Quick Splice II

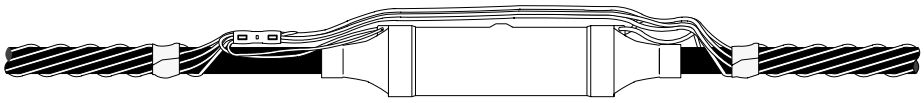
5461
Molded Rubber Inline Splicing Kit
Instruction Sheet

IEEE Std. No. 404–1986

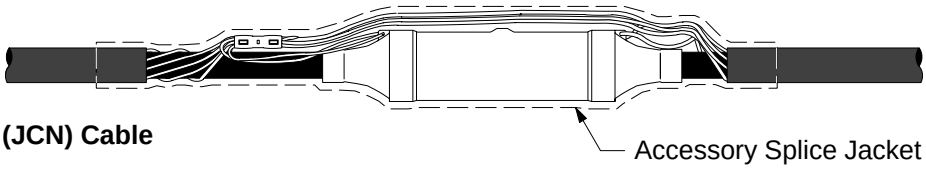
35 kV Class
200 kV BIL

Kit Contents:

1 Molded Rubber Splice Body
1 Porta Pencil
2 Packets of Silicone Grease
(clear 5cc tube with green letters)
1 Template
1 Instruction Sheet



(CN) Cable



(JCN) Cable

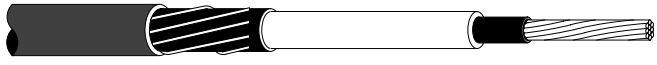
Selection Chart
NOTE: Final determining factor is cable insulation diameter

Kit Number	Cable Insulation O.D. Range	Conductor Size	Cable Insulation Thickness
		AWG	mils
5461	1.00 – 1.15 in. (25,4 – 29,2 mm)	2 Stranded	345
		1 Solid	345
		1 Stranded	345
		1/0 Solid	345
		1/0 Stranded	345

Table 1



Concentric Neutral Cable



Jacketed Concentric Neutral Cable

NUMBER OF PAGES: 6	SCALE: Not to scale
ISSUE DATE: 3/4/96	ISSUE: B

3M Quick Splice II

Molded Rubber Inline Splicing Kit

for use on Concentric Neutral (CN) Cable and Jacketed Concentric Neutral (JCN) Cable

(With Accessory Splice Jacket, e.g. 3M SJ or HSJ Series Kit)

5461

78–8096–5118–1

A. Prepare Cable Using Standard Procedures

1. Allow sufficient neutral wire length on CABLE Y to jumper across splice. Locate neutral wire connection beyond end of splice body on CABLE X end *(Figure 1 shown on CN cable)*.

   NOTE: If neutral wires are to be grounded at splice, also locate ground connection beyond splice body on CABLE X end *(Figure 1)*.

