

Environmental Protection Agency

§ 86.427-78

§ 86.423-78 Test vehicles.

(a)(1) Before beginning service accumulation on a test vehicle, the manufacturer may perform a zero-kilometer exhaust emission test.

(2) If such a test is performed, the data shall be submitted to the Administrator when the application is submitted.

(3) Zero-kilometer test results shall not be included in the determination of deterioration factors.

(b) Once a manufacturer begins to operate a test vehicle, as indicated by compliance with paragraph (a) of this section, the data from the vehicle will be used, unless specified otherwise by the Administrator. Discontinuation of a vehicle shall be allowed only with the written consent of the Administrator.

(c) Test vehicles shall be calibrated at zero kilometres within the production tolerances applicable to the manufacturer's specifications.

(d) The Administrator may disqualify a vehicle which receives assembly line operations and adjustments which will not be performed on production vehicles.

[42 FR 1126, Jan. 5, 1977, as amended at 49 FR 48138, Dec. 10, 1984]

§ 86.425-78 Test procedures.

(a) Motorcycle emission test procedures are found in subpart F.

(b) The Administrator may prescribe emission test procedures for any motorcycle which he determines is not susceptible to satisfactory testing by the procedures set forth in subpart F.

(c) Testing of any type with respect to any test vehicle other than that specified in this subpart and subpart F is not allowed except as specifically authorized by the Administrator.

§ 86.426-78 Service accumulation.

(a) The procedure for service accumulation will be the Durability Driving Schedule as specified in appendix IV to this part. A modified procedure may also be used if approved in advance by the Administrator. Except with the advance approval of the Administrator, all vehicles will accumulate distance at a measured curb mass which is within 5 kg (11.0 lb) of the loaded vehicle mass specified by the Administrator.

(b) During service accumulation, vehicles shall not be operated for more than 12 hours during an operating sequence. Engine shutdowns are permitted during the operating sequence, but the periods of shutdown are not included in the 12 hour total. Following each operating sequence, the vehicle shall soak, without operation, for a minimum of 8 hours. During soak periods, the vehicle shall be exposed to normal outside ambient temperatures and humidity conditions unless vehicle maintenance or servicing is being performed.

(c) The manufacturer's recommended shifting procedure will be used for laps 1 through 10. Lap 11 shifts (W.O.T. accelerations) must be conducted at the manufacturer's recommended maximum safe engine speed.

[42 FR 1126, Jan. 5, 1977, as amended at 42 FR 56737, Oct. 28, 1977]

§ 86.427-78 Emission tests.

(a)(1) Each test vehicle shall be driven with all emission control systems installed and operating for the following total test distances, or for such lesser distances as the Administrator may agree to as meeting the objectives of this procedure. (See § 86.419 for class explanation.)

Displacement class	Total test distance (kilometers)	Minimum test distance (kilometers)	Minimum number of tests
I	6,000	2,500	4
II	9,000	2,500	4
III	15,000	3,500	4

(2) A zero kilometer emission test may be performed prior to the beginning of service accumulation.

(b) All vehicles shall undergo at least four emission tests; one at the minimum test distance, one before and one after periodic maintenance, and one at the total test distance. If no maintenance is scheduled, then at least two tests will be performed, at equal intervals, between the minimum and total test distances. Additional tests may be performed; such tests must be at equal intervals and approved by the Administrator prior to starting service accumulation.

§ 86.428-80

40 CFR Ch. I (7-1-04 Edition)

(c) Where the Administrator agrees to a lesser distance for service accumulation, he may modify the maintenance provisions of this subpart.

(d) All tests required by this subpart must be conducted at an accumulated distance within 250 kilometers (155 mi) of the nominal distance at each test point.

(e)(1) If a manufacturer conducts multiple tests at any test point at which the data are intended to be used in the calculation of the deterioration factor, the number of tests must be the same at each point and may not exceed three valid tests unless the manufacturer chooses to average the test results.

(2) If the manufacturer chooses to average the test results at a test point, he may conduct more tests than the minimum number of tests conducted at any other test point.

The results of the multiple tests shall be averaged to create a single value which is the test point value used in the deterioration factor calculation specified in § 86.432-78.

(3) When using this option to generate data for a particular test point, the manufacturer must include in the average all valid test data generated at that test point.

(4) The manufacturer shall follow the same procedure for all exhaust pollutants.

(5) The test results obtained from the emission tests performed before and after maintenance affecting emissions shall not be averaged.

(f) The Administrator may require that any one or more of the test vehicles be submitted to him, at such places as he may designate, for the purpose of conducting emissions tests. The Administrator may specify that he will conduct such testing at the manufacturer's facility, in which case instrumentation and equipment specified by the Administrator shall be made available by the manufacturer for test operations. Any testing conducted at a manufacturer's facility pursuant to this paragraph shall be scheduled by the manufacturer as promptly as possible.

(g) Whenever the Administrator conducts a test on a test vehicle, the results of that test, unless subsequently

invalidated by the Administrator, shall comprise the data for the vehicle at that prescribed test point and the manufacturer's data for that prescribed test point shall not be used in determining compliance with emission standards.

[42 FR 1126, Jan. 5, 1977, as amended at 49 FR 48139, Dec. 10, 1984]

§ 86.428-80 Maintenance, scheduled; test vehicles.

(a) Periodic maintenance on the engine, emission control system, and fuel system of test vehicles shall be scheduled for performance at the same distance intervals that will be specified in the manufacturer's maintenance instructions furnished to the ultimate purchaser. Such maintenance shall be performed only under the following provisions.

(b) Periodic major engine tune-ups to the manufacturer's specifications may be performed no more frequently than as follows nor may any tune-up be performed within 1000 km prior to the official test.

Displacement class	Minimum interval (kilometer)
I	3,000
II	3,000
III	4,000

(c) A scheduled major engine tune-up shall be restricted to items listed below and shall be conducted in a manner consistent with service instructions and specifications provided by the manufacturer for use by customer service personnel. The following items may be inspected, replaced, cleaned, adjusted, and/or serviced as required: (1) Breaker points, timing, (2) idle speed and idle air/fuel mixture, (3) valve lash, (4) engine bolt torque, and (5) spark plugs.

(d) The Administrator will specify the ignition timing, idle air fuel mixture and other fuel system adjustments to be used at each tune-up. The settings selected will be those the Administrator deems appropriate within the physically available range.

(e) Periodic change of engine and transmission oil, and change or service of oil, air, and fuel filters will be allowed at the same distance intervals