

## Quick Term II

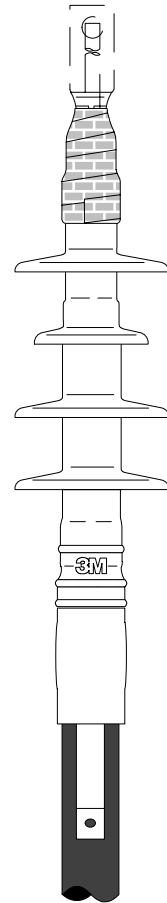
### Silicone Rubber Termination

IEEE Std. No. 48-1990

Class 1 Termination  
15 kV Class  
110 kV BIL

#### Kit Contents

- 3 Hi-K Silicone Rubber Terminations
- 3 Silicone PST Jacket-Seal Assemblies
- 3 Mechanical Ground Strap Assemblies
- 3 Mastic Seal Strips  
(Black with white release liners, bagged)
- 1 Roll of Scotch™ 13 Semi-Conducting Tape
- 3 Strips of Scotch™ 70 Silicone Rubber Tape  
(Gray with clear release liners)
- 3 Packs of Silicone Grease  
(Clear tube with green letters)
- 1 Scotch™ Cable Preparation Kit
- 1 Instruction Sheet



#### 5 to 15 kV Selection Chart

**NOTE: Final determining factor is cable insulation diameter**

Kit No.	Cable Insulation O.D. Range	Cable Jacket O.D. Range	Conductor Size Range (AWG & kcmil)				
			5 kV (.90") 100%	8 kV (.115")* 100%	8 kV (.140") 133%	15 kV (.175") 100%	15 kV (.220") 133%
<b>5632K</b>	0.33 – 0.69 in. (8,4 – 17,5 mm)	0.55 – 0.92 in. (14,0 – 23,4 mm)	8 – 2/0	8 – 1/0	8 – 1	8 – 4	8 – 6

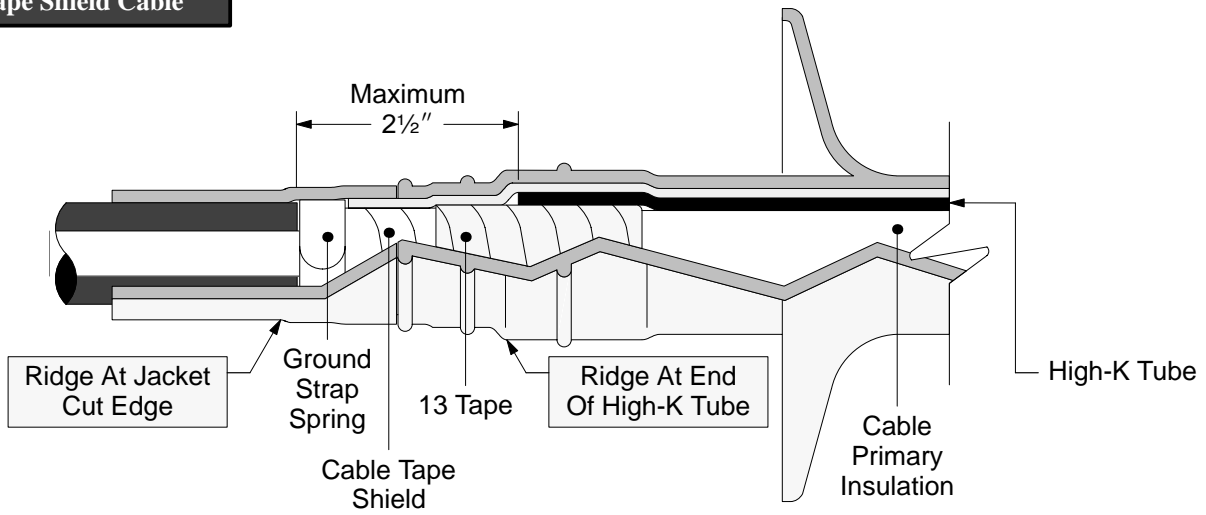
(\*) Also suitable for 5 kV – 133%

Table 1

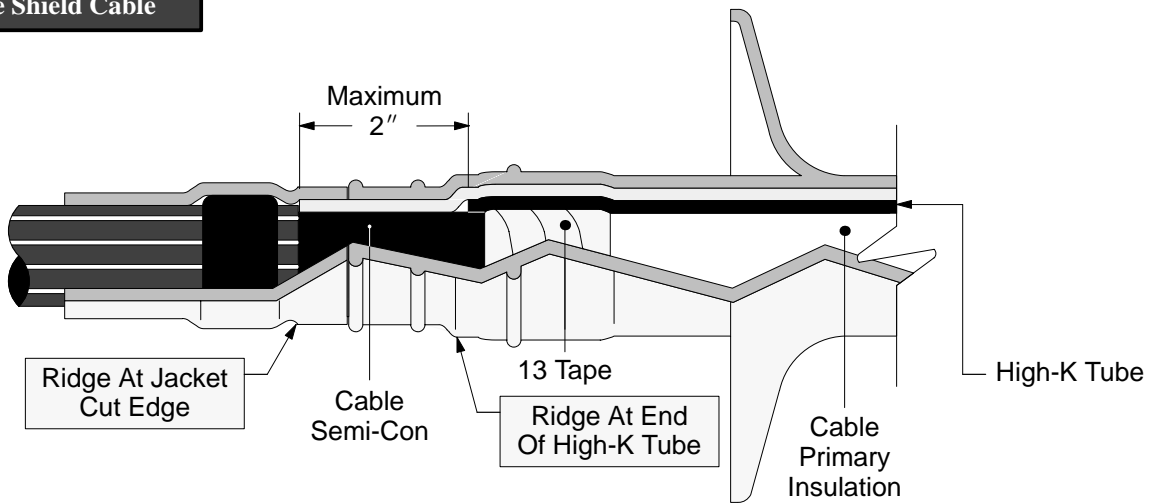
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Tape Shield</div> </div> <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="margin-right: 10px;">Wire Shield</div> </div> <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="margin-right: 10px;">UniShield™</div> </div> <p style="font-size: small; margin-top: 10px;">UniShield™ is a registered trademark of Cablec Corporation</p>	<h2 style="margin: 0;">Quick Term II</h2> <h3 style="margin: 0;">Silicone Rubber Termination Kit for Single Conductor Tape Shield Wire Shield or UniShield™ Cables</h3> <h2 style="margin: 20px 0 0 0;">5632K</h2>				
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px solid black; padding-right: 5px;">SCALE:</td> <td style="padding-left: 5px;">Not to scale</td> </tr> <tr> <td style="border-right: 1px solid black; padding-right: 5px;">ISSUE DATE: 6/28/93</td> <td style="padding-left: 5px;">ISSUE: B</td> </tr> </table>	SCALE:	Not to scale	ISSUE DATE: 6/28/93	ISSUE: B	<h1 style="margin: 0;">2047MT-73</h1>
SCALE:	Not to scale				
ISSUE DATE: 6/28/93	ISSUE: B				

