

(1) A supply opening or duct from the atmosphere or from a ventilated compartment or from a compartment that is open to the atmosphere; and

(2) An exhaust opening into another ventilated compartment or an exhaust duct to the atmosphere.

(b) Each exhaust opening or exhaust duct must originate in the lower third of the compartment.

(c) Each supply opening or supply duct and each exhaust opening or exhaust duct in a compartment must be above the normal accumulation of bilge water.

(d) Except as provided in paragraph (e) of this section, supply openings or supply ducts and exhaust openings or exhaust ducts must each have a minimum aggregate internal cross-sectional area calculated as follows:

$$A=5 \ln (V/5);$$

where:

(1) A is the minimum aggregate internal cross-sectional area of the openings or ducts in square inches;

(2) V is the net compartment volume in cubic feet, including the net volume of other compartments connected by openings that exceed 2 percent of the area between the compartments; and

(3)  $\ln (V/5)$  is the natural logarithm of the quantity  $(V/5)$ .

(e) The minimum internal cross-sectional area of each supply opening or duct and exhaust opening or duct must exceed 3.0 square inches.

(f) The minimum internal cross-sectional area of terminal fittings for flexible ventilation ducts installed to meet the requirements of paragraph (d) of this section must not be less than 80 percent of the required internal cross-sectional area of the flexible ventilation duct.

[CGD 76-082, 44 FR 73027, Dec. 17, 1979; 45 FR 7544, Feb. 4, 1980]

### Subpart L—Start-in-Gear Protection

SOURCE: CGD 79-137, 46 FR 3515, Jan. 15, 1981, unless otherwise noted.

#### § 183.701 Applicability.

This subpart applies to outboard motors and starting controls, and to man-

ufacturers, distributors or dealers installing such equipment.

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

#### § 183.705 Definitions.

For the purposes of this subpart:

(a) *Outboard motor* means a self-contained propulsion system of any horsepower rating designed to be installed on, and removable from the transom of a boat.

(b) *Static thrust* means the forward or backward thrust developed by an outboard motor and associated propulsion unit while stationary.

(c) *Starting control* means the motor throttle, shift and starting control mechanisms located at a position remote from the outboard motor.

(d) *Local starting* means operating a mechanical or electrical starting device built into the outboard motor.

(e) *Distributor* means any person engaged in the sale and distribution of boats or associated equipment for the purpose of resale.

(f) *Dealer* means any person who is engaged in the sale and distribution of boats or associated equipment to purchasers who the seller in good faith believes to be purchasing any such boat or associated equipment for purposes other than resale.

#### § 183.710 Start-in-gear protection required.

(a) Any outboard motor which is capable of developing a static thrust of 115 pounds or more at any motor operating speed with any propeller or jet attachment recommended for or shipped with the motor by the manufacturer, must be equipped with a device to prevent the motor being started when controls are set so as to attain that thrust level, as follows:

(1) Outboard motors designed for local starting must have a built-in start-in-gear protection device.

(2) Outboard motors designed for remote starting must have either a built-in start-in-gear protection device or be installed with remote starting controls containing this device. An outboard motor designed for remote starting that does not have a built-in start-in-gear protection device must, at the time of sale, have a tag or label attached at the location of the control