



Motor Lead Pigtail Splice

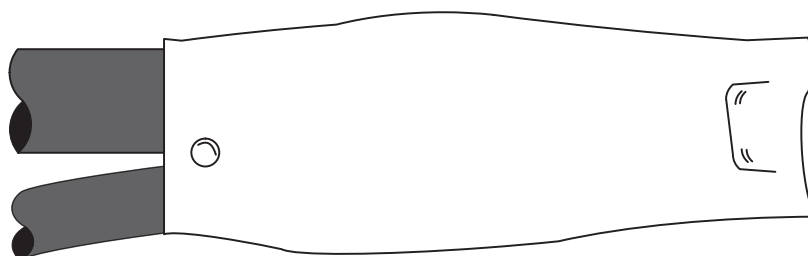
for 5/8 kV Non-Shielded Cables

for 1000 Volts or less cables (heavy-duty and two-hole lug applications)

Instructions



CSA Certified for
600V or Less



Kit Contents (kit contains 3 splices):

- 3—Lug Covers
- 3—Locking Pins
- 3—Tubes Silicone Grease
- 3—Bag Solvent Cleaning Cloths
- 3—Mastic Sealing Strip(s)*
- 3—Strips Scotch® Linerless Rubber Splicing Tape 130C
- 3—Instruction Sheet

*Quantity varies with kit number.

Table 1

Kit Number	Cable Size Range (AWG/kcmil)		Cable Insulation O.D. Range	Max. Bolt Length
	Feeder	Motor Lead		
5316	8–4	10–4	0.30–0.51 in.	1/2 in.
5317	2–1/0	4–1/0	0.43–0.65 in.	3/4 in.
5318	1/0–250	2–250	0.53–0.88 in.	1 1/4 in.
5319	250–500	4/0–500	0.75–1.12 in.	1 1/2 in.

Technical Information:

- For non-shielded cables
- Rated 5/8 kV
- For cables rated 1000 Volts or less (heavy-duty and two hole lug applications)
- Cable Size Range: Feeder: #8 AWG—500 kcmil
Motor Lead: #10 AWG—500 kcmil
- Copper Conductors

CAUTION

Working around energized 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.

3M™ Motor Lead Pigtail Splice Kits

for 5/8 kV or less Non-Shielded Cables

5316, 5317, 5318, 5319

78-8096-4634-8-F

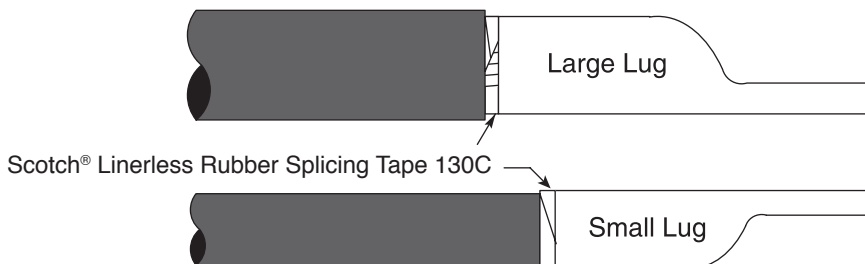
1.0 Prepare Cable According to Standard Procedures

- 1.1 Check to be sure cables fit within cable kit range as shown in Table 1 on cover.
- 1.2 Remove cable insulation for length recommended by terminal lug manufacturer; if no information is available, remove for depth of lug barrel.

2.0 Install Lugs

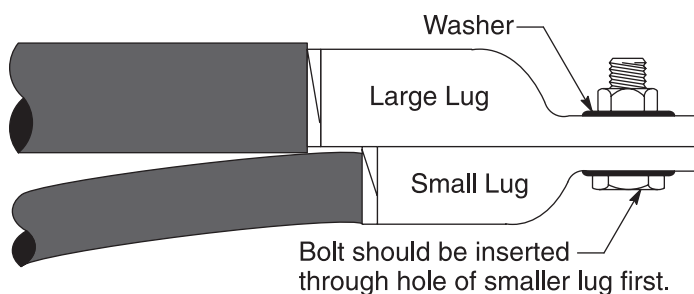
- 2.1 Install and crimp lugs per manufacturer's direction. See back page if 3M™ Scotchlok™ Copper Lugs are used.
- 2.2 Clean insulation for approximately 6 using solvent saturated cloths provided in kit.
- 2.3 FOR 8kV ONLY. Fill lug/insulation gaps with Scotch® Linerless Rubber Splicing Tape 130C (Figure 1).