## Correct Installation of Termination (Component Alignment)

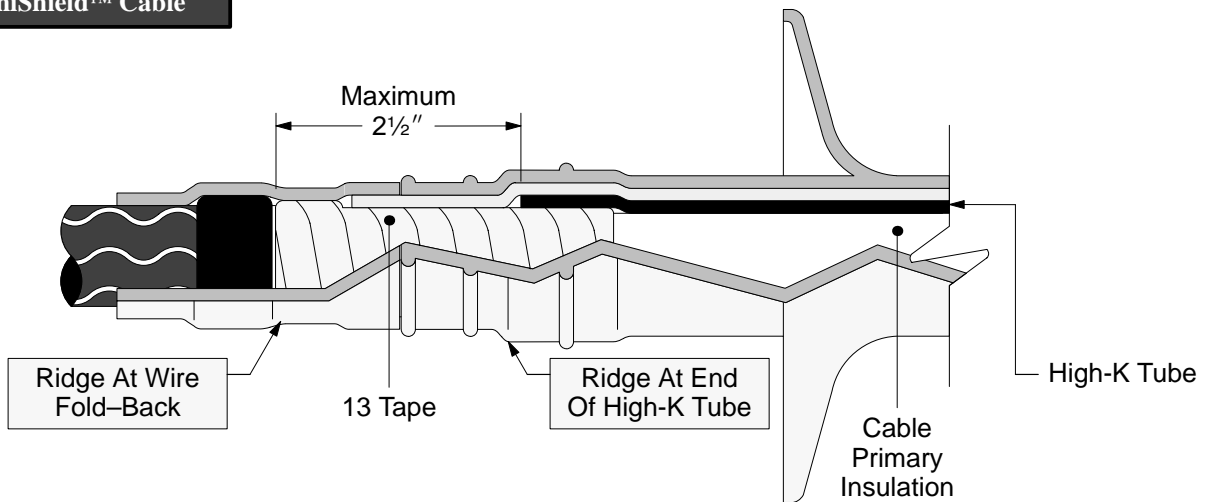
### Tape Shield Cable



### Wire Shield Cable



### UniShield™ Cable



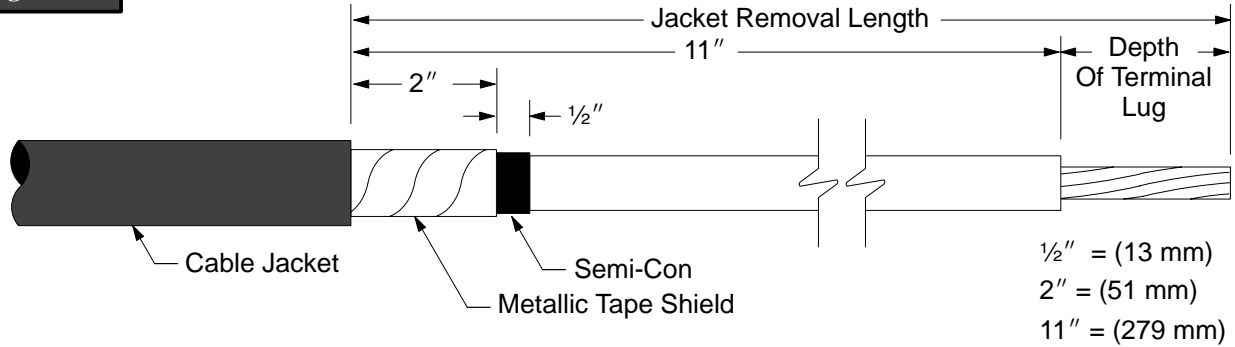
## A. Prepare Cable

1. Check to be sure cable size fits within kit range as shown in *Table 1* (cover page).
2. Prepare cable by following directions suited to specific shielding type.

### Tape Shield

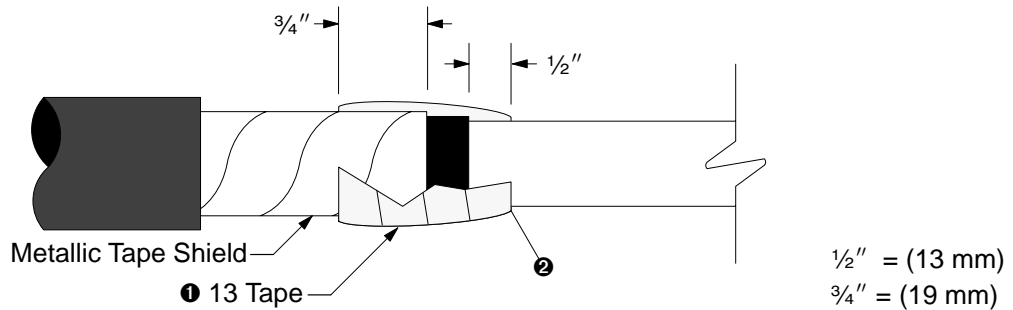
1. Prepare cable using dimensions shown in *Figure 1*. **Be sure to allow for depth of terminal lug.**

**Figure 1**



2. Wrap 2 highly stretched half-lapped layers of Scotch™ 13 Semi-Conducting Tape ❶ (*Figure 2*) over the tape shield and semi-con extending 1/2" onto cable insulation. Start and end taping 3/4" (19 mm) onto tape shield. Provide a smooth, even leading edge over cable insulation as shown ❷ *Figure 2*.

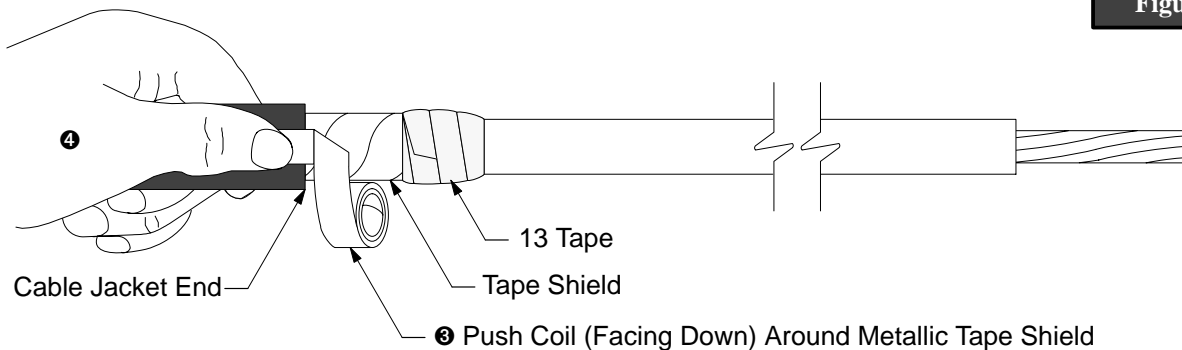
**Figure 2**



3. Install ground strap. Unwrap 1" to 2" (25 mm to 50 mm) of coiled flat strap. Position ground strap assembly with tail extending along cable jacket and coiled end facing down and away from you ❸ (*Figure 3*), over metallic shielding. Hold the ground strap tail in place with thumb ❹ while wrapping the coiled end, counter-clockwise, around the cable metallic shield. Cinch (tighten), the attached constant-force spring after final wrap.

