Cold Shrink

5732–5735 Low Voltage Inline Splice Kits

Instructions

CSA Certified for 600V or Less

NRTL

For use with 3/C Armor Power Cable (TECK-90) up to 1000 Volts

Kit Contents:

3 Cold Shrink PST Tubes
1 Cold Shrink PST Jacket Tube
2 Scotch® Shielding Tape 24 Strips
1 Copper Shielding Sleeve (2' Lg.)
2 Constant Force Springs (Size #4)

NOTE: Connectors are not included in kit. Use only CSA certified compression connectors.

Table 1: Kit Selection

Kit No.	Cable Sizes AWG or MCM	Overall Jacket Diameter
5732	#2—1/0	0.95—2.4" (24—61 mm)
5733	2/0—250	1.15—3.3" (29—84 mm)
5734	250—500	1.55—4.0" (39—102 mm)
5735	500—750	1.55—4.0" (39—102 mm)

⚠CAUTION

Working around energized electrical systems may cause serious injury or death. Installation should be performed by personnel familiar with good safety practice in handling electrical equipment. De-energize and ground all electrical systems before installing product.

1.0 Prepare Cable

See Table 2 for cable cutback dimensions.

1.1 Position cables and cut so conductor ends overlap. (See Fig. 1)

1.2 Remove cable jacket of each cable according to dimension “D”. (See Fig. 1)

1.3 Remove armor leaving 1" of armor exposed from end of each cable jacket. (See Fig. 1)

1.4 File rough edges of armor smooth.

1.5 Remove inner jacket leaving ½" exposed from the end of the armor.

1.6 Remove cable fillers back to end of inner jacket.

1.7 Match conductor phases.

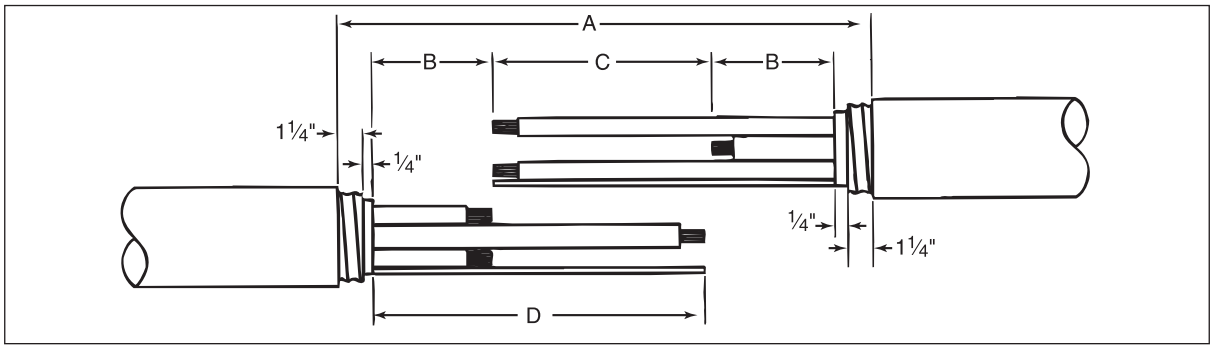
1.8 Shorten conductors by dimensions indicated in Fig. 1.

1.9 Remove insulation from conductor ends:
—If using Copper connectors: Remove insulation for ½ of connector length.
—If using Aluminum connectors: Remove insulation for ½ of connector length +¼".

Table 2: Dimensions for Fig. 1

Kit No.	A	B	C	D
5732	19" (48.5 cm)	4.5" (11.5 cm)	7" (18 cm)	13" (33 cm)
5733	22" (56 cm)	5.5" (14 cm)	8" (20.5 cm)	15" (38 cm)
5734 & 5735	26" (66 cm)	6.5" (16.5 cm)	10" (25.5 cm)	18" (45.5 cm)

