

**PART 610—FUEL ECONOMY
RETROFIT DEVICES**

TEST PROCEDURES AND EVALUATION
CRITERIA

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Subpart A—General Provisions

Subpart A—General Provisions

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(a) The purpose of an evaluation program initiated under these rules is to determine, in accordance with standardized procedures, the performance of various retrofit devices applicable to automobiles for which fuel economy improvement claims are made, and to compile and disseminate the results of the evaluation. It should be stressed that the role of this program will be the generation, analysis and dissemination of technical data, and not the approval or certification of retrofit devices.

**Subpart B—Evaluation Criteria for the
Preliminary Analysis**

(1) Through engineering or statistical analysis of data from vehicle tests, the evaluation program will determine the effects on fuel economy, exhaust emissions, durability and driveability of the applicable vehicles due to the installation or use of the devices. The evaluation program will also include additional procedures, whenever determined by the Administrator as necessary, to evaluate the durability of the devices themselves, their effects on vehicle durability or other effects only evident over the course of extended mileage accumulation.

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(b) Data generated in an evaluation program by the Administrator of the Environmental Protection Agency (EPA) are public information and will be published in the FEDERAL REGISTER and elsewhere for use by the Federal Trade Commission and the public. The results of any evaluation conducted by the Administrator may be used in any subsequent investigation or enforcement action in the event that a device is marketed in violation of Federal or state law.

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AUTHORITY: Sec. 511, Motor Vehicle Information and Cost Savings Act, as amended (sec. 301, Pub. L. 94-163, 89 Stat. 915 (15 U.S.C. 2011)).

SOURCE: 44 FR 17946, Mar. 23, 1979, unless otherwise noted.

§ 610.11 Definitions.

(a) Except as specifically defined below, all terms used in this part which are defined in 40 CFR part 86 or 40 CFR part 600 shall have the meanings provided therein.

(1) "Retrofit device" or "device" means:

(i) Any component, equipment, or other device (except a flow measuring

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instrument or other driving aid, or lubricant or lubricant additive) which is designed to be installed in or on an automobile as an addition to, as a replacement for, or through alteration or modification of, any original component, or other devices; or

(ii) Any fuel additive which is to be added to the fuel supply of an automobile by means other than fuel dispenser pumps; and

(iii) Which any manufacturer, dealer, or distributor of such device represents will provide higher fuel economy than would have resulted with the automobile as originally equipped, as determined under rules of the Administrator.

(2) "Automobile" means any four-wheeled vehicle propelled by fuel which is manufactured primarily for use on public streets, roads, and highways (except any vehicle operated exclusively on a rail or rails), and which is rated at 6,000 lbs. gross vehicle weight or less.

(3) "Fuel economy" means the average number of miles traveled by an automobile per gallon of gasoline (or equivalent amount of other fuel) consumed, as determined by the Administrator in accordance with procedures established under subpart D or F.

(4) "Manufacturer" means a person or company which is engaged in the business of producing or assembling, and which has primary control over the design specifications, of a retrofit device for which a fuel economy improvement claim is made.

(5) "Retrofit" means the addition of a new item, modification or removal of an existing item of equipment beyond that of regular maintenance, on an automobile after its initial manufacture.

(6) "Federal Test Procedure" or "City Fuel Economy Test" means the test procedures specified in 40 CFR part 86, except as those procedures are modified in these protocols.

(7) "Highway Fuel Economy Test" means the test procedure described in § 600.111(b).

(8) "Operator" means any person who installs, services or maintains a retrofit device in an automobile or who operates an automobile with a retrofit device installed.

(9) "Device integrity" means the durability of a device and effect of its malfunction on vehicle safety or other parts of the vehicle system.

(10) "Test data" means any information which is a quantitative measure of any aspect of the behavior of a retrofit device.

(11) "Testing agent" means any person who develops test data on a retrofit device.

(12) "Preconditioning" means the operation of an automobile through one (1) EPA Urban Dynamometer Driving Schedule, described in 40 CFR part 86.

(13) "Configuration" means the mechanical arrangement, calibration and condition of a test automobile, with particular respect to carburetion, ignition timing, and emission control systems.