**NOTE: Wrapped portion of ground strap must contact cable metallic tape shield only. Adjust location if needed.**

**Figure 3**

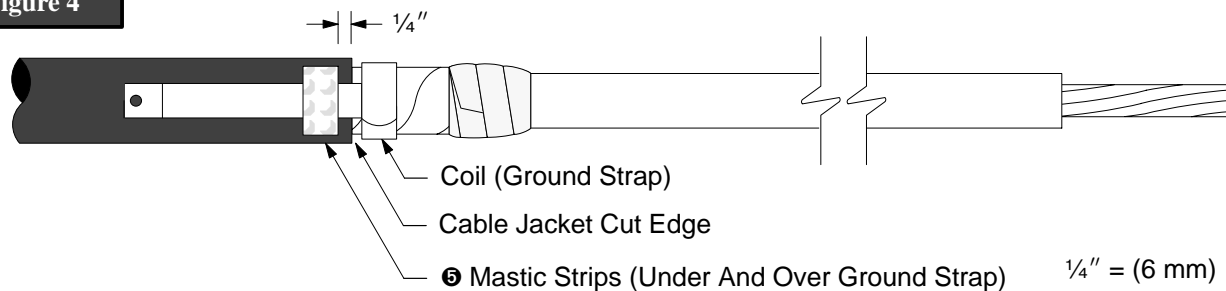


## Tape Shield (continued)

### 4. Seal ground strap

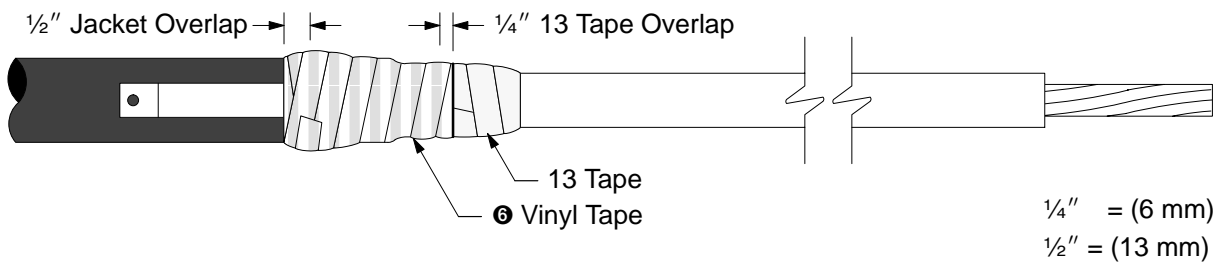
- a. Select one of three mastic strips provided in kit. Cut 2 pieces  $1\frac{1}{2}$ " (38 mm) long and remove white liners.
- b. Place 1 piece under grounding strap  $\frac{1}{4}$ " from cable jacket cut edge. Push strap into mastic and place the second piece over ground strap ⑤ *Figure 4*.

Figure 4



- c. Apply one highly stretched half-lapped layer of vinyl tape (not supplied) over ground strap spring and sealing mastic. Start  $\frac{1}{4}$ " over 13 tape and extend  $\frac{1}{2}$ " onto cable jacket below sealing mastic ⑥ *Figure 5*.

Figure 5

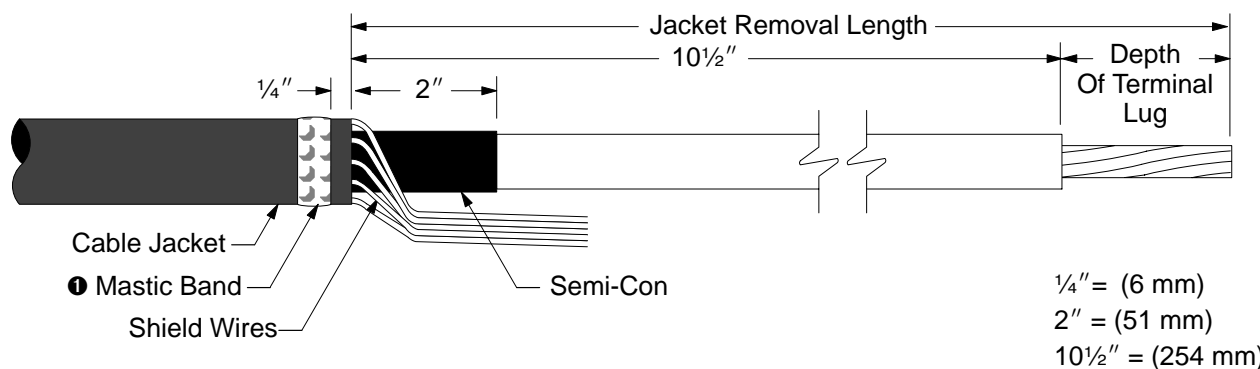


- d. Proceed to Step B.

## Wire Shield

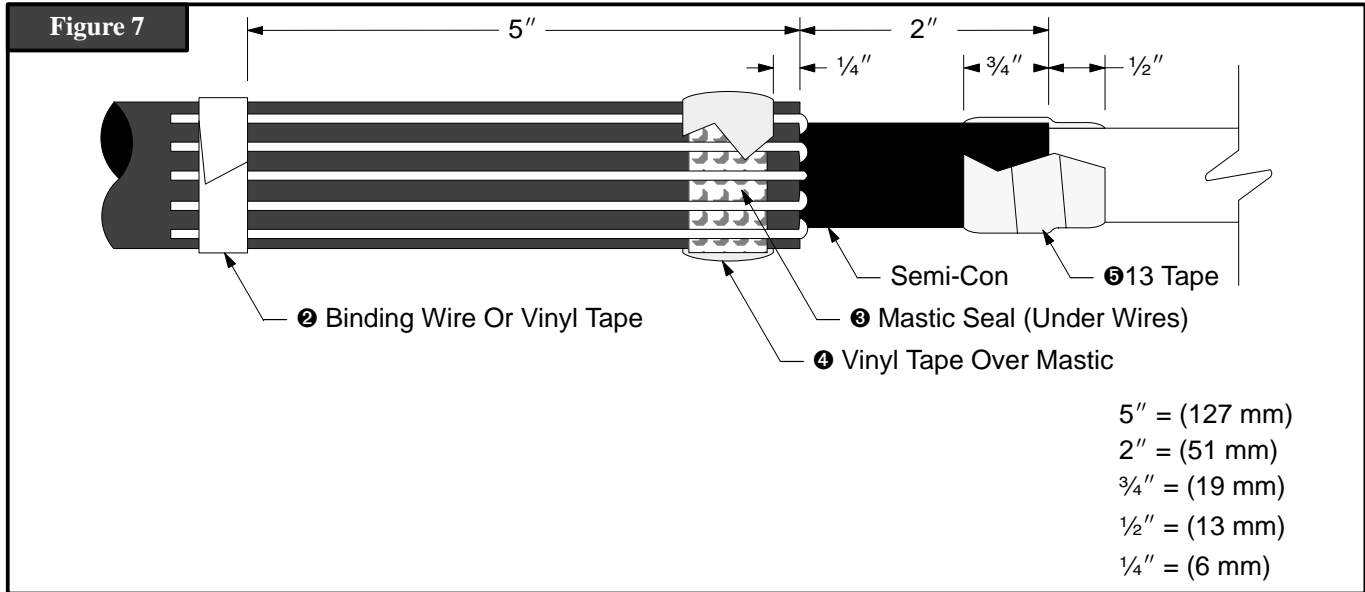
1. Prepare cable using dimensions shown in *Figure 6*. **Be sure to allow for depth of terminal lug.**
2. Select one of three mastic strips from kit and remove white release liners. Using slight tension, wrap a band of mastic around the cable jacket  $\frac{1}{4}$ " (6 mm) from cut edge ① *Figure 6*. Cut off excess.

