

Application Note

Bonding Leviton Pre-terminated Armored Cable Assemblies

Why bond armored cables?

Some of Leviton’s cables contain metallic armor, which acts as a conduit path and protection for the cable. This armor, which is a non-current-carrying metallic member, must be bonded to the earth (grounded) to ensure errant electrical contacts are safely discharged. This helps ensure reliable operation of telecommunications cable systems, IT equipment, and surge protection devices.

The National Electrical Code, Articles 250 and 770.93, provides the general requirements for grounding any armored fiber cables. Further, industry standards, such as ANSI/TIA-607-D, provide information on proper grounding and bonding of telecommunications cables and equipment. Always refer to your local authority having jurisdiction (LAHJ) for more information to ensure that proper grounding and bonding of your telecommunications equipment is performed.

Leviton armored cables can be bulk cable or pre-terminated fiber assemblies. The provided instructions cover both cases, with notes related to cable type.

Bonding metallic armor of cables

The following parts and tools are required:

- Grounding Strap Kit (#11140671)
- Cable Sheath Knife
- Rubber Head Mallet
- 3/8” Open End Wrench or Nut Driver
- 8.5 mil Heavy Duty Electrical Tape
- Telecom Shears



Grounding Strap Kit

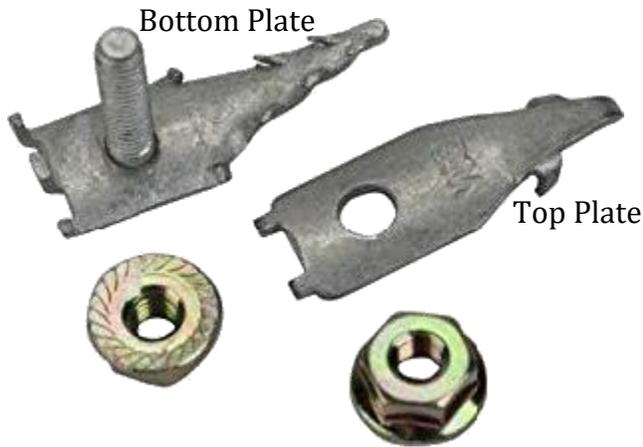
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Product Line:
Armored Fiber Cables

Part Numbers Affected:
All armored cables

Shield Bond Connector 4460-D References



To install the bonding device, please follow these instructions:

1. Using the Cable Sheath Knife, carefully slit the heat shrink either at the junction of the armor and inner cable jacket (pre-terminated assembly) or in the outer jacket around the armor (bulk cable). Be sure to cut at an appropriate length to accommodate the bonding clamp being used.



2. Using the Cable Sheath Knife, make a slit in the heat shrink (if present) and outer armor's jacket that is perpendicular to the cable. Expose the armor to an appropriate length to accommodate the bonding clamp being used.



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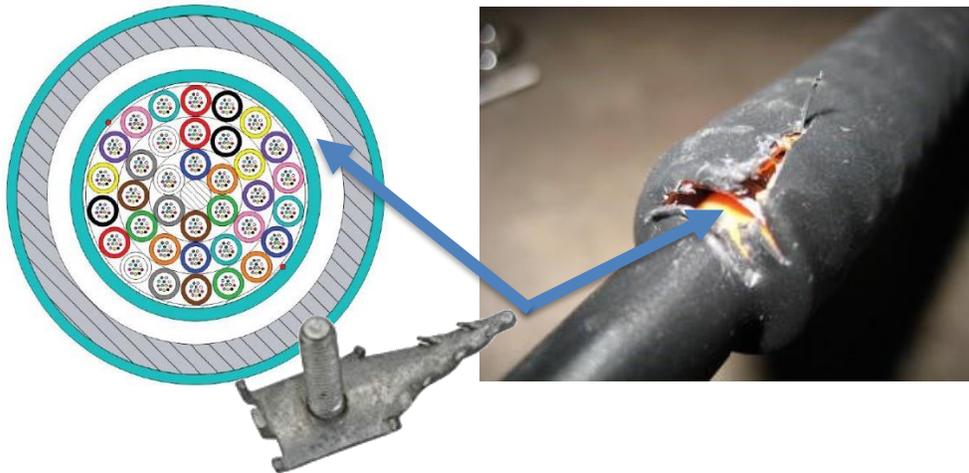
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- Carefully insert the bottom plate of the bonding clamp per manufacturer's instructions between the armor and inner cable jacket.



Use the mallet to gently insert the bottom plate under the armor. Make sure the jacket of the fiber optic cable is not damaged.

- Place the top plate of the clamp over the inserted portion and secure using one [1] of the provided nuts using the 3/8" open end wrench or nut driver.



Ensure that the top and bottom plates compress onto the armor only and not the heat shrink or outer jacket.

- Using an 8.5 mil tape, wrap the heat shrink (if present), armor's jacket, bonding clamp, and inner cable sheath.



Ensure that the bonding stub and nut are not covered with tape as this will negate the bonding function.

- Follow TIA and LAHJ bonding and grounding methodology requirements for bonding this cable to the appropriate grounding points, e.g. the telecommunications grounding busbar or the telecommunications main grounding busbar.