

**SPLICE- STRAIGHT, THREE CONDUCTOR, 26 kV
 PAPER INSULATED, LEAD SHEATH**

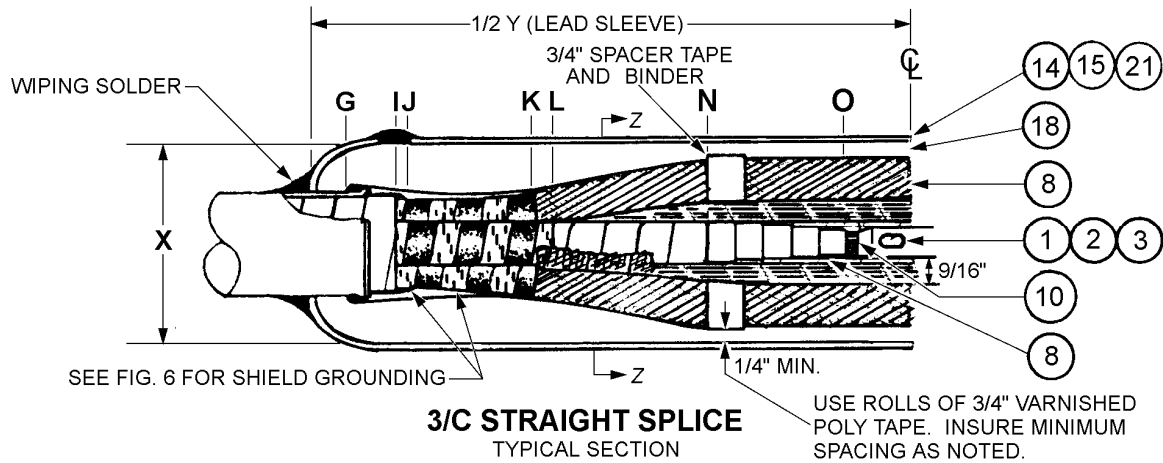


FIGURE 1

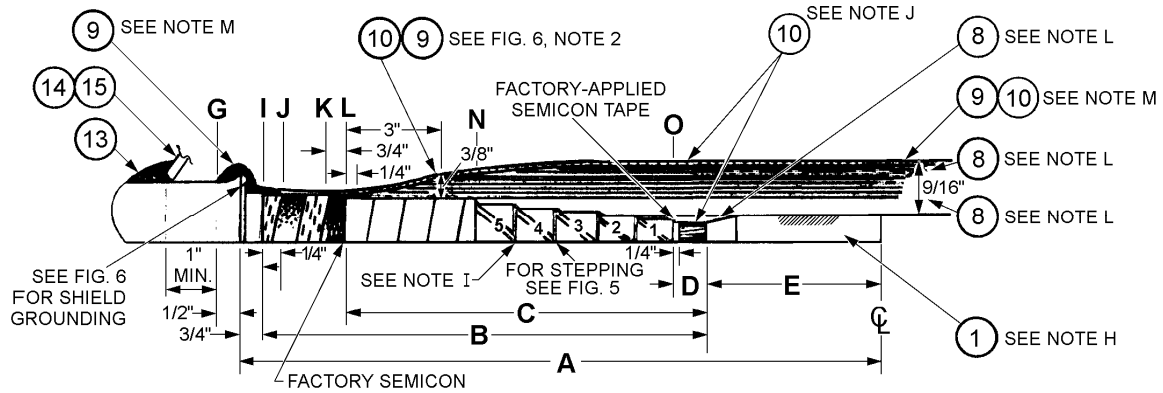
See Figure 2, page 2, for dimension and taping details.

MATERIAL LIST

Item	Quantity	Description	Stock No.
1, 2, or 3	*3 EA	Tinned Copper Compression Connector	*
4	As Req'd.	Adapter, Copper Reducer	As Req'd.
5	As Req'd.	Solder, Rosin Core, 50/50	728504
6	As Req'd.	1" Varnished Poly Tape	736684
8	16 RL	3/4" Varnished Poly Tape	736682
9	7 RL	1" Tinned Copper Shielding Braid (Mesh Tape)	736244
10	2 RL	1" Tape, Crepe Paper, Carbon Black (Semicon)	736245
11	4 RL	Yarn, Dry 100% Cotton	727340
12	As Req'd.	Taping Oil	726320
13	As Req'd.	Wiping Metal	728528
14	*As Req'd.	Lead Sleeve, Y Long, 5" I.D.	Non-stock
15	*As Req'd.	Lead Sleeve, Y Long, 6" I.D.	Non-stock
16	6 LB	40-60 Bar Solder	728496
17	1 EA	Solder Flux	728112
18	As Req'd.	Filling Compound	726318
20	As Req'd.	Tape, Cotton, Woven, 1"	736170
21	*As Req'd.	Lead Sleeve, Y Long, 7" I.D.	Non-stock

* See Table 1 for proper item and stock numbers.

