

(3) A graphic representation of the range of acceptable speed tolerances is found in §86.115 of this chapter.

(c) The US06 driving cycle is set forth in appendix I of part 86 of this chapter.

(d) The SC03 driving cycle is set forth in appendix I of part 86 of this chapter.

[71 FR 77933, Dec. 27, 2006, as amended at 76 FR 39531, July 6, 2011]

#### § 600.110-08 Equipment calibration.

The equipment used for fuel economy testing must be calibrated according to the provisions of §§86.116 and 86.216 of this chapter.

[71 FR 77933, Dec. 27, 2006]

#### § 600.111-08 Test procedures.

This section provides test procedures for the FTP, highway, US06, SC03, and the cold temperature FTP tests. Testing shall be performed according to test procedures and other requirements contained in this part 600 and in part 86 of this chapter, including the provisions of part 86, subparts B, C, and S. Test hybrid electric vehicles using the procedures of SAE J1711 (incorporated by reference in §600.011). For FTP testing, this generally involves emission sampling over four phases (bags) of the UDDS (cold-start, transient, warm-start, transient); however, these four phases may be combined into two phases (phases 1 + 2 and phases 3 + 4). Test plug-in hybrid electric vehicles using the procedures of SAE J1711 (incorporated by reference in §600.011) as described in §600.116-12. Test electric vehicles using the procedures of SAE J1634 (incorporated by reference in §600.011) as described in §600.116-12.

(a) *FTP testing procedures.* The test procedures to be followed for conducting the FTP test are those prescribed in §§86.127 through 86.138 of this chapter, as applicable, except as provided for in paragraph (b)(5) of this section. (The evaporative loss portion of the test procedure may be omitted unless specifically required by the Administrator.)

(b) *Highway fuel economy testing procedures.* (1) The Highway Fuel Economy Dynamometer Procedure (HFET) consists of a preconditioning highway driving sequence and a measured highway driving sequence.

(2) The HFET is designated to simulate non-metropolitan driving with an average speed of 48.6 mph and a maximum speed of 60 mph. The cycle is 10.2 miles long with 0.2 stop per mile and consists of warmed-up vehicle operation on a chassis dynamometer through a specified driving cycle. A proportional part of the diluted exhaust emission is collected continuously for subsequent analysis of hydrocarbons, carbon monoxide, carbon dioxide using a constant volume (variable dilution) sampler. Diesel dilute exhaust is continuously analyzed for hydrocarbons using a heated sample line and analyzer. Methanol and formaldehyde samples are collected and individually analyzed for methanol-fueled vehicles (measurement of methanol and formaldehyde may be omitted for 1993 through 1994 model year methanol-fueled vehicles provided a HFID calibrated on methanol is used for measuring HC plus methanol). Methanol, ethanol, formaldehyde, and acetaldehyde samples are collected and individually analyzed for ethanol fueled vehicles.

(3) Except in cases of component malfunction or failure, all emission control systems installed on or incorporated in a new motor vehicle must be functioning during all procedures in this subpart. The Administrator may authorize maintenance to correct component malfunction or failure.

(4) The provisions of §86.128 of this chapter apply for vehicle transmission operation during highway fuel economy testing under this subpart.

(5) Section 86.129 of this chapter applies for determination of road load power and test weight for highway fuel economy testing. The test weight for the testing of a certification vehicle will be that test weight specified by the Administrator under the provisions of part 86 of this chapter. The test weight for a fuel economy data vehicle will be that test weight specified by the Administrator from the test weights covered by that vehicle configuration. The Administrator will base his selection of a test weight on the relative projected sales volumes of the various test weights within the vehicle configuration.