

**Mine Safety and Health Admin., Labor**

**§ 75.700-1**

**§ 75.602 Trailing cable junctions.**

[STATUTORY PROVISION]

When two or more trailing cables junction to the same distribution center, means shall be provided to assure against connecting a trailing cable to the wrong size circuit breaker.

**§ 75.603 Temporary splice of trailing cable.**

[STATUTORY PROVISION]

One temporary splice may be made in any trailing cable. Such trailing cable may only be used for the next 24-hour period. No temporary splice shall be made in a trailing cable within 25 feet of the machine, except cable reel equipment. Temporary splices in trailing cables shall be made in a workmanlike manner and shall be mechanically strong and well insulated. Trailing cables or hand cables which have exposed wires or which have splices that heat or spark under load shall not be used. As used in this section, the term "splice" means the mechanical joining of one or more conductors that have been severed.

**§ 75.604 Permanent splicing of trailing cables.**

[STATUTORY PROVISIONS]

When permanent splices in trailing cables are made, they shall be:

- (a) Mechanically strong with adequate electrical conductivity and flexibility;
- (b) Effectively insulated and sealed so as to exclude moisture; and
- (c) Vulcanized or otherwise treated with suitable materials to provide flame-resistant qualities and good bonding to the outer jacket.
- (d) Made using splice kits accepted or approved by MSHA as flame resistant.

[35 FR 17890, Nov. 20, 1970, as amended at 57 FR 61223, Dec. 23, 1992]

**§ 75.605 Clamping of trailing cables to equipment.**

[STATUTORY PROVISIONS]

Trailing cables shall be clamped to machines in a manner to protect the

cables from damage and to prevent strain on the electrical connections.

**§ 75.606 Protection of trailing cables.**

[STATUTORY PROVISIONS]

Trailing cables shall be adequately protected to prevent damage by mobile equipment.

**§ 75.607 Breaking trailing cable and power cable connections.**

[STATUTORY PROVISIONS]

Trailing cable and power cable connections to junction boxes shall not be made or broken under load.

**Subpart H—Grounding**

**§ 75.700 Grounding metallic sheaths, armors, and conduits enclosing power conductors.**

[STATUTORY PROVISIONS]

All metallic sheaths, armors, and conduits enclosing power conductors shall be electrically continuous throughout and shall be grounded by methods approved by an authorized representative of the Secretary.

**§ 75.700-1 Approved methods of grounding.**

Metallic sheaths, armors and conduits in resistance grounded systems where the enclosed conductors are a part of the system will be approved if a solid connection is made to the neutral conductor; in all other systems, the following methods of grounding will be approved:

- (a) A solid connection to a borehole casing having low resistance to earth;
- (b) A solid connection to metal waterlines having low resistance to earth;
- (c) A solid connection to a grounding conductor, other than the neutral conductor of a resistance grounded system, extending to a low resistance ground field located on the surface;
- (d) Any other method of grounding, approved by an authorized representative of the Secretary, which ensures that there is no difference in potential between such metallic enclosures and the earth.