



FIELD REPAIR SPLICE KIT

PART # - BRISK

PART LIST

Qty	Part/ Description
4	#12/14 Butt Splice Crimp Connectors
8	#08/10 Butt Splice Crimp Connectors
1	12" Length of RWU 90 Green 12 AWG Wire
1	12" Length of RWU 90 Black 12 AWG Wire
1	12" Length of RWU 90 Green 10 AWG Wire
1	12" Length of RWU 90 Black 10AWG Wire
1	12" Length of RWU 90 Green 08 AWG Wire
1	12" Length of RWU 90 Black 08 AWG Wire
4	Inner Heat Shrink Sleeve 3" Long
2	Outer Heat Shrink Sleeve 6" Long

TOOLS REQUIRED

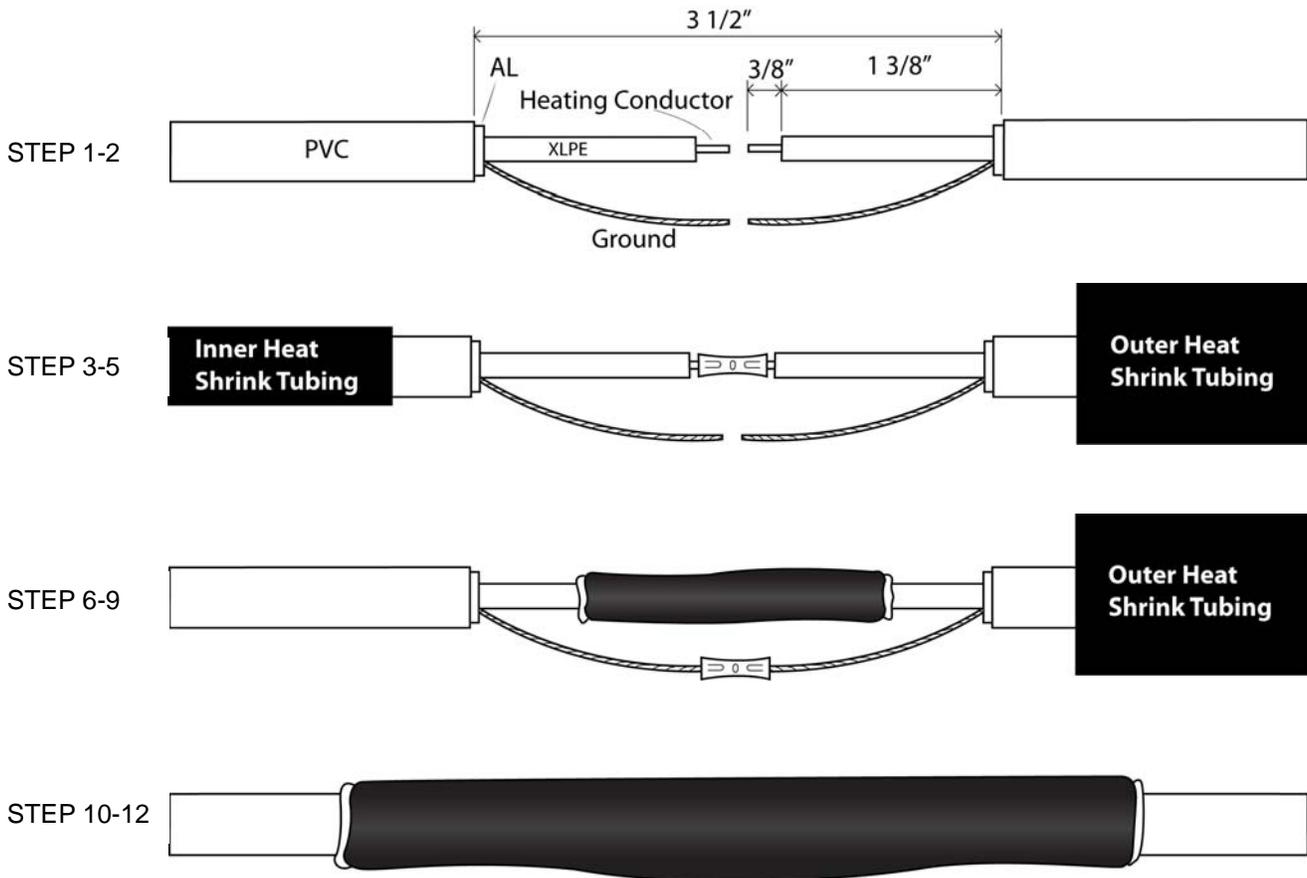
- Side Cutters to trim the area to be spliced
- Co-ax wire stripper and wire stripper – 14-08
- Hand crimping tool
- Heat gun for shrink tubing
- Megger to test insulation after the splice
- Volt-ohm meter to check resistance

IMPORTANT NOTE: It is important to use the appropriate splice connector and cold lead to match the amperage draw of the cable being repaired.

