Coast Guard, DHS § 183.455

TABLE 5—ALLOWABLE AMPERAGE OF CONDUCTORS—Continued

Conductor size (AWG)	Temperature rating of conductor insulation						
	60 °C (140 °F)	75 °C (167 °F)	80 °C (176 °F)	90 °C (194 °F)	105 °C (221 °F)	125 °C (257 °F)	200 °C (392 °F)
4 to 6 7 to 24 25 and above	.60 .50 .40						

[CGD 73-217, 42 FR 5944, Jan. 31, 1977; 42 FR 24739, May 16, 1977, as amended by CGD 81-092, 48 FR 55736, Dec. 15, 1983]

§ 183.430 Conductors in circuits of less than 50 volts.

- (a) Each conductor in a circuit that has a nominal voltage of less than 50 volts must:
- (1) Meet the requirements of $\S 183.435$; or
 - (2) Meet:
- (i) The insulating material temperature rating requirements of SAE Standard J378; and
- (ii) SAE Standard J1127, or SAE Standard 1128.
- (b) This section does not apply to communication systems; electronic navigation equipment; resistance conductors that control circuit amperage; and pigtails of less than seven inches of exposed length.

[CGD 73-217, 42 FR 5944, Jan. 31, 1977, as amended by CGD 87-009, 53 FR 36971, Sept. 23, 1988]

§ 183.435 Conductors in circuits of 50 volts or more.

- (a) Each conductor in a circuit that has a nominal voltage of 50 volts or more must be:
- (1) A conductor that has insulation listed and classified moisture resistant and flame retardant in Article 310, NFPA No. 70, National Electric Code;
- (2) A flexible cord type SO, STO, ST, SJO, SJT, or SJTO listed in Article 400, NFPA No. 70, National Electric Code;
- (3) A conductor that meets IEEE Standard 45.
- (4) A conductor that meets UL Standard 1426
- (b) Where the nominal circuit voltage of each of three or more current carrying conductors in a duct, bundle, or cable is 50 volts or more, the amperages of each of those conductors must not exceed the value in table 5 multi-

plied by the correction factor in note 2 to Table 5 for the number of conductors that carry 50 volts or more.

(c) This section does not apply to communication systems; electronic navigation equipment; resistance conductors that control circuit amperage; conductors in secondary circuits of ignition systems; and pigtails of less than seven inches of exposed length.

[CGD 73-217, 42 FR 5944, Jan. 31, 1977; 42 FR 24739, May 16, 1977, as amended by CGD 80-047 and CGD 80-046, 45 FR 85450, Dec. 29, 1980; CGD 87-009, 53 FR 36972, Sept. 23, 1988]

§ 183.440 Secondary circuits of ignition systems.

- (a) Each conductor in a secondary circuit of an ignition system must meet SAE Standard J557.
- (b) The connection of each ignition conductor to a spark plug, coil, or distributor must have a tight fitting cap, boot, or nipple.

§ 183.445 Conductors: Protection.

- (a) Each conductor or group of conductors that passes through a bulk-head, structural member, junction box, or other rigid surface must be protected from abrasion.
- (b) Each ungrounded terminal or stud that is continuously energized must meet §183.455 or must have a boot, nipple, cap, cover, or shield that prevents accidental short-circuiting at the terminals or studs.

[CGD 81-092, 48 FR 55736, Dec. 15, 1983]

§ 183.455 Overcurrent protection: General.

 (a) Each ungrounded current-carrying conductor must be protected by a