



# Quick Term II

## Cold Shrink™ Silicone Rubber Termination

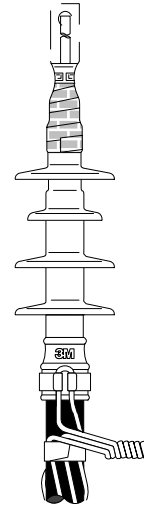
### Instruction Sheet

#### IEEE Std. No. 48-1990

Class 1 Termination  
15 kV Class  
110 kV BIL

#### Kit Contents:

- 1 Hi-K Silicone Rubber Termination
- 2 Scotch™ 70 Silicone Rubber Tape Strip(s)
- 1 Neutral Wire Ground Clip
- 1 Pack of Silicone Grease  
(clear 5cc tube with green letters)
- 1 Instruction Sheet




#### 15 kV Kit Selection Chart

NOTE: Cross reference conductor size with insulation O.D. range.

Kit Number	Cable Insulation O.D. Range	Conductor Size Range (AWG & kcmil)
		15 kV
5601	0.637 – 1.12 in. (16 – 28 mm)	4 Stranded or 2 Solid – 4/0 (35 – 100 mm <sup>2</sup> )
5602	0.84 – 1.38 in. (21 – 35 mm)	250 – 500 (125 – 250 mm <sup>2</sup> )
5603	1.08 – 1.80 in. (27 – 46 mm)	500 – 1250 (300 – 600 mm <sup>2</sup> )

Table 1

 <p>Concentric Neutral Cable</p>	<h3>Quick Term II</h3> <p>Cold Shrink™ Silicone Rubber Termination Kits for use on Concentric Neutral (CN) Cable</p>		
	<b>5601</b>	<b>5602</b>	<b>5603</b>
DR.: D Tracy	APP.: P. McDonough	<h1>78-8114-1039-4</h1>	
NUMBER OF PAGES: 8	SCALE: Not to scale		
ISSUE DATE: 2/3/97	ISSUE: B		

## A. Prepare Cable

1. Check to be sure cable size fits within kit range as shown in *Table 1* (cover page).
2. Train cable into position and cut to length required for installation. Allow sufficient neutral wire length for neutral connection.
3. Bind neutral wires with a piece of wire or vinyl tape at dimension [A] + [B] ❶ (*Table 2 and Figure 1*).
4. Bend the neutral wires over the binding wire or vinyl tape ❷ (*Figure 1*).
5. Remove cable semi-conductive insulation shield (semi-con) for a distance of [C] plus [B] ❸ (*Table 2 and Figure 1*).
6. Remove cable insulation ❹ (*Figure 1*) from end of conductor ❺ for distance [B] ❺ (*Table 2 and Figure 1*).
7. Place a marker tape 2" back from semi-con cut edge as shown ❻ (*Figure 1*).

\* add 1" to [A] and [C] for short lug barrels (1" or less).