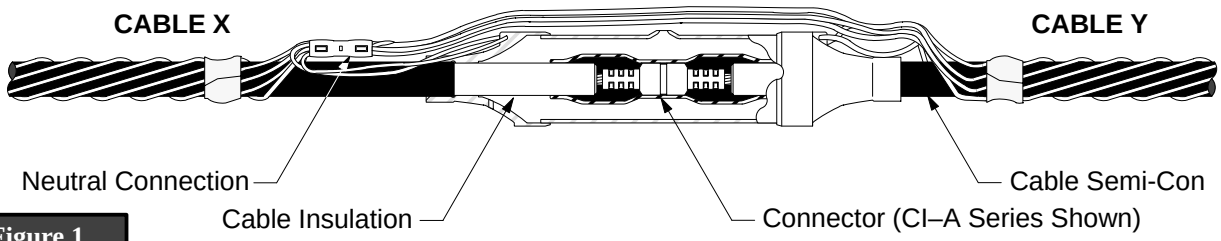
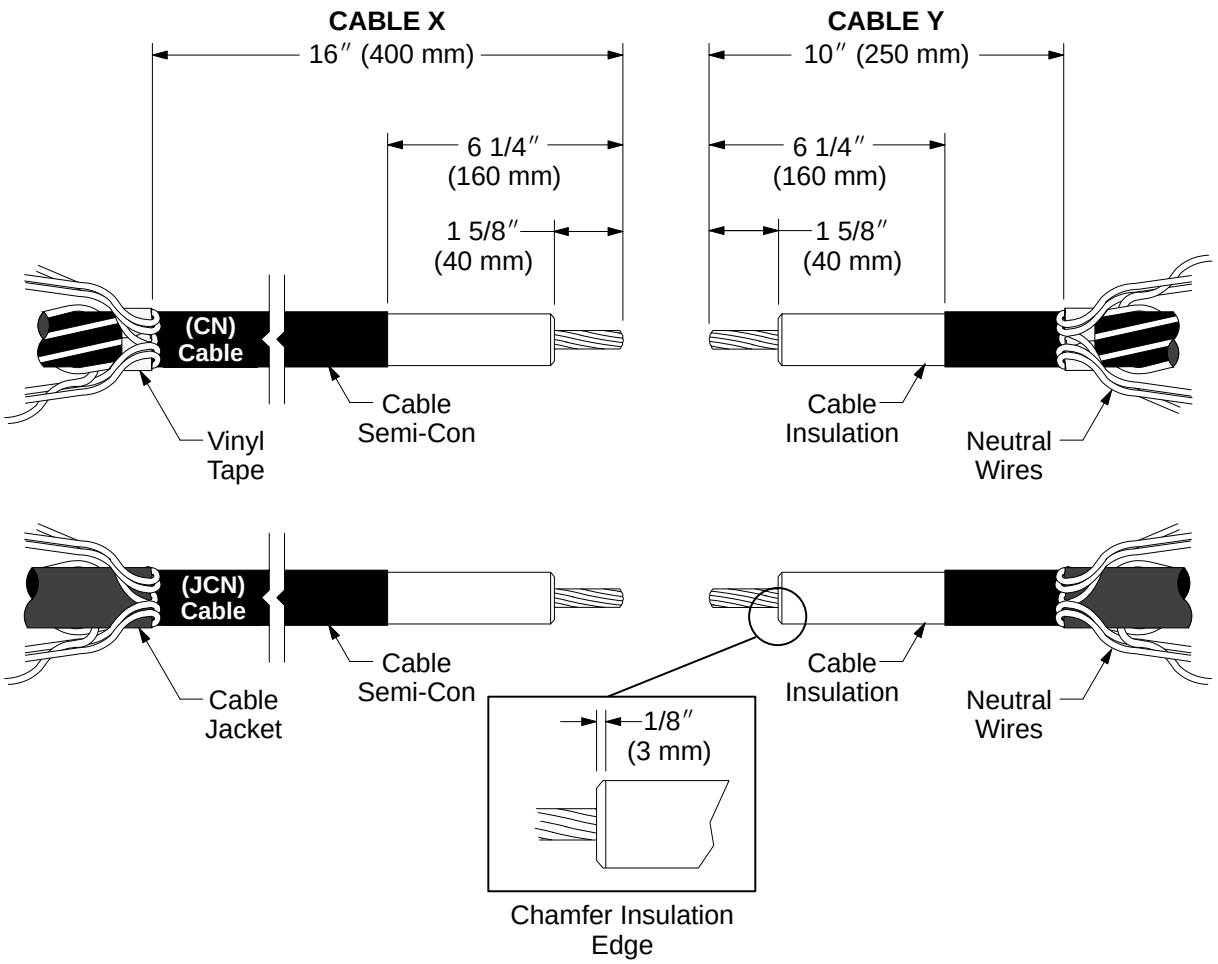


Figure 1

2. Gently fold neutral wires back over cable, *(Figure 2)* avoiding sharp bends. If cable does not have a jacket, bind neutral wires as shown with wire or vinyl tape *(Figure 2)* and fold neutral wires back over binding *(Figure 2)*.
3. Continue cable preparation according to *(Figure 2)* below.

   NOTE: Check dimensions using templates provided.

