

Coast Guard, DHS

§ 183.505

manually reset, tripfree circuit breaker or fuse.

(b) A manually reset, trip-free circuit breaker or fuse must be placed at the source of power for each circuit or conductor except:

(1) If it is physically impractical to place the circuit breaker or fuse at the source of power, it may be placed within seven inches of the source of power for each circuit or conductor measured along the conductor.

(2) If it is physically impractical to place the circuit breaker or fuse at or within seven inches of the source of power, it may be placed within 40 inches of the source of power for each circuit or conductor, measured along the conductor, if the conductor is contained throughout its entire distance between the source of power and the required circuit breaker or fuse in a sheath or enclosure such as a junction box, control box, or enclosed panel.

(c) The current rating of each circuit breaker or fuse must not exceed:

(1) For circuits of less than 50 volts, 150% of the value of the amperage in Table 5 for the conductor size it is protecting; and

(2) For circuits of 50 volts or more, the value of the amperage in Table 5 for the conductor size it is protecting. If this value does not correspond to a standard size or rated circuit breaker or fuse the next larger size or rated circuit breaker or fuse may be used if it does not exceed 150% of the allowed current capacity of the conductor.

(d) The voltage rating of each circuit breaker or fuse must not be less than the nominal circuit voltage of the circuit it is protecting.

(e) This section does not apply to resistance conductors that control circuit amperage; conductors in secondary circuits of ignition systems; pigtailed of less than seven inches of exposed length; and power supply conductors in cranking motor circuits.

[CGD 73-217, 42 FR 5944, Jan. 31, 1977, as amended by CGD 78-090, 44 FR 68466, Nov. 29, 1979]

§ 183.460 Overcurrent protection: Special applications.

(a) Each ungrounded output conductor from a storage battery must have a manually reset, trip-free circuit

breaker or fuse, unless the output conductor is in the main power feed circuit from the battery to an engine cranking motor. The circuit breaker or fuse must be within 72 inches of the battery measured along the conductor, unless, for boats built prior to August 1, 1985, the circuit has a switch that disconnects the battery.

(b) Each ungrounded output conductor from an alternator or generator, except for self-limiting alternators or generators, must have a circuit breaker or fuse that has a current rating that does not exceed 120 percent of the maximum rated current of the alternator or generator at 60 °C.

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

Subpart J—Fuel Systems

SOURCE: CGD 74-209, 42 FR 5950, Jan. 31, 1977, unless otherwise noted.

GENERAL

§ 183.501 Applicability.

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

(b) [Reserved]

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 81-092, 48 FR 55736, Dec. 15, 1983; USCG-1999-5832, 64 FR 34716, June 29, 1999]

§ 183.505 Definitions.

As used in this subpart:

Flame arrestor means a device or assembly that prevents passage of flame through a fuel vent.

Fuel system means the entire assembly of the fuel fill, vent, tank, and distribution components, including pumps, valves, strainers, carburetors, and filters.

Static floating position means the attitude in which a boat floats in calm water, with each fuel tank filled to its rated capacity, but with no person or item of portable equipment on board.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 85-098, 52 FR 19728, May 27, 1987]

§ 183.507 General.

Each fuel system 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 is part of portable equipment.

EQUIPMENT STANDARDS**§ 183.510 Fuel tanks.**

(a) Each fuel tank in a boat must have been tested by its manufacturer under § 183.580 and not leak when subjected to the pressure marked on the tank label under § 183.514(b)(5).

(b) Each fuel tank must not leak if subjected to the fire test under § 183.590. Leakage is determined by the static pressure test under § 183.580, except that the test pressure must be at least one-fourth PSIG.

(c) Each fuel tank of less than 25 gallons capacity must not leak if tested under § 183.584.

(d) Each fuel tank with a capacity of 25 to 199 gallons must not leak if tested under § 183.586.

(e) Each fuel tank of 200 gallons capacity or more must not leak if tested under §§ 183.586 and 183.588.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 81-092, 48 FR 55736, Dec. 15, 1983]

§ 183.512 Fuel tanks: Prohibited materials.

(a) A fuel tank must not be constructed from terneplate.

(b) Unless it has an inorganic sacrificial galvanic coating on the inside and outside of the tank, a fuel tank must not be constructed from black iron or carbon steel.