Figure 6



## Wire Shield (continued)

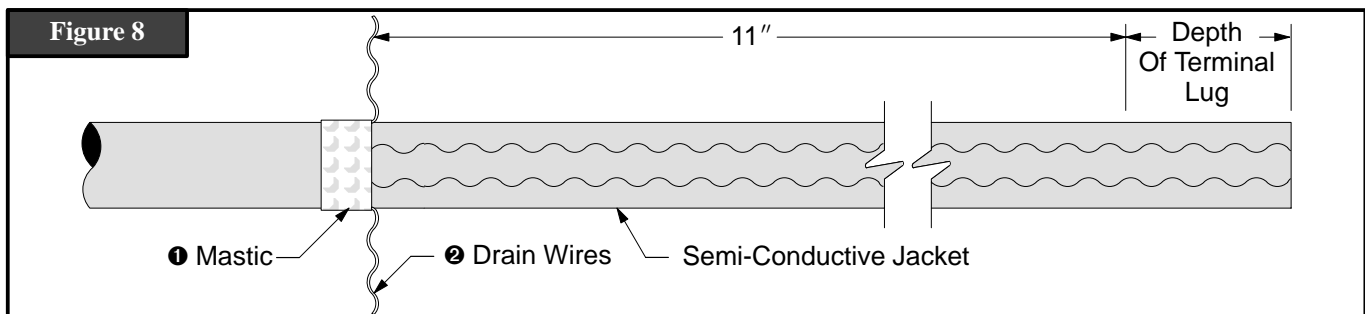
- Bend neutral wires back over applied sealing mastic and secure to cable jacket 5" (127 mm) below jacket cut edge using vinyl tape or binding wire ② *Figure 7*.
- Compress neutral wires into mastic ③ by over-wrapping seal strip with two highly stretched layers electrical grade vinyl tape ④ *Figure 7*.
- Wrap 2 highly stretched half-lapped layers of Scotch™ 13 Semi-Conducting Tape over the semi-con ⑤ (*Figure 7*) extending ½" (13 mm) onto cable insulation. Start and end taping ¾" (19 mm) onto semi-con. Provide a smooth, even leading edge over cable insulation as shown.



- Proceed to Step B.

## UniShield™

- Prepare cable using dimensions shown in *Figures 8 through 10*. **Be sure to allow for depth of terminal lug.**
- Select one of three mastic strips, provided in kit and remove white liners. Using slight tension, wrap a band of mastic around the cable jacket at dimension shown ① *Figure 8*.
- Pull drain wires through semi-conductive jacket to leading edge of applied mastic band ② *Figure 8*.



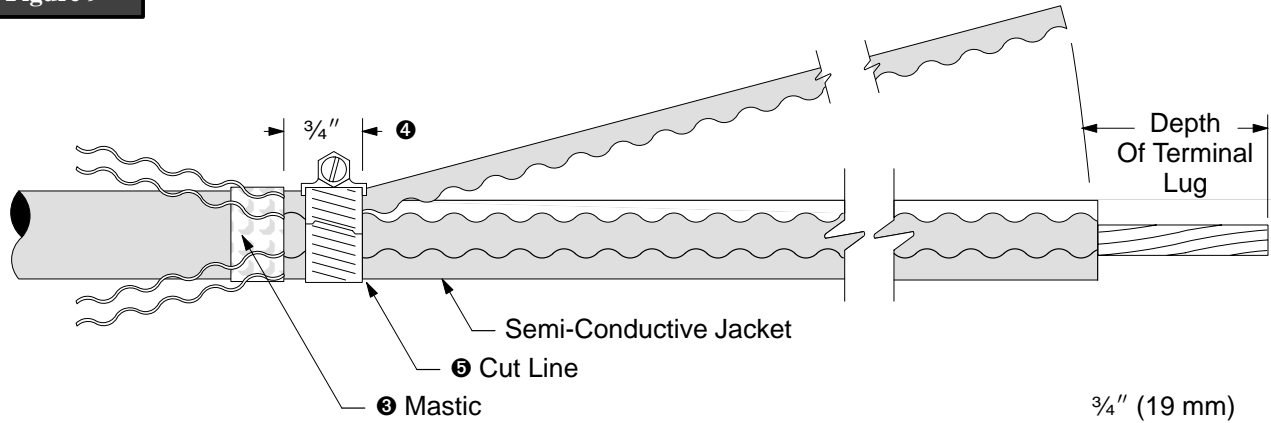
- Bend drain wires back and press into mastic ③ *Figure 9*. Overwrap mastic with a highly stretched two-layer band of vinyl tape (e.g. Scotch™ 33+ tape, not supplied) ⑥ *Figure 10*. Secure wires to cable jacket 5" (127 mm) below mastic using binding wire or vinyl tape ⑦ *Figure 10*
- Remove semi-conductive jacket leaving ¾" (19 mm) exposed beyond drain wires as shown ④ *Figures 9 and 10*.