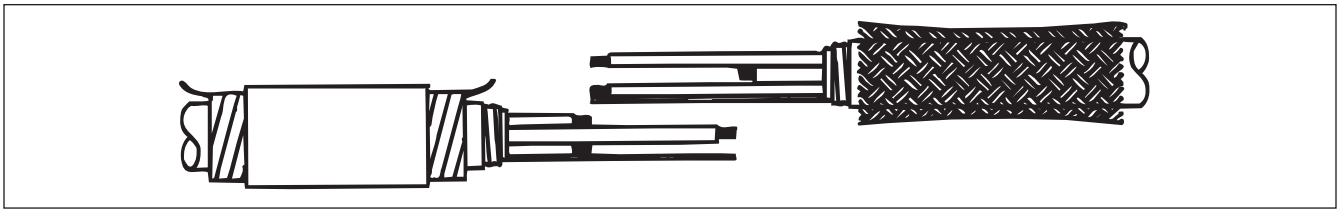
Fig. 1 Cable Preparation



2.0 Placement of Cold Shrink PST Jacket and Copper Shielding Sleeve

2.1 Slide the large Cold Shrink PST Jacket over one of the cables, making sure cable is free of dust or debris. This PST Jacket Sleeve has two supporting cores. A core end must extend from each end of the assembly. Hold the leading core end outside the assembly when sliding the assembly over the cable.
2.2 Slide the Copper Shielding Sleeve over the opposite cable. Compress sleeve lengthwise to increase diameter to make it easy to place around the cable. Make sure cable is free of dust and debris.

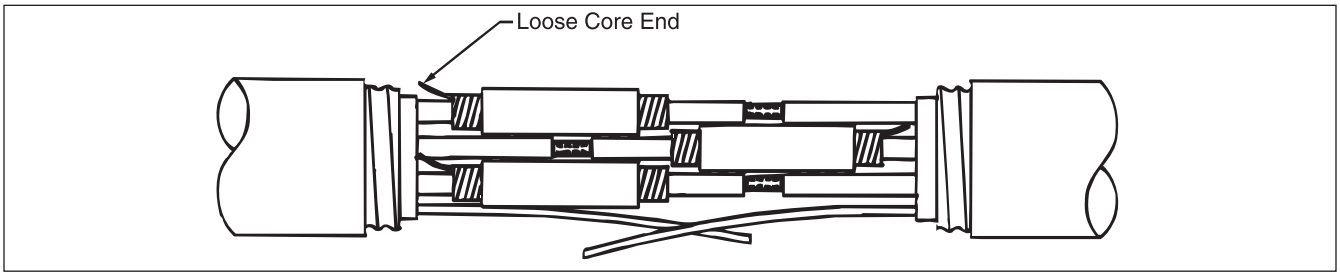
Fig. 2 Position Jacket Sleeve and Shield Sleeve



3.0 Connect Conductors

3.1 Slide the small Cold Shrink PST Tubes over each of the longer conductors, placing the loose core end on first. (See Fig. 2)
3.2 Match conductor phases and position connectors.
3.3 Crimp connectors with proper tool and die.
3.4 After crimping, remove any excess anti-oxidant paste and any sharp metal flash.
3.5 Slide the small Cold Shrink PST Tubes over the connector area.
3.6 Position the PST Tube so it will be centered over the connection when core is removed.

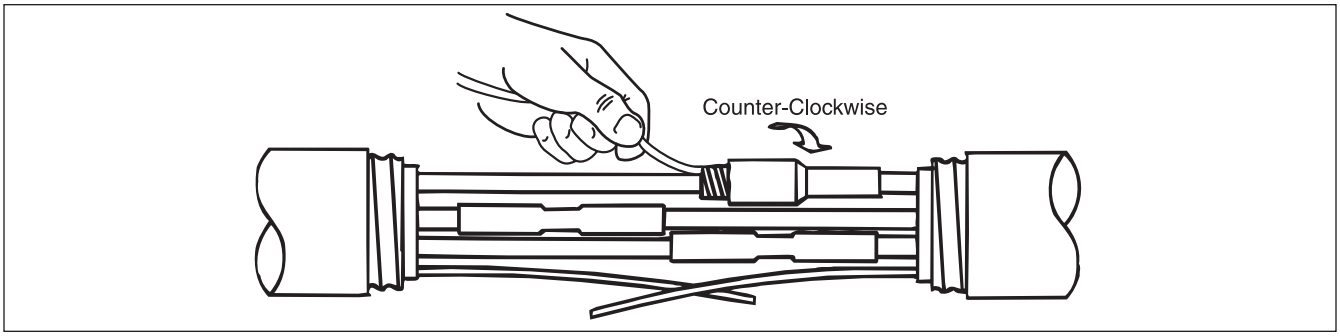
Fig. 3 Position Sleeves before Crimping the Connectors



3.7 Hold PST Tube in position with one hand and remove core with other hand. To begin core removal, give a slight tug to the loose core end and continue unwinding counter clockwise. (See Fig. 4) An occasional tug of the loose core end while unwinding will aid in the removal of the core.

NOTE: It may be necessary to remove a small portion of the core to permit centering of the tube. DO NOT remove core past beginning of the tube at this point.