Figure 1



- 2.4 Bolt lugs together. See Table 1 on cover for maximum bolt length. See Figure 2 for proper bolt/lug arrangement.

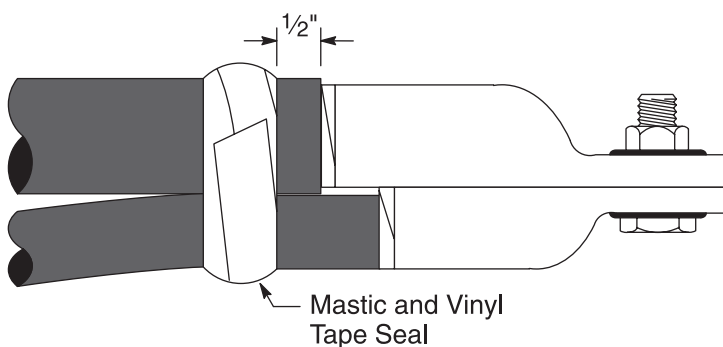
Figure 2



3.0 Install Lug Cover

- 3.1 Separate cables and apply mastic strip between and around them, $\frac{1}{2}$ " from ends of cable insulations (Figure 3). Build mastic to an overall diameter that is greater than the inside diameter of the Lug Cover. Press cables together and make certain that no void exists between them (Figure 3).
- 3.2 Overwrap the mastic with 1 or 2 wraps of vinyl tape (Figure 3).

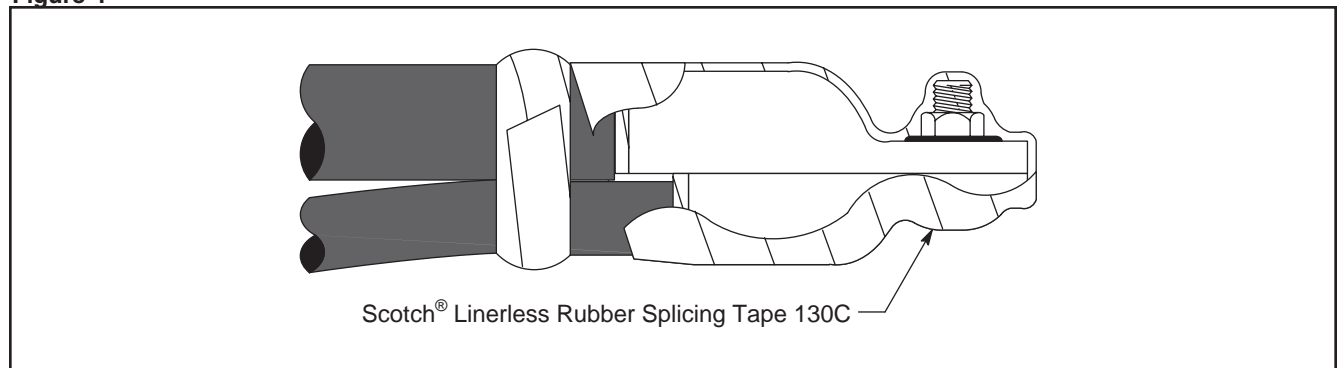
Figure 3



3.3 FOR 8 kV ONLY. Cover the lugs and bolt with four half-lapped layers of Scotch® Linerless Rubber Splicing Tape130C (Figure 4).

Note: *Lug cover will be printed with 5 kV rating. Mastic layer qualifies the part as 8 kV.*