(14) "Baseline configuration" means the unretrofitted test configuration, tuned in accordance with the automobile manufacturer's specifications.

(15) "Adjusted configuration" means the test configuration after adjustment of engine calibrations to the retrofit specifications, but excluding retrofit hardware installation.

(16) "Retrofitted configuration" means the test configuration after adjustment of engine calibrations to the retrofit specifications *and* after all retrofit hardware has been installed.

(17) "Data fleet" means a fleet of automobiles tested at "zero device-miles" in "baseline configuration," the "retrofitted configuration" and in some cases the "adjusted configuration," in order to determine the changes in fuel economy and exhaust emissions due to the "retrofitted configuration," and where applicable the changes due to the "adjusted configuration," as compared to the fuel economy and exhaust emissions of the "baseline configuration."

(18) "Durability fleet" means a fleet of automobiles operated for mileage accumulation used to assess deterioration effects associated with the retrofit device.

(19) "Zero device-miles" means the period of time between retrofit installation and the accumulation of 100 miles of automobile operation after installation.

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(20) "Independent laboratory" means a test facility operated independently of any motor vehicle, motor vehicle engine, or retrofit device manufacturer capable of performing retrofit device evaluation tests. Additionally, the laboratory shall have no financial interests in the outcome of these tests other than a fee charged for each test performed.

(21) "Evaluation program" or "program" means the sequence of analyses and tests prescribed by the Administrator as described in § 610.13 in order to evaluate the performance of a retrofit device.

(22) "Preliminary analysis" means the engineering analysis performed by EPA prior to testing prescribed by the Administrator based on data and information submitted by a manufacturer or available from other sources.

[44 FR 17946, Mar. 23, 1979, as amended at 49 FR 18489, May 1, 1984]

§ 610.12 Program initiative.

A retrofit device evaluation program will be initiated as follows:

(a) At the request of the Federal Trade Commission (FTC) when it has reason to believe that fuel economy representation made for a retrofit device being marketed may be inadequate,

(b) At the EPA Administrator's initiative, or

(c) Upon the application of any manufacturer of a retrofit device (or prototype thereof) for which a fuel economy improvement claim is made.

§ 610.13 Program structure.

(a) Each device evaluation program will consist of up to three phases:

(1) A preliminary analysis of available information and test data on the device to be performed by the EPA Administrator;

(2) Designing and conducting of a sequence of tests to determine device effectiveness if considered necessary by virtue of the Administrator's preliminary analysis; and

(3) Publication in the FEDERAL REGISTER, and submission to the Department of Transportation and to the Federal Trade Commission, of a summary of the results of any tests conducted under subparts C through F, or if none

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were conducted, then a summary of the results of the preliminary analysis conducted under subpart B; together with the Administrator's conclusions as to the effect of the tested retrofit device on fuel economy and exhaust emissions, and as to any other information that the Administrator determines is relevant in evaluating such device.

(b) Each of the above phases may, as appropriate, include the use of statistically valid sample sizes and statistical evaluation of measured results.

§ 610.14 Payment of program costs.

(a) All costs incurred in an evaluation program initiated at the request of the FTC or at the Administrator's initiative, including the cost of purchasing any necessary quantity of the device under evaluation, will be borne by the United States.

(b) For those evaluation programs initiated at the request of a manufacturer of a retrofit device, should the Administrator test the device, or cause the device to be tested, as part of the evaluation, then that manufacturer shall supply, at his own expense, one or more samples of the device to the Administrator and shall be liable for the costs of testing which are incurred by the Administrator. The manufacturer shall also be liable for the cost of any preliminary testing at an independent testing laboratory performed as part of the evaluation program. Apart from the costs of testing a device, EPA shall be responsible for costs of formulating its engineering evaluation of a device.

[44 FR 17946, Mar. 23, 1979, as amended at 49 FR 18838, May 3, 1984]

§ 610.15 Eligibility for participation.

Participation in an evaluation program initiated under § 610.12(c) will be available to any person or company who agrees to follow the procedures set forth in these protocols. Failure to conform to any aspect of these protocols, without the approval of the Administrator, may be interpreted as withdrawal from participation in the program.

§ 610.16 Applicant's responsibilities.

Each applicant for evaluation under § 610.12(c) will be responsible for the following: