

6-CONDUCTOR CABLE REPAIR INSTRUCTIONS

PREFERRED REPAIR METHOD

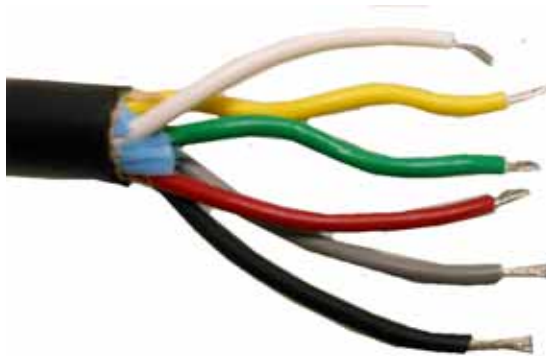
1. Trim the end of the wire needing repair. A clean cut will ensure even length wires.

FIGURE 1. Trimmed End



2. Strip the jacket back from the end by approximately 2". Do not cut through the jacket too far and cause damage to the cable conductors.
3. Untwist the yellow and green wires as needed. Strip insulation from the wires by approximately 0.25".

FIGURE 2. Jacket Stripped Back



4. Slide 6.5" of the shrink tubing supplied with the repair kit over either the cable end being reworked or the sub assembly supplied in the repair kit.

FIGURE 3. Large Heatshrink Installed

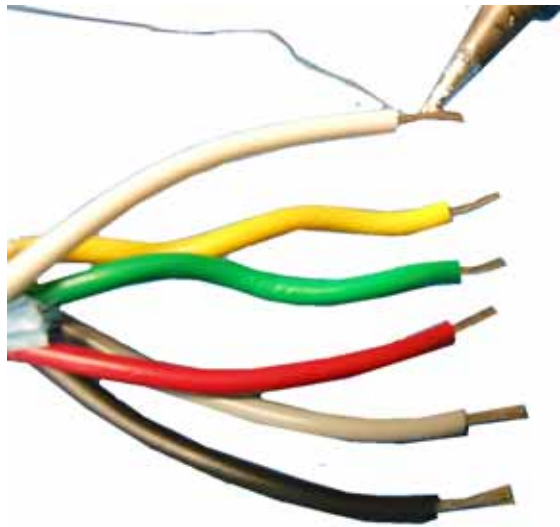


5. Pre-tin the wire ends of the cable being repaired and the sub-assembly supplied in the repair kit.

NOTE: Tinning is the process of applying solder to the ends of the wires that will be soldered together later.



FIGURE 4. Tinning



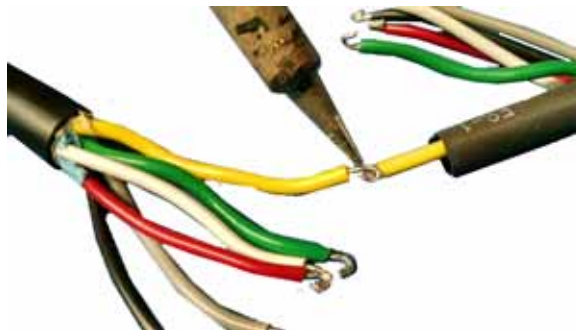
6. Form the end of each wire into a J shape.

FIGURE 5. J-Hooked Ends with Heatshrink



7. Place a piece of shrink tubing (supplied in the repair kit) over the wires of the sub-assembly.
8. Hook the matching wire ends together. Gently squeeze the ends together with needle nose pliers if necessary.
9. Solder the wires together at the joint where they connect.

FIGURE 6. Solder Matched Wire Colors Together



10. Slide the shrink tubing over the soldered joint.
11. Use a heat source to secure the shrink wrap in place.

FIGURE 7. After Shrink Wrap



12. Solder and install shrink tubing over the remaining matched wire colors.
13. Slide the 6.5" piece of shrink tubing over the assembly area. Make sure that each end is overlapped.

FIGURE 8. Large Heatshrink Overlap



14. Use a heat source to shrink the tubing into place.

NOTE: The area of cable will not be flexible after the repair. Route and tie up the repaired area so it will not put stress on the NCV connection.

