system response time to exceed 13 seconds to 90 percent of a step change in input, whichever is less.

(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.

§§ 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 loaded test dynamometer shall be adjusted to produce a load of 9.0 ±1.0 hp at 30 mph.

(c) Speed shall be measured from the dynamometer roll(s) with an accuracy of ±1.5 mph at 30 mph true roll speed.

§ 85.2230 Steady state test dynamometer—EPA 91.

(a) Special calendar and model year applicability. The requirements of §85.2229 apply concurrently for tests conducted under Emission Performance Warranty on 1995 and earlier model year vehicles or engines until December 31, 1993, after which the requirements of this section 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