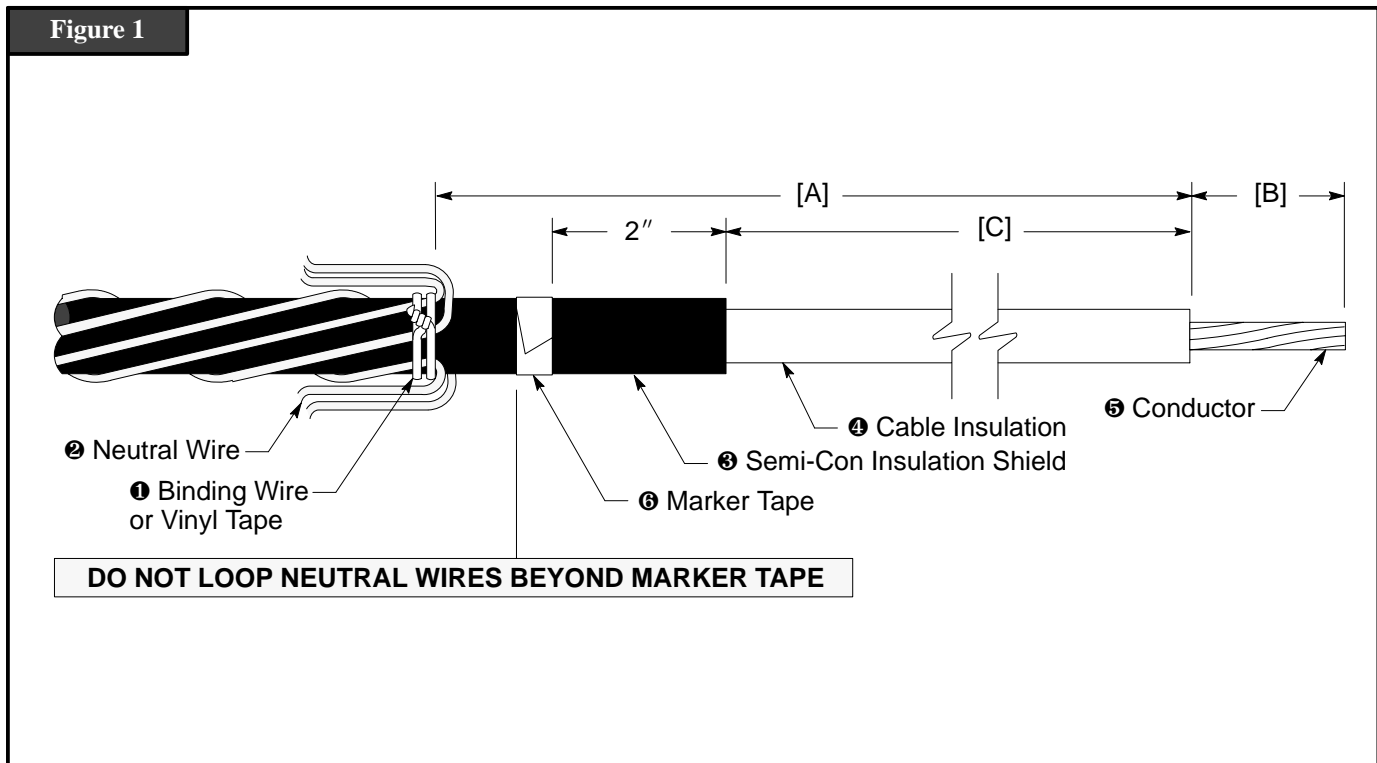
Dimension	Kit Number		
	5601	5602	5603
[A]	9"	9"	9 1/2"
[B]	Depth of Terminal Lug Barrel		
[C]	5 1/2"	5 1/2"	6"

Table 2

Conductor Size	3M Stem Connector Number	B†
2 Solid 1, 2 1/0	SC0002 SC0001 SC0010	1 3/4" (44,5 mm)
2/0 3/0 4/0	SC0020 SC0030 SC0040	2 3/8" (60,3 mm)

† For 3M SC Series Stem Connector.

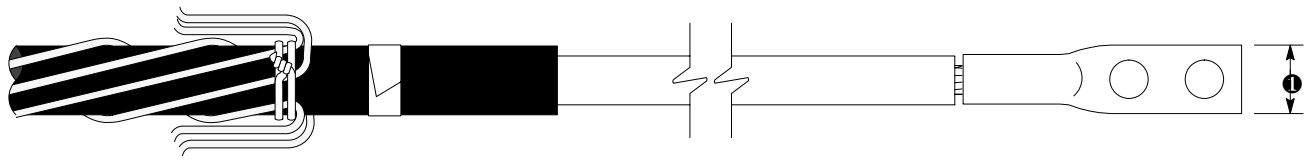
Table 3



## B. Install Lug or Connector

1. If lug ❶ will not fit through the core of the termination, slide termination on cable before installing lug. **Do not remove core at this time.**

Figure 2



2. When using 3M type lugs or connectors, refer to the tooling index (*Pages 5 and 6*) for crimping information.
3. Position lug or connector and crimp according to manufacturer's directions. **Remove excess contact aid and sharp crimp flash.**

## C. Clean Cable Insulation and Lug Barrel Using Standard Practice

1. Wipe the cable insulation with an approved solvent. **Do not allow solvent to touch semi-con insulation shield!**
2. If abrasive must be used:
  - a. Use on insulation only. **Do not use abrasive on semi-con insulation shield!**
  - b. Use only aluminum oxide abrasive; grit 120 or finer or Scotch™ A-3 Electrician's Abrasive Roll.
  - c. Be careful not to reduce the cable insulation diameter below that allowed by the kit.

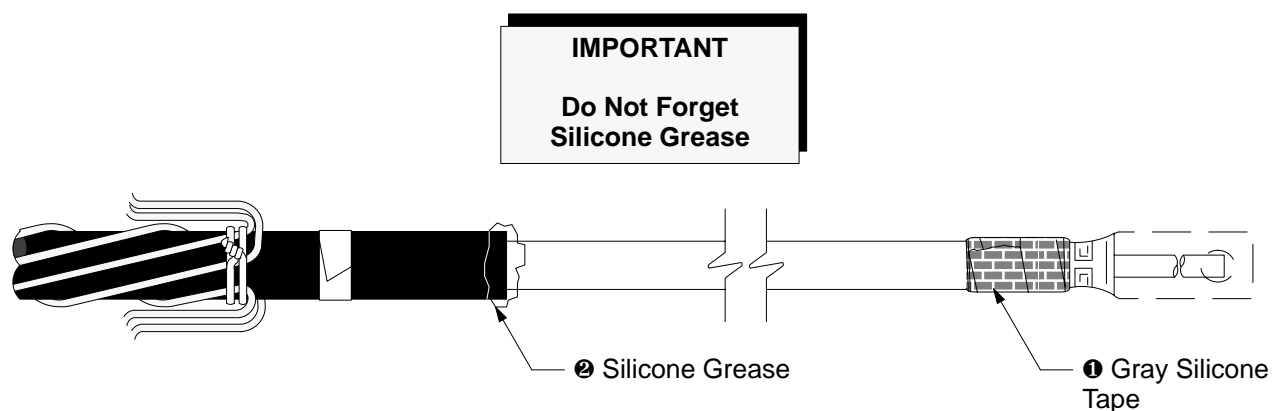
## D. Install Termination

1. **Important:** A track resistant seal **must** be made between the silicone termination insulator and connector using one of two **gray** Scotch™ 70 Silicone Rubber Electrical Tape Strips (contained in kit) ❶ (*Figure 3*).

If the lug barrel is smaller than the cable insulation, wrap the bottom end of the lug with gray silicone tape to the approximate diameter of the cable insulation ❶ (*Figure 3*).

2. Cover the edge of the semi-con insulation shield with a liberal coating of silicone grease ❷ (*Figure 3*). **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.**

Figure 3

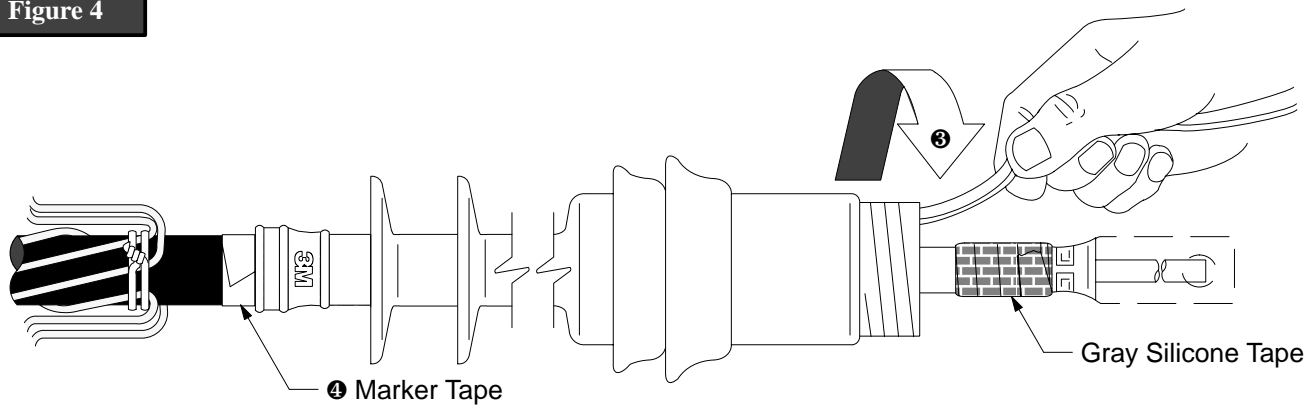


## D. Install Termination (continued)

1. Slide the termination body onto the cable and remove core by unwinding, counter-clockwise ③ (Figure 4), starting with the loose end. Make sure the termination body is butted up to the edge of the marker tape ④ (Figure 4).

