PART 85—CONTROL OF AIR POLLUTION FROM MOBILE SOURCES

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AUTHORITY: 42 U.S.C. 7521, 7522, 7524, 7525, 7541, 7542, 7601(a).

Subparts A–E [Reserved]

Subpart F—Exemption of Aftermarket Conversions From Tampering Prohibition

SOURCE: 59 FR 48490, Sept. 21, 1994, unless otherwise noted.

§ 85.501 General applicability.

Sections 85.501 through 85.505 are applicable to aftermarket conversion systems for which an enforcement exemption is sought from the tampering prohibitions contained in section 203 of the Act.

§ 85.502 Definitions.

(a) *The Act* means the Clean Air Act as amended (42 U.S.C. 7501 *et seq.*).

(b) *Administrator* means the Administrator of the Environmental Protection Agency or his or her authorized representative.

(c) *Aftermarket conversion system* means any combination of hardware, including but not limited to fuel storage and fuel metering hardware, which is installed on a light-duty vehicle, light-duty truck, heavy-duty vehicle, or heavy-duty engine with the effect of allowing the vehicle or engine to operate on a fuel other than the fuel which the vehicle or engine was originally certified to use. Components which do not affect the emissions performance of the converted vehicle or engine, as determined by the Administrator, are not included for the purposes of this subpart.

(d) *Aftermarket conversion installer* means any company or individual which installs an aftermarket conversion system on a light-duty vehicle, light-duty truck, heavy-duty vehicle, or heavy-duty engine with the effect of allowing the vehicle or engine to operate on a fuel other than the fuel which the vehicle or engine was originally certified to use.

(e) *Aftermarket conversion certifier* means any company or individual which assembles the various aftermarket conversion hardware components into a particular combination or configuration and certifies that combination or configuration according to the provisions of this subpart.

(f) *Model Year* means the manufacturer's annual production period (as determined by the Administrator) which includes January 1 of such calendar year: *Provided,* That if the manufacturer has no annual production period, the term *model year* shall mean the calendar year.

§ 85.503 Conditions of exemption.

(a) As a condition of receiving an enforcement exemption from the tampering prohibitions contained in section 203 of the Act, an aftermarket conversion certifier must certify the aftermarket conversion system, using the applicable procedures in part 86 of this chapter, and meeting the applicable standards and requirements in §§ 85.504 and 85.505, and accept liability for in-use performance of the aftermarket conversion system as outlined in this part.

(b) As a condition of receiving an enforcement exemption from the tampering prohibitions contained in section 203 of the Act, an aftermarket conversion installer must:

(1) Install a conversion which has been certified as a new vehicle or engine, using the applicable procedures in part 86 of this chapter, and meeting the applicable standards and requirements in §§ 85.504 and 85.505; and

(2) Accept liability for in-use performance of the aftermarket conversion system as outlined in this part.

§ 85.504 Applicable standards.

(a) The emission standards applicable to conversions of 1993 and later model year vehicles and engines are:

(1) All of the requirements that would apply if the conversion were being certified as if it were a new vehicle or engine.

(2) If a vehicle or engine to be converted was originally certified to a NO_X or particulate family emission limit other than the applicable new vehicle NO_X or particulate standard, the family emission limit is the applicable standard.

(b) The emission standards applicable to conversions of 1992 and earlier model year vehicles and engines are:

(1) *Exhaust hydrocarbons (as applicable by fuel type).* The Tier 0 hydrocarbon standards, as applicable by vehicle class, contained in §§ 86.094–8 and 86.094–9 of this chapter, and the hydrocarbon standards, as applicable by engine class, contained in §§ 86.094–10 and 86.094–11 of this chapter;

(2) *CO, NO_X and particulate.* The applicable CO, NO_X and particulate standards or NO_X and particulate family

emission limits the vehicle or engine was originally certified as meeting;

(3) *Evaporative hydrocarbons.* Any evaporative requirements applicable to the original vehicle or engine will remain applicable to the conversion if the converted vehicle or engine retains the ability to operate on the fuel which it was designed and certified to use.

§ 85.505 Labeling.

(a) The aftermarket conversion certifier shall provide with each aftermarket conversion system a supplemental emission control information label, which shall be affixed by the aftermarket conversion installer in a permanent manner to each converted vehicle, in a location adjacent to the original emission control information label required in § 86.092–35 of this chapter. If the supplemental label cannot be placed adjacent to the original label, it shall be placed in a location where it will be seen by a person viewing the original label.

(b) The supplemental label shall be affixed in such a manner that it cannot be removed without destroying or defacing the label. The label shall not be affixed to any equipment which is easily detached from the vehicle.

(c) The supplemental label shall clearly state that the vehicle has been equipped with an aftermarket conversion system designed to allow it to operate on a fuel other than the fuel it was originally manufactured to operate on, and shall identify the fuel(s) which the vehicle is designed to use.

(d) The supplemental label shall show the vehicle model year; the aftermarket conversion certifier's name, address and telephone number; the installer's name, address, and telephone number; the date on which the aftermarket conversion system was installed; the mileage of the vehicle at the time of the conversion; and shall state that the converted vehicle complies with federal emission requirements.

(e) The supplemental label shall list any original parts that were removed during installation of the aftermarket conversion system, as well as any changes in tune-up specifications required for the aftermarket conversion system.

Subparts G–N [Reserved]

Subpart O—Urban Bus Rebuild Requirements

SOURCE: 58 FR 21386, Apr. 21, 1993, unless otherwise noted.

§ 85.1401 General applicability.

The requirements of this subpart shall be applicable to 1993 and earlier model year urban buses operating in consolidated metropolitan statistical areas and metropolitan statistical areas with a 1980 population of 750,000 or more that have their engines rebuilt or replaced after January 1, 1995.

§ 85.1402 Definitions.

The definitions of this section apply to this subpart.

Agency means the Environmental Protection Agency.

Certified Equipment or *Retrofit/Rebuild Equipment* means equipment certified in accordance with the certification regulations contained in this subpart.

Emission Related Parts means those parts installed for the specific purpose of controlling emissions or those components, systems, or elements of design which must function properly to assure continued emission compliance.

Engine Configuration means the set of components, tolerances, specifications, design parameters, and calibrations related to the emissions performance of the engine and specific to a subset of an engine family having a unique combination of displacement, fuel injection calibration, auxiliary emission control devices and emission control system components.

Engine Rebuild means an activity, occurring over one or more maintenance events, involving:

(1) Disassembly of the engine including the removal of the cylinder head(s); and

(2) The replacement or reconditioning of more than one major cylinder component in more than half of the cylinders.

Engine Replacement means the removal of an engine from the coach followed by the installation of another engine.

In-Use Compliance Period for purposes of in-use testing means a period of 150,000 miles.

Maintenance Event means a single maintenance activity for which the engine is removed from service. Once the engine is returned to service, the maintenance event is considered done.

Major Cylinder Component means piston assembly, cylinder liner, connecting rod, or piston ring set.

MOD Director means Director of Manufacturers Operations Division, Office of Mobile Sources—Office of Air and Radiation of the Environmental Protection Agency.

Office Director means the Director for the Office of Mobile Sources—Office of Air and Radiation of the Environmental Protection Agency or an authorized representative of the Office Director.

Operator means transit authority, state, city department, or private or public entity controlling the use of one or more urban buses.

Original Engine Configuration means the engine configuration at time of initial sale.

Original Equipment Part means a part present in or on an engine at the time an urban bus is originally sold to the ultimate purchaser.

Scheduled Maintenance means those maintenance events required by the equipment certifier in order to ensure that the retrofitted engine will maintain its emissions performance over the in-use compliance period.

Urban bus has the meaning set forth in § 86.091–2 of this chapter.

Written Instructions for Proper Maintenance and Use means those maintenance and operation instructions specified in the warranty as being necessary to assure compliance of the retrofit/rebuild equipment with applicable emission standards for the in-use compliance period.

§ 85.1403 Particulate standard for pre-1994 model year urban buses effective at time of engine rebuild or engine replacement.

(a) Operators of urban buses in areas described in § 85.1401 shall be in compliance with one of the two programs described in paragraphs (b) and (c) of this section. An operator may switch between programs from year to year only if the operator has been in compliance with all the requirements of the newly chosen program at all times between January 1, 1995 and the date on which the operator chooses to switch programs.

(b) Program 1: Performance based requirement. Program 1 requires that affected urban buses meet a particulate standard of 0.10 g/bhp-hr effective at time of engine rebuild or replacement and thereafter. The requirement to meet the 0.10 g/bhp-hr standard is automatically waived if no equipment has been certified that meets the 0.10 g/bhp-hr standard and has a life cycle cost of $7,940 or less (in 1992 dollars) for the engine being rebuilt. Program 1 contains fallback requirements for engines for which the 0.10 g/bhp-hr standard is waived. Such urban bus engines must receive equipment that provides a 25 percent reduction in particulate emissions relative to the particulate level of the original engine configuration. This 25 percent reduction requirement is automatically waived if no equipment has been certified for the engine being rebuilt that provides a 25 percent reduction in particulate emissions and has a life cycle cost $2,000 or less (in 1992 dollars). In cases where equipment is not available to either meet a 0.10 g/bhp-hr standard for less than the applicable cost ceiling or achieve a 25 percent reduction for less than the applicable cost ceiling, the urban bus is required to be equipped with an engine rebuilt to the original engine configuration or a configuration certified to have a particulate level lower than that of the original engine configuration.

(1) Exhaust emissions from any urban bus for which this subpart is applicable shall not exceed a particulate standard of 0.10 grams per brake horsepower-hour (0.037 grams per megajoule) if equipment is available for the engine model of such urban bus at time of engine rebuild or engine replacement, as specified in paragraph (b)(1)(i) of this section.

(i) Equipment is available for a particular engine model if equipment has been certified to a particulate standard of 0.10 grams per brake horsepower-hour (0.037 grams per megajoule), and the equipment for the engine model has

been approved for certification for six months or more, and has a life cycle cost as determined under paragraph (b)(1)(ii) of this section that does not exceed the life cycle cost ceiling specified in paragraph (b)(1)(iii) of this section.

(ii) The life cycle cost of equipment is equal to the sum of the purchase price, the installation cost, the incremental fuel cost, the cost of any fuel additives required, and the incremental maintenance cost associated with the equipment each as defined in paragraphs (b)(1)(ii)(A) through (b)(1)(ii)(E) of this section minus an engine replacement credit as defined in paragraph (b)(1)(ii)(F) of this section if the equipment replaces an existing engine with a new engine.

(A) The purchase price is defined as the price at which the equipment (including all parts necessary to install and operate the equipment properly) is offered to the operator. The purchase price excludes reasonable shipping and handling fees and taxes, and equipment costs incurred by the urban bus operator for a standard rebuild.

(B)(*1*) The installation cost is defined as the labor cost of installing the equipment on an urban bus engine, incremental to a standard rebuild, based on a labor rate of $35 per hour. The installation cost is calculated using the following equation:

$$\text{Installation Cost} = \left(\begin{array}{c}\text{Incremental hours}\\ \text{for installation}\end{array}\right) \times \left(\frac{\$35}{\text{hour}}\right) \times \left(\frac{\text{CPI}_R}{\text{CPI}_{1992}}\right)$$

Where,

CPI_R is the most recent published Consumer Price Index at time of rebuild (for ''all items'' as published by the U.S. Bureau of Labor Statistics).

CPI_{1992} is the Consumer Price Index (for ''all items'' as published by the U.S. Bureau of Labor Statistics) for 1992.

(*2*) The estimated number of hours necessary to install the equipment will be determined as part of the equipment certification process, as detailed in § 85.1407.

(C) The incremental fuel cost is defined as the increased fuel costs or the fuel savings due to the use of the equipment. (By definition, fuel savings will be negative values.) The calculation of incremental fuel cost will depend on the type of equipment being installed.

(*1*)(*i*) For equipment not requiring a change from on road federal diesel fuel, the incremental fuel cost shall be calculated as follows:

$$\text{Incremental fuel cost} = \frac{\left(\begin{array}{c}\text{fuel economy}\\ \%\text{ reduction}\end{array}\right) \times (129.104\text{ miles})}{\frac{3.3\text{ miles}}{\text{gallon}}} \times \left(\frac{\$0.72}{\text{gallon}}\right) \times \frac{\text{CPI}_R}{\text{CPI}_{1992}} \text{S}$$

Where,

CPI_R is the most recent published Consumer Price Index at time of rebuild (for ''all items'' as published by the U.S. Bureau of Labor Statistics).