(c) A fuel tank encased in cellular plastic or in fiber reinforced plastic must not be constructed from a ferrous alloy.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977; 42 FR 24739, May 16, 1977]

§ 183.514 Fuel tanks: Labels.

(a) Each fuel tank must have a label that meets the requirements of paragraphs (b) through (d) of this section.

(b) Each label required by paragraph (a) of this section must contain the following information:

(1) Fuel tank manufacturer's name (or logo) and address.

(2) Month (or lot number) and year of manufacture.

(3) Capacity in U.S. gallons.

(4) Material of construction.

(5) The pressure the tank is designed to withstand without leaking.

(6) Model number, if applicable.

(7) The statement, "This tank has been tested under 33 CFR 183.510(a)."

(8) If the tank is tested under § 183.584 at less than 25g vertical accelerations the statement, "Must be installed aft of the boat's half length."

(c) Each letter and each number on a label must:

(1) Be at least $\frac{1}{16}$ inch high and

(2) Contrast with the basic color of the label or be embossed on the label.

(d) Each label must:

(1) Withstand the combined effects of exposure to water, oil, salt spray, direct sunlight, heat, cold, and wear expected in normal operation of the boat, without loss of legibility; and

(2) Resist efforts to remove or alter the information on the label without leaving some obvious sign of such efforts.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 81-092, 48 FR 55737, Dec. 15, 1983; USCG-1999-5832, 64 FR 34716, June 29, 1999]

§ 183.516 Cellular plastic used to encase fuel tanks.

(a) Cellular plastic used to encase metallic fuel tanks must:

(1) Not change volume by more than five percent or dissolve after being immersed in any of the following liquids for 24 hours at 29 °C:

(i) Reference fuel B ASTM D 471 (incorporated by reference, see § 183.5).

(ii) No. 2 reference oil of ASTM D 471 (incorporated by reference, see § 183.5).

(iii) Five percent solution of trisodium phosphate in water; and

(2) Not absorb more than 0.12 pound of water per square foot of cut surface, measure under Military Specification MIL P-21929B.

(b) Non-polyurethane cellular plastic used to encase metallic fuel tanks must have a compressive strength of at least 60 pounds per square inch at ten percent deflection measured under

ASTM D 1621 (incorporated by reference, see §183.5), “Compressive Strength of Rigid Cellular Plastics”.

(c) Polyurethane cellular plastic used to encase metallic fuel tanks must have a density of at least 2.0 pounds per cubic foot, measured under ASTM D 1622 (incorporated by reference, see §183.5), “Apparent Density of Rigid Cellular Plastics.”

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 77-98, 42 FR 36253, July 14, 1977; CGD 81-092, 48 FR 55737, Dec. 15, 1983; USCG-2000-7223, 65 FR 40059, June 29, 2000]

§ 183.518 Fuel tank openings.

Each opening into the fuel tank must be at or above the topmost surface of the tank.

§ 183.520 Fuel tank vent systems.

(a) Each fuel tank must have a vent system that prevents pressure in the tank from exceeding 80 percent of the pressure marked on the tank label under §183.514(b)(5).

(b) Each vent must:

(1) Have a flame arrester that can be cleaned unless the vent is itself a flame arrester; and

(2) Not allow a fuel overflow at the rate of up to two gallons per minute to enter the boat.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 77-98, 42 FR 36253, July 14, 1977]

§ 183.524 Fuel pumps.

(a) Each diaphragm pump must not leak fuel from the pump if the primary diaphragm fails.

(b) Each electrically operated fuel pump must not operate except when the engine is operating or when the engine is started.

(c) If tested under §183.590, each fuel pump, as installed in the boat, must not leak more than five ounces of fuel in 2½ minutes, inclusive of leaks from fuel line, fuel filter and strainer.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 77-98, 42 FR 36253, July 14, 1977]

§ 183.526 Carburetors.

(a) [Reserved]

(b) Each carburetor must not leak more than five cubic centimeters of fuel in 30 seconds when:

(1) The float valve is open;

(2) The carburetor is at half throttle; and

(3) The engine is cranked without starting; or

(4) The fuel pump is delivering the maximum pressure specified by its manufacturer.

(c) Each updraft and horizontal draft carburetor must have a device that:

(1) Collects and holds fuel that flows out of the carburetor venturi section toward the air intake;

(2) Prevents collected fuel from being carried out of the carburetor assembly by the shock wave of a backfire or by reverse air flow; and

(3) Returns collected fuel to the engine induction system after the engine starts.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 77-98, 42 FR 36253, July 14, 1977]

§ 183.528 Fuel stop valves.

