AND OVERCOATED CABLES:
Position the metal braided pigtail (or two twisted pigtails for the tee splice) on top of and between the two barrel connectors. Trim the pigtail back slightly to even up the strands. Slide the end of an uninsulated barrel connector over the end of the pigtail. Crimp using a standard crimping tool for uninsulated barrel connectors. See Figure 7.

8. FOR ALL CABLES:
(For braided cables, first push the braids back eight inches on the cable with the connectors attached.) Carefully slide a length of the seven inches long heat shrink tubing over the cable(s) with the crimped on barrel connectors past the connection area but DO NOT SHRINK THE TUBE. Then, carefully slide a length of the short heat shrink tubing over each of the longer conductors. (One on each side of the splice.) See Figure 8.

9. FOR ALL CABLES:
Insert the bare ends of the conductors of the other cable into the open ends of the barrel connectors. Crimp the barrel connectors one at a time. Slide the heat shrink tubes over the barrel connectors. Using a propane torch or heat gun, apply the heat evenly until both tubes shrink around the barrel connectors. See Figure 9.

**WARNING**

**ELECTRIC SHOCK HAZARD.** Do not cross connect two conductors from two heating cables together nor connect two conductors of one heat cable together as either will cause a short circuit. Failure to comply can result in personal injury or property damage.
10. FOR TEE SPLICES ONLY:
   Apply a moderate amount of RTV between the paired cables. Be sure to fill the space completely between the cables. See Figure 10.

11. FOR OVERCOATED CABLES:
   Wrap the entire area of the crimped insulated barrel connectors with the fiberglass tape.
   Insert the other metal braided pigtail into the open end of the uninsulated barrel connector. Crimp using a standard crimping tool for uninsulated barrel connectors. See Figure 11.

12. FOR ALL CABLES:
   Remove the cellophane backing on the silicone tape. Start wrapping one inch from the end of the sheath of a cable. Spiral wrap under tension with a 50% overlap. Finish wrapping one inch past the end of the sheath of the other cable(s). See Figure 12.

13. FOR ALL CABLES:
   Slide the length of heat shrink tubing over the splice so that the barrel connectors are centered in the tubing. See Figure 13.

14. FOR ALL CABLES:
   Using a propane torch or heat gun, apply heat evenly until the tube shrinks around the cable. Both ends should remain visibly sealed when cool. If not, gently reheat. See Figure 14.

15. FOR BRAIDED CABLES:
   Extend the braids over the heat shrink connection. Insert the bare metal braided pigtail into the open end of the uninsulated barrel connector. Crimp using a standard crimping tool for uninsulated barrel connectors. See Figure 15.

16. FOR ALL CABLES:
   Secure all cables to the pipe(s). See Figure 16.
Limited Warranty:
Please refer to the Chromalox limited warranty applicable to this product at http://www.chromalox.com/customer-service/policies/termsofsale.aspx.