CPI_{1992} is the Consumer Price Index (for ''all items'' as published by the U.S. Bureau of Labor Statistics) for 1992.

(*ii*) The percent change in fuel economy will be determined as part of the equipment certification process, as detailed in § 85.1407. If equipment causes the fuel economy of the engine to increase, the value of the fuel economy %

reduction in the above equation shall be a negative value.

(*2*) For equipment requiring a fuel other than on-road federal diesel fuel, the incremental fuel cost shall be calculated as follows:

$$\text{Incremental fuel cost} = \begin{pmatrix}\text{Incremental}\\ \text{price at which}\\ \text{fuel is offered}\end{pmatrix} \times \begin{pmatrix}\text{Discounted}\\ \text{lifetime}\\ \text{miles}\end{pmatrix}$$

Where,

$$\text{Incremental price at which fuel is offered} = \begin{pmatrix}\text{Cost per mile}\\ \text{for}\\ \text{alternative fuel}\end{pmatrix} - \begin{pmatrix}\text{Cost per mile}\\ \text{for}\\ \text{diesel fuel}\end{pmatrix}$$

(*i*) For equipment/alternative fuel that is being certified under §85.1407 as available to all affected operators for less than the life cycle cost ceiling, the discounted lifetime mileage is 129,104 miles. For equipment/alternative fuel that is not being certified under §85.1407 as available to all affected operators for less than the life cycle cost ceiling, the discounted lifetime mileage is based on the age of the urban bus engine being rebuilt as specified in the following table:

Age of engine at time of rebuild	Discounted lifetime miles
5 Years	229,478
6 Years	204,881
7 Years	180,703
8 Years	155,902
9 Years	131,505
10 Years	109,680
11 Years	90,608
12 Years	70,200
13 Years	48,364
14 Years	25,000
15 or more Years	0

(*ii*) The cost per mile for diesel fuel is calculated based on the following equation:

$$\text{Cost per mile of diesel fuel} = \frac{\text{Price of diesel fuel per gallon, excluding taxes}}{\text{3.3 miles per gallon}}$$

(*iii*) For equipment/alternative fuel that is being certified under §85.1407 as available to all affected operators for less than the life cycle cost ceiling, the price of diesel fuel per gallon, excluding taxes, is $\$0.72 \times (CPI_R/CPI_{1992})$. For equipment/alternative fuel that is not being certified under §85.1407 as available to all affected operators for less than the life cycle cost ceiling, the price of diesel fuel per gallon, excluding taxes, is the price at which the operator currently purchases diesel fuel, excluding taxes.

(*iv*) The cost per mile for alternative fuels is calculated based on the following equation:

$$\text{Cost per mile for alternative fuel} = \frac{\left(\begin{array}{c}\text{Unit price of}\\ \text{alternative fuel,}\\ \text{excluding taxes}\end{array}\right)}{\left(\begin{array}{c}\text{Fuel economy of}\\ \text{alternatively}\\ \text{fueled engine}\end{array}\right)}$$

(*v*) In order for the equipment/alternative fuel to be required, the fuel supplier must provide a contract to the urban bus operator specifying the cost of the fuel for the life of the engine being retrofitted. The contract must specify the maximum incremental cost, compared to the cost of diesel fuel on a per mile basis, at which the fuel will be sold. As part of the contract, the fuel supplier must also provide on-site facilities, meeting all applicable safety and fire code requirements, for refueling the urban bus engines being retrofitted, unless the operator already has sufficient refueling facilities or the operator agrees to use off-site refueling facilities.

(*vi*) The fuel economy of the engine retrofitted with the equipment will be determined as part of the equipment certification process, as detailed in § 85.1407.

(D) For equipment requiring the use of a fuel additive, the fuel additive cost shall be calculated as follows:

$$\text{Fuel additive cost} = \frac{\left(\begin{array}{c}\text{Amount of fuel additive}\\ \text{required per gallon of fuel}\end{array}\right)\times\left(\begin{array}{c}\text{Discounted}\\ \text{lifetime miles}\end{array}\right)}{(\text{Fuel economy of engine})} \times\left(\begin{array}{c}\text{Price of fuel additive}\\ \text{per gallon}\\ \text{of fuel additive}\end{array}\right)$$

(*1*) For diesel-fueled engines, the fuel economy of the engine is 3.3 miles per gallon. For alternatively-fueled engines, the fuel economy of the engine shall be determined as part of the equipment certification process, as detailed in § 85.1407.

(*2*) For equipment/fuel additive that is being certified under § 85.1407 as available to all affected operators for less than the life cycle cost ceiling, the discounted lifetime mileage is 129,104 miles. For equipment/fuel additive that is not being certified under § 85.1407 as available to all affected operators for less than the life cycle cost ceiling, the discounted lifetime mileage is based on the age of the urban bus engine being rebuilt as specified in the following table:

Age of engine at time of rebuild	Discounted lifetime miles
5 Years	229,478
6 Years	204,881
7 Years	180,703
8 Years	155,902
9 Years	131,505
10 Years	109,680
11 Years	90,608
12 Years	70,200
13 Years	48,364
14 Years	25,000
15 or more Years	0

(*3*) The price of the fuel additive is the price at which the fuel additive supplier supplies the fuel additive to the urban bus operator. In order for the equipment/fuel additive to be required, the equipment/fuel additive supplier

must provide a contract to the urban bus operator specifying the maximum cost at which the fuel additive will be sold for the life of the engine being retrofitted.

(*4*) The amount of fuel additive required per gallon of diesel fuel will be determined as part of the equipment certification process, as detailed in § 85.1407.

(*E*) The incremental maintenance cost of the equipment is equal to the cost of the parts necessary for scheduled maintenance of the retrofit equipment incremental to cost of the parts necessary for maintenance of an original, non-retrofitted engine. The incremental maintenance cost will be determined as part of the equipment certification process, as detailed in § 85.1407.

(*F*) For equipment which replaces an existing urban bus engine with a new, previously unused engine, a credit will be applied to the life cycle cost. The engine replacement credit will be determined as follows:

$$\text{Engine Replacement Credit}_R = \$10{,}000 \times \left(\text{CPI}_R / \text{CPI}_{1992}\right)$$

Where,

CPI_R is the most recent published Consumer Price Index at time of rebuild (for ''all items'' as published by the U.S. Bureau of Labor Statistics).

$CP1_{1992}$ is the Consumer Price Index (for ''all items'' as published by the U.S. Bureau of Labor Statistics) for 1992.

(iii) The life cycle cost ceiling for complying with the 0.10 grams per brake horsepower-hour (0.037 grams per megajoule) particulate rebuild standard is calculated by the following equation at the time of rebuild:

$$\text{Life Cycle Cost Ceiling}_R = \$7{,}940 \times \left(\text{CPI}_R / \text{CPI}_{1992}\right)$$

Where,

CPI_R is the most recent published Consumer Price Index at time of rebuild (for ''all items'' as published by the U.S. Bureau of Labor Statistics).

CPI_{1992} is the Consumer Price Index (for ''all items'' as published by the U.S. Bureau of Labor Statistics) for 1992.

(2) If no equipment meets the provisions of paragraph (b)(1) of this section for a particular model of urban bus engine, then any urban bus for which this subpart is applicable shall use equipment that has been certified to achieve at least a 25 percent reduction in particulate emissions from the original certified particulate emission level of the urban bus engine model being rebuilt, if such equipment is available as specified in paragraph (b)(2)(i) of this section. If no certification data exists for the emission level of the original urban bus engine configuration as initially certified, then other test data collected over the heavy-duty engine Federal Test Procedure, or an approved alternative test procedure prescribed under § 85.1414, may be considered in determining the percent reduction.

(i) Equipment is available for a particular engine model if equipment has been certified to achieve at least a 25 percent reduction in particulate emissions from original levels, and the equipment for the engine model has been approved for certification for six months or more, and has a life cycle cost as determined under paragraph (b)(2)(ii) of this section that does not exceed the life cycle cost ceiling specified in paragraph (b)(2)(iii) of this section.

(ii) The life cycle cost of equipment is equal to the sum of the purchase price, the installation cost, the incremental fuel cost, the cost of any fuel additives required, and the incremental

maintenance cost associated with the equipment each as defined in paragraphs (b)(2)(ii)(A) through (b)(2)(ii)(E) of this section minus an engine replacement credit as defined in paragraph (b)(2)(ii)(F) of this section if the equipment replaces an existing engine with a new engine.

(A) The purchase price is defined as the price at which the equipment (including all parts necessary to install and operate the equipment properly) is offered to the operator. The purchase price excludes reasonable shipping and handling fees and taxes, and equipment costs incurred by the urban bus operator for a standard rebuild.

(B)(*1*) The installation cost is defined as the labor cost of installing the equipment on an urban bus engine, incremental to a standard rebuild, based on a labor rate of $35 per hour. The installation cost is calculated using the following equation:

$$\text{Installation Cost} = \left(\begin{array}{c}\text{Incremental hours}\\ \text{for installation}\end{array}\right) \times \left(\frac{\$35}{\text{hour}}\right) \times \left(\frac{CPI_R}{CPI_{1992}}\right)$$

Where,

CPI_R is the most recent published Consumer Price Index at time of rebuild (for ''all items'' as published by the U.S. Bureau of Labor Statistics).

CPI_{1992} is the Consumer Price Index (for ''all items'' as published by the U.S. Bureau of Labor Statistics) for 1992.

(*2*) The estimated number of hours necessary to install the equipment will be determined as part of the equipment certification process, as detailed in § 85.1407.

(C) The incremental fuel cost is defined as the increased fuel costs or the fuel savings due to the use of the equipment. (By definition, fuel savings will be negative values.) The calculation of incremental fuel cost will depend on the type of equipment being installed.

(1)(i) For equipment not requiring a change from on road federal diesel fuel, the incremental fuel cost shall be calculated as follows:

$$\text{Incremental fuel cost} = \frac{\left(\begin{array}{c}\text{fuel economy}\\ \text{\% reduction}\end{array}\right) \times (129{,}104 \text{ miles})}{\frac{3.3 \text{ miles}}{\text{gallon}}} \times \left(\frac{\$0.72}{\text{gallon}}\right) \times \frac{CPI_R}{CPI_{1992}}$$

Where,

CPI_R is the most recent published Consumer Price Index at time of rebuild (for ''all items'' as published by the U.S. Bureau of Labor Statistics).

CPI_{1992} is the Consumer Price Index (for ''all items'' as published by the U.S. Bureau of Labor Statistics) for 1992.

(*ii*) The percent change in fuel economy will be determined as part of the equipment certification process, as detailed in § 85.1407. If equipment causes the fuel economy of the engine to increase, the value of the fuel economy % reduction in the above equation shall be a negative value.

(*2*) For equipment requiring a fuel other than on road federal diesel fuel, the incremental fuel cost shall be calculated as follows:

$$\text{Incremental fuel cost} = \begin{pmatrix}\text{Incremental}\\ \text{price at which}\\ \text{fuel is offered}\end{pmatrix} \times \begin{pmatrix}\text{Discounted}\\ \text{lifetime}\\ \text{miles}\end{pmatrix}$$

Where,

$$\text{Incremental price at which fuel is offered} = \begin{pmatrix}\text{Cost per mile}\\ \text{for}\\ \text{alternative fuel}\end{pmatrix} - \begin{pmatrix}\text{Cost per mile}\\ \text{for}\\ \text{diesel fuel}\end{pmatrix}$$

(*i*) For equipment/alternative fuel that is being certified under § 85.1407 as available to all affected operators for less than the life cycle cost ceiling, the discounted lifetime mileage is 129,104 miles. For equipment/alternative fuel that is not being certified under § 85.1407 as available to all affected operators for less than the life cycle cost ceiling, the discounted lifetime mileage is based on the age of the urban bus engine being rebuilt as specified in the following table:

Age of engine at time of rebuild	Discounted lifetime miles
5 years	229,478
6 years	204,881
7 years	180,703
8 years	155,902
9 years	131,505
10 years	109,680
11 years	90,608
12 years	70,200
13 years	48,364
14 years	25,000
15 or more years	0

(*ii*) The cost per mile for diesel fuel is calculated based on the following equation:

$$\text{Cost per mile of diesel fuel} = \frac{\text{Price of diesel fuel per gallon, excluding taxes}}{\text{3.3 miles per gallon}}$$

(*iii*) For equipment/alternative fuel that is being certified under § 85.1407 as available to all affected operators for less than the life cycle cost ceiling, the price of diesel fuel per gallon, excluding taxes, is $\$0.72 \times (CPI_R/CPI_{1992})$. For equipment/alternative fuel that is not being certified under § 85.1407 as available to all affected operators for less than the life cycle cost ceiling, the price of diesel fuel per gallon, excluding taxes, is the price at which the operator currently purchases diesel fuel, excluding taxes.