(a) Each electrically operated fuel stop valve in a fuel line between the fuel tank and the engine must:

(1) Open electrically only when the ignition switch is on; and

(2) Operate manually.

(b) If tested in accordance with the fire test under §183.590, a fuel stop valve installed in a fuel line system requiring metallic fuel lines or “USCG Type A1” hose must not leak fuel.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 85-098, 52 FR 19728, May 27, 1987]

§ 183.530 Spud, pipe, and hose fitting configuration.

Except when used for a tank fill line, each spud, pipe, or hose fitting used with hose clamps must have:

(a) A bead;

(b) A flare; or

(c) A series of annular grooves or serrations no less than 0.015 inches deep, except a continuous helical thread, knurl, or groove.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by USCG-1999-5832, 64 FR 34716, June 29, 1999]

§ 183.532 Clips, straps, and hose clamps.

(a) Each clip, strap, and hose clamp must:

(1) Be made from a corrosion resistant material; and

(2) Not cut or abrade the fuel line.

(b) If tested in accordance with the fire test under §183.590, a hose clamp installed on a fuel line system requiring metallic fuel lines or “USCG Type A1” hose must not separate under a one pound tensile force.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 85-098, 52 FR 19728, May 27, 1987]

§ 183.534 Fuel filters and strainers.

If tested under §183.590, each fuel filter and strainer, as installed in the boat, must not leak more than five ounces of fuel in 2½ minutes inclusive of leaks from the fuel pump and fuel line.

[CGD 77-98, 42 FR 36253, July 14, 1977]

§ 183.536 Seals and gaskets in fuel filters and strainers.

(a) [Reserved]

(b) Each gasket and each sealed joint in a fuel filter and strainer must not leak when subjected for 24 hours to a gasoline that has at least a 50 percent aromatic content at the test pressure marked on the fuel tank label.

[CGD 81-092, 48 FR 55737, Dec. 15, 1983]

§ 183.538 Metallic fuel line materials.

Each metallic fuel line connecting the fuel tank with the fuel inlet connection on the engine must:

(a) Be made of seamless annealed copper, nickel copper, or copper-nickel; and

(b) Except for corrugated flexible fuel line, have a minimum wall thickness of 0.029 inches.

§ 183.540 Hoses: Standards and markings.

(a) “USCG Type A1” hose means hose that meets the performance requirements of:

(1) SAE Standard J1527DEC85, Class 1 and the fire test in §183.590; or

(2) Underwriters’ Laboratories, Inc. (UL) Standard 1114.

(b) “USCG Type A2” hose means hose that meets the performance requirements of SAE Standard J1527DEC85, Class 2 and the fire test in §183.590;

(c) “USCG Type B1” hose means hose that meets the performance requirements of SAE Standard J1527DEC85, Class 1.

(d) “USCG Type B2” hose means hose that meets the performance requirements of SAE Standard J1527DEC85, Class 2.

NOTE: SAE Class 1 hose has a permeation rating of 100 grams or less fuel loss per square meter of interior surface in 24 hours.

SAE Class 2 hose has a permeation rating of 300 grams or less fuel loss per square meter of interior surface in 24 hours.

(e) Each “USCG Type A1,” “USCG Type A2,” “USCG Type B1,” and “USCG Type B2” hose must be identified by the manufacturer by a marking on the hose.

(f) Each marking must contain the following information in English:

(1) The statement “USCG TYPE (insert A1 or A2 or B1 or B2).”

(2) The year in which the hose was manufactured.

(3) The manufacturer’s name or registered trademark.

(g) Each character must be block capital letters and numerals that are at least one eighth-inch high.

(h) Each marking must be permanent, legible, and on the outside of the hose at intervals of 12 inches or less.

[CGD 85-098, 52 FR 19728, May 27, 1987]

§ 183.542 Fuel systems.

(a) Each fuel system in a boat must have been tested by the boat manufacturer and not leak when subjected to the greater of the following pressures:

(1) Three pounds per square inch; or

(2) One and one-half times the pressure created in the lowest part of the fuel system when it is filled to the level of overflow with fuel.

(b) The test pressure shall be obtained with air or inert gas.

