

**WAC 352-60-090 Backfire flame control.** No person shall operate or permit the operation of a vessel powered by a gasoline engine unless it meets the following requirements:

(1) All gasoline engines, except outboard motors, must be equipped with an acceptable means of backfire flame control. Installations consisting of backfire flame arresters approved by the United States Coast Guard under 46 Code of Federal Regulations Parts 25 and 58 are acceptable.

(2) A United States Coast Guard approved flame arrester bearing basic Approval Numbers 162.015 or 162.041 or engine air and fuel induction systems bearing basic Approval Numbers 162.015 or 162.042 may be continued in use as long as they are serviceable and in good condition. New installations or replacements must meet the applicable requirements of subsection (3) of this section.

(3) The following are acceptable means of backfire flame control for gasoline engines:

(a) A backfire flame arrester complying with SAE J-1928 or UL 1111, and marked accordingly. The flame arrester must be suitably secured to the air intake with a flamtight connection.

(b) An engine air and fuel induction system which provides adequate protection from propagation of backfire flame to the atmosphere equivalent to that provided by an acceptable backfire flame arrester. A gasoline engine utilizing an air and fuel induction system, and operated without an approved backfire flame arrester, must either include a reed valve assembly or be installed in accordance with SAE J-1928.

(c) An arrangement of the carburetor or engine air induction system that will disperse any flames caused by the engine backfire. The flames must be dispersed to the atmosphere outside the vessel in such a manner that the flames will not endanger the vessel, persons on board, or nearby vessels and structures. Flame dispersion may be achieved by attachments to the carburetor or location of the engine air induction system. All attachments shall be of metallic construction with flamtight connections and firmly secured to withstand vibration, shock, and engine backfire. Such installations do not require formal approval and labeling, but must comply with this requirement.

[Statutory Authority: RCW 43.51.400, 88.12.065, 88.12.125, 88.12.245 and chapter 33, C.F.R. Part 175.15. WSR 94-16-027, § 352-60-090, filed 7/25/94, effective 8/25/94. Statutory Authority: RCW 43.51.400. WSR 84-11-057 (Order 79), § 352-60-090, filed 5/18/84.]