**Tip:** An occasional tug of the strand while unwinding will aid in core removal.

Figure 4

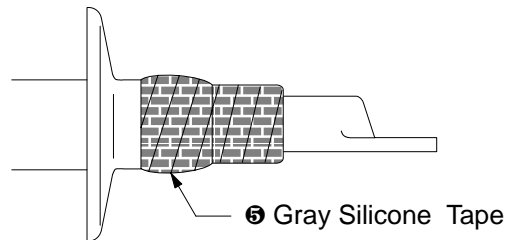


**NOTE:** The material being removed at this step is mixed polymers and can be recycled with  waste.

other

2. Complete the lug seal using the second gray silicone tape strip. Overlap insulator by one inch and extend tape wrapping onto lug barrel as shown in ⑤ (Figure 5).

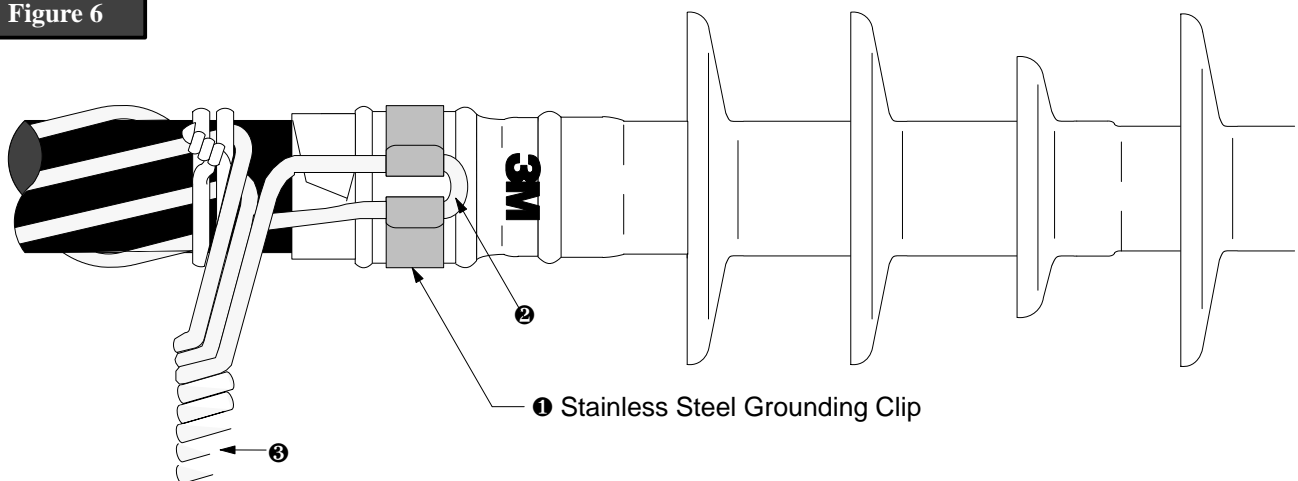
Figure 5



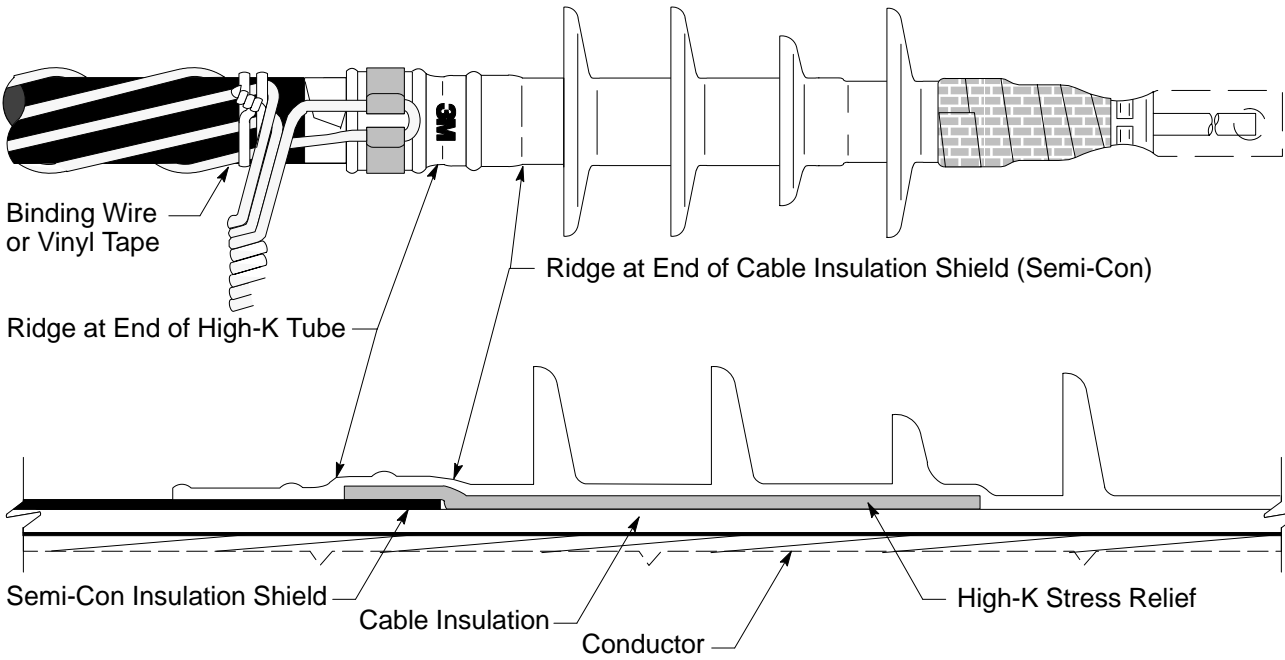
## E. Install Ground Connection

1. Snap stainless steel grounding clip onto base of termination ① (Figure 6). **Clip must be applied to the base of the termination, between the bottom two rings.**
2. Loop one neutral strand around ground clip ends, pulling clip tight onto the termination ② (Figure 6).
3. Bundle all neutral wires together and connect to ground ③ (Figure 6).

Figure 6

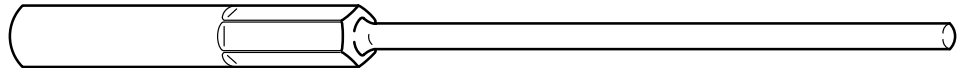


### Correct Installation of Termination



# Tooling Index

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

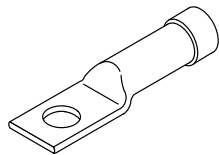


CRIMPING TABLE FOR 3M STEM TYPE CONNECTOR

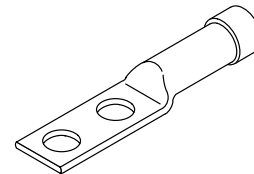