**NOTE: To ease jacket removal, install hose clamp (not provided) as shown and ring cut 80% through jacket ⑤ *Figure 9*. Remove jacket sections by pulling against hose clamp. DO NOT BELL SEMI-CON JACKET. Remove hose clamp.**

**Some "UniShield™" cables feature dual-layer conductive jackets. Both layers must be removed during cable preparation.**

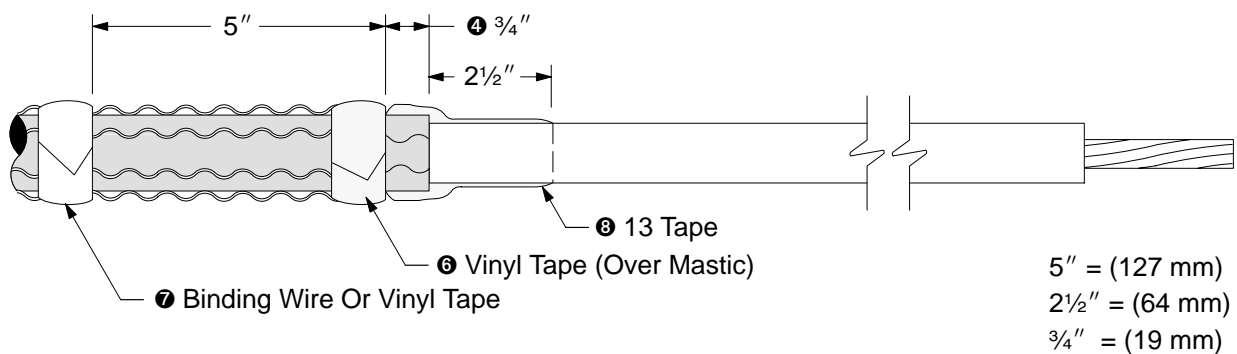
## UniShield™ (continued)

Figure 9



6. Wrap 2 highly stretched half-lapped layers of Scotch™ 13 Semi-Conducting Tape over end of cable semi-conductive jacket extending 2½" (64 mm) onto cable insulation. Start and end taping at drain wires. Provide a smooth, even leading edge over cable insulation ⑧ Figure 10.

Figure 10



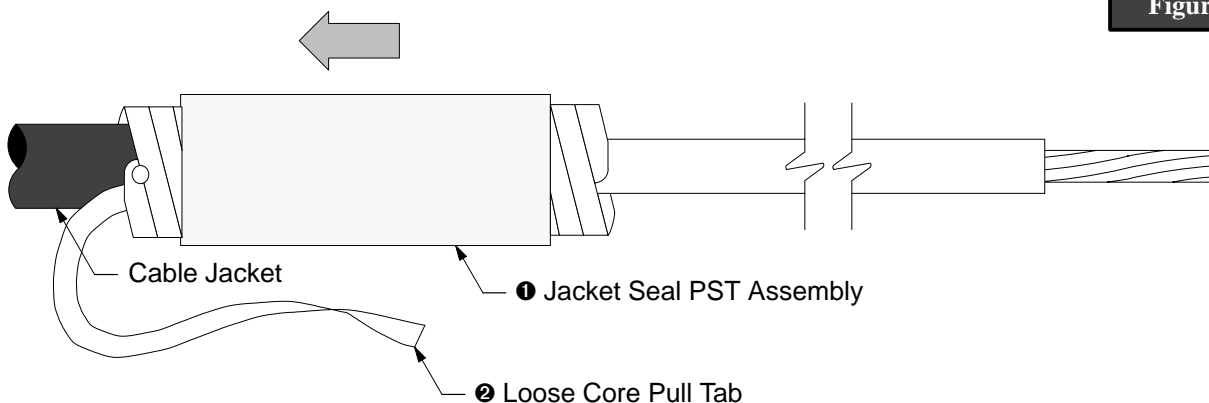
7. Proceed to Step B.

## B. Install Terminations (All Shield Types)

1. Position jacket seal PST assembly ① (Figure 11) over cable jacket with loose core pull tab ② directed away from prepared cable end.

**NOTE: Do not pull or release core at this time.**

Figure 11



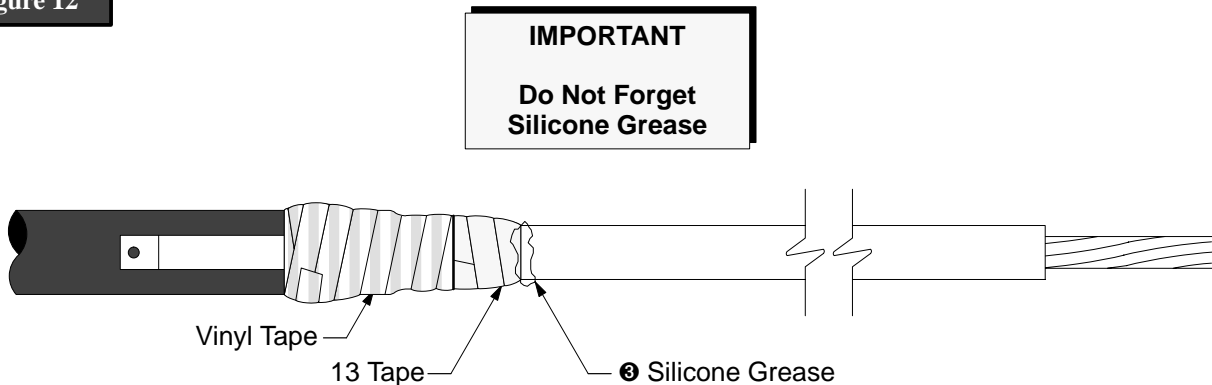
## Install Termination (All Shield Types) (continued)

2. Cover the edge of the 13 tape with a liberal coating of Silicone Grease ③ *Figure 12*.

**On this product the Silicone Grease does not serve as a lubricant. It must be used to fill the step at the semi-con cutoff.**

Spread remaining silicone grease over entire surface of cable primary insulation.

Figure 12



3. Position the skirted termination body over the prepared cable and remove the core (*Figure 13*). Pull while unwinding, counter-clockwise, ④ starting with the loose pull tab end.