[CGD 81-092, 48 FR 55737, Dec. 15, 1983]

MANUFACTURER REQUIREMENTS

§ 183.550 Fuel tanks: Installation.

(a) Each fuel tank must not be integral with any boat structure or mounted on an engine.

(b) Each fuel tank must not move at the mounting surface more than one-fourth inch in any direction.

(c) Each fuel tank must not support a deck, bulkhead, or other structural component.

(d) Water must drain from the top surface of each metallic fuel tank when the boat is in its static floating position.

(e) Each fuel tank support, chock, or strap that is not integral with a metallic fuel tank must be insulated from the tank surface by a nonmoisture absorbing material.

(f) Cellular plastic must not be the sole support for a metallic fuel tank.

(g) If cellular plastic is the sole support of a non-metallic fuel tank, the cellular plastic must meet the requirements of § 183.516 (b) or (c).

(h) Each fuel tank labeled under § 183.514(b)(8) for installation aft of the boat's half length must be installed with its center of gravity aft of the boat's half length.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 81-092, 48 FR 55737, Dec. 15, 1983; USCG-1999-5832, 64 FR 34716, June 29, 1999]

§ 183.552 Plastic encased fuel tanks: Installation.

(a) Each fuel tank encased in cellular plastic foam or in fiber reinforced plastic must have the connections, fittings, and labels accessible for inspection and maintenance.

(b) If a metallic fuel tank is encased in cellular plastic or in fiber reinforced plastic, water must not collect between the plastic and the surface of the tank or be held against the tank by capillary action.

(c) If the plastic is bonded to the surface of a metallic fuel tank, the adhesive strength of the metal to the plastic bond must exceed the cohesive strength of the plastic.

§ 183.554 Fittings, joints, and connections.

Each fuel system fitting, joint, and connection must be arranged so that it can be reached for inspection, removal, or maintenance without removal of permanent boat structure.

§ 183.556 Plugs and fittings.

(a) A fuel system must not have a fitting for draining fuel.

(b) A plug used to service the fuel filter or strainer must have a tapered pipethread or be a screw type fitted with a locking device other than a split lock washer.

§ 183.558 Hoses and connections.

(a) Each hose used between the fuel pump and the carburetor must be "USCG Type A1" hose.

(b) Each hose used—

(1) For a vent line or fill line must be:

(i) "USCG Type A1" or "USCG Type A2"; or

(ii) "USCG Type B1" or "USCG Type B2" if no more than five ounces of fuel is discharged in 2½ minutes when:

(A) The hose is severed at the point where maximum drainage of fuel would occur,

(B) The boat is in its static floating position, and

(C) The fuel system is filled to the capacity marked on the tank label under § 183.514(b)(3).

(2) From the fuel tank to the fuel inlet connection on the engine must be:

(i) "USCG Type A1"; or

(ii) "USCG Type B1" if no more than five ounces of fuel is discharged in 2½ minutes when:

(A) The hose is severed at the point where maximum drainage of fuel would occur,

(B) The boat is in its static floating position, and

(C) The fuel system is filled to the capacity marked on the tank label under § 183.514(b)(3).

(c) Each hose must be secured by:

(1) A swaged sleeve;

(2) A sleeve and threaded insert; or

(3) A hose clamp.

(d) The inside diameter of a hose must not exceed the actual minor outside diameter of the connecting spud,

pipe, or fitting by more than the distance shown in Table 8.

TABLE 8

If minor outside diameter of the connecting spud, pipe, or fitting is—	The inside diameter of the hose must not exceed the minor outside diameter of the connecting spud, pipe, or hose fitting by more than the following distance:
Less than 3/8 in	0.020 in.
3/8 in. to 1 in	0.035 in.
Greater than 1 in	0.065 in.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 85-098, 52 FR 19728, May 27, 1987]

§ 183.560 Hose clamps: Installation.

Each hose clamp on a hose from the fuel tank to the fuel inlet connection on the engine, a hose between the fuel pump and the carburetor, or a vent line must:

- (a) Be used with hose designed for clamps;
- (b) [Reserved]
- (c) Be beyond the bead, flare, or over the serrations of the mating spud, pipe, or hose fitting; and
- (d) Not depend solely on the spring tension of the clamp for compressive force.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 81-092, 48 FR 55737, Dec. 15, 1983]

§ 183.562 Metallic fuel lines.