Conductor Size	3M Connector No.	Recommended Crimping Tools				
		Manufacturer	Mech. Tool	Die (No. Crimps)	Hydraulic Tool	Die (No. Crimps)
#2 Sol. #1, #2 1/0	SC0002 SC0001 SC0010	Burndy	MD6	BG(4), W243(4)	Y35, Y39, Y45**	U25ART(2), U243(2)
		Kearny	0-51, 0-52	5/8-1(4)	12, 20, 40, Ton	5/8-1(4)
		T & B	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 Scotchlok™ Copper/Aluminum Lugs

40016 thru 40079  
One hole



40132 thru 40178  
Two hole

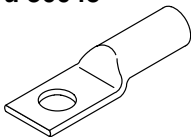
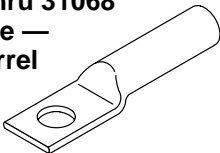



Cable Size AWG/ kcmil	Stud Size (in.)	Scotchlok™ Lug Number	CRIMPING TOOL-DIE SETS (NO. OF CRIMPS)												
			Burndy Corporation					Thomas & Betts Corporation				Square D Co. Anderson Div.		ITT Blackburn Co.	Kearne Nat'l Div.
			MD6	MY29	Y34A	Y35, 39, 45*, 46*	Y1000**	TBM 5	TBM 8	TBM 12	TBM 15	VC6-3** 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)								Square D Co. Anderson Div. VC6-3, VC6-FT**
			Burdny Corporation				Thomas & Betts Corporation				
			MD6	MY29	Y34A	Y35, Y39 Y45*, Y46*	TBM 5	TBM 8	TBM 15		
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)	—	

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