

time of the inspection; the non-complying conditions found; and the signature of the inspector. Except as provided in §§ 229.9, 229.137, and 229.139, any conditions that constitute non-compliance with any requirement of this part shall be repaired before the locomotive is used. Except with respect to conditions that do not comply with § 229.137 or § 229.139, a notation shall be made on the report indicating the nature of the repairs that have been made. Repairs made for conditions that do not comply with § 229.137 or § 229.139 may be noted on the report, or in electronic form. A notation shall be made on the report indicating the nature of the repairs that have been made. The person making the repairs shall sign the report. The report shall be filed in the office of the carrier at the place where the inspection is made or at one central location and retained for at least 92 days.

(c) Each carrier shall designate qualified persons to make the inspections required by this section.

[45 FR 21109, Mar. 31, 1980, as amended at 50 FR 6953, Feb. 19, 1985; 67 FR 16050, Apr. 4, 2002]

§ 229.23 Periodic inspection: General.

(a) Each locomotive and steam generator shall be inspected at each periodic inspection to determine whether it complies with this part. Except as provided in § 229.9, all non-complying conditions shall be repaired before the locomotive or the steam generator is used. Except as provided in § 229.33, the interval between any two periodic inspections may not exceed 92 days. Periodic inspections shall only be made where adequate facilities are available. At each periodic inspection, a locomotive shall be positioned so that a person may safely inspect the entire underneath portion of the locomotive.

(b) The periodic inspection of the steam generator may be postponed indefinitely if the water suction pipe to the water pump and the leads to the main switch (steam generator switch) are disconnected, and the train line shut-off-valve is wired closed or a blind gasket applied. However, the steam generator shall be so inspected before it is returned to use.

(c) After April 30, 1980, each new locomotive shall receive an initial periodic

inspection before it is used. Except as provided in § 229.33, each locomotive in use on or before April 30, 1980, shall receive an initial periodic inspection within 92 days of the last 30-day inspection performed under the prior rules (49 CFR 230.331 and 230.451). At the initial periodic inspection, the date and place of the last tests performed that are the equivalent of the tests required by §§ 229.27, 229.29, and 229.31 shall be entered on Form FRA F 6180-49A. These dates shall determine when the tests first become due under §§ 229.27, 229.29, and 229.31. Out of use credit may be carried over from Form FRA F 6180-49 and entered on Form FRA F 6180-49A.

(d) Each periodic inspection shall be recorded on Form FRA F 6180-49A. The form shall be signed by the person conducting the inspection and certified by that person's supervisor that the work was done. The form shall be displayed under a transparent cover in a conspicuous place in the cab of each locomotive.

(e) At the first periodic inspection in each calendar year the carrier shall remove from each locomotive Form FRA F 6180-49A covering the previous calendar year. If a locomotive does not receive its first periodic inspection in a calendar year before April 2 because it is out of use, the form shall be promptly replaced. The Form FRA F 6180-49A covering the preceding year for each locomotive, in or out of use, shall be signed by the railroad official responsible for the locomotive and filed as required in § 229.23(f). The date and place of the last periodic inspection and the date and place of the last test performed under §§ 229.27, 229.29, and 229.31 shall be transferred to the replacement Form FRA F 6180-49A.

(f) The mechanical officer of each railroad who is in charge of a locomotive shall maintain in his office a secondary record of the information reported on Form FRA F 6180-49A under this part. The secondary record shall be retained until Form FRA F 6180-49A has been removed from the locomotive and filed in the railroad office of the mechanical officer in charge of the locomotive. If the Form FRA F 6180-49A removed from the locomotive is not clearly legible, the secondary record shall be retained until the Form FRA F

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6180-49A for the succeeding year is filed. The Form F 6180-49A removed from a locomotive shall be retained until the Form FRA F 6180-49A for the succeeding year is filed.

[45 FR 21109, Mar. 31, 1980, as amended at 45 FR 39852, June 12, 1980; 50 FR 6953, Feb. 19, 1985]

§ 229.25 Tests: Every periodic inspection.

Each periodic inspection shall include the following:

(a) All mechanical gauges used by the engineer to aid in the control or braking of the train or locomotive, except load meters used in conjunction with an auxiliary brake system, shall be tested by comparison with a dead-weight tester or a test gauge designed for this purpose.

(b) All electrical devices and visible insulation shall be inspected.

(c) All cable connections between locomotives and jumpers that are designed to carry 600 volts or more shall be thoroughly cleaned, inspected, and tested for continuity.

(d) Each steam generator that is not isolated as prescribed in § 229.23(b) shall be inspected and tested as follows:

(1) All automatic controls, alarms and protective devices shall be inspected and tested.

(2) Steam pressure gauges shall be tested by comparison with a dead-weight tester or a test gauge designed for this purpose. The siphons to the steam gauges shall be removed and their connections examined to determine that they are open.

(3) Safety valves shall be set and tested under steam after the steam pressure gauge is tested.

(e) The event recorder, if installed, shall be inspected, maintained, and tested in accordance with the instructions of the manufacturer, supplier, or owner thereof and in accordance with the following criteria:

(1) A written copy of the instructions in use shall be kept at the point where the work is performed.

(2) The event recorder shall be tested prior to performing any maintenance work on it. At a minimum, the event recorder test shall include cycling all required recording parameters and determining the full range of each pa-

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rameter by reading out recorded data. A micro-processor based event recorder, equipped to perform self-tests, has passed the pre-maintenance inspection requirement if it has not indicated a failure.

(3) If this test does not reveal that the device is recording all the specified data and that all recordings are within the designed recording parameters, this fact shall be noted on the data verification result required to be maintained by this section and maintenance and testing shall be performed as necessary until a subsequent test is successful.

(4) When a successful test is accomplished, a copy of those data verification results shall be maintained with the locomotive's maintenance records until the next one is filed.

(5) A railroad's event recorder periodic maintenance shall be considered effective if ninety percent (90%) of the recorders inbound in any given month for periodic inspection are still fully functional; maintenance practices and test intervals shall be adjusted as necessary to yield effective periodic maintenance.

[45 FR 21109, Mar. 31, 1980, as amended at 58 FR 36614, July 8, 1993; 60 FR 27905, May 26, 1995; 66 FR 4192, Jan. 17, 2001]

§ 229.27 Annual tests.

Each locomotive shall be subjected to the tests and inspections included in paragraphs (b) and (c) of this section, and each non-MU locomotive shall also be subjected to the tests and inspections included in paragraph (a) of this section, at intervals that do not exceed 368 calendar days:

(a)(1) The filtering devices or dirt collectors located in the main reservoir supply line to the air brake system shall be cleaned, repaired, or replaced.

(2) Brake cylinder relay valve portions, main reservoir safety valves, brake pipe vent valve portions, feed and reducing valve portions in the air brake system (including related dirt collectors and filters) shall be cleaned, repaired, and tested.

(3) The date and place of the cleaning, repairing, and testing shall be recorded on Form FRA F 6180-49A and the person performing the work and that person's supervisor shall sign the