(*iv*) The cost per mile for alternative fuels is calculated based on the following equation:

$$\text{Cost per mile for alternative fuel} = \frac{\left(\begin{array}{c}\text{Unit price of}\\ \text{alternative fuel,}\\ \text{excluding taxes}\end{array}\right)}{\left(\begin{array}{c}\text{Fuel economy of}\\ \text{alternatively}\\ \text{fueled engine}\end{array}\right)}$$

(*v*) In order for the equipment/alternative fuel to be required, the fuel supplier must provide a contract to the urban bus operator specifying the cost of the fuel for the life of the engine being retrofitted. The contract must specify the incremental cost, compared to the cost of diesel fuel on a per mile basis, at which the fuel will be sold. As part of the contract, the fuel supplier must also provide on-site facilities, meeting all applicable safety and fire code requirements, for refueling, the urban bus engines being retrofitted, unless the operator already has sufficient refueling facilities or the operator agrees to use off-site refueling facilities. The fuel supplier must also provide for any modifications to existing facilities that are necessary due to the use of the equipment/alternative fuel to meet applicable safety and fire code requirements.

(*vi*) The fuel economy of the engine retrofitted with the equipment will be determined as part of the equipment certification process, as detailed in § 85.1407.

(D) For equipment requiring the use of a fuel additive, the fuel additive cost shall be calculated as follows:

$$\text{Fuel additive cost} = \frac{\left(\begin{array}{c}\text{Amount of fuel additive}\\ \text{required per gallon of fuel}\end{array}\right)\times\left(\begin{array}{c}\text{Discounted}\\ \text{lifetime miles}\end{array}\right)}{(\text{Fuel economy of engine})}$$

$$\times\left(\begin{array}{c}\text{Price of fuel additive}\\ \text{per gallon}\\ \text{of fuel additive}\end{array}\right)$$

(*1*) For diesel-fueled engines, the fuel economy of the engine is 3.3 miles per gallon. For alternatively-fueled engines, the fuel economy of the engine shall be determined as part of the equipment certification process, as detailed in § 85.1407.

(*2*) For equipment/fuel additive that is being certified under § 85.1407 as available to all affected operators for less than the life cycle cost ceiling, the discounted lifetime mileage is 129,104 miles. For equipment/fuel additive that is not being certified under § 85.1407 as available to all affected operators for less than the life cycle cost ceiling, the discounted lifetime mileage is based on the age of the urban bus engine being rebuilt as specified in the following table:

Age of engine at time of rebuild	Discounted lifetime miles
5 years	229,478
6 years	204,881
7 years	180,703
8 years	155,902
9 years	131,505
10 years	109,680
11 years	90,608
12 years	70,200
13 years	48,364
14 years	25,000

Age of engine at time of rebuild	Discounted lifetime miles
15 or more years	0

(*3*) The price of the fuel additive is the price at which the fuel additive supplier supplies the fuel additive to the urban bus operator. In order for the equipment/fuel additive to be required, the equipment/fuel additive supplier must provide a contract to the urban bus operator specifying the maximum cost at which the fuel additive will be sold for the life of the engine being retrofitted.

(*4*) The amount of fuel additive required per gallon of diesel fuel will be determined as part of the equipment certification process, as detailed in § 85.1407.

(E) The incremental maintenance cost of the equipment is equal to the cost of the parts necessary for scheduled maintenance of the retrofit equipment incremental to cost of the parts necessary for maintenance of an original, non-retrofitted engine. The incremental maintenance cost will be determined as part of the equipment certification process, as detailed in § 85.1407.

(F) For equipment which replaces an existing urban bus engine with a new, previously unused engine, a credit will be applied to the life cycle cost. The engine replacement credit will be determined as follows:

$$\text{Engine Replacement Credit}_R = \$10{,}000 \times \left(\text{CPI}_R / \text{CPI}_{1992}\right)$$

Where,

CPI_R is the most recent published Consumer Price Index at time of rebuild (for ''all items'' as published by the U.S. Bureau of Labor Statistics).

CPI_{1992} is the Consumer Price Index (for ''all items'' as published by the U.S. Bureau of Labor Statistics) for 1992.

(iii) The life cycle cost ceiling for complying with the 25 percent particulate emission reduction requirement is calculated by the following equation at the time of rebuild:

$$\text{Life Cycle Cost Ceiling}_R = \$2{,}000 \times \left(\text{CPI}_R / \text{CPI}_{1992}\right)$$

Where,

CPI_R is the most recent published Consumer Price Index at time of rebuild (for ''all items'' as published by the U.S. Bureau of Labor Statistics).

CPI_{1992} is the Consumer Price Index (for ''all items'' as published by the U.S. Bureau of Labor Statistics) for 1992.

(3)(i) Urban buses covered by this subpart for which no equipment is available under paragraphs (b)(1) or (b)(2) of this section shall be equipped with one of the following:

(A) The original engine rebuilt to its original engine configuration as specified in paragraph (b)(3)(ii) of this section; or

(B) An engine identical to its original engine which has been rebuilt to its original configuration as specified in paragraph (b)(3)(ii) of this section; or

(C) An engine of a configuration with a certification PM level lower than the original configuration; or

(D) A replacement engine with a particulate matter certification level lower than the original engine.

(ii) All replacement or rebuilt parts shall be equivalent to the original equipment specifications.

(4) Notwithstanding paragraph (b)(3) of this section, if as of July 1, 1996, no equipment has been certified to meet the cost ceiling requirements of paragraphs (b)(1) or (b)(2) of this section,

then urban buses covered by this subpart shall be equipped with equipment that has been certified to achieve at least a 25 percent reduction in particulate emissions from the original certified particulate emission level of the urban bus engine model being rebuilt, provided the equipment does not require any of the following:

(i) A switch from mechanical control to electronic control; or

(ii) Installation of exhaust aftertreatment equipment; or

(iii) The use of a fuel different from the fuel on which the engine currently operates.

(c) Program 2: Averaging based program. Program 2 requires affected urban bus operators to meet an annual average fleet particulate emissions level, rather than requiring each individual rebuilt urban bus engine in the operator's fleet to meet a specific particulate emission level. Under Program 2, each affected fleet operator must reduce particulate emissions from its affected urban buses (i.e., 1993 and earlier model year urban buses) to a level low enough to meet an annual average target level for a fleet (TLF) for particulate emissions (in grams per brake horsepower-hour). The TLF is calculated for each year of the program beginning in 1996. During each calendar year, the average particulate emissions level from all of the operator's pre-1994 model year urban buses must be at or below the TLF for that calendar year. The TLF for a particular calendar year is calculated based on the Agency's determination of the projected emission level for each engine model in the operator's pre-1994 model year urban bus fleet, as specified in paragraph (c)(1)(iii) of this section, and based on a schedule for rebuilding of affected urban bus engines, as specified in paragraph (c)(1)(iv) of this section.

(1) During each calendar year starting with 1996, urban bus operators shall be in compliance with an annual Target Level for a Fleet (TLF) of particulate emissions calculated using the equation defined in paragraph (c)(1)(i) of this section. Operators must comply with a TLF, rounded to two places after the decimal, until all pre-1994 urban buses have been retired from the operator's fleet.

(i) An urban bus operator's annual Target Level for a Fleet (TLF) for a particular calendar year shall be calculated as follows:

$$TLF_{CY} = \frac{\left(\sum_{MY=CY-15}^{1993} \left(B_{MY}\right) \times \left(WP_{MY}\right) \right)}{\sum_{MY=CY-15}^{1993} \left(B_{MY}\right)}$$

Where,

CY is the calendar year.

MY is the model year.

B_{MY} is the number of urban buses of that model year in the operator's fleet as of January 1, 1995, plus any urban buses of that model year added to the fleet after January 1, 1995.

WP_{MY} is the weighted average of projected particulate emissions for urban buses of that model year calculated using the formula in paragraph (c)(1)(ii) of this section.

(ii) The weighted average of projected particulate emissions for urban buses of a particular model year is calculated using the following equation:

$$WP_{MY} = \frac{\left(\sum_{1}^{z}(B_z)\times(P_z)\right)}{\sum_{1}^{z}(B_z)}$$

Where,

MY is the model year.

z is the number of different engine models in the fleet of model year MY.

B_z is the number of urban buses in the operator's fleet as of January 1, 1995 (including those added after January 1, 1995) equipped with a specific engine model of the given model year.

P_z is the projected particulate emission level of that engine model provided in paragraphs (c)(1)(iii) and (c)(1)(iv) of this section.

(iii)(A) Pre-rebuild particulate emission levels and projected post-rebuild particulate emission levels in grams per brake horsepower-hour (g/bhp-hr) are based on engine type and model year and are specified in the following table. The appropriate particulate level, pre-rebuild or post-rebuild, shall be determined using the information contained in paragraph (c)(1)(iv) of this section.

Engine model	Model year of engine	Pre-rebuild particulate level (g/bhp-hr)	Projected post-rebuild particulate level (g/bhp-hr)
DDC 6V92TA	1979–1987	0.50	0.30
	1988–1989	0.30	0.10
DDC 6V92TA DDECI	1986–1987	0.30	0.30
DDC 6V92TA DDECII	1988–1991	0.31	0.10
	1992	0.25	0.10
	1993 (no trap)	0.25	0.10
	1993 (trap)	0.07	0.07
DDC Series 50	1993	0.16	0.10
DDC 6V71N	1973–1987	0.50	0.50
	1988–1989	0.50	0.10
DDC 6V71T	1985–1986	0.50	0.50
DDC 8V71N	1973–1984	0.50	0.50
DDC 6L71TA	1990	0.59	0.10
	1988–1989	0.31	0.10
DDC 6L71TA DDEC	1990–1991	0.30	0.10
Cummins L10	1985–1987	0.65	0.65
	1988–1989	0.55	0.10
	1990–1991	0.46	0.10
Cummins L10 EC	1992	0.25	0.10
	1993 (trap)	0.05	0.05
Alternatively-fueled engines	Pre-1994	0.10	0.10
Other engines	Pre-1988	0.50	0.50
	1988–1993	(1)	0.10

[1] Certification level.

(B) For the TLF calculations as specified in paragraph (c)(1)(iv) of this section, post-rebuild particulate emissions levels for a specific engine model shall be equal to the following:

(*1*) 0.10 g/bhp-hr, for any engine model (other than any model year 1984 and 1987 engine models, and those engine models indicated in paragraph (c)(1)(iii)(B)(*4*) of this section) for which equipment has been certified by July 1, 1994 as meeting the emission and cost requirements of paragraph (b)(1) of this section for all affected urban bus operators;

(*2*) For any engine model for which no equipment has been certified by

July 1, 1994 as meeting the requirements of paragraph (b)(1) of this section for all affected urban bus operators, (and for any model year 1984 and 1987 engine models) for which equipment has been certified by July 1, 1994 as meeting the emission and cost requirements of paragraph (b)(2) of this section for all affected urban bus operators, the post-rebuild particulate emission level shall equal the lowest emission level (greater than or equal to 0.10 g/bhp-hr) certified for any such equipment;

(*3*) For any engine model for which no equipment has been certified by July 1, 1994 as meeting the emission and cost requirements of paragraph (b)(1) or paragraph (b)(2) of this section for all affected urban bus operators, the post-rebuild particulate emission level shall equal the pre-rebuild particulate level;

(*4*) For any engine model with a pre-rebuild particulate level below 0.10 g/bhp-hr, the post-rebuild particulate emission level shall equal the pre-rebuild particulate level;

(*5*) Notwithstanding paragraph (c)(1)(iii)(C)(*3*) of this section, if by July 1, 1994, no equipment has been certified for any of the engine models listed in the table at paragraph (c)(1)(iii)(A) of this section, then the post-rebuild particulate levels shall be as indicated in the table at paragraph (c)(1)(iii)(A) of this section.