ORIGINATOR	STANDARDS COORDINATOR	STANDARDS SUPERVISOR	UNIT DIRECTOR
<i>Jim S. Horn</i>	<i>Charles L. Shaffer</i>	<i>John C. Skinner</i>	<i>Betty Robin</i>



3/C STRAIGHT SPLICE — DIMENSION AND TAPING DETAILS

FIGURE 2

SPLICING DETAIL NOTES

- A.** Rack cables in their final positions. Cut Runs 1 and 2 to butt squarely together.
- B.** Prepare joint sleeve to fit around joint and prepare sleeve ends for solder.
- C.** Clean inside of sleeve and cable surface where sleeve will rest during splicing. Slip sleeve over cable to this area unless split sleeve is necessary.
- D.** Remove jacket "A+6" inches (See Table 1) on both cables. Remove lead sheath "A" inches (see Table 1) on both cables and remove all burrs and sharp edges. Prepare sheaths for soldering. Bell cable sheath if necessary.
- E.** Remove overall binder tapes to point **I** (see Figures 1 and 2). Remove outer filler to point **I** and inner filler. Then bind cables together tightly at point **J** with dry cotton one-inch tape.

(Notes continued on next page.)

TABLE 1

Splice Groups		Dimensions (Inches)						Compression Connector		
		A	B	C*	D	E	X	Y	Item No.	Stock No.
500 kcmil	Run 1	15-3/4	12-3/4	8-1/2	1/2	1-3/4	7	36 max.	3	677347
500 kcmil	Run 2	15-3/4	12-3/4	8-1/2	1/2	1-3/4				
#4/0	Run 1	15-5/8	12-3/4	8-1/2	1/2	1-1/4	6	36 max.	2	677341
#4/0	Run 2	15-5/8	12-3/4	8-1/2	1/2	1-1/4				
#1	Run 1	13-3/8	10-3/4	8-1/2	1/2	1	5	36 max.	1	677337
#1	Run 2	13-3/8	10-3/4	8-1/2	1/2	1				
#1	**Run 1	13-5/8	10-3/4	8-1/2	1/2	1-1/4	6	36 max.	2	677341
#4/0	**Run 2	15-5/8	12-3/4	8-1/2	1/2	1-1/4				

* Dimension "C" should not be reduced below 8-1/2" (creepage).

** See Note Q.

Approximate measurements. They may have to be adjusted for conditions such as a phasing splice or different material.

- F. Wrap each cable with four turns of dry cotton tape for temporary protection and tie at point **O**. Put heat lamp on splice at this time to keep moisture off cable.
- G. Remove cable shielding and paper insulation tape from each conductor per Figure 2, point **O**. Leave at least one-quarter inch of factory semicon on conductor to run crepe paper over.
- H. Remove shielding tape to point **K** and step insulation per Figure 5. Temporarily tie stepped insulation down with dry left twist. Terminate factory semicon at point **L**. Steps should be torn and not cut sharply. Let them feather out so they form a taper.
- I. Compress the connector after conductors are shaped. Deburr and smooth off connector. Flush connector with 110° C taping oil if necessary to clean area. **Do not** use transformer oil to flush splice!
- J. Apply one half-lapped layer of one-inch crepe semi-conducting tape between the factory-applied semi-conducting conductor shield of each cable. Be sure the continuity between the conductor shields is complete!
- K. Fill the corner of each step with dry cotton yarn soaked in 40° C taping oil if necessary to fill sharp steps that are not feathered out.
- L. Apply three-quarter-inch varnished poly tape to conductor O.D. overall thickness as shown. Apply three-quarter-inch varnished poly tape to build up stress cone. Stop three-quarter-inch tape one-quarter inch from end of factory shielding tape. Apply 40° C taping oil between each tape layer. Use heat lamp to keep taping oil hot.
- M. Install copper mesh tape between points **K**¹ and **K**² (on first and second runs) and three-quarter inch over points **K** for soldering. Solder and ground mesh turns as noted. Also install copper mesh tape between points **G** and **J**. See Figure 6 for details.

TIN SHEATH, SEAL END OVER WITH WIPING SOLDER.

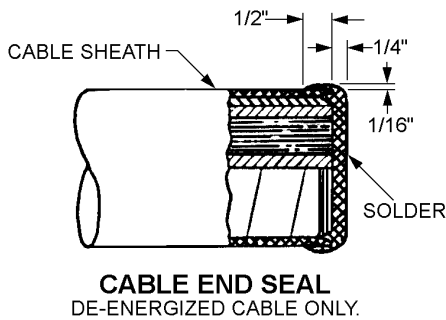
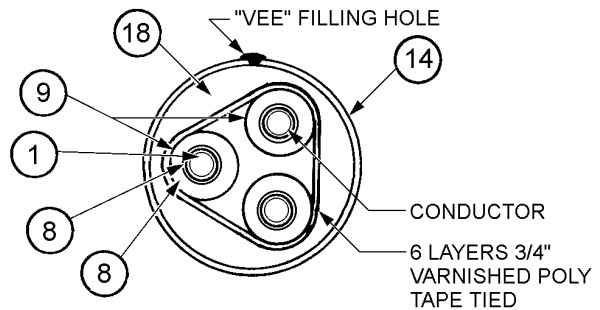


