

(ii) In the case of electric vehicles, a description of all maintenance to electric motor, motor controller, battery configuration, or other components performed within 2,000 miles prior to fuel economy testing.

(iii) A copy of calibrations for engine, fuel system, and emission control devices, showing the calibration of the actual components on the test vehicle as well as the design tolerances.

(iv) In the case of electric vehicles, a copy of calibrations for the electric motor, motor controller, battery configuration, or other components on the test vehicle as well as the design tolerances.

(v) If calibrations for components specified in paragraph (b)(2) (iii) or (iv) of this section were submitted previously as part of the description of another vehicle or configuration, the original submittal may be referenced.

(c) The manufacturer shall submit the following fuel economy data:

(1) For vehicles tested to meet the requirements of part 86 (other than those chosen in accordance with § 86.085-24 (c) and (h)), the city and highway fuel economy results from all tests on that vehicle, and the test results adjusted in accordance with paragraph (g) of this section.

(2) For each fuel economy data vehicle, all individual test results (excluding results of invalid and zero mile tests) and these test results adjusted in accordance with paragraph (g) of this section.

(d) The manufacturer shall submit an indication of the intended purpose of the data (e.g., data required by the general labeling program or voluntarily submitted for specific labeling).

(e) In lieu of submitting actual data from a test vehicle, a manufacturer may provide fuel economy values derived from an analytical expression, e.g., regression analysis. In order for fuel economy values derived from analytical methods to be accepted, the expression (form and coefficients) must have been approved by the Administrator.

(f) If, in conducting tests required or authorized by this part, the manufacturer utilizes procedures, equipment, or facilities not described in the Application for Certification required in

§ 86.087-21, the manufacturer shall submit to the Administrator a description of such procedures, equipment, and facilities.

(g)(1) The manufacturer shall adjust all test data used for fuel economy label calculations in subpart D and average fuel economy calculations in subpart F for passenger automobiles within the categories identified in paragraphs (a)(1) and (a)(2) of § 600.510. The test data shall be adjusted in accordance with (g)(3) or (g)(4) as applicable.

(2) The manufacturer shall only adjust the test data used for fuel economy label calculations, in subpart D for light trucks within the categories identified in paragraphs (a)(3) through (a)(6) of § 600.510. The test data shall be adjusted in accordance with (g)(3) or (g)(4) as applicable.

(3) The manufacturer shall adjust all test data generated by vehicles with engine-drive system combinations with more than 6,200 miles by using the following equation:

$$FE_{4,000mi} = FE_r [0.979 + 5.25 \times 10^{-6} (mi)]^{-1}$$

Where:

$FE_{4,000mi}$  = Fuel economy data adjusted to 4,000-mile test point rounded to the nearest 0.1 mpg.

$FE_r$  = Tested fuel economy value rounded to the nearest 0.1 mpg.

$mi$  = System miles accumulated at the start of the test rounded to the nearest whole mile.

(4) For vehicles with 6,200 miles or less accumulated, the manufacturer is not required to adjust the data.

[50 FR 27185, July 1, 1985]

**§ 600.006-89 Data and information requirements for fuel economy vehicles.**

(a) For certification vehicles with less than 10,000 miles, the requirements of this section are considered to have been met except as noted in paragraph (c) of this section.

(b)(1) The manufacturer shall submit the following information for each fuel economy data vehicle:

(i) A description of the vehicle, exhaust emission test results, applicable deterioration factors, adjusted exhaust emission levels, and test fuel property values as specified in § 600.113-93 except

as specified in paragraph (h) of this section.

(ii) A statement of the origin of the vehicle including total mileage accumulation, and modification (if any) form the vehicle configuration in which the mileage was accumulated. (For modifications requiring advance approval by the Administrator, the name of the Administrator's representative approving the modification and date of approval are required.) If the vehicle was previously used for testing for compliance with part 86 of this chapter or previously accepted by the Administrator as a fuel economy data vehicle in a different configuration, the requirements of this paragraph may be satisfied by reference to the vehicle number and previous configuration.

(iii) A statement that the fuel economy data vehicle, with respect to which data are submitted:

(A) Has been tested in accordance with applicable test procedures,

(B) Is, to the best of the manufacturer's knowledge, representative of the vehicle configuration listed, and

(C) Is in compliance with applicable exhaust emission standards.

(2) The manufacturer shall retain the following information for each fuel economy data vehicle, and make it available to the Administrator upon request:

(i) A description of all maintenance to engine, emission control system, or fuel system, or fuel system components performed within 2,000 miles prior to fuel economy testing.

(ii) In the case of electric vehicles, a description of all maintenance to electric motor, motor controller, battery configuration, or other components performed within 2,000 miles prior to fuel economy testing.

(iii) A copy of calibrations for engine, fuel system, and emission control devices, showing the calibration of the actual components on the test vehicle as well as the design tolerances.

(iv) In the case of electric vehicles, a copy of calibrations for the electric motor, motor controller, battery configuration, or other components on the test vehicle as well as the design tolerances.

(v) If calibrations for components specified in paragraph (b)(2) (iii) or (iv)

of this section were submitted previously as part of the description of another vehicle or configuration, the original submittal may be referenced.

