# **3M** Termination Grounding Kit GSK-56

## Instructions

For Longitudinally Corrugated (L.C.) Shielded and Tape Shielded Cable with extruded insulation shield

### **Kit Contents:**

- 1 Preformed Ground Strap
- 1 Constant Force Spring
- 1 Instruction Sheet

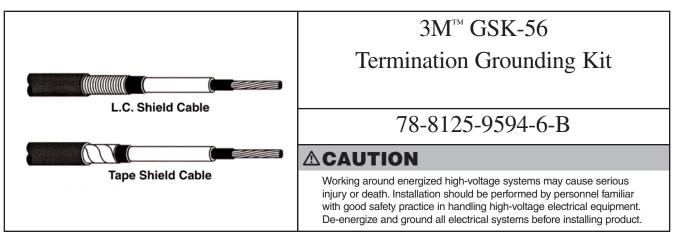
Designed for use with: 3M<sup>™</sup> QT-III Termination Kits 7655-S-4, 7656-S-4, 7665-S-8, 7666-S-8, 7645-T-110, 7646-T-110, 7655-T-150 and 7656-T-150

#### **Cable and Termination Accommodation Chart**

(Final determining factor for ground strap is cable shield diameter)

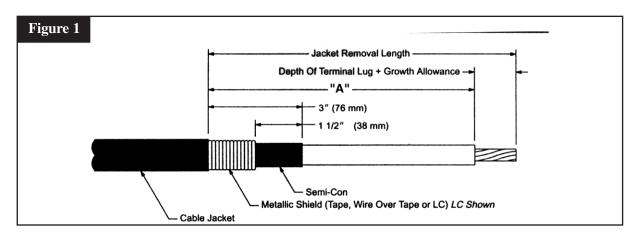
Product	Termination Kit Number	Conductor Range (AWG/kcmil)						
		5 kV (90 mil)	5/8 kV (115 mil)	15 kV (175/220 mil)	25/28 kV (260/280 mil)	35 kV (345 mil)		
GSK-56	7655-S-4	700–1500	600–1250	500–1000	250–800	—		
	7656-S-4	1750–2000	1500–2000	1250–2000	900–1750	—		
	7645-T-110	700–1500	600–1250	500–1000	500–1000 —			
	7646-T-110	1750–2000	1500–2000	1250–2000 —		—		
	7655-T-150	700–1500	600–1250	500–1000	250-800	3/0–600		
	7656-T-150	1750–2000	1500–2000	1250–2000	900–1750	700–1500		
	7665-S-8	700–1500	600–1250	500–1000	250-800	3/0–600		
	7666-S-8	1750–2000	1500–2000	1250–2000	900–1750	700–1500		
	Shield Diameter Range: 1.15" (29 mm) to 2.42" (61 mm)							

Table 1



#### 1.0 Ground Kit Installation

- 1.1 Confirm correct termination selection from Table 1 on page 1.
- 1.2 Prepare cable using dimensions shown in the figure and table below. Be sure to allow for the depth of the terminal lug. Typical aluminum lug growth allowance for 2 AWG to 350 kcmil conductors is 1/4" (6 mm).

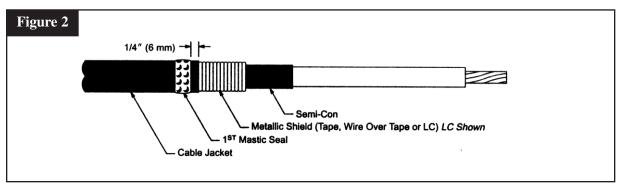


<b>Table</b>	2
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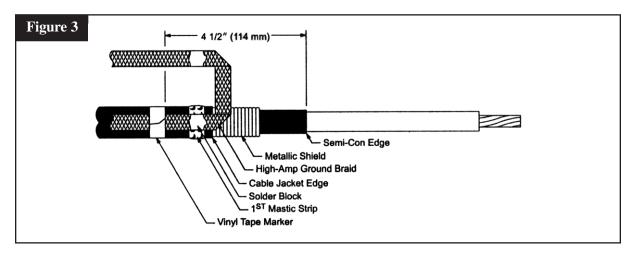
Kit Number	Insulation O.D. (Inches)	5 kV (AWG/kcmil)	8 kV (AWG/kcmil)	15 kV (AWG/kcmil)	25/28 kV (AWG/kcmil)	35 kV (AWG/kcmil)	Dimension "A" (Inches)
7655-S-4	10.5–1.80	700–1500	600–1250	500-1000	250-800	—	9
7656-S-4	1.53–2.32	1750–2000	1500–2000	1250–2000	900–1750	_	9
7645-T-110		700–1500	600–1250	500-1000	_	_	9
7646-T-110		1750–2000	1500–2000	1250–2000	_		9
7655-T-150		700–1500	600–1250	500–1000	250–800	3/0–600	<b>12</b> ½
7656-T-150		1750–2000	1500–2000	1250–2000	900–1750	700–1500	<b>12</b> ½
7665-S-8*	1.05–1.46	700–1000	600–900	500–700	250–500	3/0–350	16 ½
7665-S-8*	1.24–1.80	1100–1500	1000–1250	750–1000	600–800	500–600	16
7666-S-8*	1.53–1.85	1750–1800	1500–1700	1250	900–1000	700–900	16 ½
7666-S-8*	1.65–2.32	1900–2000	1750–2000	1500–2000	1250–1750	1000–1500	16

\*Cutbacks vary depending on the conductor size. Check to see that you are using the proper cutback. Insulation O.D. is the final determining factor.

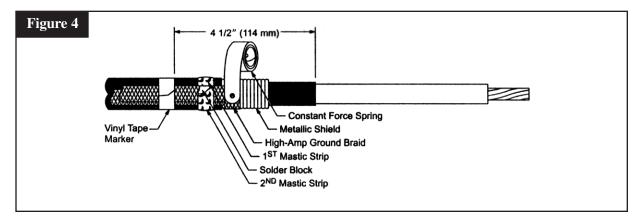
1.3 Select one of the mastic strips from the kit. Remove liners and using light tension, apply a single wrap of mastic around the cable jacket 1/4" (6 mm) from the cut edge. Cut off excess mastic.



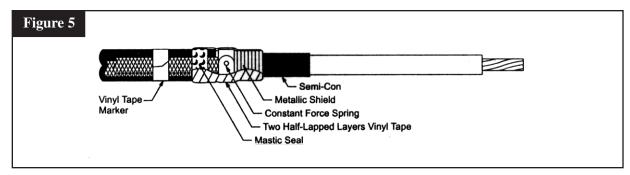
1.4 Position the pre-formed "U" shaped high-amp ground braid over the metallic shield with tails extending over the cable jacket as shown. The solder block must be centered over the previously applied mastic strip. Secure one tail to the cable jacket with a vinyl tape marker located 4 1/2" (114 mm) from the edge of the cable semi-con.



1.5 Wrap the ground strap around the metallic shield and secure with a constant force spring. Using the second strip of mastic, remove the liners and wrap mastic over the solder blocks and the first mastic strip. If the solder blocks overlap each other, mastic must be applied between the solder blocks.



1.6 Wrap two half-lapped layers of vinyl tape around the mastic seal, constant force spring and exposed metallic shield. Do not cover cable semi-con.



1.7 Refer to the instructions supplied with the kit, starting with the "Install Lug or Connector" section to complete the termination installation.

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