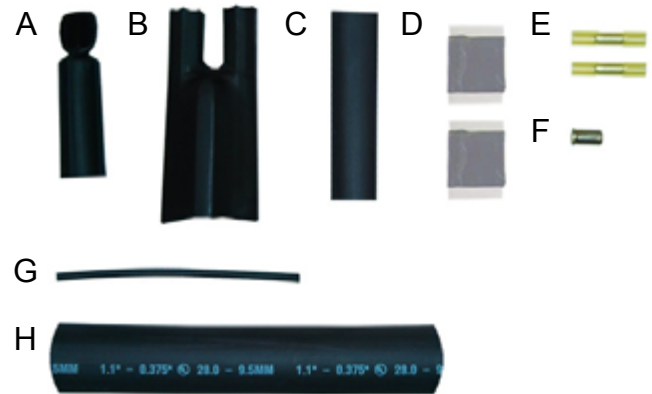


# DTEK-2

## Tee Kit with 2 Leg Boot

| Item | Description                 | Quantity |
|------|-----------------------------|----------|
| A    | End Seal                    | 1        |
| B    | 2 Leg Heat Shrink Boot      | 1        |
| C    | Ground Wire Heat Shrink     | 1        |
| D    | Mastic Tape 2 packs         | 2        |
| E    | Heat Shrink Butt Connectors | 2        |
| F    | Ground Crimp Sleeve         | 1        |
| G    | 1/8" x 3" Heat Shrink Tube  | 1        |
| H    | Outer Heat Shrink Tube      | 1        |



### Removing the Outer Jacket

- 6" from the cable end, score the circumference of the cable outer jacket. Then score the outer jacket from the previous score toward the cable end. (FIG 1)
- Flex the score points and remove the outer jacket, exposing the inner braid. (FIG 2)
- Push the braid back toward the over jacket, creating a bulge in the braid.
- Use a small screwdriver to create an opening in the braid near the original score point. (FIG 3)
- Bend the heater cable over on itself creating an elbow.
- Keeping the braid pushed towards the elbow, push the cable upward through the braid opening. After the cable is pushed through the braid, pull the braid tight. This will be the heater ground wire. (FIG 4)

Figure 1



Figure 2



Figure 3

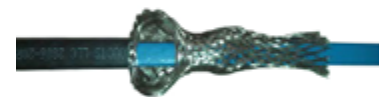


Figure 4



## Removing the INNER Jacket

7. Approximately 1/2" to 1" above the braid, score the circumference of the inner jacket. Then score the inner jacket from the previous score toward the cable end. Do not cut into the heater core. (FIG 5)
8. Remove inner jacket.
9. Once heater core is exposed. Cut a "V" Notch. (FIG 6)
10. Using needle nose pliers, grab each bus wire at the V notch and using a twisting motion, pull the bus wire and the outer edge of heater material out away from the heater core material. Expose each wire down to the intact inner jacket. (FIG 7) NOTE: If the bus wires are hard to pull out use a blade to remove the black core from the side of the bus wires.
11. Once bus wires are exposed. Remove excess heater core material.
12. Repeat for remaining two cables ends.

## Installing the Heat Shrink Tubes

13. Thread 2 cables through the 2 legged boot. Large opening of boot should be faced toward the ends of the cables. (FIG 8)
14. On the remaining cable, thread the large heat shrink tube over the cable. Thread the Ground Wire Heat Shrink tube onto the heater cable. (FIG 9)

## Wire Connections

15. Take the 2 cables that are threaded through the 2 leg heat shrink boot. Line up together and take 1 bus wire and its opposing bus wire of the opposite cable. Twist together until about 1" of combined length exists. Repeat for the other remaining 2 bus wires. (FIG 10)

Figure 5

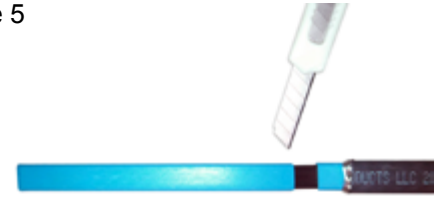


Figure 6



Figure 7



Figure 8



Figure 9



Figure 10



16. Trim excess material with wire cutters at the proper dimension for the butt connectors.
17. Insert butt connectors over the combined twisted bus wires. Ensure the butt connectors fully cover the exposed twisted bus wires. Trim bus wires if necessary to ensure coverage.
18. Using crimping pliers. Crimp butt connectors to the twisted pair of wires. Only crimp the corresponding side of the butt connector. (FIG 11) Repeat for both twisted bus wires.
19. Cut the 1/8" Heat Shrink tube into 2 pieces approximately 1" in length. Thread small heat shrink tubes onto 3rd cable. Trim bus wires with 1/2" exposed bus wires. (FIG 12)
20. Using crimping pliers. Crimp butt connectors that are existing on the 2 cable side to each exposed bus wire on the single sided connection. (FIG 13) Repeat for both bus wires.
21. Use a heat gun or torch to shrink down the 1/8" heat tube and the butt connectors. (FIG 14)
22. Using the mastic tape. Wrap all the exposed areas until completely covered. Ensure that the mastic is also wrapped in between the cables, butt connectors, and around the ground wires. (FIG 15)
23. Use a maximum of 3 pieces of mastic to properly cover the connections from ground braid to ground braid. (FIG 16)