Fig. 4 Center Sleeves and Remove Cores

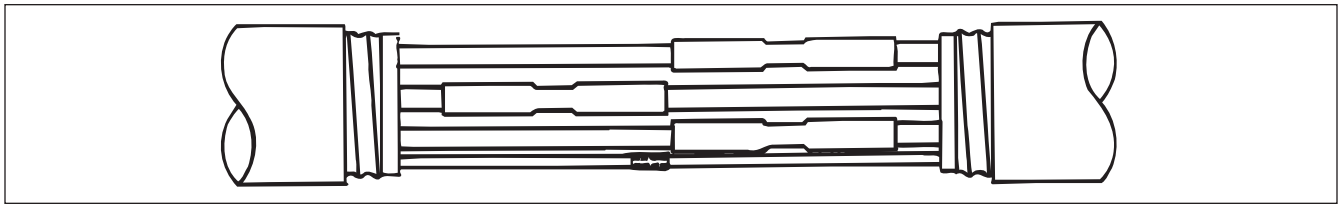


4.0 Connect Ground Wires

If there are ground wires, join ground wires with proper connectors and appropriate crimping tool and die. (See Fig. 5)

NOTE: If it is necessary to keep a uniform profile of the splice, wrap all conductors together with Scotch® Rubber Mastic Tape 2228 or Scotch® Linerless Rubber Splicing Tape 130C (not included in kit) as filler where the diameter is small. Normally this is not necessary but will improve the profile of the splice.

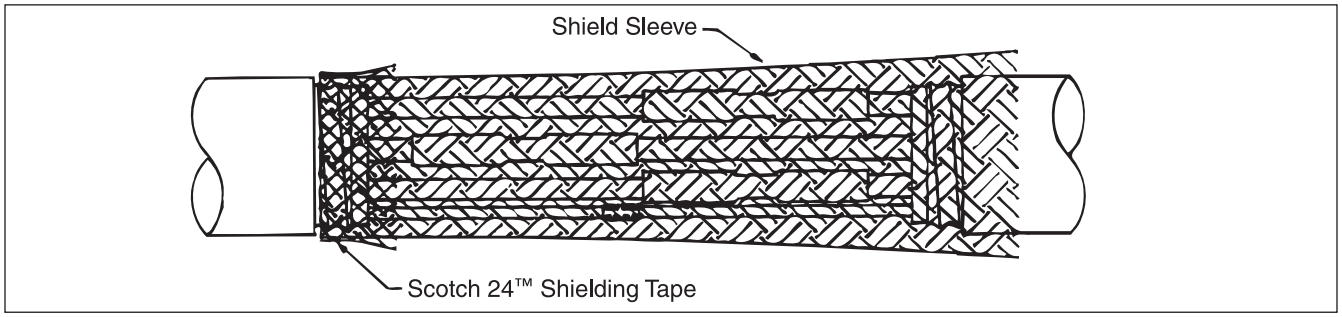
Fig. 5 Connect Ground Wire



5.0 Connect Copper Shield Sleeve

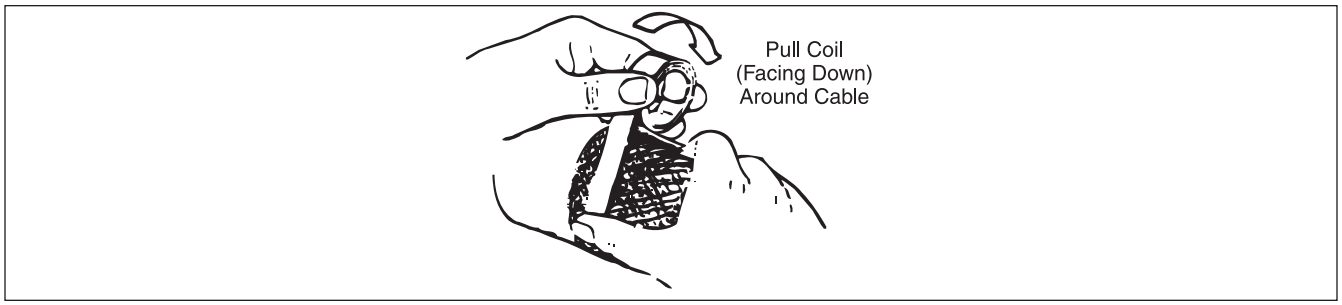
5.1 Position the Copper Shield Sleeve over splice opening as shown in Fig. 6. This will provide armor continuity.
5.2 At each end of the exposed armor, wrap several layers of Scotch® Shielding Tape 24 over the Copper Shield Sleeve. Use all the shielding tape included in the kit. Tie off end of shielding tape.
5.3 Fold ends of Copper Shielding Sleeve back over the shielding tape. (See Fig. 6)

