§ 169.241 Machinery.
(a) At each inspection for certification and periodic inspection, the marine inspector will examine and test the following items to the extent necessary, to determine that they are in proper operating condition and fit for the service for which they are intended:

1. **Engine starting system.** Alternate methods of starting are checked.

2. **Engine control mechanisms.** Mechanisms are operationally tested and visually examined.

3. **Auxiliary machinery.** All machinery essential to the routine operation of the vessel is checked.

4. **Fuel systems.** Tanks, tank vents and other appurtenances, piping and pipe fittings are examined. The fuel systems for the auxiliary propulsion engines and all other fuel systems installed are checked. All valves in the fuel lines are tested by operating locally and at remote operating positions.

5. **Sea valves and bulkhead closure valves.** All overboard discharge and intake valves are checked.

6. **Bilge and drainage systems.** The means provided for pumping bilges are operationally tested. All suction strainers are examined.

(b) During all inspections special attention is paid to ensure that no fire hazards exist and that guards or protective devices are provided in all hazardous places.


§ 169.243 Electrical.
At each inspection for certification and periodic inspection, the marine inspector will examine and test the following items to the extent necessary, to determine that they are in proper operating condition, in safe electrical condition, and fit for the service for which they are intended:

(a) **Electrical cable.** All cable is examined as far as practicable without undue disturbance of the cable or electrical apparatus.

(b) **Overload or circuit protective devices.** Circuit breakers are tested by manual operation and fuses examined visually. The ratings of fuses are checked to determine suitability for the service intended.

(c) **Rotating machinery.** Rotating electrical machinery essential to the routine operation of the vessel is examined.

(d) **Generators, etc.** All generators, motors, lighting fixtures and circuit interrupting devices located in spaces or areas which may contain flammable vapors are checked.

(e) **Storage batteries.** Batteries are checked for condition and security of stowage.

(f) **Fire detection and alarm system.** Electrical apparatus, which operates as part of or in conjunction with a fire detection or alarm system installed on board the vessel, is operationally tested. The test is applied, in a manner to simulate, as closely as practicable, the actual operation in case of fire.


§ 169.245 Lifesaving equipment.
At each inspection for certification and periodic inspection the following tests and inspections of lifesaving equipment will be conducted:

(a) All air tank buoyant units of all lifesaving appliances are tested for airtightness.

(b) Each lifeboat is lowered to near the water and loaded with its allowed capacity, evenly distributed throughout the length. The total weight used is at least equal to the allowed capacity of the lifeboat considering persons to weigh 75 kg (165 pounds) each. The lifeboat is then lowered into the water until it is afloat and released from the falls.

(c) Each personal flotation device is examined to determine its serviceability. If found to be satisfactory, it is stamped “Passed,” together with the date and the port. If found to be unsatisfactory, the personal flotation device must be removed from the vessel’s equipment and repaired. If it is beyond repair it must be destroyed in the presence of the Coast Guard inspector.

(d) Each lifeboat winch electrical control apparatus is opened and inspected.

(e) Where gravity davits are installed, it must be demonstrated that...
the lifeboat can be swung out and lowered from any stopped position by merely releasing the brake on the lifeboat winch. The use of force to start the davits or the lifeboat winch is not permitted.

(f) Inflatable liferaft containers are examined for defects and the inspector verifies that the inflatable liferafts and hydraulic releases, if installed, have been serviced at an approved facility in accordance with the provisions of subparts 160.051 and 160.062, respectively, of this chapter.

(g) All other items of lifesaving equipment are examined to determine that they are in suitable condition.


§ 169.247 Firefighting equipment.

(a) At each inspection for certification and periodic inspection and at such other times as considered necessary all fire-extinguishing equipment is inspected to ensure it is in suitable condition. Tests may be necessary to determine the condition of the equipment. The inspector verifies that the tests and inspections required in Tables 169.247(a)(1) and (a)(2) of this subchapter have been conducted by a qualified servicing facility at least once every twelve months.

(1) Hand portable fire extinguishers and semi-portable fire extinguishing systems are examined for excessive corrosion and general condition.

(2) All parts of the fixed fire-extinguishing systems are examined for excessive corrosion and general condition.

(3) Piping, controls, valves, and alarms on all fire-extinguishing systems are checked to be certain the system is in operating condition.

(4) The fire main system is operated and the pressure checked at the most remote and highest outlets.

(5) Each firehose is subjected to a test pressure equivalent to its maximum service pressure.

(b) Hand portable fire extinguishers and semi-portable fire extinguishing systems are examined for excessive corrosion and general condition.

(c) Exams have been conducted by a qualified servicing facility at least once every twelve months.

(d) Each firehose is examined to ensure it is in suitable condition.

Table 169.247(a)(1)—Portable Extinguishers—Continued

<table>
<thead>
<tr>
<th>Type unit</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon dioxide</td>
<td>Weigh cylinders. Recharge if weight loss exceeds 10 pct of weight of charge. Inspect hose and nozzle to be sure they are clear.</td>
</tr>
<tr>
<td>Dry chemical (cartridge-operated type)</td>
<td>Examine pressure cartridge and replace if end is punctured or if cartridge is otherwise determined to have leaked or to be in unsuitable condition. Inspect hose and nozzle to see they are clear. Insert charged cartridge. Be sure dry chemical is free-flowing (not caked) and chamber contains full charge.</td>
</tr>
<tr>
<td>Dry chemical (stored pressure)</td>
<td>See that pressure gage is in operating range. If not, or if seal is broken, weigh or otherwise determine that full charge of dry chemical is in extinguisher. Recharge if pressure is low or if dry chemical is needed. See that pressure gage, if provided, is in operating range. Recharge if pressure loss exceeds 10 pct of weight of charge. Inspect hose and nozzle to ensure they are clear.</td>
</tr>
<tr>
<td>HALON 1211 or HALON 1301.</td>
<td>See that pressure gage, if provided, is in operating range. Recharge if pressure loss exceeds 10 pct of weight of charge.</td>
</tr>
</tbody>
</table>


§ 169.249 Pressure vessels.

Pressure vessels must meet the requirements of part 54 of this chapter. The inspection procedures for pressure vessels are contained in subpart 61.10 of this chapter.

§ 169.251 Steering apparatus.

At each inspection for certification and periodic inspection the steering apparatus is inspected and operationally tested to determine that its condition is satisfactory and that it is fit for the service intended.


§ 169.253 Miscellaneous systems and equipment.

(a) At each inspection for certification and periodic inspection all