(c) The manufacturer shall submit the following fuel economy data:

(1) For vehicles tested to meet the requirements of 40 CFR part 86 (other than those chosen in accordance with 40 CFR 86.1829-01(a) or 40 CFR 86.1844-01), the city and highway fuel economy results from all tests on that vehicle, and the test results adjusted in accordance with paragraph (g) of this section.

(2) For each fuel economy data vehicle, all individual test results (excluding results of invalid and zero mile tests) and these test results adjusted in accordance with paragraph (g) of this section.

(d) The manufacturer shall submit an indication of the intended purpose of the data (e.g., data required by the general labeling program or voluntarily submitted for specific labeling).

(e) In lieu of submitting actual data from a test vehicle, a manufacturer may provide fuel economy values derived from an analytical expression, e.g., regression analysis. In order for fuel economy values derived from analytical methods to be accepted, the expression (form and coefficients) must have been approved by the Administrator.

(f) If, in conducting tests required or authorized by this part, the manufacturer utilizes procedures, equipment, or facilities not described in the Application for Certification required in 40 CFR 86.087-21 or 40 CFR 86.1844-01 as applicable, the manufacturer shall submit to the Administrator a description of such procedures, equipment, and facilities.

(g)(1) The manufacturer shall adjust all test data used for fuel economy label calculations in subpart D and average fuel economy calculations in subpart F for the classes of automobiles within the categories identified in paragraphs (a)(1) through (6) of § 600.510. The test data shall be adjusted in accordance with paragraph (g) (3) or (4) as applicable.

(2) [Reserved]

(3) The manufacturer shall adjust all test data generated by vehicles with engine-drive system combinations with

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more than 6,200 miles by using the following equation:

$$FE_{4,000mi} = FE_T [0.979 + 5.25 \times 10^{-6} (\text{mi})]^{-1}$$

Where:

$FE_{4,000mi}$  = Fuel economy data adjusted to 4,000-mile test point rounded to the nearest 0.1 mpg.

$FE_T$  = Tested fuel economy value rounded to the nearest 0.1 mpg.

$mi$  = System miles accumulated at the start of the test rounded to the nearest whole mile.

(4) For vehicles with 6,200 miles or less accumulated, the manufacturer is not required to adjust the data.

(h) For light-duty fuel economy trucks over 6000 lbs GVWR, the manufacturer must submit emissions data generated while using the following test weight basis:

(1) Adjusted Loaded Vehicle Weight (ALVW) as defined in §86.094-2 of this chapter; or

(2) Loaded Vehicle Weight (LVW) as defined in §86.082-2 of this chapter, in which case the Administrator reserves the right to either require the manufacturer to test using ALVW and submit the data or submit the vehicle for testing by the Administrator for emission standards compliance.

[51 FR 37850, Oct. 24, 1986, as amended at 59 FR 39652, Aug. 3, 1994; 64 FR 23973, May 4, 1999]

### § 600.007-08 Vehicle acceptability.

(a) All certification vehicles and other vehicles tested to meet the requirements of part 86 of this chapter (other than those chosen per §86.1829-01(a) of this chapter), are considered to have met the requirements of this section.

(b) Any vehicle not meeting the provisions of paragraph (a) of this section must be judged acceptable by the Administrator under this section in order for the test results to be reviewed for use in subpart C or F of this part. The Administrator will judge the acceptability of a fuel economy data vehicle on the basis of the information supplied by the manufacturer under §600.006(b). The criteria to be met are:

(1) A fuel economy data vehicle may have accumulated not more than 10,000 miles. A vehicle will be considered to have met this requirement if the en-

gine and drivetrain have accumulated 10,000 or fewer miles. The components installed for a fuel economy test are not required to be the ones with which the mileage was accumulated, e.g., axles, transmission types, and tire sizes may be changed. The Administrator will determine if vehicle/engine component changes are acceptable.

(2) A vehicle may be tested in different vehicle configurations by change of vehicle components, as specified in paragraph (b)(1) of this section, or by testing in different inertia weight classes. Also, a single vehicle may be tested under different test conditions, i.e., test weight and/or road load horsepower, to generate fuel economy data representing various situations within a vehicle configuration. For purposes of this part, data generated by a single vehicle tested in various test conditions will be treated as if the data were generated by the testing of multiple vehicles.

(3) The mileage on a fuel economy data vehicle must be, to the extent possible, accumulated according to §86.1831 of this chapter.

(4) Each fuel economy data vehicle must meet the same exhaust emission standards as certification vehicles of the respective engine-system combination during the test in which the city fuel economy test results are generated. This may be demonstrated using one of the following methods:

(i) The deterioration factors established for the respective engine-system combination per §86.1841-01 of this chapter as applicable will be used; or

(ii) The fuel economy data vehicle will be equipped with aged emission control components according to the provisions of §86.1823-08 of this chapter.

(5) The calibration information submitted under §600.006(b) must be representative of the vehicle configuration for which the fuel economy and carbon-related exhaust emissions data were submitted.

(6) Any vehicle tested for fuel economy or carbon-related exhaust emissions purposes must be representative of a vehicle which the manufacturer intends to produce under the provisions of a certificate of conformity.

(7) For vehicles imported under §85.1509 or §85.1511(b)(2), (b)(4), (c)(2),