Figure 2

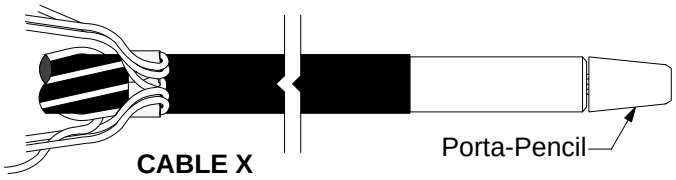


4. Clean cable using standard practice:
   a. **Do not use solvent or abrasive on cable semi-conductive insulation shield.**
   b. If abrasive must be used, do not reduce cable insulation diameter below the 1.00″ (25,4 mm) specified for splice.

B. Installation *(Shown on CN Cable)*

1. Place Porta-Pencil over conductor strands of CABLE X *(Figure 3)*. Large end should butt against cable insulation end.

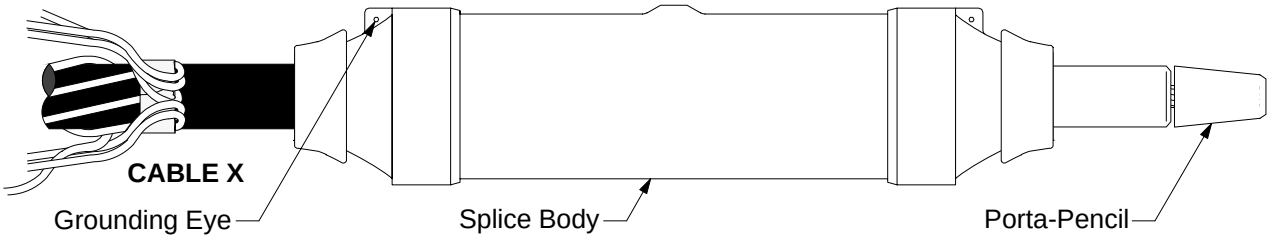
Figure 3



2. Lubricate Porta-Pencil, cable insulation and semi-con of CABLE X and both ends of splice bore with silicone grease provided.
3. Slide splice body onto CABLE X until the Porta-Pencil is fully exposed *(Figure 4)*. For easier installation, the splice body may be rotated while being installed.

   NOTE: For Jacketed Concentric Neutral (JCN) Cables, the accessory splice jacketing should also be slid on cable at this time (e.g. 3M SJ Series or HSJ Series Tube).

Figure 4



4. Remove Porta-Pencil, leaving conductor exposed for connector.
5. Install CI connector (Connector Table) or other 3M approved equivalent. Crimp per the CRIMPING TOOL TABLE.

   NOTE: Do not crimp center of connector. Remove excess contact aid and file off any crimp flashing.

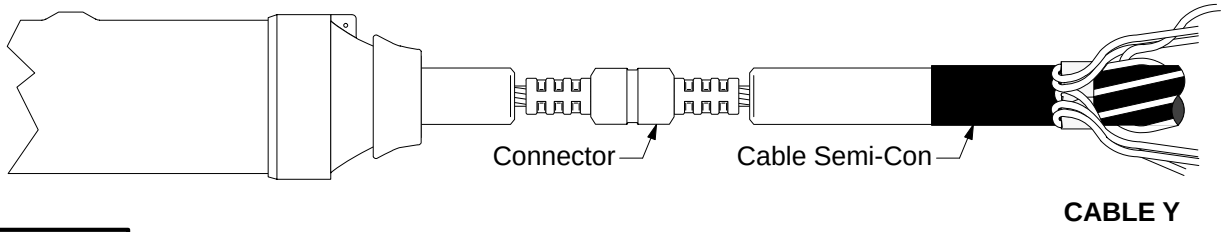
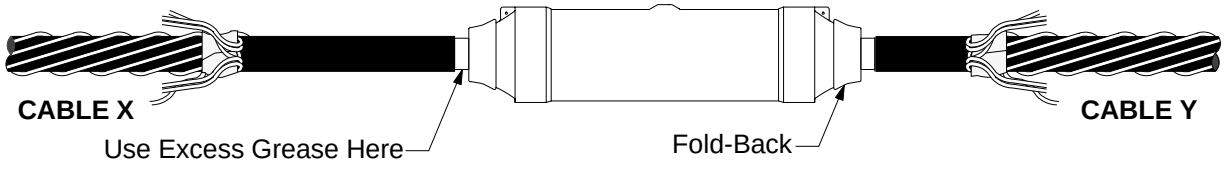


Figure 5

6. Lubricate connector and CABLE Y insulation with silicone grease.
7. Slide splice body into final position by centering between semi-con cutbacks. Use excess grease to fill area at fold-back on CABLE X end *(Figure 6)*.