(C) For TLF calculations as specified in paragraph (c)(1)(iv) of this section, post-rebuild particulate emission levels for a specific engine model shall be equal to the following:

(*1*) 0.10 g/bhp-hr, for any engine model (other than those indicated in paragraph (c)(1)(iii)(C)(*4*) of this section) for which equipment has been certified by July 1, 1996 as meeting the emission and cost requirements of paragraph (b)(1) of this section for all affected urban bus operators;

(*2*) For any engine model for which no equipment has been certified by July 1, 1996 as meeting the requirements of paragraph (b)(1) of this section for all affected urban bus operators, but for which equipment has been certified by July 1, 1996 as meeting the emission and cost requirements of paragraph (b)(2) of this section for all affected urban bus operators, the post-rebuild particulate emission level shall equal the lowest emission level (greater than or equal to 0.10 g/bhp-hr) certified for any such equipment;

(*3*) For any engine model for which no equipment has been certified by July 1, 1996 as meeting the requirements of either paragraph (b)(1) or paragraph (b)(2) of this section, the post-rebuild particulate emission level shall equal the pre-rebuild particulate level;

(*4*) For any engine model with a pre-rebuild particulate level below 0.10 g/bhp-hr, the post-rebuild particulate emission level shall equal the pre-rebuild particulate level;

(*5*) Notwithstanding paragraph (c)(1)(iii)(C)(*3*) of this section, if by July 1, 1996, no equipment has been certified to meet the emission requirements of paragraph (b)(1) or paragraph (b)(2) of this section for any of the engine models listed in the table at paragraph (c)(1)(iii)(A) of this section, then the post-rebuild particulate levels shall be the pre-rebuild particulate levels specified in the table at paragraph (c)(1)(iii)(A) of this section.

(D) For TLF calculations as specified in paragraph (c)(1)(iv) of this section, post-rebuild particulate emission levels for a specific engine model shall be equal to the following:

(*1*) 0.10 g/bhp-hr, for any engine model (other than those indicated in paragraph (c)(1)(iii)(D)(*4*) of this section) for which equipment has been certified by July 1, 1998 as meeting the emission and cost requirements of paragraph (b)(1) of this section for all affected urban bus operators;

(*2*) For any engine model for which no equipment has been certified by July 1, 1998 as meeting the requirements of paragraph (b)(1) of this section for all affected urban bus operators, but for which equipment has been certified by July 1, 1996 as meeting the emission and cost requirements of paragraph (b)(2) of this section for all affected urban bus operators, the post-rebuild particulate emission level shall equal the lowest emission level (greater than or equal to 0.10 g/bhp-hr) certified by July 1, 1998 for any such equipment;

(*3*) For any engine model for which no equipment has been certified by July 1, 1998 as meeting the emission and cost requirements of paragraph (b)(1) or (b)(2) of this section, the post-rebuild particulate emission level shall equal the pre-rebuild particulate level;

(*4*) For any engine model with a pre-rebuild particulate level below 0.10 g/bhp-hr, the post-rebuild particulate emission level shall equal the pre-rebuild particulate level;

(*5*) Notwithstanding paragraph (c)(1)(iii)(D)(*3*) of this section, if by July 1, 1998, no equipment has been certified to meet the emission requirements of paragraph (b)(1) or (b)(2) of this section for any of the engine models listed in the table at paragraph (c)(1)(iii)(A) of this section, then the post-rebuild particulate levels shall be the pre-rebuild particulate levels specified in the table at paragraph (c)(1)(iii)(A) of this section; and

(*6*) Notwithstanding paragraph (c)(1)(iii)(D)(*3*) of this section, if by July 1, 1998, equipment has been certified to meet the emissions requirements of paragraph (b)(1) or (b)(2) of this section for any of the engine models listed in the table at paragraph (c)(1)(iii)(A) of this section, but no equipment has been certified by July 1, 1998 to meet the life-cycle cost requirements of paragraph (b)(1) or (b)(2) of this section, then the post-rebuild particulate levels shall be as specified in the following table:

Engine model	Model year sold	Pre-rebuild PM level (g/bhp-hr)	Post-rebuild PM level (g/bhp-hr)
DDC 6V92TA	1979–1987	0.50	0.30
	1988–1989	.30	.30
DDC 6V92TA DDECI	1986–1987	.30	.30
DDC 6V92TA DDECII	1988–1991	.31	.25
	1992	.25	.25
	1993 (no trap)	.25	.25
	1993 (trap)	.07	.07
DDC Series 50	1993	.16	.16
DDC 6V71N	1973–1987	.50	.50
	1988–1989	.50	.50
DDC 6V71T	1985–1986	.50	.50
DDC 8V71N	1973–1984	.50	.50
DDC 6L71TA	1990	.59	.59
	1988–1989	.31	.31
DDC 6L71TA DDEC	1990–1991	.30	.30
Cummins L10	1985–1987	.65	.46
	1988–1989	.55	.46
	1990–1991	.46	.46
Cummins L10 EC	1992	.25	.25
	1993 (trap)	.05	.05
Alternatively-fueled Engines	Pre-1994	.10	.10
Other Engines	Pre-1988	.50	.50
	1988–1993	(1)	(1)

(1) New engine certification level.

(iv) To determine which particulate (PM) emission level from paragraph (c)(1)(iii) of this section is used for a particular model year engine in a fleet for the TLF of a given calendar year, use the following table:

Model year of engine	Year for which TLF is being calculated	Particulate emission level (see § 85.1403(c)(1)(iii))
1993	1996–1998	Pre-Rebuild Level.[1]
	1999–2001	Post-Rebuild Level.[3]
	2002–thereafter	Post-Rebuild Level.[4]
1992	1996–1998	Pre-Rebuild Level.[1]
	1999–2003	Post-Rebuild Level.[3]
	2004–thereafter	Post-Rebuild Level.[4]
1991	1996–1997	Pre-Rebuild Level.[1]
	1998–2002	Post-Rebuild Level.[3]
	2003–thereafter	Post-Rebuild Level.[4]
1990	1996–1999	Pre-Rebuild Level.[1]
	2000–thereafter	Post-Rebuild Level.[4]
1989	1996–1999	Pre-Rebuild Level.[1]

Model year of engine	Year for which TLF is being calculated	Particulate emission level (see § 85.1403(c)(1)(iii))
	2000–thereafter	Post-Rebuild Level.[4]
1988	1996–1998	Pre-Rebuild Level.[1]
	1999–thereafter	Post-Rebuild Level.[3]
1987	1996–1998	Post-Rebuild Level.[2]
	1999–thereafter	Post-Rebuild Level.[3]
1986	1996–1997	Pre-Rebuild Level.[1]
	1998–thereafter	Post-Rebuild Level.[3]
1985	1996	Pre-Rebuild Level.[1]
	1997–thereafter	Post-Rebuild Level.[2]
1984	1996–thereafter	Post-Rebuild Level.[2]
Pre-1984	1996–thereafter	Pre-Rebuild Level.[1]

[1] The pre-rebuild PM level established in paragraph (c)(1)(iii)(A) of this section.
[2] The post-rebuild PM level established pursuant to paragraph (c)(1)(iii)(B) of this section.
[3] The post-rebuild PM level established pursuant to paragraph (c)(1)(iii)(C) of this section.
[4] The post-rebuild PM level established pursuant to paragraph (c)(1)(iii)(D) of this section.

(2) To determine compliance under this program, the TLF, rounded to two places after the decimal, shall be compared with an annual Fleet Level Attained (FLA) of particulate emissions calculated using the equation defined in paragraph (c)(2)(i) of this section, and also rounded to two places after the decimal. At all times during a given calendar year, the FLA must be at or below the TLF for the same calendar year in order for the fleet to be in compliance.

(i) An urban bus operator shall calculate its Fleet Level Attained (FLA) using the following equation:

$$FLA = \frac{\left(\sum_{MY=MY_1}^{1993} \left(B_{MY}\right) \times \left(WE_{MY}\right) \right)}{\left(\sum_{MY=MY_1}^{1993} B_{MY} \right) + B_R}$$

Where,

MY is the model year.

MY_1 is the model year of the oldest urban bus in a operator's fleet.

B_{MY} is the number of urban buses of model year MY in an operator's fleet, excluding those urban buses older than fifteen years that meet a 0.10 grams per brake horsepower-hour particulate standard.

B_R is the number of 1993 and earlier model year urban buses retired since January 1, 1995 that would have been less than 15 years old, as calculated by the model year of the urban bus on December 31st of the given calendar year, but does not include retired urban buses that are replaced by other 1993 and earlier model year urban buses.

WE_{MY} is the weighted average of engine-specific particulate emissions for urban buses in that model year in an operator's fleet, excluding those urban buses older than fifteen years that meet a 0.10 grams per brake horsepower-hour particulate standard, calculated using the formula in paragraph (c)(2)(ii) of this section.

(ii) The weighted average of engine specific particulate emissions for urban buses of a particular model year, excluding those urban buses older than fifteen years that meet a 0.10 grams per brake horsepower-hour particulate standard is calculated using the following equation:

$$WE_{MY} = \frac{\left(\sum_{1}^{q}\left(B_q\right)\times\left(E_q\right)\right)}{\sum_{1}^{q}\left(B_q\right)}$$

Where,

q is the number of different engine configurations in a given model year, excluding those urban buses older than fifteen years that meet a 0.10 grams per brake horsepower-hour particulate standard.

B_q is the number of urban buses with a specific engine configuration.

E_q is the engine-specific particulate emission level for a given configuration.

(iii) The E_q shall be defined as:

(A) The pre-rebuild level as specified in paragraph (c)(1)(iii) of this section in cases where an engine has not been rebuilt after January 1, 1995 or has been rebuilt to its original configuration; or

(B) The particulate emission level (in grams per brake horsepower-hour) achieved after installing emission control equipment on the urban bus at time of rebuild, where an engine has been rebuilt using emission control equipment after January 1, 1995. Such particulate emission levels will be established by the equipment certifier during equipment certification; or

(C) 0.10 grams per brake horsepower-hour (0.037 grams per megajoule) for urban buses covered by the provisions specified in paragraph (d)(1) of this section; or

(D) The particulate emission level (in grams per brake horsepower-hour) of the upgrade engine configuration for urban buses covered by the provisions specified in paragraph (d)(3) of this section; or

(E) The particulate emission level (in grams per brake horsepower-hour) determined by applying an additional percent reduction in particulate emissions to the particulate levels determined in paragraphs (c)(2)(iii)(A) through (c)(2)(iii)(D) of this section for those urban buses operating on diesel-based fuels which achieve particulate reductions beyond federally required diesel fuel with 0.05 weight percent sulfur content. Such additional percent reductions will be determined through certification of such diesel-based fuels as specified in § 85.1407.

(d)(1) Operators of urban buses covered by this subpart which have had particulate traps installed prior to January 1, 1995, or are powered by an alternative fuel that significantly reduces particulate emissions compared to emissions from diesel fuel, may assume that such urban buses are operating at a PM level of 0.10 grams per brake horsepower-hour (0.037 grams per megajoule) for purposes of meeting the requirements set forth in paragraphs (b) and (c) of this section as long as such urban buses have engines that are properly calibrated and maintained in accordance with equipment manuals and instructions, and the operator has no reason to believe otherwise.

(2) Any urban buses which have had particulate traps installed prior to January 1, 1995, or are powered by a fuel that significantly reduces particulate emissions compared to emissions from diesel fuel, whose engines have not been properly calibrated and maintained in accordance with equipment manuals and instructions or the operator has reason to believe otherwise, shall be treated as if such equipment was not installed for purposes of determining compliance with paragraphs (b) and (c) of this section.

(3) Operators of urban buses covered by this subpart which have upgrade kits installed prior to January 1, 1995, may assume that such urban buses are operating at the PM level of the upgraded engine configuration for purposes of meeting the requirements set forth in paragraphs (b) and (c) of this section.

(e)(1) The standard and percent emission reductions requirements set forth in paragraphs (b) and (c) of this section

refer to exhaust emitted over the operating schedule set forth in paragraph (f)(2) of Appendix I to part 86 of this chapter and measured and calculated in accordance with the procedures set forth in subpart N of part 86 of this chapter.

(2) Equipment certifiers may also submit emission results from EPA-approved alternative test procedures showing compliance with the 25 percent reduction requirements of paragraphs (b) and (c) of this section. As required in §85.1414, the equipment certifier shall supply information on the alternative test procedure which supports the certifier's claims that the alternative test procedure is typical of in-use urban bus operation.