**NOTE: (a) Make sure the termination body (not the core) is aligned as follows *Figure 13*:**

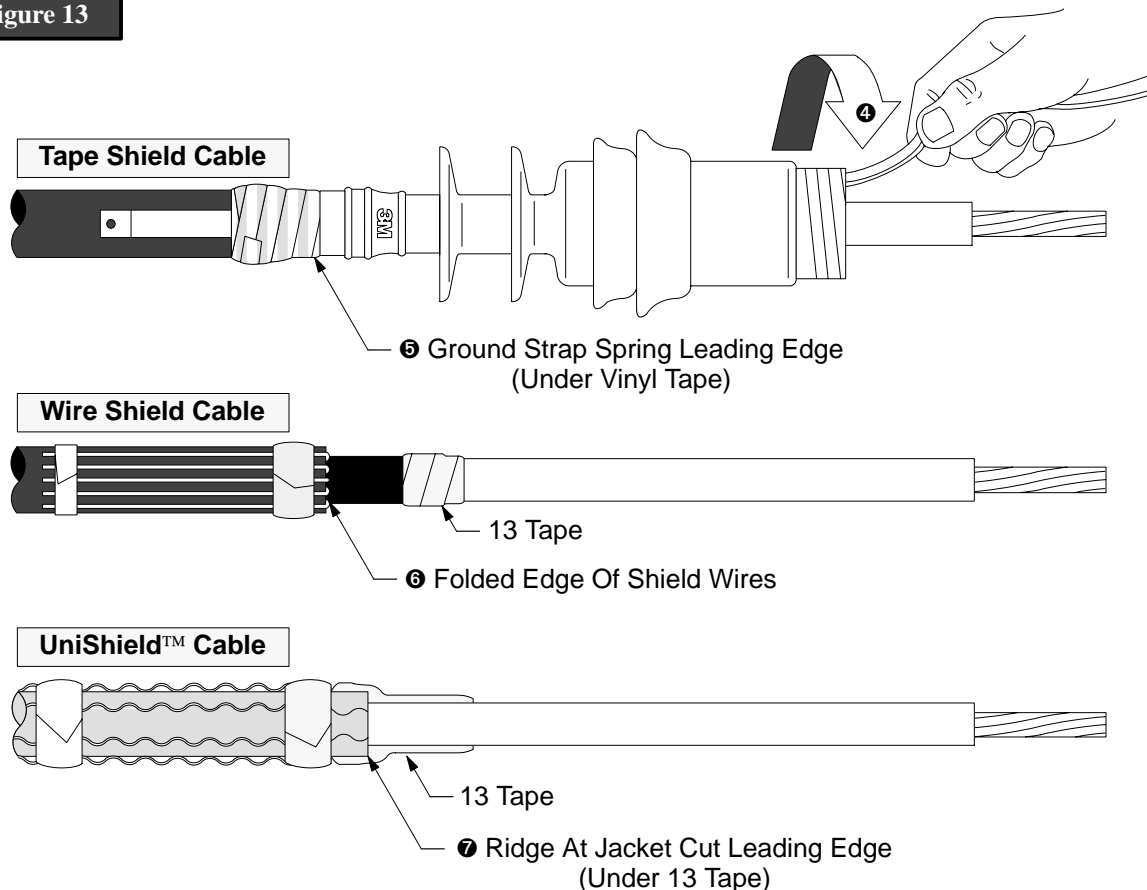
**TAPE SHIELD CABLE — Butt to ground strap spring leading edge ⑤.**

**WIRE SHIELD CABLE — Butt to folded edge of shield wires ⑥.**

**UNISHIELD™ CABLE — Butt to ridge at jacket cut leading edge ⑦.**

- (b) Once the termination insulator has made adequate contact over the cable shield area (approx. 1") there is no need to continue supporting the assembly. Do not push or pull on the termination assembly while removing the core material.

Figure 13



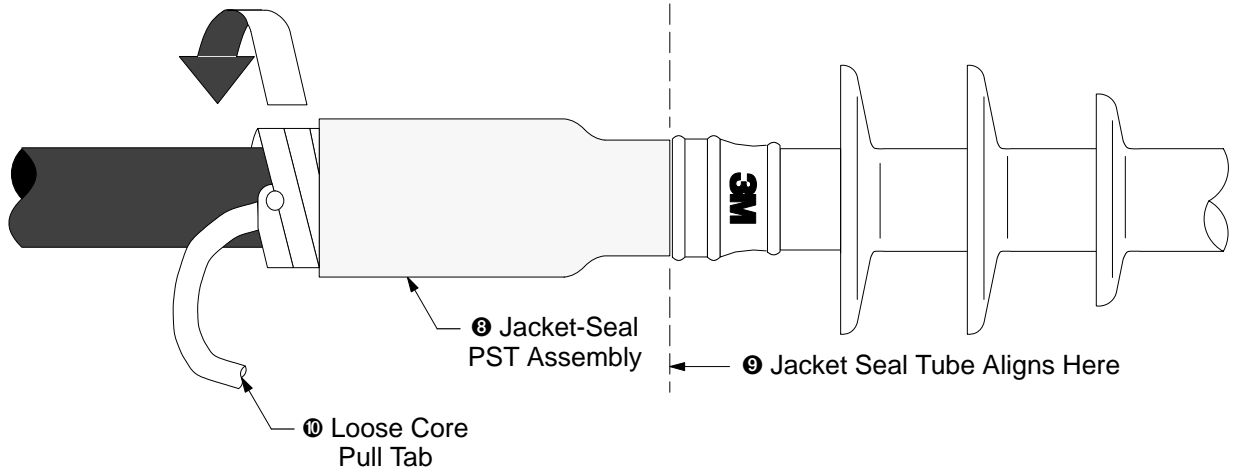
## Install Termination (All Shield Types) (continued)

4. Install jacket-seal PST assembly ⑧ (*Figure 14*) overlapping base of termination body.

**NOTE:** The PST assembly tube (not the core) should butt against the lowest ring of the termination body ⑨.

Remove the PST assembly core by pulling the loose tab ⑩ while unwinding counter-clockwise.

Figure 14



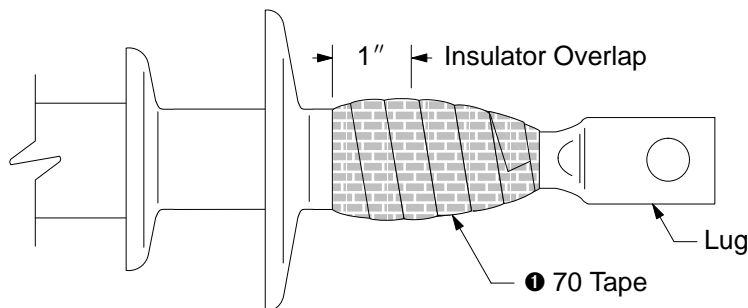
## C. Install Terminal Lug Or Connector

1. Install terminal lug per manufacturer's direction. See page 10 or 11 if 3M lugs are used. Remove excess oxide inhibitor and any sharp metal lug/connector flashing after crimping.
2. Wrap 2 half-lapped layers of Scotch™ 70 Silicone Rubber Tape over the lug barrel and onto the termination insulator for 1" (25 mm) ① (*Figure 15*). Start and end taping on the lug barrel.

**TAPING HINT:** Apply Scotch™ 70 Silicone Rubber Tape with minimum tension (just enough to avoid folds or wrinkles).

3. If lug is not used, solder block conductor and wrap 2 half-lapped layers of 70 Tape from the solder block to 1" (25 mm) onto the insulator using "Taping Hint".