- (a) Each metallic fuel line that is mounted to the boat structure must be connected to the engine by a flexible fuel line.
- (b) Each metallic fuel line must be attached to the boat's structure within four inches of its connection to a flexible fuel line.

§ 183.564 Fuel tank fill system.

- (a) Each fuel fill opening must be located so that a gasoline overflow of up to five gallons per minute for at least five seconds will not enter the boat when the boat is in its static floating position.
- (b) Each hose in the tank fill system must be secured to a pipe, spud, or hose fitting by:
 - (1) A swaged sleeve;
 - (2) A sleeve and threaded insert; or
 - (3) Two adjacent metallic hose clamps that do not depend solely on

the spring tension of the clamps for compressive force.

(c) Each hose clamp in the tank fill system must be used with a hose designed for clamps.

(d) Hose clamps used in the tank fill system must:

- (1) Have a minimum nominal band width of at least one-half inch; and
- (2) Be over the hose and the spud, pipe, or hose fitting.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 81-092, 48 FR 55737, Dec. 15, 1983]

§ 183.566 Fuel pumps: Placement.

Each fuel pump must be on the engine it serves or within 12 inches of the engine, unless it is a fuel pump used to transfer fuel between tanks.

§ 183.568 Anti-siphon protection.

Each fuel line from the fuel tank to the fuel inlet connection on the carburetor must:

- (a) Be above the level of the tank top; or
- (b) Have an anti-siphon device or an electrically operated fuel stop valve:
 - (1) At the tank withdrawal fitting; or
 - (2) Installed so the line from the fuel tank is above the top of the tank; or
- (c) Provided that the fuel tank top is below the level of the carburetor inlet, be metallic fuel lines meeting the construction requirements of §183.538 or "USCG Type A1" hose, with one or two manual shutoff valves installed as follows:

- (1) Directly at the fuel tank connection arranged to be readily accessible for operation from outside of the compartment, and
- (2) If the length of fuel line from the tank outlet to the engine inlet is greater than 12 feet, a manual shutoff valve shall be installed at the fuel inlet connection to the engine.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 81-092, 48 FR 55737, Dec. 15, 1983; CGD 85-098, 52 FR 19729, May 27, 1987]

§ 183.570 Fuel filters and strainers: Installation.

Each fuel filter and strainer must be supported on the engine or boat structure independent from its fuel line connections, unless the fuel filter or strainer is inside a fuel tank.

§ 183.572 Grounding.

Each metallic component of the fuel fill system and fuel tank which is in contact with fuel must be statically grounded so that the resistance between the ground and each metallic component of the fuel fill system and fuel tank is less than 100 ohms.

TESTS**§ 183.580 Static pressure test for fuel tanks.**

A fuel tank is tested by performing the following procedures in the following order:

(a) Fill the tank with air or inert gas to the pressure marked on the tank label under §183.514(b)(5).

(b) Examine each tank fitting and seam for leaks using a leak detection method other than the pressure drop method.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 81-092, 48 FR 55737, Dec. 15, 1983]

§ 183.584 Shock test.

A fuel tank is tested by performing the following procedures in the following order:

(a) Perform the static pressure test under §183.580.

(b) If the tank is non-metallic, fill it to capacity with a gasoline that has at least a 50 percent aromatic content. Keep the fuel in the tank at 21 °C or higher for 30 days prior to testing.

(c) Mount the tank to the platform of an impact test machine.

(d) Fill the tank to capacity with water.

(e) Apply one of the following accelerations within three inches of the center of the horizontal mounting surface of the tank. The duration of each vertical acceleration pulse is measured at the base of the shock envelope.

(1) If the tank is not labeled under §183.514(b)(8) for installation aft of the half length of the boat, apply 1000 cycles of 25g vertical accelerations at a rate of 80 cycles or less per minute. The duration of the acceleration pulse must be between 6 and 14 milliseconds.

(2) If the tank is manufactured for installation with its center of gravity aft of the half length of the boat, apply 1000 cycles of 15g vertical accelerations

at a rate of 80 cycles or less per minute. The duration of the shock pulse must be between 6 and 14 milliseconds.

(f) Perform the static pressure test under §183.580.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by USCG-1999-5832, 64 FR 34716, June 29, 1999]

§ 183.586 Pressure impulse test.

A fuel tank is tested by performing the following procedures in the following order:

(a) Perform the static pressure test under §183.580.