(f) Every operator subject to the requirements prescribed in this section shall keep records of all engine rebuilds and replacements performed on urban buses as required in §85.1404, and maintain evidence that their urban buses are in compliance with the requirements of paragraphs (b) or (c) of this section.

(g) Operators shall affix the label provided with the equipment, required under §85.1411(a), to the engine being rebuilt with the equipment.

[58 FR 21386, Apr. 21, 1993, as amended at 63 FR 14635, Mar. 26, 1998]

§85.1404 Maintenance of records for urban bus operators; submittal of information; right of entry.

(a) The operator of any urban bus for which this subpart is applicable shall maintain and retain the following adequately organized and indexed records beginning January 1, 1995. Each operator shall keep such records until the five year anniversary of a rebuild or until the engine is rebuilt again, whichever occurs first.

(1) *General records.* The records required to be maintained under this paragraph shall consist of all purchase records, receipts, and part numbers for parts and components used in the rebuilding of urban bus engines.

(2) *Individual records.* A brief history of each urban bus subject to the rebuild provisions prescribed under this section including the records and documentation required to be maintained under §85.1403(f) of this subpart.

(3) *Fuel purchase records.* The records required under this paragraph consist of all purchase records of fuels for which the operator is claiming additional emission reductions under §85.1403(c)(2)(iii)(E), purchase records for fuel additives required for use with equipment, and purchase records for fuels, other than diesel fuel, which are used with dual-fueled engines.

(b)(1) Any operator subject to the requirements under this section shall provide any EPA Enforcement Officer, upon presentation of credentials during operating hours, access to the following:

(i) Any facility where records required to be maintained under this section are generated or stored.

(ii) Any facility where engine rebuilding or replacement takes place.

(2) Upon admission to any facility referred to in paragraph (b)(1) of this section, any EPA Enforcement Officer shall be allowed:

(i) To inspect and make copies of records required to be maintained under this section.

(ii) To inspect and photograph any urban bus and engine subject to the standards set forth in §85.1403 of this subpart.

(iii) To inspect and monitor any activity related to the rebuilding or replacement of an engine in an urban bus for which these regulations are applicable as described in §85.1401 of this subpart.

§85.1405 Applicability.

The provisions of §§85.1405 through 85.1414 apply to retrofit/rebuild equipment which is to be installed on or used with 1993 and earlier model year urban buses whose engines are rebuilt or replaced after January 1, 1995. For the purposes of §§85.1405 through 85.1414, ''equipment'' includes alternative fuels and fuel additives to be used with urban bus engines.

§85.1406 Certification.

(a) Certification compliance shall be demonstrated as follows:

(1) *Test procedure and emission results.* The emission test to be used is the

heavy-duty engine Federal Test Procedure as set forth in the applicable portions of part 86 of this chapter or an approved alternative test procedure prescribed under §85.1414. Certification emission testing must be carried out using representative production equipment as provided in paragraph (b) of this section. The test results must demonstrate that the retrofit/rebuild equipment will comply with either the particulate emission requirements of §§85.1403(b)(1)(i) or 85.1403(b)(2)(i), or provide some level of particulate emission reduction, and will not cause the urban bus engine to fail to meet any applicable Federal emission requirements set for that engine in the applicable portions of 40 CFR part 86, provided the equipment is properly installed.

(2) *Emission test engine selection.* (i) The test engine used must represent the ''worst case'' with respect to particulate emissions of all those engine configurations for which the retrofit/rebuild equipment is being certified. The worst case engine configuration shall be the engine configuration having the highest engine-out particulate matter emission levels, when properly maintained and used, prior to installation of the retrofit/rebuild equipment. EPA reserves the right to request data or information showing that the particulate emission reduction efficiency of the retrofit/rebuild equipment being certified under this paragraph, for use with more than one engine family, does not vary significantly among the engine families.

(ii) The results of certification tests using the worst case engine selections made in this section shall be applicable for the other engine configurations for which the retrofit/rebuild equipment is designed.

(iii) The worst case test engine selected for certification emission testing is not required to meet Federal emission standards before the retrofit/rebuild equipment is installed. However, each test engine shall have representative emissions performance that is close to the standards and have no obvious or suspected emission defects. Each test engine shall be tuned properly and set to the engine manufacturer's specifications before testing is performed. Any excessively worn or malfunctioning emission related part shall be repaired or replaced with a new part prior to testing.

(iv) To demonstrate compliance with the particulate emission requirements of §85.1403(b)(1)(i), the test engine used may be a new unused engine, an in-use engine that has been rebuilt previously, or an in-use engine that has not been rebuilt previously.

(v) (A) To demonstrate compliance with the particulate emission requirements of §85.1403(b)(2)(i) on engines for which particulate certification data exists, the test engine used may be a new unused engine, an in-use engine that has been rebuilt previously, or an in-use engine that has not been rebuilt previously.

(B) To demonstrate compliance with the particulate emission requirements of §85.1403(b)(2)(i) on engines for which no particulate certification data exists, the test engine used may be a new unused engine, or an in-use engine that is newly rebuilt to its original configuration.

(b) Diesel test fuel. Federally required low sulfur diesel fuel (with a sulfur content of 0.05 weight percent) shall be used for all new emissions testing required to be performed for certification of retrofit/rebuild equipment for diesel-fueled urban bus engines.

(c) Test equipment selection. Certification shall be based upon tests utilizing representative production equipment selected in a random manner.

(d) Replacing original equipment parts. Installation of any certified retrofit/rebuild equipment shall not result in the permanent removal or rendering inoperative of any original equipment emission related part other than the part(s) being replaced. Furthermore, installation of any certified retrofit/rebuild equipment shall not cause or contribute to an unreasonable risk to the public health, welfare or safety, or result in any additional range of parameter adjustability or accessibility to adjustment than that of the vehicle manufacturer's emission related part.

(e) Affects on engine on-board diagnostic system. Installation of any certified retrofit/rebuild equipment shall not alter or render inoperative any feature of the on-board diagnostic system

incorporated by the engine manufacturer. The certified equipment may integrate with the existing diagnostic system if it does not alter or render inoperative any features of the system.

(f) In-use enforcement. (1) As a condition of certification, the equipment certifier agrees to notify operators who have installed this equipment and repair the equipment without cost to the operator when the Agency determines that a substantial number of the equipment kits, when properly maintained and used, and in actual use throughout the in-use compliance period, do not meet emission requirements.

(2) If the equipment certifier disagrees with such determination of nonconformity and so advises the MOD Director, the MOD Director shall afford the equipment certifier and other interested persons an opportunity to present their views and evidence in support thereof at a public hearing conducted in accordance with procedures found in §85.1807. For purposes of this section, substitute the word ''equipment'' in place of the phrase ''motor vehicles and engines.''

§85.1407 Notification of intent to certify.

(a) Prior to the sale of any certified retrofit/rebuild equipment, notification of the intent to certify must be approved by the MOD Director.

(1) All notifications shall include:

(i) Identification of the candidate retrofit/rebuild equipment to be certified, including a list of parts and part numbers;

(ii) Identification of all engine configurations for which the equipment is being certified including make(s), engine model(s), model year(s), engine size(s) and all other specific configuration characteristics necessary to assure that the equipment will not be installed in any configuration for which it has not been certified;

(iii) All results and documentation of tests and procedures used by the equipment certifier as evidence of compliance with the emission requirements specified in §85.1406;

(iv) A description of the test equipment selection criteria used, and a statement that the test equipment used for certification testing is representative production equipment consistent with §85.1406(c);

(v) A description of the test engine selection criteria used, and rationale that supports the technical judgment of the equipment certifier that the engine configuration used for certification testing represents worst case with respect to particulate matter emissions of all those configurations for which the retrofit/rebuild equipment is being certified, and all data that supports that conclusion;

(vi) A copy of the written instructions for proper maintenance and use of the equipment, including instructions as to whether the engine must be rebuilt to its original configuration before installing the equipment;

(vii) The scheduled maintenance required for the equipment over the in-use compliance period, including service intervals of the retrofit/rebuild equipment which detail the maintenance and replacement intervals in months and/or miles, as applicable;

(viii) A copy of the warranty language to be provided to the operator pursuant to both §§85.1409(a) and 85.1409(b);

(ix) A statement of commitment and willingness to comply with all the relevant terms and conditions of this subpart;

(x) A statement by the equipment certifier that use of its certified equipment will not cause a substantial increase to urban bus engine emissions in any normal driving mode not represented during certification testing; and

(xi) The office or officer of the equipment certifier authorized to receive correspondence regarding certification requirements pursuant to this subpart.

(2) If an equipment certifier wishes to certify equipment for use under §85.1403(b) for all affected urban bus operators as specified in §85.1401, the notification shall also contain all data and documentation used by the equipment certifier as evidence of compliance with the life cycle cost requirements specified in §§85.1403(b)(1)(ii) or 85.1403(b)(2)(ii); including:

(i) The price to be charged to an urban bus operator for the equipment, excluding shipping and handling costs and taxes;

(ii) A detailed breakout of the total number of hours necessary to install the equipment, and the number of hours necessary to install the equipment, incremental to a standard rebuild;

(iii) For equipment not requiring a change from on road diesel fuel, the percent change in fuel economy for an urban bus engine retrofitted with the equipment compared to the original engine based on testing performed over the heavy-duty engine Federal test procedure or an approved alternative test procedure prescribed under §85.1414, including all test data supporting the reported change in fuel economy;

(iv) For alternatively-fueled equipment, the fuel economy of the retrofitted engine based on testing performed over an approved test procedure prescribed under §85.1414, including all test data supporting the reported fuel economy, and the unit price of the alternative fuel that will be charged to all affected urban bus operators;

(v) For equipment requiring a fuel additive, the amount of fuel additive required per gallon of fuel and the unit price of the fuel additive that will be charged to all affected urban bus operators; and

(vi) A list of the scheduled maintenance for an engine with the retrofit, and a detailed breakdown of the cost of the parts necessary to perform scheduled maintenance, incremental to the cost of the parts necessary for maintenance typically performed on an engine without the equipment.

(3) If an equipment certifier wishes to certify equipment for use under §85.1403(b), but not for use by all affected urban bus operators as specified in §85.1401, the notification shall, in addition to the data and documentation specified in paragraph (a)(1) of this section, also contain data and documentation that demonstrate compliance with the life cycle cost requirements specified in §85.1403(b)(1)(ii) or §85.1403(b)(2)(ii) including:

(i) A detailed breakout of the total number of hours necessary to install the equipment, and the number of hours necessary to install the equipment, incremental to a standard rebuild;

(ii) The percent change in fuel economy for an urban bus engine retrofitted with the equipment compared to the original engine based on testing performed over the heavy-duty engine Federal test procedure or an approved alternative test procedure prescribed under §85.1414, including all test data supporting the reported change in fuel economy;

(iii) A list of the scheduled maintenance for an engine with the retrofit, and a detailed breakdown of the cost of the scheduled maintenance, incremental to the cost of maintenance typically performed on an engine without the equipment;

(iv) For alternatively-fueled equipment, the fuel economy of the retrofitted engine based on testing performed over an approved test procedure prescribed under §85.1414, including all test data supporting the reported fuel economy;

(v) For equipment requiring a fuel additive, the amount of fuel additive required per gallon of fuel; and

(vi) A description of the type of urban bus operator to which the equipment certifier expects to sell the equipment for less than the life cycle cost requirements specified in §85.1403(b)(1)(ii) or §85.1403(b)(2)(ii).

(4) The notification shall be signed by an officer of the equipment certifier attesting to the accuracy and completeness of the information supplied in the notification.

(5) Notification to the Agency shall be by certified mail or another method by which date of receipt can be established.

(6) Two complete and identical copies of the notification and any subsequent industry comments on any such notification shall be submitted by the equipment certifier to: MOD Director, MOD (6405J), Attention: Retrofit/Rebuild Equipment, 401 ''M'' Street SW., Washington, DC 20460.

(7) A copy of the notification submitted under paragraph (a)(6) of this section will be placed in a public docket and a summary will be published in the FEDERAL REGISTER. Any party interested in the outcome of the decision as to whether retrofit/rebuild equipment

may be certified, may submit comments to the MOD Director on any notice in the public docket for 45 days after the summary of the notification of intent to certify has been published in the FEDERAL REGISTER.