<u>Gauge No.</u>	<u>Amperage</u>
#12	up to 20A
#10	20A ~ 30A
#8	30A ~ 45A

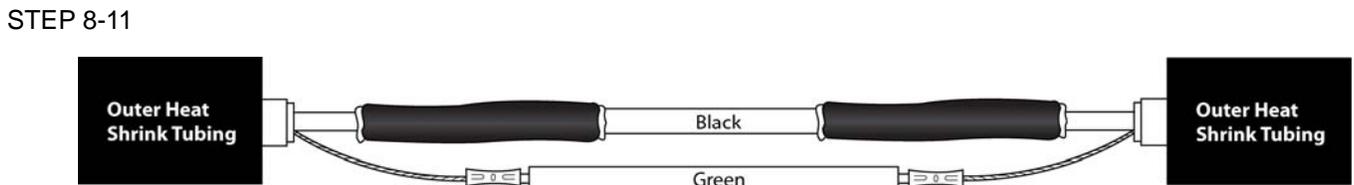
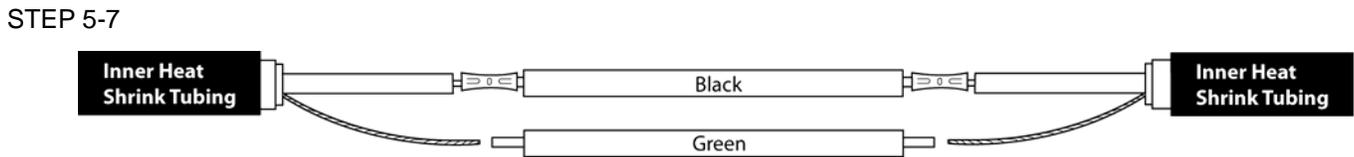
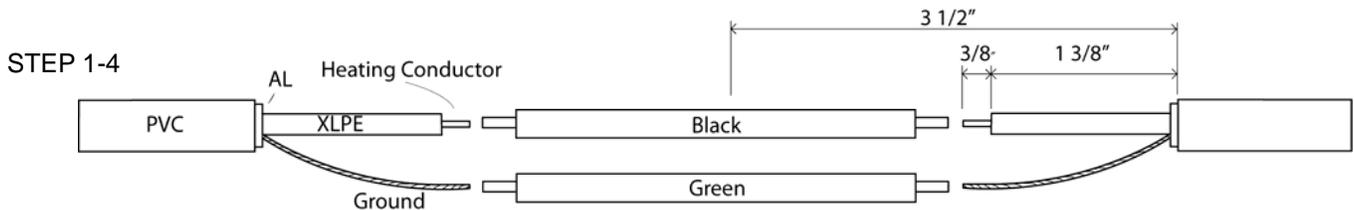
SIMPLE METHOD – NICKED OR CUT CABLE

1. Cut cable at point of nick or cut.
2. Strip both ends of the exposed heating cable to show center conductor and ground wire.
3. Push inner heat shrink tubing over heating cable end.
4. Push large heat shrink tubing over one end.
5. Install crimp connector on center conductors.
6. Center inner heat shrink tubings over crimp.
7. Heat with hot air gun until tubing is completely shrunk and some excess liquid sealant can be seen at both ends.
8. Let the splices cool down for 1 – 2 minutes.
9. Install crimp connector on ground wires.
10. Pull the outer heat shrink tubing back over one end of the splice and shrink down with hot air gun (Start from the center of the splices and work towards both ends). Make sure that heat is applied around the tubing and that overheating is avoided. If the tubing starts to get glossy, it is a sign of overheating. Stop heating when the outer tubing is tight and some excess sealant protrudes from both ends.
11. Allow the finished splice to cool down for 5-10 minutes.
12. Measure insulation, total resistance and continuity.



OPTIONAL METHOD – REPLACING DAMAGED CABLE

1. Cut out defective cable.
Important Note: If the length of defective cable is $\geq 1\%$ of the original cable length, do not use this method. Cutting off excessive cable may cause over-heating and system failure. Please consult Britech for technical assistance.
2. Clean heating cables thoroughly. Make sure all parts exposed are clean & dry.
3. Strip both ends of the exposed heating cable to show center conductor and ground wire.
4. Strip both cold leads (BLACK and GREEN) 3/8" to expose center conductor.
5. Push inner heat shrink tubing over the cable ends.
6. Push large heat shrink tubing over each end.
7. Splice resistance wires to the BLACK cold lead.
8. Center inner heat shrink tubing over crimps.
9. Heat with hot air gun until tubing is completely shrunk and some excess liquid sealant can be seen at both ends.
10. Let the splices cool down for 1-2 minutes.
11. Splice ground wires to the GREEN cold lead.
12. Pull the outer heat shrink tubing over one finished inner splice and start shrinking with hot air gun. (Start from the center of the splices and work towards both ends). Make sure that heat is applied around the tubing and that overheating is avoided. If the tubing starts to get glossy, it is a sign of overheating. Stop heating when the outer tubing is tight and some excess sealant protrudes from both ends.
13. Cool down for 5-10 minutes.
14. Repeat step 12. Center outer heat shrink over the other finished inner shrink.
15. Measure insulation, total resistance and continuity.



INSTALLATION PICTURES

