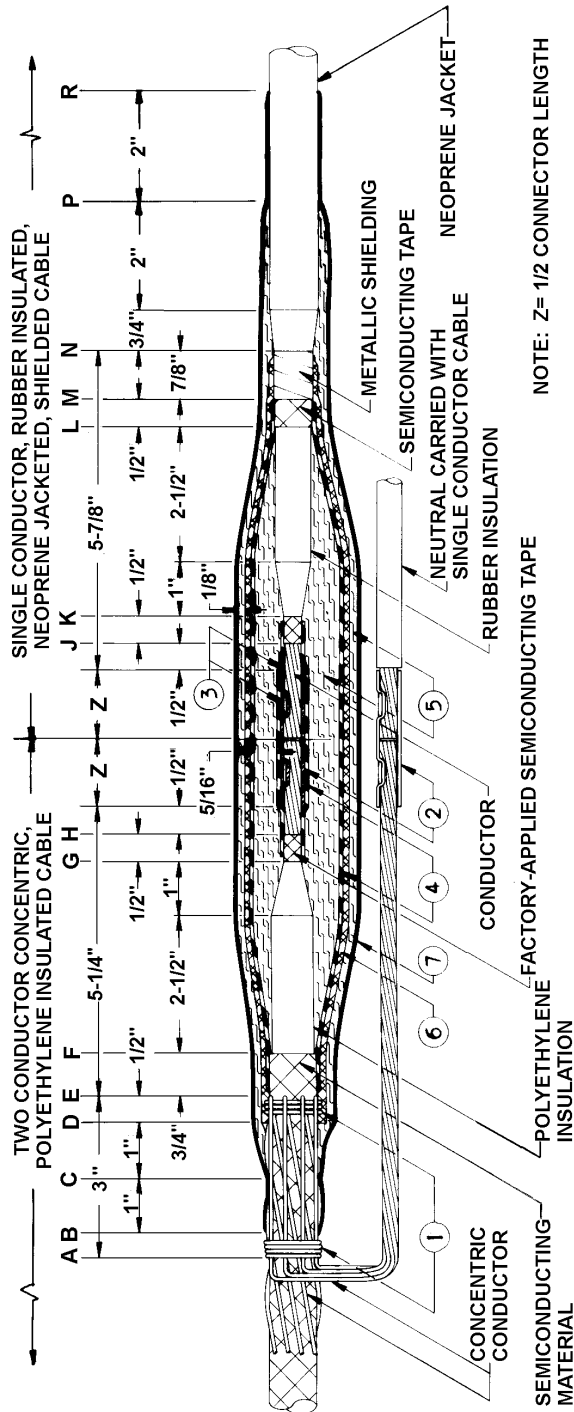


# CONSTRUCTION GUIDELINE

## SPLICE - STRAIGHT - 5000 VOLT, TWO CONDUCTOR CONCENTRIC, POLYETHYLENE INSULATED TO SINGLE CONDUCTOR, RUBBER INSULATED, NEOPRENE JACKETED, SHIELDED COPPER CABLE



### MATERIAL LIST

ITEM	QTY	DESCRIPTION	STOCK #
1	As Req'd	Wire, bare copper, #14	610218E
2	2	Splice, compression, tapered	677337 thru 677349
3	As Req'd	Tape, putty, insulating, 1-1/2"	736750
4	As Req'd	Tape, electrical, semiconducting	736670
5	As Req'd	Tape, with separator, high voltage, 1"	736500
6	As Req'd	Tape, tinned copper shielding	736244
7	As Req'd	Tape, plastic, pressure sensitive, 1"	736644E
8	As Req'd	Cleaner, electrical insulation	726157E
9	As Req'd	Solder, rosin core, 50/50	728504

ORIGINATOR	STANDARDS COORDINATOR	STANDARDS SUPERVISOR	UNIT DIRECTOR
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- A. Train cable to final position, allowing ends to overlap.
- B. Determine the centerline of the splice and mark.
- C. Bind concentric wires of the two conductor cable at point "E" with several turns of #14 copper wire, Stock No. 610218E. Unwrap the concentric wires and bend back over the binding wires so that they lie flat against the cable and parallel to each other. Bind to cable at point "A".
- D. Cut cables at centerline so as to butt squarely together.
- E. Two conductor concentric, polyethylene insulated cable:
  - (a) Remove and trim factory applied semiconducting sheath over insulation to point "F".
  - (b) Remove insulation to point "G" and pencil as shown leaving a smooth finish.
  - (c) Remove factory applied semiconducting tape adjacent to conductor to point "H".
- F. Single conductor, rubber insulated, neoprene jacketed, shielded cable:
  - (a) Remove jacket and cable tape to point "N".
  - (b) Unwrap shielding to point "M" and cut.
  - (c) Remove factory-applied semiconducting tape, under shielding, to point "L".
  - (d) Remove insulation to point "K" and pencil insulation as shown leaving a smooth finish.
  - (e) Remove factory-applied semiconducting tape adjacent to conductor to point "J".
- G. Attach connector to conductors. Remove any burrs or sharp points.
- H. Using cable cleaner Stock No. 726157E, wipe connector and bare conductor free of grease and oil.
- I. Fill all indents and voids with sealant, Stock No. 686541, to present a smooth surface for taping.
- J. Apply electrical semiconducting tape, Stock No. 736670, from point "G" to point "K", half-lapped, stretching tape to approximately three-fourths of its original width, to form a smooth void free splice. Semiconducting tape must not overlap cable insulation (points "G" and "K").
- K. Thoroughly clean the surface of the single conductor, rubber insulated cable from point "K" to point "L", using file, non-conductive abrasive cloth, and cable cleaner Stock No. 726157E.

- L.** Apply high voltage ozone resistant tape, Stock No. 736500 from point "F" to point "L", half-lapped with sufficient tension to prevent wrinkles, building up to a thickness of 5/16 inch over connector and extending level to shoulder of factory insulation. Insulation tape must not overlap semiconducting material at points "F" and "L".
- M.** Apply electrical semiconducting tape, Stock No. 736670, from point "E" to point "M", half-lapped, stretching tape to approximately three-fourths of its original width, to form a smooth void free splice.
- N.** Apply shielding tape, Stock No. 736244, from point "D" to point "N", 1/4 to 1/2 lap. Apply shielding tape in two pieces., wrapping from the center toward each end. Overlap at the center and solder in place at the center, to the concentric conductor at point "D". and to the shielding at point "N".
- O.** Pencil jacket at point "N" as shown, leaving a smooth surface.
- P.** Clean jacket between points "N" and "R" with cable cleaner Stock No. 726157E, taking particular care to remove wax finish. Roughen jacket surface to point "R" with a small rasp.
- Q.** Apply high voltage, ozone resistant insulation tape, Stock No. 736500 from point "C" to point "P", half-lapped with sufficient tension to prevent wrinkles, building up to a thickness of 1/8 inch.
- R.** Apply two layers, half-lapped of plastic electrical tape, Stock No. 736644E, over entire termination, from point "B" to point "R". Tape shall be applied so as to shed water, and shall be applied with only enough tension to shape.
- S.** Lead concentric conductor wires out from cable and twist to form a stranded conductor. Lay in position to meet neutral cable carried with single conductor cable. Cut neutral cable and twisted concentric conductors so as to butt squarely together and join with connector.