§ 230.65

leak under the lagging due to a crack in the shell, or to any other condition which may reduce safety. Pursuant to §230.29, the boiler must be repaired before being returned to service.

§ 230.65 Steam blocking view of engine crew.

The steam locomotive owner and/or operator shall keep the boiler, and its piping and appurtenances, in such repair that they do not emit steam in a manner that obscures the engine crew's vision.

Subpart C—Steam Locomotives and Tenders

§ 230.66 Design, construction, and maintenance.

The steam locomotive owner and operator are responsible for the general design, construction and maintenance of the steam locomotives and tenders under their control.

§ 230.67 Responsibility for inspection and repairs.

The steam locomotive owner and/or operator shall inspect and repair all steam locomotives and tenders under their control. All defects disclosed by any inspection shall be repaired in accordance with accepted industry standards, which may include established railroad practices, before the steam locomotive or tender is returned to service. The steam locomotive owner and/or operator shall not return the steam locomotive or tender to service unless they are in good condition and safe and suitable for service.

SPEED INDICATORS

§ 230.68 Speed indicators.

Steam locomotives that operate at speeds in excess of 20 miles per hour over the general system of railroad transportation shall be equipped with speed indicators. Where equipped, speed indicators shall be maintained to ensure accurate functioning.

ASH PANS

§ 230.69 Ash pans.

Ash pans shall be securely supported from mud-rings or frames with no part less than $2\frac{1}{2}$ inches above the rail. Their operating mechanism shall be so arranged that they may be safely operated and securely closed.

BRAKE AND SIGNAL EQUIPMENT

§230.70 Safe condition.

- (a) Pre-departure inspection. At the beginning of each day the locomotive is used, the steam locomotive operator shall ensure that:
- (1) The brakes on the steam locomotive and tender are in safe and suitable condition for service;
- (2) The air compressor or compressors are in condition to provide an ample supply of air for the locomotive service intended;
- (3) The devices for regulating all pressures are properly performing their functions:
- (4) The brake valves work properly in all positions: and
- (5) The water has been drained from the air-brake system.
- (b) Brake pipe valve required. Each steam locomotive shall have a brake pipe valve attached to the front of the tender, the rear of the back cab wall, or adjacent to the exit of a vestibuled cab. The words "Emergency Brake Valve" shall be clearly displayed near the valve.

§ 230.71 Orifice testing of compressors.

- (a) Frequency of testing. The compressor or compressors shall be tested for capacity by orifice test as often as conditions may require, but not less frequently than once every 92 service days.
- (b) Orifice testing criteria. (1) Compressors in common use, as listed in the following table, shall have orifice test criteria as follows:

Make	Compressor size	Single strokes per minute	Diameter of orifice (in inches)	Air pressure maintained (in pounds)
Westinghouse	9½	120	11/64	60
Westinghouse	11	100	3/16	60
Westinghouse	150 CFM 81/2 CC	100	9/32	60