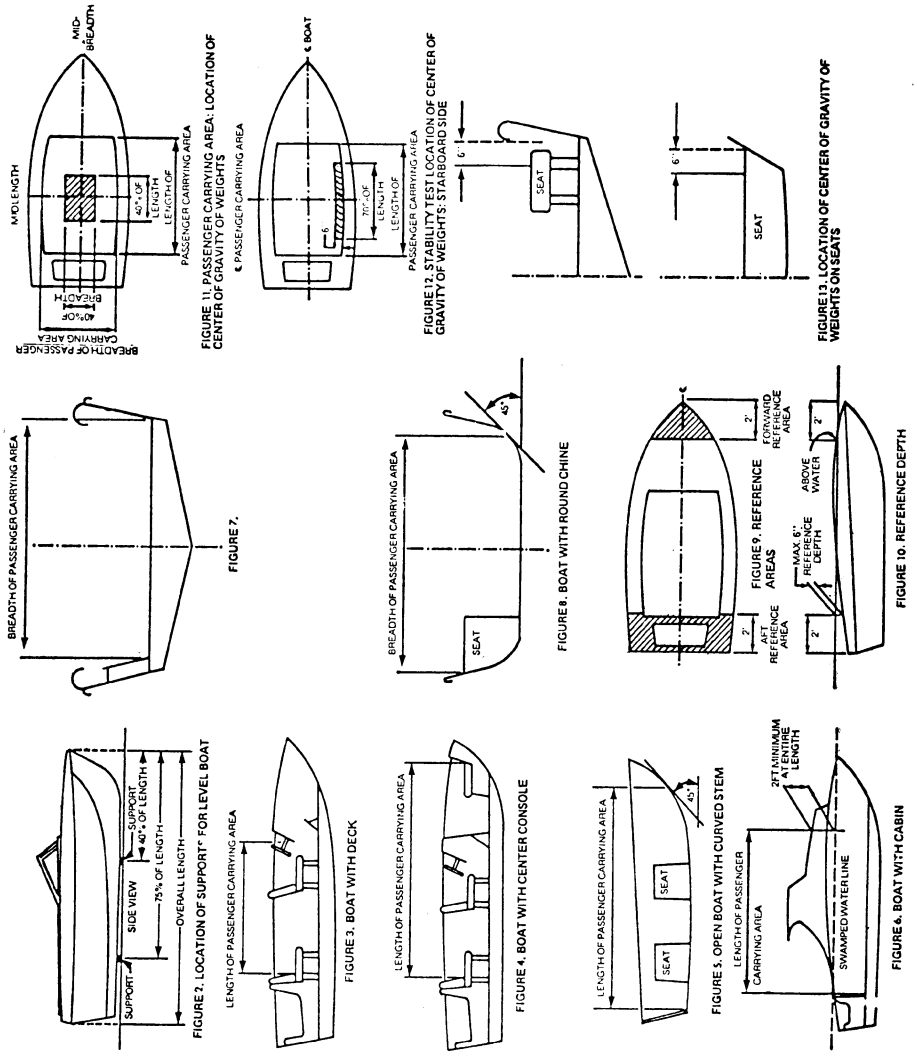
FIGURES TO SUBPART H OF PART 183



Subpart I—Electrical Systems

SOURCE: CGD 73–217, 42 FR 5944, Jan. 31, 1977, unless otherwise noted.

GENERAL

§ 183.401 Purpose, applicability, and effective dates.

(a) This subpart applies to all boats that have gasoline engines, except outboard engines, for electrical generation, mechanical power, or propulsion.

(b) [Reserved]

[CGD 73–217, 42 FR 5944, Jan. 31, 1977, as amended by CGD 81–092, 48 FR 55736, Dec. 15, 1983; USCG–1999–5832, 64 FR 34716, June 29, 1999]

§ 183.402 Definitions.

As used in this subpart—

AWG means American Wire Gauge.

Electrical component means electrical equipment such as, but not limited to, conductors, solenoids, motors, generators, alternators, distributors, resistors, appliances and electrical control devices.

Pigtails means external power conductors or wires that are part of electrical components and appliances, such as bilge pumps, blowers, lamps, switches, solenoids, and fuses.

Sheath means a material used as a continuous protective covering, such as electrical tape, molded rubber, molded plastic, or flexible tubing, around one or more insulated conductors.

[CGD 73–217, 42 FR 5944, Jan. 31, 1977, as amended by CGD 85–098, 52 FR 19728, May 27, 1987; CGD 96–026, 61 FR 33670, June 28, 1996]

§ 183.405 General.

Each electrical component on a boat to which this subpart applies must meet the requirements of this subpart unless the component is part of an outboard engine or part of portable equipment.

MANUFACTURER REQUIREMENTS

§ 183.410 Ignition protection.

(a) Each electrical component must not ignite a propane gas and air mixture that is 4.25 to 5.25 percent propane gas by volume surrounding the electrical component when it is operated at each of its manufacturer rated voltages and current loadings, unless it is isolated from gasoline fuel sources, such as engines, and valves, connections, or other fittings in vent lines, fill lines, distribution lines or on fuel tanks, in accordance with paragraph (b) of this section.

(b) An electrical component is isolated from a gasoline fuel source if:

(1) A bulkhead that meets the requirements of paragraph (c) of this section is between the electrical component and the gasoline fuel source;

(2) The electrical component is:

(i) Lower than the gasoline fuel source and a means is provided to prevent fuel and fuel vapors that may leak from the gasoline fuel source from becoming exposed to the electrical component; or

(ii) Higher than the gasoline fuel source and a deck or other enclosure is between it and the gasoline fuel source; or

(3) The space between the electrical component and the gasoline fuel source is at least two feet and the space is open to the atmosphere.

(c) Each bulkhead required by paragraph (b)(1) of this section must:

(1) Separate the electrical component from the gasoline fuel source and extend both vertically and horizontally the distance of the open space between the fuel source and the ignition source;

(2) Resist a water level that is 12 inches high or one-third of the maximum height of the bulkhead, whichever is less, without seepage of more than one-quarter fluid ounce of fresh water per hour; and

(3) Have no opening located higher than 12 inches or one-third the maximum height of the bulkhead, whichever is less, unless the opening is used for the passage of conductors, piping, ventilation ducts, mechanical equipment, and similar items, or doors, hatches, and access panels, and the maximum annular space around each item or door, hatch or access panel must not be more than one-quarter inch.

§ 183.415 Grounding.

If a boat has more than one gasoline engine, grounded cranking motor circuits must be connected to each other by a common conductor circuit that can carry the starting current of each of the grounded cranking motor circuits.

§ 183.420 Batteries.

(a) Each installed battery must not move more than one inch in any direction when a pulling force of 90 pounds or twice the battery weight, whichever is less, is applied through the center of gravity of the battery as follows:

(1) Vertically for a duration of one minute.