(b)(1) For an urban bus operator to take credit for additional particulate emission reductions for use of a clean diesel fuel under §85.1403(c)(2)(iii)(E), the following information must be submitted to the Agency:

(i) The additional percent reduction in particulate emissions for engines operated on the clean diesel fuel.

(A) The additional percent reduction in particulate emissions shall be calculated based on the results of emission tests performed on urban bus engines using federally required low sulfur fuel and the fuel for which the certifier is demonstrating addition emission reductions.

(B) The additional percent reduction in particulate emissions shall be calculated based on the following equation:

$$\text{Percent reduction of particulate emissions} = \frac{\left(\begin{array}{c}\text{Particulate emissions}\\ \text{for engines operated}\\ \text{on Federally required}\\ \text{low sulfur fuel}\end{array}\right) - \left(\begin{array}{c}\text{Particulate emissions}\\ \text{for engines operated}\\ \text{on clean diesel fuel}\end{array}\right)}{\left(\begin{array}{c}\text{Particulate emissions}\\ \text{for engines operated}\\ \text{on Federally required}\\ \text{low sulfur fuel}\end{array}\right)}$$

(ii) The emission testing results for hydrocarbons, carbon monoxide, and oxides of nitrogen. The results must show that use of the clean diesel fuel does not lead to increases in any of these emissions.

(2) Emission test results must be submitted for all of the engine models for which an urban bus operator wishes to claim additional particulate emission reductions.

(3) Emissions test results shall be measured over the heavy-duty engine Federal test procedure or an approved alternative test procedure prescribed under §85.1414.

(c) The MOD Director reserves the right to review an application to determine if the submitted documents adequately meet all the requirements for certification specified in §§85.1406 and 85.1407. The MOD Director shall determine and will publish in the FEDERAL REGISTER the effective date of certification of the candidate equipment. Equipment may be sold as certified after the effective date of certification.

EFFECTIVE DATE NOTE: Information collection requirements in §85.1407 have not been approved by the Office of Management and Budget (OMB) and are not effective until OMB has approved them.

§ 85.1408 Objections to certification.

(a) At any time prior to certification, the MOD Director may notify the equipment certifier that such equipment shall not be certified pending further investigation. The basis upon which this notification shall be made may include, but not be limited to, information or test results submitted by the equipment certifier, or public comments submitted on the equipment which indicate:

(1) The test procedure used to demonstrate compliance with the particulate matter emission standard or percent reduction of §85.1403 was not in compliance with the heavy-duty engine Federal Test Procedure of 40 CFR part 86 or an alternative test procedure approved by the Agency under §85.1414; or

(2) Use of the candidate equipment may cause an urban bus engine to exceed any applicable emission requirements; or

(3) Use of the candidate equipment could cause or contribute to an unreasonable risk to public health, welfare or safety in its operation or function; or

(4) Installation of the candidate equipment requires procedures or materials which would likely cause such equipment to be improperly installed under normal conditions or would likely result in an urban bus engine being misadjusted; or

(5) Information and/or data required to be in the notification of intent to certify as provided by § 85.1407 have not been provided or may be inadequate; or

(6) The life cycle cost estimates provided by the equipment certifier do not accurately reflect the true life cycle costs for the candidate equipment.

(b) The equipment certifier must respond in writing to the statements made in the notification by the MOD Director, or the MOD Director shall withdraw the equipment certifier's notification of intent to certify. A copy of the certifier's response will be placed in the public docket.

(1) Any party interested in the outcome of a decision as to whether retrofit/rebuild equipment may be certified may provide the MOD Director with any relevant written information up to ten days after the certifier responds to the MOD Director's objection.

(2) Any interested party may request additional time to respond to the information submitted by the equipment certifier. The MOD Director upon a showing of good cause by the interested party may grant an extension of time to reply up to 30 days.

(3) The equipment certifier may reply to information submitted by interested parties. Notification of intent to reply shall be submitted to the MOD Director within 10 days of the date information from interested parties is submitted to the MOD Director.

(4) The MOD Director may, at his or her discretion, allow oral presentations by the equipment certifier or any interested party in connection with contested equipment certification.

(c) If notification has been provided to an equipment certifier pursuant to paragraph (a) of this section, the MOD Director shall, after reviewing all pertinent data and information, render a decision and inform the equipment certifier in writing as to whether such equipment may be certified and, if so, under what conditions the equipment may be certified. The written decision shall include an explanation of the reasons therefor.

(1) The decision by the MOD Director shall be provided to the certifier after receipt of all necessary information by the certifier or interested parties, or of the date of any oral presentation regarding the certification, whichever occurs second.

(2) A copy of the decision shall be sent to all interested parties identified in paragraphs (b)(3) and (b)(4) of this section.

(3) Within 20 days of receipt of a decision made pursuant to paragraph (c) of this section, any party may file a written appeal to the Office Director. The Office Director may, in his or her discretion, allow additional oral or written submissions, prior to rendering a final decision. The schedule for such submission shall be in accordance with the schedule specified in § 85.1408(b).

(4) If no party files an appeal with the Office Director within 20 days, then the decision of the MOD Director shall be final.

(5) The Office Director shall make a final decision regarding the certification of equipment after receipt of all necessary information by the equipment certifier or from the date of any oral presentation, whichever occurs later.

(6) A copy of all final decisions made under this section shall be published in the FEDERAL REGISTER.

§ 85.1409 Warranty.

(a) As a condition of certification, the retrofit/rebuild equipment certifier shall warrant that if the certified equipment is properly installed and maintained as stated in the written instructions for proper maintenance and use, the equipment will not cause an urban bus engine to exceed the emission requirements of this subpart and the emission standards set forth in 40

CFR part 86. This retrofit/rebuild equipment warranty shall extend for a period of 150,000 miles from when the equipment is installed.

(b) As a condition of certification, the retrofit/rebuild equipment certifier shall provide an emissions defect warranty that if the certified equipment is properly installed and maintained as stated in the written instructions for proper maintenance and use, the equipment certifier will replace all defective parts, free of charge. This emissions defect warranty shall extend for a period of 100,000 miles from when the equipment is installed.

§ 85.1410 Changes after certification.

The equipment certifier shall recertify any retrofit/rebuild equipment which was certified pursuant to § 85.1406 and to which modifications are made affect emissions or the capability of the equipment to meet any other requirement of this subpart.

§ 85.1411 Labeling requirements.

(a) All retrofit/rebuild equipment certified pursuant to this subpart shall contain a label that shall be affixed to the rebuilt engine which states, ''Certified to EPA Urban Bus Engine Rebuild Standards,'' the model and serial number of the equipment, the particulate emissions certification level of the equipment, and the name of the equipment certifier or other party designated to determine the validity of warranty claims. The label containing the information must be made durable and readable for at least the in-use compliance period of the equipment.

(b) The package in which the certified retrofit/rebuild equipment is contained, or an insert as described in paragraph (c) of this section, must have the following information conspicuously placed thereon:

(1) The statement ''Certified by (name of certifier or warranter) to EPA Urban Bus Engine Rebuild Emission Standards''; and

(2) A list of the vehicles or engines (in accordance with § 85.1407(a)(1)(ii)) for which the equipment is certified, unless such information is provided as specified in paragraph (d) of this section.

(c) The package in which the certified retrofit/rebuild equipment is contained must include the following information provided on a written insert:

(1) A list of the vehicles or engines (in accordance with § 85.1407(a)(1)(ii)) for which the equipment is certified, unless such information is provided as specified in paragraph (d) of this section;

(2) A list of all of the parts and identification numbers for the parts included in the package;

(3) The instructions for proper installation of the equipment;

(4) A statement of the maintenance or replacement interval for which the retrofit/rebuild equipment is certified; and

(5) A description of the maintenance necessary to be performed on the retrofit/rebuild equipment in the proper maintenance and use of the equipment.

(d) The information required by paragraphs (b)(2) and (c)(1) of this section may be provided in a catalog rather than on the package or on an insert, provided that access to the catalog is readily available to purchasers and installers of the equipment.

(e) When an equipment certifier desires to certify existing in-service stocks of its products, it may do so provided:

(1) The equipment does not differ in any operational or durability characteristic from the equipment specified in the notification made pursuant to § 85.1407; and

(2) An information sheet is made available to all parties selling the equipment.

(i) The information sheet shall be provided with all equipment sold as certified; and

(ii) The information sheet shall contain all of the information specified in paragraph (b) of this section.

EFFECTIVE DATE NOTE: Information collection requirements in § 85.1411 have not been approved by the Office of Management and Budget (OMB) and are not effective until OMB has approved them.

§ 85.1412 Maintenance and submittal of records for equipment certifiers.

(a) For each certified retrofit/rebuild equipment, the equipment certifier must establish, maintain and retain for

5 years from the date of certification the following adequately organized and indexed records:

(1) Detailed production drawings showing all dimensions, tolerances, performance requirements and material specifications and any other information necessary to completely describe the equipment;

(2) All data obtained during testing of the equipment and subsequent analyses based on that data, including the mileage and the vehicle or engine configuration determinants;

(3) All information used in determining those vehicles or engine for which the equipment is represented as being equivalent from an emissions standpoint to the original equipment being replaced;

(4) A description of the quality control plan used to monitor production and assure compliance of the equipment with the applicable certification requirements;

(5) All data taken in implementing the quality control plan, and any subsequent analyses of that data; and

(6) All in-service data, analyses performed by the equipment certifier and correspondence with vendors, distributors, consumers, retail outlets or engine manufacturers regarding any design, production or in-service problems associated with 25 or more pieces of any certified equipment.

(b) The records required to be maintained in paragraph (a) of this section shall be made available to the Agency upon the written request of the MOD Director.

(c) If the equipment certifier is selling equipment that is not certified as available to all affected urban bus operators under §85.1403(b) and §85.1407, then the equipment certifier shall submit to EPA, at the time an offer is made, a copy of all offers made to affected urban bus operators for which the equipment certifier has offered to sell its certified equipment for less than the life cycle cost limits specified in §85.1403(b)(1)(iii) or §85.1403(b)(2)(iii). The equipment certifier may assert that some of the information is entitled to confidential treatment as provided in §85.1414.

EFFECTIVE DATE NOTE: Information collection requirements in §85.1412 have not been approved by the Office of Management and Budget (OMB) and are not effective until OMB has approved them.

§85.1413 Decertification.

(a) The MOD Director may notify an equipment certifier that the Agency has made a preliminary determination that certain retrofit/rebuild equipment should be decertified.

(1) Such a preliminary determination may be made if there is reason to believe that the equipment manufactured has failed to comply with §§85.1405 through 85.1414. Information upon which such a determination will be made includes but is not limited to the following:

(i) The equipment was certified on the basis of emission tests, and the procedures used in such tests were not in substantial compliance with a portion or portions of the heavy-duty engine Federal Test Procedure contained in 40 CFR part 86 or an alternative test prescribed under 40 CFR 85.1414; or

(ii) Use of the certified equipment is causing urban bus engine emissions to exceed emission requirements for any regulated pollutant; or

(iii) Use of the certified equipment causes or contributes to an unreasonable risk to public health, welfare or safety or severely degrades driveability operation or function; or

(iv) The equipment has been modified in a manner requiring recertification pursuant to §85.1410; or

(v) The certifier of such equipment has not established, maintained or retained the records required pursuant to §85.1412 or fails to make the records available to the MOD Director upon written request pursuant to §85.1412; or

(vi) The life cycle cost of the equipment exceeds the limits specified in §85.1403(b)(1)(iii) or §85.1403(b)(2)(iii).

(2) Notice of a preliminary determination to decertify shall contain:

(i) A description of the noncomplying equipment;

(ii) The basis for the MOD Director's preliminary decision; and

(iii) The date by which the certifier must:

(A) Terminate the sale of the equipment as certified equipment; or

(B) Make the necessary change (if so recommended by the Agency); or

(C) Request an opportunity in writing to dispute the allegations of the preliminary decertification.

(b) If the equipment certifier requests an opportunity to respond to the preliminary determination, the certifier and other parties interested in the MOD Director's decision whether to decertify the equipment shall, within 15 days of the date of the request, submit written presentations, including the relevant information and data, to the MOD Director. The MOD Director, in his or her discretion, may provide an opportunity for oral presentations.

(1) Any interested party may request additional time to respond to the information submitted by the equipment certifier. The MOD Director upon a showing of good cause by the interested party may grant an extension of time to reply up to 30 days.