FIGURE 3



CROSS SECTION "Z"

FIGURE 4

- N. Bind phases together using three-quarter-inch varnished poly tape.
- O. Position sleeve around splice with filling "vee" hole up. Solder sleeve ends to cable lead sheaths.
- P. Tip joint downward and fill with 145° C joint compound. Position "vee" hole at high end. Allow compound to cool, then add additional compound as required. Close and solder "vee" hole.
- Q. When joining different sized cables, fill space between connector and smaller conductor with an adapter sleeve prior to crimping connector.
- R. Tools shall be kept in drip pan under a heat lamp to prevent contamination and condensation. If splice is to be left overnight, bag and put desiccant inside bag.

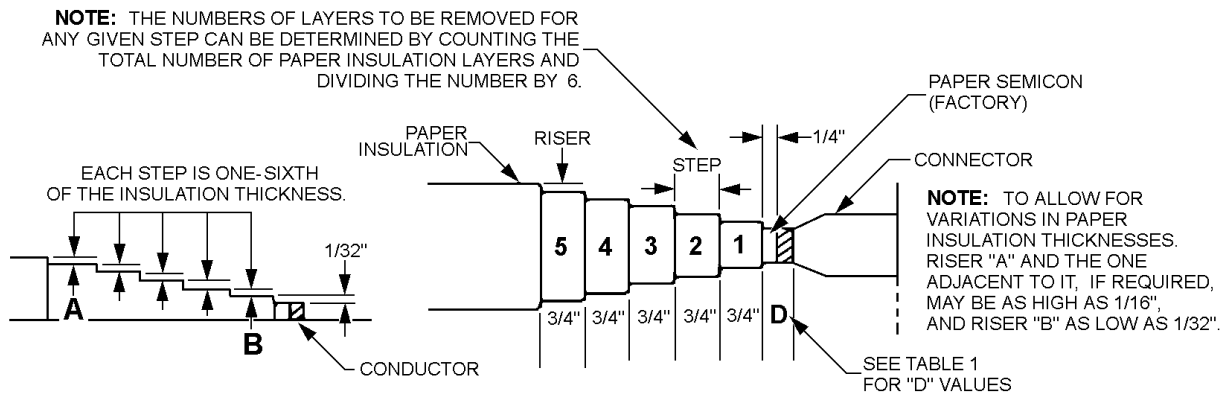
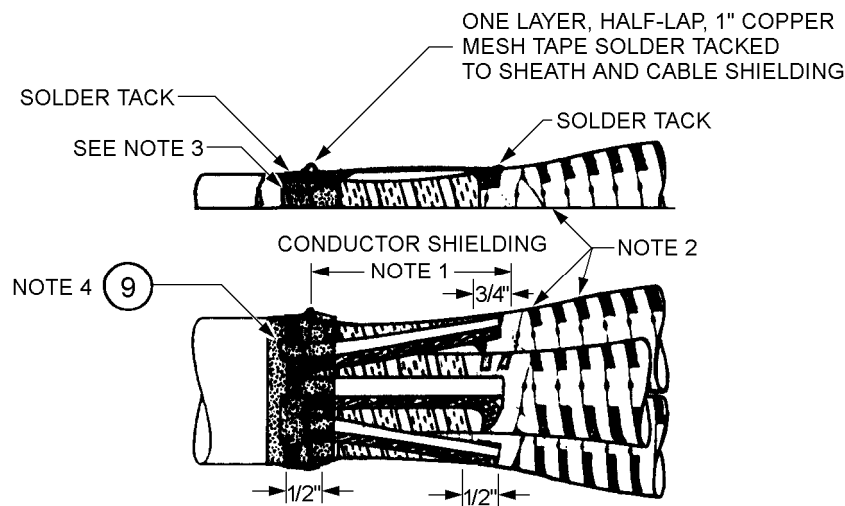


DIAGRAM FOR STEPPING THE INSULATION

FIGURE 5



TERMINATION OF CONDUCTOR SHIELDING TAPE

FIGURE 6

PROCEDURE NOTES

1. For cutting dimensions of sheath, binder and conductor shielding tape, refer to note "H" and Figure 2.
2. Wrap each conductor with a half-lapped layer of crepe paper semicon across splice from point "K¹" to point "K²". From a point 3/4" over copper shielding tape apply braid between points "K¹" and "K²". Solder tack edges and run two continuous longitudinal seams of solder, 180 degrees apart, between points "K¹" and "K²".
3. The trailing end of copper braid, after securing, shall be connected to the sheath as illustrated above (Figure 6).
4. Solder ends of braid. Also solder braid between turns to cable shielding and to lead sheath