(b) If the tank is non-metallic, fill it to capacity with a gasoline that has at least a 50 percent aromatic content. Keep the fuel in the tank at 21 °C or higher for 30 days prior to testing.

(c) Mount the tank on a test platform.

(d) Fill the tank to capacity with water.

(e) Cap and seal each opening in the tank.

(f) Apply 25,000 cycles of pressure impulse at the rate of no more than 15 impulses per minute varying from zero to three PSIG to zero inside the tank top from a regulated source of air, inert gas, or water.

(g) Perform the static pressure test under §183.580.

§ 183.588 Slosh test.

A fuel tank is tested by performing the following procedures in the following order:

(a) Perform the static pressure test under §183.580.

(b) Perform the pressure impulse test under §183.586.

(c) Secure the tank to the platform of a tank rocker assembly.

(d) Fill the tank to one-half capacity with water.

(e) Cap and seal each opening in the tank.

(f) Apply 500,000 cycles or rocking motion 15 degrees to each side of the tank centerline at the rate of 15 to 20 cycles a minute. The axis of rotation of the rocker and fuel tank must be perpendicular to the centerline of the tank length at a level six inches or less above or below the tank's bottom.

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(g) Perform the static pressure test under § 183.580.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by USCG-1999-5832, 64 FR 34716, June 29, 1999]

§ 183.590 Fire test.

(a) A piece of equipment is tested under the following conditions and procedures:

(1) Fuel stop valves, "USCG Type A1" or USCG Type A2" hoses and hose clamps are tested in a fire chamber.

(2) Fuel filters, strainers, and pumps are tested in a fire chamber or as installed on the engine in the boat.

(3) Fuel tanks must be tested filled with fuel to one-fourth the capacity marked on the tank in a fire chamber or in an actual or simulated hull section.

(b) Each fire test is conducted with free burning heptane and the component must be subjected to a flame for 2½ minutes.

(c) If the component is tested in a fire chamber:

(1) The temperature within one inch of the component must be at least 648 °C sometime during the 2½ minute test;

(2) The surface of the heptane must be 8 to 10 inches below the component being tested; and

(3) The heptane must be in a container that is large enough to permit the perimeter of the top surface of the heptane to extend beyond the vertical projection of the perimeter of the component being tested.

(d) If the component is being tested as installed on an engine, heptane sufficient to burn 2½ minutes must be poured over the component and allowed to run into a flat bottomed pan under the engine. The pan must be large enough to permit the perimeter of the top surface of the heptane to extend beyond the vertical projection of the perimeter of the engine.

(e) If a fuel tank is being tested in an actual or simulated hull section, the actual or simulated hull section must be of sufficient size to contain enough heptane to burn for 2½ minutes in a place adjacent to the tank.

[CGD 74-209, 42 FR 5950, Jan. 31, 1977, as amended by CGD 77-98, 42 FR 36253, July 14, 1977; CGD 85-098, 52 FR 19729, May 27, 1987]

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Subpart K—Ventilation

SOURCE: CGD 76-082, 44 FR 73027, Dec. 17, 1979, unless otherwise noted.

§ 183.601 Applicability.

This subpart applies to all boats that have gasoline engines for electrical generation, mechanical power, or propulsion.

[USCG-1999-5832, 64 FR 34716, June 29, 1999]

§ 183.605 Definitions.

As used in this subpart:

"Fuel" means gasoline.

"Open to the atmosphere" means a compartment that has at least 15 square inches of open area directly exposed to the atmosphere for each cubic foot of net compartment volume.

[CGD 76-082, 44 FR 73027, Dec. 17, 1979, as amended by CGD 85-098, 52 FR 19729, May 27, 1987]

§ 183.607 Incorporation by reference.

(a) The following standards are incorporated by reference. Copies may be obtained from the sources indicated. They are also available for inspection at Coast Guard Headquarters, 2100 2nd St., SW., Stop 7000, Washington, DC 20593-7000 and at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(1) AMCA Standard 210-74, Figure 12. Air Moving and Conditioning Association, 30 West University Drive, Arlington Heights, Illinois 60004.

(2) ASTM Standard D 471. American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

(3) UL Standard 1128, Underwriters Laboratories, Incorporated, 12 Laboratory Drive, Research Triangle Park, NC 27709-3995.

(b) The Director of the Federal Register approved the incorporation by reference in paragraph (a)(2) on September 26, 1976 and the incorporations