Environmental Protection Agency

§ 85.2230

(7) Engine speed detection. The analyzer must utilize a tachometer capable of detecting engine speed in revolutions per minute (rpm) with a 0.5 second response time and an accuracy of ±3 percent of the true rpm.

(8) Test and mode timers. The analyzer must be capable of simultaneously determining the amount of time elapsed in a test, and in a mode within that test.

(9) Sample rate. The analyzer must be capable of measuring exhaust concentrations of gases specified in this section at a minimum rate of once every 0.75 second.

(d) Demonstration of conformity. The analyzer must be demonstrated to the satisfaction of the inspection program manager, through acceptance testing procedures, to meet the requirements of this section and to be capable of being maintained as required in §85.2233.

[58 FR 58413, Nov. 1, 1993; 59 FR 33913, July 1, 1994]

§§ 85.2226–85.2228 [Reserved]

§ 85.2229 Dynamometer—EPA 81.

(a) applicability. The requirements of this subsection apply to short tests conducted under Emissions Performance Warranty through December 31, 1993. The requirements of §85.2230 apply concurrently until December 31, 1993, after which the requirements of §85.2230 are solely in effect. The following exceptions apply: In a state where the Administrator has approved a SIP revision providing for implementation of a basic centralized program meeting the requirements of part 51, subpart S of this chapter, according to the schedule specified in §51.373 of this chapter, the requirements of §85.2229 are concurrently in effect until June 30, 1994 for 1995 and earlier model year vehicles or engines; in a state where the Administrator has approved a SIP revision providing for implementation of an enhanced program meeting the requirements of part 51, subpart S of this chapter, according to the schedule specified in §51.373 of this chapter, the requirements of §85.2229 are concurrently in effect until December 31, 1995 for 1995 and earlier model year vehicles or engines.

(b) The chassis dynamometer for steady state short tests must provide the capabilities described in paragraphs (b) (1) through (7) of this section.

(1) Power absorption. The dynamometer must be capable of applying a load to the vehicle’s driving tire surfaces at the horsepower and speed levels specified in paragraph (c) of this section.

(2) Short-term stability. Power absorption at constant speed may not drift more than ±0.5 horsepower (hp) during any single test mode.

(3) Roll weight capacity. The dynamometer must be capable of supporting...
§ 85.2231 On-board diagnostic test equipment requirements.

(a) The test system interface to the vehicle shall include a plug that conforms to SAE J1962 “Diagnostic Connector.” The procedure shall be done in accordance with SAE J1962 “Diagnostic Connector” (JUN92). This incorporation of reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of all the SAE documents cited above may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001. Copies may be inspected at the EPA Docket No. A–94–21 at EPA’s Air Docket, (LE–131) Room 1500 M, 1st Floor, Waterside Mall, 1200 Pennsylvania Ave., NW., Washington, DC, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(b) The test system shall be capable of communicating with the standard data link connector of vehicles with certified OBD systems.

(c) The test system shall be capable of checking for the monitors supported by the on-board diagnostic system and the evaluation status of supported monitors (test complete/test not complete) in Mode $01$ PID $01$, as well as be able to request the diagnostic trouble codes, as specified in SAE J1979. In addition, the system shall have the capability to include bi-directional communication for control of the evaporative canister vent solenoid. SAE J1979 is incorporated by reference and approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of all the SAE documents cited above may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001. Copies may be inspected at the EPA Docket No. A–94–21 at EPA’s Air Docket, (LE–131) Room 1500 M, 1st Floor, Waterside Mall, 1200 Pennsylvania Ave., NW., Washington, DC, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(d) [Reserved]

§ 85.2232 Calibrations, adjustments—EPA 81.

(a) Applicability. The requirements of this subsection apply to short tests conducted under Emissions Performance Warranty through December 31, 1993. The requirements of § 85.2233 apply concurrently until December 31, 1993, after which the requirements of § 85.2233 are solely in effect. The following exceptions apply: In a state where the Administrator has approved a SIP revision providing for implementation of a basic centralized program meeting the requirements of part 51, subpart S of this chapter, the requirements of this section are concurrently in effect until June 30, 1994 for 1995 and earlier model year vehicles or engines; in a state where the Administrator has approved a SIP revision providing for implementation of an enhanced program meeting the requirements of part 51, subpart S