Figure 6

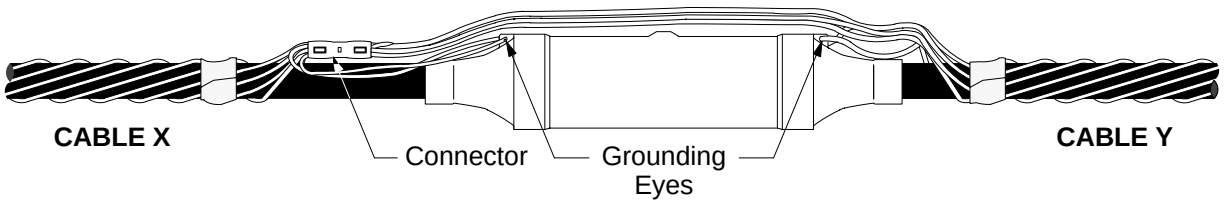


8. Use finger tips of both hands to roll out fold-backs on both ends of the splice.

C. Grounding Splice *(Shown on CN Cable)*

1. Position concentric neutral wires back over cable and splice. Attach one strand from each cable to its respective grounding eye, returning it back to the neutral wire bundle *(Figure 7)*.
2. Join neutral wires using an appropriate connector. A low profile inline compression connector is recommended *(Figure 7)*.

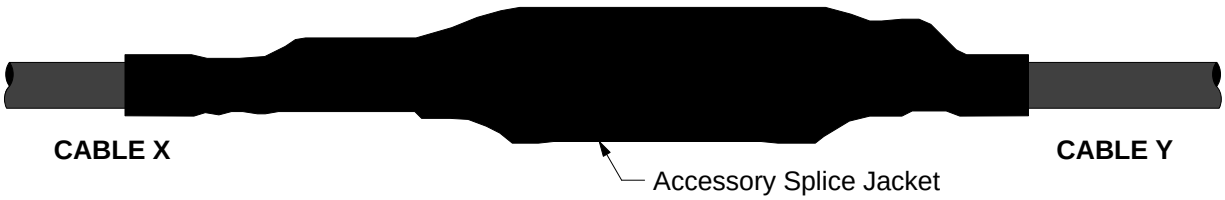
Figure 7



D. Jacketed Concentric Neutral (JCN) Cable Only

1. Install Accessory Splice Jacket Kit over splice and exposed neutral wires (Figure 8).
2. For 3M SJ Series or HSJ Series Splice Jacket, refer to instructions provided with kit.

Figure 8



CONNECTOR TABLE			
Conductor Size (AWG)		**Connector Designation**	
Stranded	**Solid**	**A**	**840**
2	1	CI–2A	CI–21–840
2, 1	1, 1/0	CI–1A	CI–21–840
1/0	—	CI–1/0A	CI–1/0–840

CRIMPING TOOL TABLE							
Mechanical				**Hydraulic**			**Technical Data**
Mfg.	**Tool**	**Die (Crimps Per End)**		**Tool**	**Die (Crimps Per End)**		
		A	**840**		**A**	**840**	
Burndy	MD6	W–BG (2) BG (3)	W–K840 (4) W–249 (3)	Y–35, Y–39, Y–45*	U25 ART (1)	U28 ART (2)	VOLTAGE RATING 35 kV, 200 kV BIL FOR CABLES RATED 90°C CONDUCTOR TEMP. CONTINUOUS AL. OR CU. COND. PASSES TESTS REQUIRED IN IEEE STANDARD 404–1986 FOR POWER CABLE JOINTS
Kearney	0–52, 0–51	5/8 (3)	840 (4)** 845H (3)	WH–1, WH–2	5/8 (3)	840 (3)**	
T&B	TBM–8	Olive (2)**	Blue (4)	TBM–15	50 (1)**	76 (2)	
Anderson	—	—	—	VC6	Universal (1)	Universal (2)	

*** — Usable with – Die Adapter PT 651.**
**** — Excess flash must be filed off to round out connector.**

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78-8096-5118-1 (B)