Fig. 6 Connect Shield Sleeve



5.4 Unwrap about 2" (5 cm) of Constant Force Spring coil. (See Fig. 7)
5.5 With thumb, hold the end of the coil in place over the bend of the Copper Shielding Sleeve. The rolled up extended coil should be facing downward and away from you. Pull the coil around the cable allowing it to unwrap and re-wrap around the cable and itself.
5.6 Cinch (tighten) the applied coil after final wrap is applied.

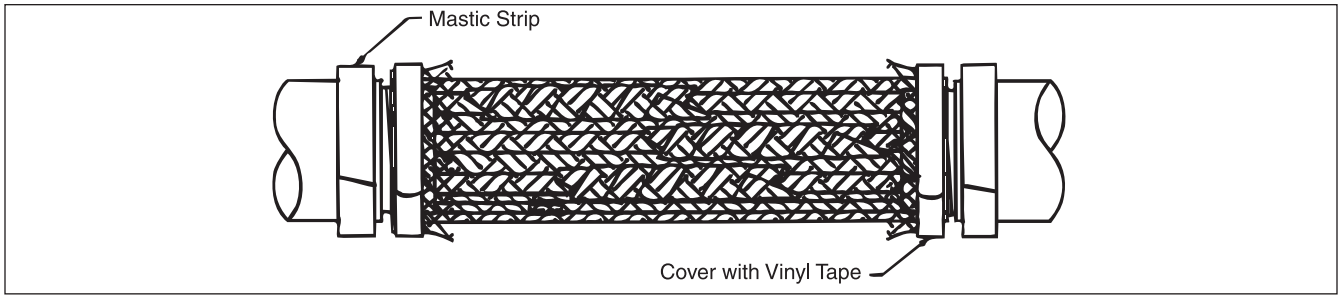
Fig. 7 Install the Constant Force Springs



6.0 Apply Mastic to seal PST Jacket

Using the Mastic Strip, build up the diameter of the cable jacket next to the Constant Force Spring. Do not build diameter of mastic larger than the Constant Force Springs. If necessary, cut off any excess of the Mastic Strips. (See Fig. 8)

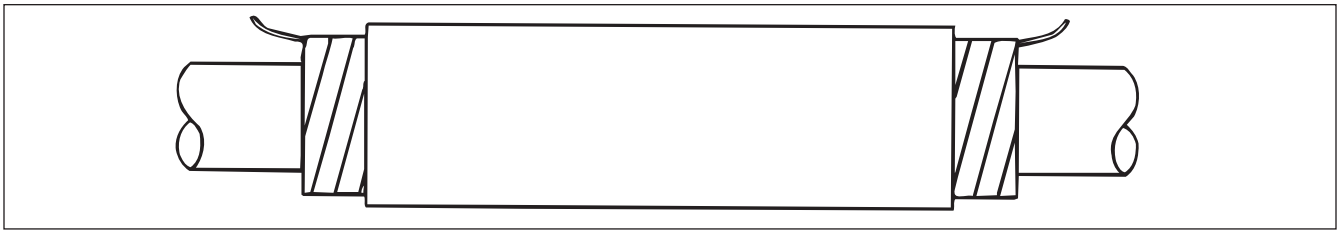
Fig. 8 Apply Vinyl Tape over Entire Splice



7.0 Apply Vinyl Tape

Apply vinyl tape (Scotch® Vinyl Electrical Tape Super 88 or Scotch® Vinyl Electrical Tape Super 33+ is recommended however, it is not included in kit) over the Constant Force Springs and the ends of the Copper Shielding Sleeve to smooth the

Fig. 9 Center Jacket Sleeve and Remove Core.



8.0 Apply Cold Shrink PST Jacket Sleeve

8.1 Center PST Jacket Sleeve over splice opening. (See Fig. 9)
8.2 Start removing the core so PST Jacket Sleeve shrinks over the entire mastic strip.
8.3 Sleeve will stretch lengthwise in order to cover the mastic strip at the opposite end of splice.
8.4 Remove the remainder of the core by unwinding counter clockwise. An occasional tug of the loose core end while unwinding will aid in the removal of the core.
8.5 Cable can be energized immediately after splice is completed.

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