



# Cable Grounding Kit

2254—For use on shielded cable 500–1000 kcmil

## Instructions

### A. Prepare Cable

1. Remove 2 inches (50 mm) of cable jacket to expose neutral wires where ground connection is to be attached. (Figure 1)

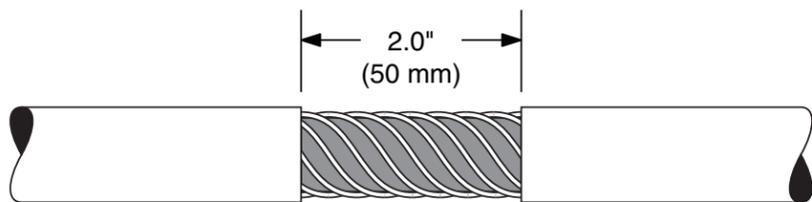


Figure 1

### B. Make Grounding Connection

1. Crimp copper braid to ground wire (ground wire not in kit: size to be determined by customer. Suggested size: 2/0 AWG 600 volt insulated) with “C” connector (in kit).

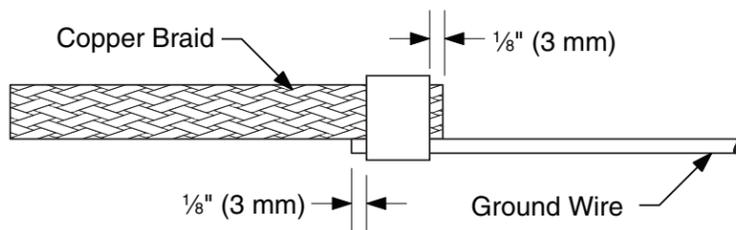


Figure 2

2. At a point 2 inches (50 mm) to one side of the jacket opening, place one wrap of mastic (in kit). (Figure 3)
3. Place ground connector on exposed concentric wires at opening edge with braid extending toward opening. Hold ground wire in place and tightly wrap with 5 layers of tape at a point 6 inches (150 mm) from the opening (Figure 3) to secure the ground wire to the cable.

**Note:** Additional taping may be required.

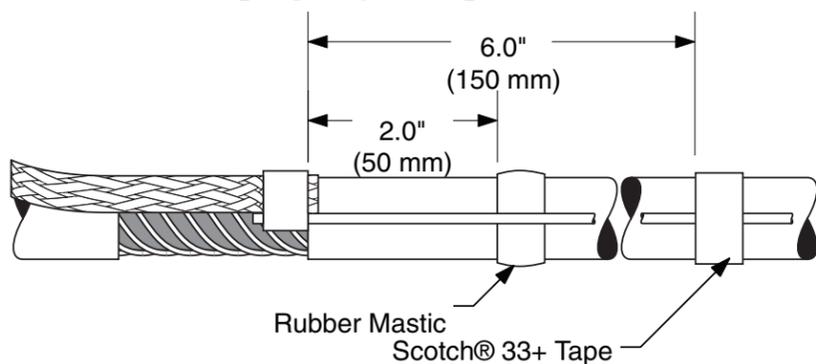


Figure 3

**Note:** Illustrations are of jacketed concentric neutral cable. Procedure is the same for other shielded cables.

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4. Tape “C” connector to concentric wires with Scotch® Vinyl Plastic Electrical Tape 33+ (in kit).
5. Wrap copper braid around concentric wires, rewinding around itself. Pull (to unwrap) the constant force spring (in kit) around the copper braid and rewrap around itself. (Figure 4)

**Note:** Be certain the copper braid and constant force spring are wrapped in the same direction, and that the spring is centered within the edges of the braid. The braid edge should be butted against the “C” connector.

Cinch (tighten) the applied spring after the final wrap.

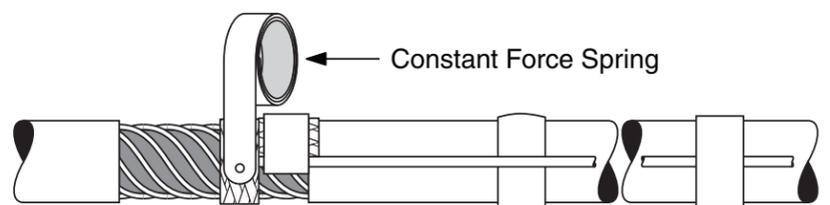
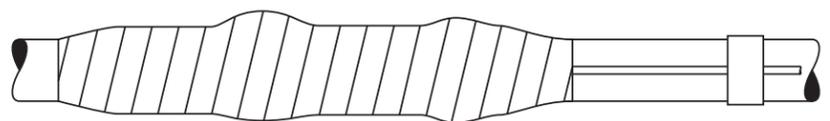


Figure 4

6. Wrap 1 layer of 33+ Vinyl Tape over coil and copper braid to insure that no frayed edges are exposed.

### C. Sealing The Assembly

1. Press the ground wire into the mastic. At the mastic wrap, use the remaining mastic to build a seal around the ground wire.
  2. Seal assembly by wrapping 2 half-lapped layers of rubber mastic tape extending 2 inches (50 mm) onto either side of the jacket opening. Stretch the tape approximately 25%. Be sure the tape extends beyond the mastic seal.
- Note:** To apply the rubber mastic tape, start at the “C” connector and wrap with the mastic side down.
3. Wrap 1 half-lapped layer of 33+ Vinyl Tape over the rubber mastic.



Completed Ground Connection

#### CAUTION

Working around energized high-voltage systems may cause serious injury or death. Installation should be performed by personnel familiar with good safety practice in handling high-voltage electrical equipment. De-energize and ground all electrical systems before installing product.

#### 3M Electrical Markets Division

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