Figure 15



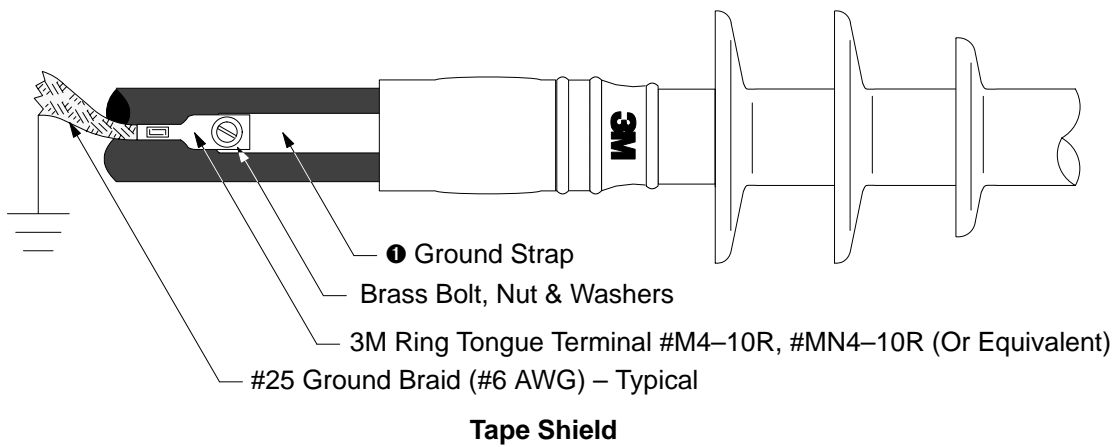


## D. Install Termination (All Shield Types) (continued)

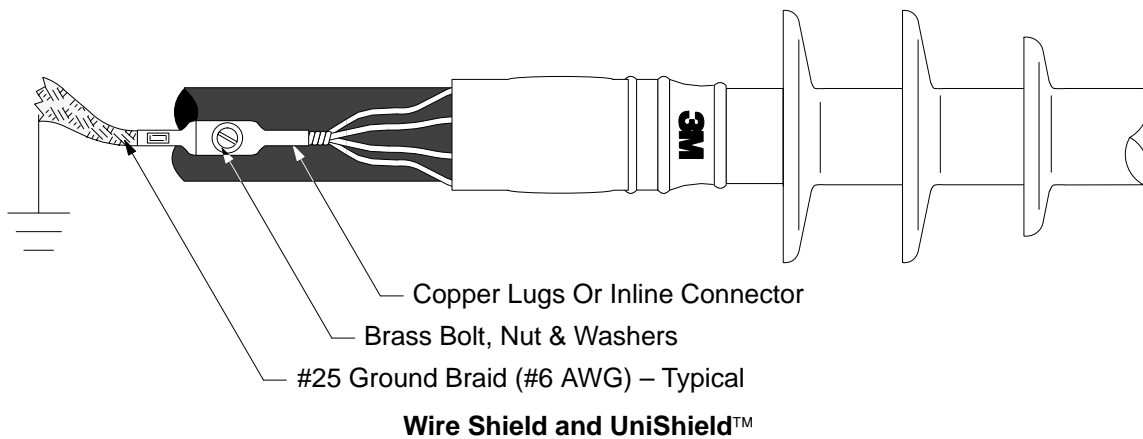
1. If cable is to be grounded at termination, connect as shown. Use **braid or wire appropriately sized for system requirements.**  
5632K Termination Ground Strap ❶ (Figure 16) is copper equivalent of 12 AWG.
2. Scotch™ number 25 grounding braid (number 6 AWG solid copper equivalent) is suitable for general grounding requirements.

Figure 16

### TYPICAL TERMINATION GROUNDING CONNECTION

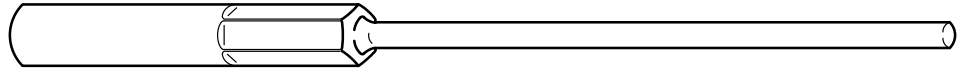


**NOTE: M4-10R Terminal Has No Insulation  
MN4-10R Terminal Has Nylon Insulated Barrel.**



# Tooling Index

## Crimping Information for 3M Stem Connectors Copper/Aluminum

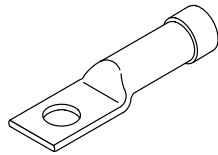


CRIMPING TABLE FOR 3M STEM TYPE CONNECTOR

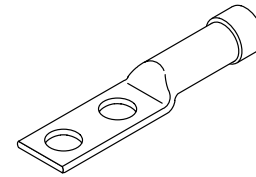
Conductor Size	3M Connector No.	Recommended Crimping Tools				
		Manufacturer	Mech. Tool	Die (No. Crimps)	Hydraulic Tool	Die (No. Crimps)
#2 Sol. #1, #2 1/0	SC0002 SC0001 SC0010	Burndy	MD6	BG(4), W243(4)	Y35, Y39, Y45**	U25ART(2), U243(2)
		Kearny	0-51, 0-52	5/8-1(4)	12, 20, 40, Ton	5/8-1(4)
		T & B	TBM 8	Olive(2)	TBM 15	50*(2)
		Anderson	—	—	VC 6	Universal(2)
2/0 3/0 4/0	SC0020 SC0030 SC0040	Burndy	MD6	W669(0) 840(5)*	Y35, Y39, Y45**	U28ART(2)
		Kearny	0-51, 0-52	840(5)*	WH-1, WH-2	840(2)
		T & B	TBM 8	White(4)	TBM 15	66(3)
		Anderson	—	—	VC 6	Universal(2)

## Lug and Crimping Information for Scotchluk™ Copper/Aluminum Lugs

40016 thru 40079  
One hole



40132 thru 40178  
Two hole

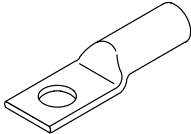
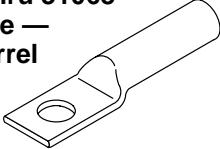