(2) The equipment certifier may have an extension of up to 30 days to reply to information submitted by interested parties. Notification of intent to reply shall be submitted to the MOD Director within 10 days of the date information from interested parties is submitted to the MOD Director.

(c) If an equipment certifier has disputed the allegations of the preliminary decisions, the MOD Director shall, after reviewing any additional information, notify the equipment certifier of his or her decision whether the equipment may continue to be sold as certified. This notification shall include an explanation upon which the decision was made and the effective date for decertification, where appropriate.

(d) Within 20 days from the date of a decision made pursuant to paragraph (c) of this section, any adversely affected party may appeal the decision to the Office Director.

(1) A petition for appeal to the Office Director must state all of the reasons why the decision of the MOD Director should be reversed.

(2) The Office Director may, in his or her discretion, allow additional oral or written testimony.

(3) If no appeal is filed with the Office Director within the permitted time period, the decision of the MOD Director shall be final.

(e) If a final decision is made to decertify equipment under paragraph (d) of this section, the certifier of such equipment shall notify his immediate customers that, as of the date of the final determination, the equipment in question has been decertified. The equipment certifier shall offer to replace decertified equipment in the customer's inventory with certified replacement equipment or, if unable to do so, shall at the customer's request repurchase such inventory at a reasonable price. The immediate customers must stop selling the equipment once the certifier has notified the customer that the equipment has been decertified.

(f) Notwithstanding the requirements of paragraph (e) of this section, equipment purchased by an urban bus operator prior to decertification, shall be considered certified pursuant to this subpart.

§85.1414 Alternative test procedures.

As a part of the certification process, as set forth in §85.1406, a certifier may request that the Agency approve an alternative test procedure, other than the heavy-duty engine Federal test procedure, to show compliance with the 25 percent reduction in particulate matter emissions as noted in §85.1403(b)(2)(i). The alternative test may be a chassis-based test, but the alternative test shall be representative of in-use urban bus operation. The requestor shall supply relevant technical support to substantiate its claim of representativeness. Upon an acceptable showing that an alternative test is representative of in-use urban bus operation, the Agency shall determine whether to set such alternative test procedures through rulemaking. The provisions of the certification process apply to such a request for alternative procedures.

EFFECTIVE DATE NOTE: Information collection requirements in §85.1414 have not been approved by the Office of Management and Budget (OMB) and are not effective until OMB has approved them.

§ 85.1415 Treatment of confidential information.

(a) Any certifier may assert that some or all of the information submitted pursuant to this subpart is entitled to confidential treatment as provided by 40 CFR part 2, subpart B.

(b) Any claim of confidentiality must accompany the information at the time it is submitted to the Agency.

(c) To assert that information submitted pursuant to this subpart is confidential, a certifier must indicate clearly the items of information claimed confidential by marking, circling, bracketing, stamping, or otherwise specifying the confidential information. In addition to the complete and identical copies submitted pursuant to § 85.1407(a)(6), the submitter shall also provide two identical copies of its submittal from which all confidential information shall be deleted. If a need arises to publicly release nonconfidential information, the Agency will assume that the submitter has accurately deleted all confidential information from this second copy.

(d) If a claim is made that some or all of the information submitted pursuant to this subpart is entitled to confidential treatment, the information covered by that confidentiality claim will be disclosed by the Administrator only to the extent and by means of the procedures set forth in 40 CFR part 2, subpart B.

(e) Information provided without a claim of confidentiality at the time of submission may be made available to the public by the Agency without further notice to the submitter, in accordance with 40 CFR 2.204(c)(2)(i)(A).

Subpart P—Importation of Motor Vehicles and Motor Vehicle Engines

AUTHORITY: 42 U.S.C. 7522, 7525, 7541, 7542(a) and 7601(a).

SOURCE: 52 FR 36156, Sept. 25, 1987, unless otherwise noted.

§ 85.1501 Applicability.

(a) Except where otherwise indicated, this subpart is applicable to motor vehicles and motor vehicle engines which are offered for importation or imported into the United States and for which the Administrator has promulgated regulations under part 86 prescribing emission standards but which are not covered by certificates of conformity issued under section 206(a) of the Clean Air Act (i.e., which are nonconforming vehicles as defined below), as amended, and part 86 at the time of conditional importation. Compliance with regulations under this subpart shall not relieve any person or entity from compliance with other applicable provisions of the Clean Air Act.

(b) Regulations prescribing further procedures for importation of motor vehicles and motor vehicle engines into the Customs territory of the United States, as defined in 19 U.S.C. 1202, are set forth at 19 CFR 12.73.

§ 85.1502 Definitions.

(a) As used in this subpart, all terms not defined herein have the meanings given them in 19 CFR 12.73, in the Clean Air Act, as amended, and elsewhere in parts 85 and 86 of this chapter.

(1) *Act.* The Clean Air Act, as amended (42 U.S.C. 7401 *et seq.*).

(2) *Administrator.* The Administrator of the Environmental Protection Agency.

(3) *Certificate of conformity.* The document issued by the Administrator under section 206(a) of the Act.

(4) *Certificate holder.* The entity in whose name the certificate of conformity for a class of motor vehicles or motor vehicle engines has been issued.

(5) *The Federal Compliance Testing sequence (FCT).* The testing sequence that incorporates all of the testing requirements of part 86 applicable at the time of an emissions test conducted pursuant to this subpart.

(6) *FTP.* The Federal Test Procedure at part 86.

(7) *Independent commercial importer (ICI).* An importer who is not an original equipment manufacturer (OEM) (see definition below) or does not have a contractual agreement with an OEM to act as its authorized representative for the distribution of motor vehicles or motor vehicle engines in the U.S. market.

(8) *Model year.* The manufacturer's annual production period (as determined by the Administrator) which includes January 1 of such calendar year; *Provided,* That if the manufacturer has no annual production period, the term ''model year'' shall mean the calendar year in which a vehicle is modified. A certificate holder shall be deemed to have produced a vehicle or engine when the certificate holder has modified the nonconforming vehicle or engine.

(9) *Nonconforming vehicle or engine.* A motor vehicle or motor vehicle engine which is not covered by a certificate of conformity prior to final or conditional importation and which has not been finally admitted into the United States under the provisions of §85.1505, §85.1509 or the applicable provisions of §85.1512. Excluded from this definition are vehicles admitted under provisions of §85.1512 covering EPA approved manufacturer and U.S. Government Agency catalyst and O_2 sensor control programs.

(10) *Original equipment manufacturer (OEM).* The entity which originally manufactured the motor vehicle or motor vehicle engine prior to conditional importation.

(11) *Original production (OP) year.* The calendar year in which the motor vehicle or motor vehicle engine was originally produced by the OEM.

(12) *Original production (OP) years old.* The age of a vehicle as determined by subtracting the original production year of the vehicle from the calendar year of importation.

(13) *Running changes.* Those changes in vehicle or engine configuration, equipment or calibration which are made by an OEM or ICI in the course of motor vehicle or motor vehicle engine production.

(14) *United States.* United States includes the Customs territory of the United States as defined in 19 U.S.C. 1202, and the Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands.

(15) *Useful life.* A period of time/mileage as specified in part 86 for a nonconforming vehicle which begins at the time of resale (for a motor vehicle or motor vehicle engine owned by the ICI at the time of importation) or release to the owner (for a motor vehicle or motor vehicle engine not owned by the ICI at the time of importation) of the motor vehicle or motor vehicle engine by the ICI after modification and/or test pursuant to §85.1505 or §85.1509.

(16) *Working day.* Any day on which Federal government offices are open for normal business. Saturdays, Sundays, and official Federal holidays are not working days.

(b) [Reserved]

[52 FR 36156, Sept. 25, 1987, as amended at 61 FR 5842, Feb. 14, 1996]

§85.1503 General requirements for importation of nonconforming vehicles.

(a) A nonconforming vehicle or engine offered for importation into the United States must be imported by an ICI who is a current holder of a valid certificate of conformity unless an exemption or exclusion is granted by the Administrator under §85.1511 of this subpart or the vehicle is eligible for entry under §85.1512.

(b) Final admission shall not be granted unless:

(1) The vehicle or engine is covered by a certificate of conformity issued in the name of the importer under part 86 and the certificate holder has complied with all requirements of §85.1505; or

(2) The vehicle or engine is modified and emissions tested in accordance with the provisions of §85.1509 and the certificate holder has complied with all other requirements of §85.1509; or

(3) The vehicle or engine is exempted or excluded under §85.1511; or

(4) The vehicle was covered originally by a certificate of conformity and is otherwise eligible for entry under §85.1512.

§85.1504 Conditional admission.

(a) A motor vehicle or motor vehicle engine offered for importation under §85.1505, §85.1509 or §85.1512 may be conditionally admitted into the United States, but shall be refused final admission unless:

(1) At the time of conditional admission, the importer has submitted to the Administrator a written report that the subject vehicle or engine has been permitted conditional admission pending EPA approval of its application for

final admission under § 85.1505, § 85.1509, or § 85.1512. This written report shall contain the following:

(i) Identification of the importer of the vehicle or engine and the importer's address and telephone number;

(ii) Identification of the vehicle or engine owner and the vehicle or engine owner's address, telephone number and taxpayer identification number;

(iii) Identification of the vehicle or engine;

(iv) Information indicating under what provision of these regulations the vehicle or engine is to be imported;

(v) Identification of the place where the subject vehicle or engine will be stored until EPA approval of the importer's application to the Administrator for final admission;

(vi) Authorization for EPA Enforcement Officers to conduct inspections or testing otherwise permitted by the Act or regulations thereunder;

(vii) Identification, where applicable, of the certificate by means of which the vehicle is being imported;

(viii) The original production year of the vehicle; and

(ix) Such other information as is deemed necessary by the Administrator.

(b) Such conditional admission shall not be under bond for a vehicle or engine which is imported under § 85.1505 or § 85.1509. A bond will be required for a vehicle or engine imported under applicable provisions of § 85.1512. The period of conditional admission shall not exceed 120 days. During this period, the importer shall store the vehicle or engine at a location where the Administrator will have reasonable access to the vehicle or engine for his/her inspection.

§ 85.1505 Final admission of certified vehicles.

(a) A motor vehicle or engine may be finally admitted into the United States upon approval of the certificate holder's application to the Administrator. Such application shall be made either by completing EPA forms or by submitting the data electronically to EPA's computer, in accordance with EPA instructions. Such application shall contain:

(1) The information required in § 85.1504(a);

(2) Information demonstrating that the vehicle or engine has been modified in accordance with a valid certificate of conformity. Such demonstration shall be made in one of the following ways:

(i) Through an attestation by the certificate holder that the vehicle or engine has been modified in accordance with the provisions of the certificate holder's certificate, and presentation to EPA of a statement by the appropriate OEM that the OEM will provide to the certificate holder and to EPA information concerning running changes to the vehicle or engine described in the certificate holder's application for certification, and actual receipt by EPA of notification by the certificate holder of any running changes already implemented by the OEM at the time of application and their effect on emissions; or

(ii) Through an attestation by the certificate holder that the vehicle or engine has been modified in accordance with the provisions of the certificate holder's certificate of conformity and that the certificate holder has conducted an FTP test, at a laboratory within the United States, that demonstrates compliance with Federal emission requirements on every third vehicle or third engine imported under that certificate within 120 days of entry, with sequencing of the tests to be determined by the date of importation of each vehicle or engine. Should the certificate holder have exceeded a threshold of 300 vehicles or engines imported under the certificate without adjustments or other changes in accordance with paragraph (a)(3) of this section, the amount of required FTP testing may be reduced to every fifth vehicle or engine. In order to make a demonstration under paragraph (a)(2)(i) of this section, a certificate holder must have received permission from the Administrator to do so;

(3) The results of every FTP test which the certificate holder conducted on the vehicle or engine. Should a subject vehicle or engine have failed an FTP at any time, the following procedures are applicable:

(i) The certificate holder may either:

(A) Conduct one FTP retest that involves no adjustment of the vehicle or engine from the previous test (e.g., adjusting the RPM, timing, air-to-fuel ratio, etc.) other than adjustments to adjustable parameters that, upon inspection, were found to be out of tolerance. When such an allowable adjustment is made, the parameter may be reset only to the specified (i.e., nominal) value (and not any other value within the tolerance band); or

(B) Initiate a change in production (running change) under the provisions of 40 CFR 86.084–14(c)(13) that causes the vehicle to meet Federal emission requirements.

