3M™ Cable Grounding Kit 2254

For use on shielded cable 500–1250 kcmil

Instruction Sheet

Installation Information

⚠CAUTION

Working around energized electrical 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.

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

A. Prepare Cable

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

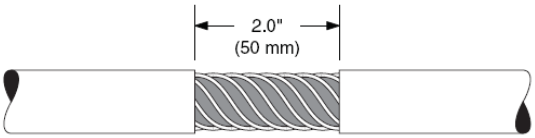


Figure 1

B. Make Grounding Connection

1. Crimp copper braid to ground wire (ground wire not in kit: size to be determined by customer. Suggested size: 2/0AWG or #2 AWG 600 volt insulted) with "C" connector (in kit). There are two "C" connectors in the kit, one for #2 AWG and one for 2/0 AWG. Use the correct one for your ground wire.

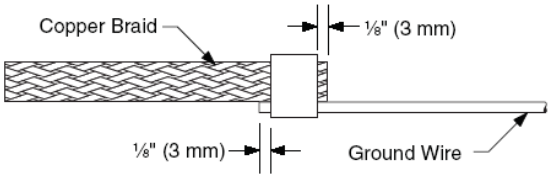
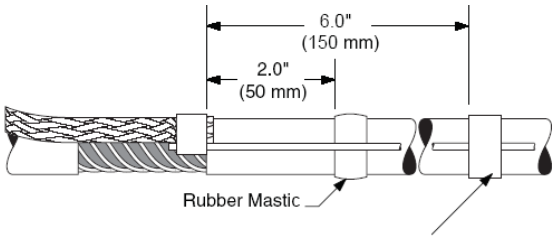


Figure 2

2. At a point 2 inches (50mm) 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 (150mm) from the opening (Figure 3) to secure the ground wire to the cable.

Note: Additional taping may be required.



Scotch® Super 33+™ Vinyl Electrical Tape

4. Tape “C” connector to the concentric wires with Scotch® Super 33+™ Vinyl Electrical Tape (in kit).

5. Wrap copper braid around concentric wires, rewrapping around itself. Pull (to unwrap) the constant force spring (in kit) around the copper braid and rewrap around itself. (Figure 4). Tighten the applied spring after the final wrap.

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.

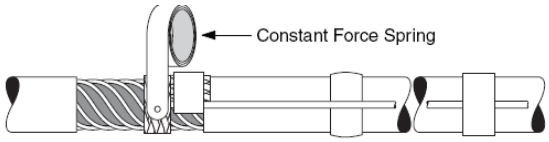


Figure 4

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

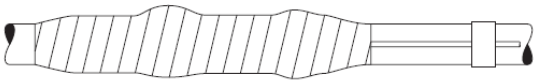
C. Sealing the Assembly

1. Wrap 1 layer of Super 33+ vinyl tape over coil and copper braid to insure that no frayed edges are exposed.

2. Seal assembly by wrapping 2 half-lapped layers of rubber mastic tape extending 2 inches (50mm) 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 Super 33+ vinyl tape over the rubber mastic.



Completed Ground Connection

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