Figure 11



Figure 12



Figure 13

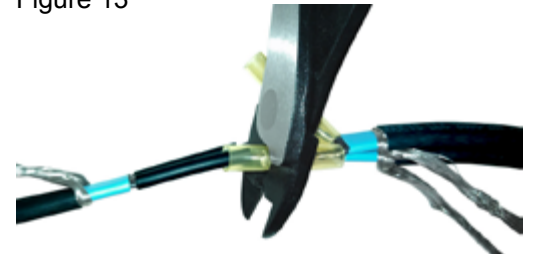


Figure 14



Figure 15



Figure 16



24. Slide the ground wire heat shrink over the affected area. Leave all ground braids outside of the heat shrink tube. Use a heat gun or torch to shrink against the mastic tape wrapped area. (FIG 17)
25. Take both ground braids that are on the 2 leg boot side and twist the double braids together to form one ground braid. Slide each ground braid through opposite sides of the ground crimp sleeve. Crimp in the middle and ensure a firm connection. (FIG 18)
26. Remove excess material. (FIG 19)
27. Slide the large heat shrink tube over the affected area. Use a heat gun or torch to effectively shrink the tube over the cable. Ensure that you do not trap air inside by starting from the middle out or from one side to the other. (FIG 20)
28. Slide the 2 leg boot over the top of the larger heat shrink tube. Ensure the boot is pulled toward the large heat shrink tube until fully covered and is properly seated. (FIG 21)
29. Use a heat gun or torch to shrink down the boot onto the heater cables and the large opening of the boot should shrink over the pre-shrunk large heat shrink tube. (FIG 22)
30. Tee Kit is finished.

**DO NOT ALLOW COMPLETED ASSEMBLY TO REST IN WATER.**

Figure 17



Figure 18



Figure 19



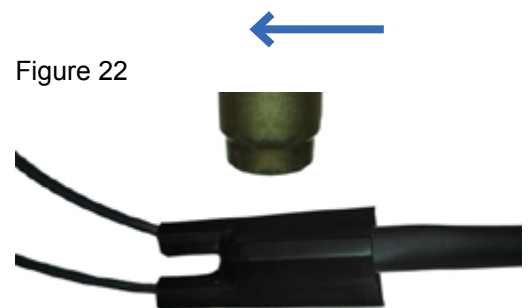
Figure 20



Figure 21

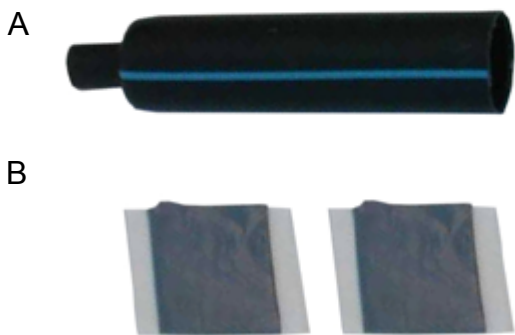


Figure 22



## End Seal for Self-Regulating Cable

| Item | Description         | Quantity |
|------|---------------------|----------|
| A    | End Seal            | 1        |
| B    | Mastic Tape 2 Packs | 2        |



## Removing the Outer Jacket

1. 2" from the cable end, score the circumference of the cable outer jacket. Then score the outer jacket from the previous score toward the cable end. (FIG 1)
2. Flex the score points and remove the outer jacket, exposing the inner braid.
3. Trim off all braided ground wires back to the outer jacket. (FIG 2)
4. Cut a "V" notch in the cable end. (FIG 3)
5. Using the mastic piece stretch and wrap the cable end. (FIG 4)
6. Slide the shrink end cap over the cable end covering the mastic wrap.
7. Heat until completely shrunk, and adhesive escapes the end cap. (FIG 5)

Figure 1

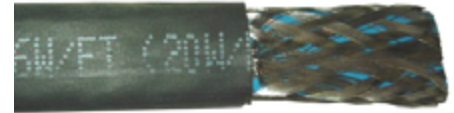


Figure 2



Figure 3



Figure 4



Figure 5

