## **CT-6 Probe Cable Splicing Instructions**

(FOR CP-2 & CP-3 SPLICING, SEE NOTE BELOW\*)

Improper probe cable splices will cause false alarms. Be sure to follow these instructions.

Two items will be necessary when splicing, and both are available from the manufacturer and distributors of Cartell:

- Two-wire shielded direct burial polyurethane-coated cable (unshielded cable and PVC jacketed cable will not give proper splices).
- Underground splice kit (made by 3M, Part #82-F1; Preferred's Part number is CA-1).

These instructions assume you have the above products.

- 1. See Figure A. Strip the outer jacket on one cable back 10 inches and cut the red and black leads to 3 inches, leaving the shield drain wire the full 10 inch length. Strip the outer jacket off the mating cable back 3 inches and strip the jacket of the red and black lead of both cables back 1/2 inch. Twist the black to black and red to red and solder the connections as shown in Figure A.
- 2. See Figure B. Trim the red and black joints and tape for proper insulation. Twist the 3 inch shield drain wire to the 10 inch shield drain wire and solder the connection as shown in Figure B.
- 3. See Figure C. Wrap aluminum foil around the splice area. Wrap the 10 inch shield drain wire tightly around the outside of the foil and solder it to itself in order to hold it in place, as shown in Figure C. This procedure insures that any signal to the splice shield will drain to ground and thus prevent false alarms.
- 4. See Figure D. Place an underground splice kit potting container around the spliced cable and epoxy pot as shown in Figure D.
  - 5. Follow the kit instructions from 3M carefully.
- •NOTE: For CP-3 splicing, match all wires by color, solder each, and tape. Then follow instructions as outlined in numbers 4 and 5 above.
- •NOTE: Use the following chart when splicing CP-3 five wire onto CP-2 wire (\*polarity is not an issue, i.e., it does not matter which blue attaches to which green or blue of the new wire):

CP SPLICING INSTRUCTIONS			
	CP-2 (before July 2009)	CP-2 (after July 2009)	CP-3 WIRE
NORMALLY CLOSED	_	_	GREEN
RELAY COMMON	FIRST BLUE*	GREEN	BLACK
NORMALLY OPEN	SECOND BLUE*	BLUE	BLUE
DATA LINE	WHITE	BLACK	_
POWER PLUS	BLACK	RED	RED
POWER MINUS	SHIELD	SHIELD	SHIELD

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