ALTERNATE REPAIR METHOD

1. Trim the end of the wire needing repair. A clean cut will ensure even length wires.

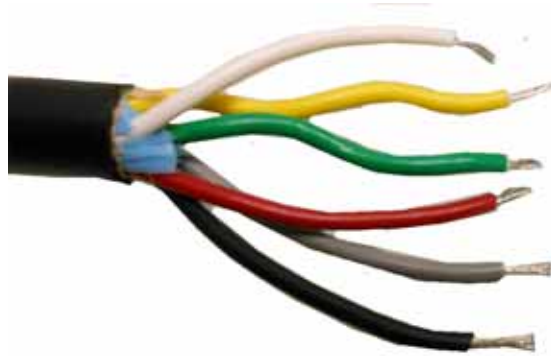
FIGURE 9. Trimmed End



2. Strip the jacket back from the end by approximately 2". Do not cut through the jacket too far and cause damage to the cable conductors.
3. Untwist the yellow and green wires as needed. Strip insulation from the wires by approximately 0.25".



FIGURE 10. Jacket Stripped Back



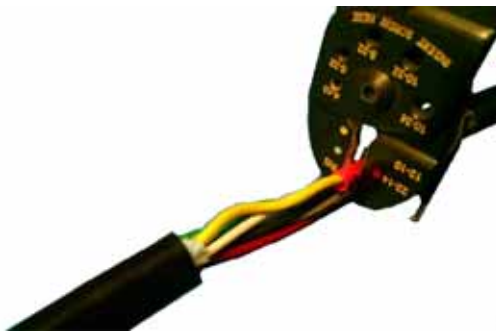
4. Slide 6.5" of the shrink tubing supplied with the repair kit over either the cable end being reworked or the sub assembly supplied in the repair kit.
5. Place a piece to shrink tubing (supplied in the repair kit) over the wire.
6. Crimp a butt-splice connector (supplied in the repair kit) to either the free end of the cable under repair or the sub-assembly (supplied in the repair kit).

FIGURE 11. First Butt-Splice Crimp



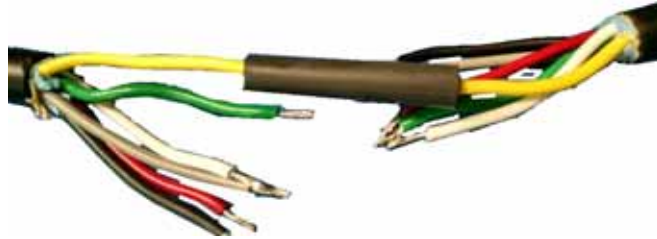
7. Crimp the other end of the butt-splice to the matching wire color on the other cable.

FIGURE 12. Completed Butt-Splice



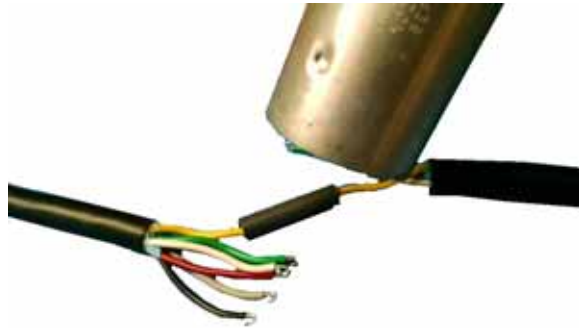
8. Slide the shrink tubing over the spliced joint.
9. Match wire colors and crimp the other end of the butt-splice.
10. Slide the shrink tubing over the joint and shrink it into place.

FIGURE 13. Butt-Splice Heatshrink



11. Use a heat source to shrink the tubing into place.

FIGURE 14. Shrink the Heatshrink



12. Repeat the butt-splicing procedure until all the wires are spliced.
13. Slide the 6.5" piece of shrink tubing over the assembly area. Make sure that each end is overlapped.
14. When all the joints are butt-spliced and shrink tubing is applied, slide the 6.5" piece of shrink tubing over the assembled area. Make sure that each end is overlapped evenly and shrink the tubing into place.

FIGURE 15. Large Heatshrink Overlap



15. Use a heat source to shrink the tubing into place.

NOTE: The area of cable will not be flexible after the repair. Route and tie up the repaired area so it will not put stress on the NCV connection.