Figure 4



3.4 Install Lug Cover. Position Lug Cover so the punch holes are positioned between the cables (Figure 5).

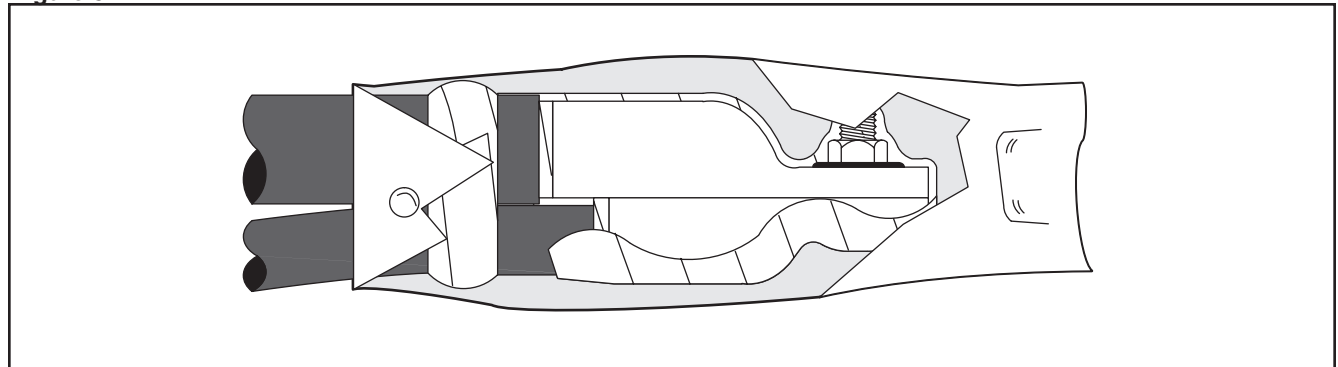
Note: *The kit contains a small tube of Silicone Grease. Use it to lightly lubricate the mastic and vinyl tape wraps. This will aid in the installation of the Lug Cover.*

3.5 Be sure that the punched holes are beyond the cable end of the mastic and vinyl tape wrap. Insert the plastic locking pin through the holes (Figure 5).

Hint: *Inserting the pin from the back side of the Lug Cover will aid in visually aligning the pin through both holes.*

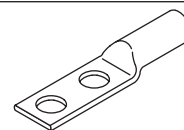
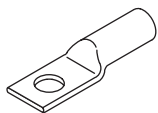
3.6 Cut off excess pin length, if desired. (Leave at least ¼" extending from Lug Cover).

Figure 5



4.0 Tooling Index

Lug and Crimping Information for 3M™ Scotchlok™ Copper Lugs	
30014 through 30045 One hole	31145 through 31166 Two hole



5.0 Copper Lugs

Cable Size	Stud Size	3M™ Scotchlok™ Copper Lug Number	CRIMPING TOOL-DIE SETS (NUMBER OF CRIMPS)							
			Burndy Corporation				Thomas & Betts Corporation			Square D Co. Anderson Div.
			MD6	MY29	Y34A	Y35, Y39, Y45*, Y46*	TBM 5	TBM 8	TBM 15	VC6-3 VC6-FT**
6	10 1/4 5/16	30014 30015 30016		6 AWG (1)		U5CRT (1)	Blue (1)	Blue (1)		Universal (1)
4	10 1/4 3/8	30018 30019 30021	W161 (1)	4 AWG (1)	A4CR (1)	U4CRT (1)	Grey (1)	Grey (1)		Universal (1)
2	1/4 5/16 3/8	30022 30023 30024	W162 (2)	2 AWG (1)	A2CR (1)	U2CRT (2)	Brown (1)	Brown (1)	33 (1)	Universal (2)
1	5/16 3/8	30027 30028		1 AWG (1)	A1CR (1)	U1CRT (2)	Green (1)	Green (1)	37 (1)	Universal (2)
1/0	5/16 3/8	30031 30032	W163 (2)	1/0 (1)	A25R (1)	U25RT (1)	Pink (2)	Pink (2)	42H (2)	Universal (1)
2/0	3/8	30036	W241 (2)	2/0 (1)	A26R (1)	U26RT (2)	Black (2)	Black (2)	45 (1)	Universal (1)
3/0	1/2	30041	W243 (2)	3/0 (1)	A27R (1)	U27RT (2)	Orange (2)	Orange (2)	50 (1)	Universal (2)
4/0	1/2	30045	BG (3)	4/0 (1)		U28RT (3)	Purple (2)	Purple (2)	54H (2)	Universal (2)
	1/2	31145	BG (4)	4/0 (2)		U28RT (2)	Purple (3)	Purple (3)	54H (3)	Universal (3)
250	1/2	31149	W166 (4)	250 (2)	A29R (2)	U29RT (3)	Yellow (2)	Yellow (2)	62 (2)	Universal (2)
300	1/2	31153			A30R (2)	U30RT (3)		White (3)	66 (3)	Universal (3)
350	1/2	31156			A31R (2)	U31RT (3)		Red (4)	71H (4)	
400	1/2	31160			A32R (2)	U32RT (3)		Blue (4)	76H (4)	
500	1/2	31166			A34R (2)	U34RT (3)		Brown (4)	87H (4)	

*Y45 and Y46 accept all Y35 dies ("U" series). For Y45 use PT6515 adapter. For Y46 use PUADP adapter.

**Anderson VC6-3 and VC6-FT require no die set.

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