Cable Size AWG/ kcmil	Stud Size (in.)	Scotchluk™ Lug Number	CRIMPING TOOL-DIE SETS (NO. OF CRIMPS)												
			Burndy Corporation					Thomas & Betts Corporation				Square D Co. Anderson Div.		ITT Blackburn Co.	Kearne Nat'l Div.
			MD6	MY29	Y34A	Y35, 39, 45*, 46*	Y1000**	TBM 5	TBM 8	TBM 12	TBM 15	VC6-3*** VC6-FT**	VC8C**	OD58	TYPE 0
6	5/16	40016	W161(1)	6 AWG(1)	A6CAB(1)	U6CABT(1)	(1)	Grey(1)	Grey(1)	—	29(1)	(1)	—	BY19(3)	J(3)
4	5/16	40020	W162(3)	4 AWG(1)	A4CAB(1)	U4CABT(1)	(1)	Green(2)	Green(2)	—	37(1)	(1)	—	BY53(3)	P(3)
2	3/8 1/2	40024	W163(3)	2 AWG(1)	A2CAB(1)	U2CABT(1)	(1)	Pink(2)	Pink(2)	—	42H(2)	(1)	—	BY23(3)	1/2(3)
		40025	W163(3)	2 AWG(1)	A2CAB(1)	U2CABT(1)	(1)	Pink(2)	Pink(2)	—	42H(2)	(1)	—	BY23(3)	1/2(3)
1	3/8 1/2	40028	W163(3)	1 AWG(1)	A1CAR(1)	U1CART(1)	(1)	Gold(2)	Gold(2)	—	45(1)	(1)	—	BY23(3)	1/2(3)
		40029	W163(3)	1 AWG(1)	A1CAR(1)	U1CART(1)	(1)	Gold(2)	Gold(2)	—	45(1)	(1)	—	BY23(3)	1/2(3)
1/0	3/8 1/2 3/8	40032	W241(3)	1/0 (1)	A25AR(1)	U25ART(1)	(1)	Tan(2)	Tan(2)	—	50(1)	(1)	—	BY25(3)	5/8-1(3)
		40033	W241(3)	1/0 (1)	A25AR(1)	U25ART(1)	(1)	Tan(2)	Tan(2)	—	50(1)	(1)	—	BY25(3)	5/8-1(3)
		40132	W241(3)	1/0 (1)	A25AR(1)	U25ART(1)	(1)	Tan(2)	Tan(2)	—	50(1)	(1)	—	BY25(3)	5/8-1(3)
2/0	1/2 1/2	40037	BG(4)	2/0(1)	A26AR(2)	U26ART(2)	(1)	Olive(2)	Olive(2)	—	54H(2)	(2)	—	BY31C(3)	5/8-1(3)
		40137	BG(4)	2/0(1)	A26AR(2)	U26ART(2)	(1)	Olive(2)	Olive(2)	—	54H(2)	(2)	—	BY31C(3)	5/8-1(3)
3/0	1/2 1/2	40041	W166(4)	3/0(1)	A27AR(2)	U27ART(2)	(1)	Ruby(2)	Ruby(2)	—	60(2)	(2)	—	—	737(3)
		40141	W166(4)	3/0(1)	A27AR(2)	U27ART(2)	(1)	Ruby(2)	Ruby(2)	—	60(2)	(2)	—	—	737(3)
4/0	1/2 5/8 1/2	40045	W660(4)	4/0(2)	A28AR(2)	U28ART(2)	(1)	—	White(4)	—	66(4)	(2)	—	BY35C(4)	840(4)
		40046	W660(4)	4/0(2)	A28AR(2)	U28ART(2)	(1)	—	White(4)	—	66(4)	(2)	—	BY35C(4)	840(4)
		40145	W660(4)	4/0(2)	A28AR(2)	U28ART(2)	(1)	—	White(4)	—	66(4)	(2)	—	BY35C(4)	840(4)
250	1/2 5/8 1/2	40049	W249(3)	—	A29AR(2)	U29ART(2)	(1)	—	—	71H(4)	71H(2)	(3)	—	—	—
		40050	W249(3)	—	A29AR(2)	U29ART(2)	(1)	—	—	71H(4)	71H(2)	(3)	—	—	—
		40149	W249(3)	—	A29AR(2)	U29ART(2)	(1)	—	—	71H(4)	71H(2)	(3)	—	—	—
300	1/2 1/2	40053	—	—	A30AR(2)	U30ART(2)	(1)	—	—	76H(4)	76(2)	(3)	—	—	—
		40153	—	—	A30AR(2)	U30ART(2)	(1)	—	—	76H(4)	76(2)	(3)	—	—	—
350	1/2 5/8 1/2	40056	—	—	—	U31ART(2)	(1)	—	—	87H(4)	87H(3)	(3)	—	—	—
		40057	—	—	—	U31ART(2)	(1)	—	—	87H(4)	87H(3)	(3)	—	—	—
		40156	—	—	—	U31ART(2)	(1)	—	—	87H(4)	87H(3)	(3)	—	—	—
400	1/2	40160	—	—	—	U32ART(4)	(1)	—	—	94H(4)	94H(4)	—	(2)	—	—
500	5/8 1/2	40067	—	—	—	U34ART(4)	(1)	—	—	106H(4)	106H(3)	—	(2)	—	—
		40166	—	—	—	U34ART(4)	(1)	—	—	106H(4)	106H(3)	—	(2)	—	—
600	1/2	40170	—	—	—	U36ART(4)	(1)	—	—	—	115H(3)	—	(3)	—	—
750	5/8 1/2	40073	—	—	—	U39ART(4)	(1)	—	—	—	125H(5)	—	(3)	—	—
		40172	—	—	—	U39ART(4)	(1)	—	—	—	125H(5)	—	(3)	—	—
1000	5/8 1/2	40079	—	—	—	S44ART(4)	(1)	—	—	—	140H(4)	—	(3)	—	—
		40178	—	—	—	S44ART(4)	(1)	—	—	—	140H(4)	—	(3)	—	—

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

\*\* Anderson VC6-3, VC6-FT, VC8C and Burndy Y1000 require no die set.

# Tooling Index

Lug and Crimping Information for Scotchlok™ Copper Lugs		
<b>30014 thru 30045</b> <b>One hole</b> 	<b>31036 thru 31068</b> <b>One hole — long barrel</b> 	<b>31145 thru 31178</b> <b>Two hole</b> 

Cable Size AWG/ kcmil	Stud Size (in.)	Scotchlok™ Copper Lug Number	CRIMPING TOOL-DIE SETS (NO. OF CRIMPS)							
			Burdndy 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 3/8	30036 31036	W241(2) W241(3)	2/0(1) 2/0(2)	A26R(1) A26R(2)	U26RT(2) U26RT(3)	Black(2) Black(3)	Black(2) Black(3)	45(1) 45(2)	Universal(1) Universal(2)
3/0	1/2 1/2	30041 31041	W243(2) W243(3)	3/0(1) 3/0(2)	A27R(1) A27R(2)	U27RT(2) U27RT(3)	Orange(2) Orange(3)	Orange(2) Orange(3)	50(1) 50(2)	Universal(2) Universal(3)
4/0	1/2 1/2 1/2	30045 31045 31145	BG(3) BG(4) BG(4)	4/0(1) 4/0(2) 4/0(2)	A28R(2)	U28RT(2) U28RT(3) U28RT(3)	Purple(2) Purple(3) Purple(3)	Purple(2) Purple(3) Purple(3)	54H(2) 54H(3) 54H(3)	Universal(2) Universal(3) Universal(3)
250	1/2 1/2	31049 31149	W166(4)	250(2)	A29R(2)	U29RT(3)	Yellow(2)	Yellow(2)	62(2)	Universal(2)
300	1/2 1/2	31053 31153	—	—	A30R(2)	U30RT(3)	—	White(3)	66(3)	Universal(3)
350	1/2 1/2	31056 31156	—	—	A31R(2)	U31RT(3)	—	Red(4)	71H(4)	—
400	1/2 1/2	31060 31160	—	—	A32R(2)	U32RT(3)	—	Blue(4)	76H(4)	—
500	1/2 5/8 1/2	31066 31067 31166	—	—	A34R(2)	U34RT(3)	—	Brown(4)	87H(4)	—
600	1/2 1/2	31068 31168	—	—	—	U36RT(3)	—	Green(4)	94H(4)	—
750	1/2	31172	—	—	—	Y39, Y45, Y46: U39RT(5)	—	—	106H(4)	—
1000	1/2	31178	—	—	—	Y45: S44RT(6) Y46: P44RT(6)	—	—	125H(4)	—

## NOTES:

We value your experience and opinions. Please enter any ideas or recommendations, associated with this product and submit to your local 3M representative

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