(ii) If the certificate holder chooses to retest in accordance with paragraph (a)(3)(i)(A) of this section:

(A) Such retests must be completed no later than five working days subsequent to the first FTP test;

(B) Should the subject vehicle or engine fail the second FTP, then the certificate holder must initiate a change in production (a running change) under the provisions of 40 CFR 86.084–14(c)(13) that causes the vehicle to meet Federal emission requirements.

(iii) If the certificate holder chooses to initiate a change in production (a running change) under the provisions of 40 CFR 86.084–14(c)(13) that causes the vehicle to meet Federal requirements, changes involving adjustments of adjustable vehicle parameters (e.g., adjusting the RPM, timing, air/fuel ratio) must be changes in the specified (i.e., nominal) values to be deemed acceptable by EPA.

(iv) Production changes made in accordance with this section must be implemented on all subsequent vehicles or engines imported under the certificate after the date of importation of the vehicle or engine which gave rise to the production change.

(v) Commencing with the first vehicle or engine receiving the running change, every third vehicle or engine imported under the certificate must be FTP tested to demonstrate compliance with Federal emission requirements until, as in paragraph(a)(2)(ii) of this section, a threshold of 300 vehicles or engines imported under the certificate is exceeded, at which time the amount of required FTP testing may be reduced to every fifth vehicle or engine.

(vi) Reports concerning these running changes shall be made to both the Manufacturers Operations and Certification Divisions of EPA within ten working days of initiation of the running change. The cause of any failure of an FTP shall be identified, if known;

(4) The applicable deterioration factor;

(5) The FTP results adjusted by the deterioration factor;

(6) Such other information that may be specified by applicable regulations or on the certificate under which the vehicle or engine has been modified in order to assure compliance with requirements of the Act;

(7) All information required under §85.1510;

(8) An attestation by the certificate holder that the certificate holder is responsible for the vehicle's or engine's compliance with Federal emission requirements, regardless of whether the certificate holder owns the vehicle or engine imported under this section;

(9) The name, address and telephone number of the person who the certificate holder prefers to receive EPA notification under §85.1505(c); and

(10) Such other information as is deemed necessary by the Administrator.

(b) EPA approval for final admission of a vehicle or engine under this section shall be presumed not to have been granted if a vehicle has not been properly modified to be in conformity in all material respects with the description in the application for certification or has not complied with the provisions of §85.1505(a)(2) or its final FTP results, adjusted by the deterioration factor, if applicable, do not comply with applicable emission standards.

(c) Except as provided in §85.1505(b), EPA approval for final admission of a vehicle or engine under this section shall be presumed to have been granted should the certificate holder not have received oral or written notice from EPA to the contrary within 15 working days of the date of EPA's receipt of the certificate holder's application under §85.1505(a). Such EPA notice shall be made to an employee of the certificate holder. If application is made on EPA

forms, the date on a certified mail receipt shall be deemed to be the official date of notification to EPA. If application is made by submitting the data electronically, the date of acceptance by EPA's computer shall be deemed to be the official date of notification to EPA. During this 15 working day period, the vehicle or engine must be stored at a location where the Administrator will have reasonable access to the vehicle or engine for his/her inspection.

§ 85.1506 Inspection and testing of imported motor vehicles and engines.

(a) In order to allow the Administrator to determine whether a certificate holder's production vehicles or engines comply with applicable emission requirements or requirements of this subpart, EPA Enforcement Officers are authorized to conduct inspections and/or tests of vehicles or engines imported by the certificate holder. EPA Enforcement Officers shall be admitted during operating hours upon demand and upon presentation of credentials to any of the following:

(1) Any facility where any vehicle or engine imported by the certificate holder under this subpart was or is being modified, tested or stored; and

(2) Any facility where any record or other document relating to modification, testing or storage of the vehicles or engines, or required to be kept by § 85.1507, is located.

EPA may require inspection or retesting of vehicles or engines at the test facility used by the certificate holder or at an EPA-designated testing facility, with transportation and/or testing costs to be borne by the certificate holder.

(b) Upon admission to any facility referred to in paragraph (a) of this section, any EPA Enforcement Officer shall be allowed during operating hours:

(1) To inspect and monitor any part or aspect of activities relating to the certificate holder's modification, testing and/or storage of vehicles or engines imported under this subpart;

(2) To inspect and make copies of any records or documents related to modification, testing and storage of a vehicle or engine, or required by § 85.1507; and

(3) To inspect and photograph any part or aspect of any such vehicle or engine and any component used in the assembly thereof.

(c) Any EPA Enforcement Officer shall be furnished, by those in charge of a facility being inspected, with such reasonable assistance as he/she may request to help him/her discharge any function listed in this subpart. A certificate holder shall cause those in charge of a facility operated for its benefit to furnish such reasonable assistance without charge to EPA (whether or not the certificate holder controls the facility).

(d) The requirements of paragraphs (a), (b) and (c) of this section apply whether or not the certificate holder owns or controls the facility in question. Noncompliance with the requirements of paragraphs (a), (b) and (c) may preclude an informed judgment that vehicles or engines which have been or are being imported under this subpart by the certificate holder comply with applicable emission requirements or requirements of this subpart. It is the certificate holder's responsibility to make such arrangements as may be necessary to assure compliance with paragraphs (a), (b) and (c) of this section. Failure to do so, or other failure to comply with paragraphs (a), (b) and (c), may result in sanctions as provided for in the Act or § 85.1513(e).

(e) Duly designated Enforcement Officers are authorized to proceed ex parte to seek warrants authorizing the inspection or testing of the motor vehicles or motor vehicle engines described in paragraph (a) of this section whether or not the Enforcement Officer first attempted to seek permission from the certificate holder or facility owner to inspect such motor vehicles or motor vehicle engines.

(f) The results of the Administrator's test under this section shall comprise the official test data for the vehicle or engine for purposes of determining whether the vehicle or engine should be permitted final entry under § 85.1505 or § 85.1509.

(g) For purposes of this section:

(1) ''Presentation of Credentials'' shall mean display of the document

designating a person as an EPA Enforcement Officer.

(2) Where vehicle storage areas or facilities are concerned, ''operating hours'' shall means all times during which personnel other than custodial personnel are at work in the vicinity of the area or facility and have access to it.

(3) Where facilities or areas other than those specified in paragraph (g)(2) of this section are concerned, ''operating hours'' shall mean all times during which the facility is in operation.

(4) ''Reasonable assistance'' includes, but is not limited to, clerical, copying, interpreting and translating services, and the making available on request of personnel of the facility being inspected during their working hours to inform the EPA Enforcement Officer of how the facility operates and to answer his/her questions.

§ 85.1507 Maintenance of certificate holder's records.

(a) The certificate holder subject to any of the provisions of this subpart shall establish, maintain and retain for six years from the date of entry of a nonconforming vehicle or engine imported by the certificate holder, adequately organized and indexed records, correspondence and other documents relating to the certification, modification, test, purchase, sale, storage, registration and importation of that vehicle or engine, including but not limited to:

(1) The declaration required by 19 CFR 12.73;

(2) Any documents or other written information required by a Federal government agency to be submitted or retained in conjunction with the certification, importation or emission testing of motor vehicles or motor vehicle engines;

(3) All bills of sale, invoices, purchase agreements, purchase orders, principal or agent agreements and correspondence between the certificate holder and the purchaser, of each vehicle or engine, and any agents of the above parties;

(4) Documents providing parts identification data associated with the emission control system installed on each vehicle or engine demonstrating that such emission control system was properly installed on such vehicle or engine;

(5) Documents demonstrating that, where appropriate, each vehicle or engine was emissions tested in accordance with the Federal Test Procedure.

(6) Documents providing evidence that the requirements of § 85.1510 have been met.

(7) Documents providing evidence of compliance with all relevant requirements of the Clean Air Act, the Energy Tax Act of 1978, and the Energy Policy and Conservation Act;

(8) Documents providing evidence of the initiation of the ''15 day hold'' period for each vehicle or engine imported pursuant to § 85.1505 or § 85.1509;

(9) For vehicles owned by the ICI at the time of importation, documents providing evidence of the date of sale subsequent to importation, together with the name, address and telephone number of the purchaser, for each vehicle or engine imported pursuant to § 85.1505 or § 85.1509;

(10) For vehicles not owned by the ICI at the time of importation, documents providing evidence of the release to the owner subsequent to importation for each vehicle or engine imported pursuant to § 85.1505 or § 85.1509; and

(11) Documents providing evidence of the date of original manufacture of the vehicle or engine.

(b) The certificate holder is responsible for ensuring the maintenance of records required by this section, regardless of whether facilities used by the certificate holder to comply with requirements of this subpart are under the control of the certificate holder.

§ 85.1508 "In Use" inspections and recall requirements.

(a) Vehicles or engines which have been imported, modified and/or FTP tested by a certificate holder pursuant to § 85.1505 or § 85.1509 may be inspected and emission tested by EPA throughout the useful lives of the vehicles or engines.

(b) Certificate holders shall maintain for six years, and provide to EPA upon request, a list of owners of all vehicles or engines imported by the certificate holder under this subpart.

(c) A certificate holder will be notified whenever the Administrator has determined that a substantial number of a class or category of the certificate holder's vehicles or engines, although properly maintained and used, do not conform to the regulations prescribed under section 202 when in actual use throughout their useful lives (as determined under section 202(d)). After such notification, the Recall Regulations at part 85, subpart S, shall govern the certificate holder's responsibilities and references to a manfacturer in the Recall Regulations shall apply to the certificate holder.

§ 85.1509 Final admission of modification and test vehicles.

(a) Except as provided in paragraphs (b), (c), (d), (e), and (f) of this section, a motor vehicle or motor vehicle engine may be imported under this section by a certificate holder possessing a currently valid certificate of conformity only if:

(1)(i) The vehicle or engine is six OP years old or older; or

(ii) The vehicle was owned, purchased and used overseas by military or civilian employees of the U.S. Government and

(A) An ICI does not hold a currently valid certificate for that particular vehicle; and

(B) The Federal agency employing the owner of such vehicle determines that such owner is stationed in an overseas area which either prohibits the importation of U.S.-certified vehicles or which does not have adequate repair facilities for U.S.-certified vehicles; and

(C) The Federal agency employing the personnel owning such vehicles determines that such vehicles are eligible for shipment to the United States at U.S. Government expense; and

(2) The certificate holder's name has not been placed on a currently effective EPA list of certificate holders ineligible to import such modification/test vehicles, as described in paragraph (j) of this section.

(b) In calendar year 1988, a motor vehicle or motor vehicle engine originally produced in calendar years 1983 through 1987 may be imported under this section by a certificate holder if:

(1) The certificate holder possesses a currently valid certificate of conformity for a vehicle or engine model originally produced in calendar years 1987 or 1988 and the make (i.e., the OEM) and fuel type of such certified model is the same as the make and fuel type of the vehicle or engine being imported under this section; and

(2) The certificate holder's name has not been placed on a currently effective EPA list of certificate holder's ineligible to import such modification/test vehicles, as described in paragraph (j) of this section.

(c) In calendar year 1989, a motor vehicle or motor vehicle engine originally produced in calendar years 1984 through 1987 may be imported under this section by a certificate holder if:

(1) The certificate holder possesses a currently valid certificate of conformity for a vehicle or engine model originally produced in calendar years 1988 or 1989 and the make and fuel type of such certified model is the same as the make and fuel type of the vehicle or engine being imported under this section; and

(2) The certificate holder's name has not been placed on a currently effective EPA list of certificate holders ineligible to import such modification/test vehicles, as described in paragraph (j) of this section,

(d) In calendar year 1990, a motor vehicle or motor vehicle engine originally produced in calendar years 1985 through 1987 may be imported under this section by a certificate holder if:

(1) The certificate holder possesses a currently valid certificate of conformity for a vehicle or engine model originally produced in calendar years 1989 or 1990 and the make and fuel type of such certified model is the same as the make and fuel type of the vehicle or engine being imported under this section; and

(2) The certificate holder's name has not been placed on a currently effective EPA list of certificate holders ineligible to import such modification/test vehicles, as described in paragraph (j) of this section.

(e) In calendar year 1991, a motor vehicle or motor vehicle engine originally produced in calendar years 1986

and 1987 may be imported under this section by a certificate holder if:

(1) The certificate holder possesses a currently valid certificate of conformity for a vehicle or engine model originally produced in calendar years 1990 or 1991 and the make and fuel type of such certified model is the same as the make and fuel type of the vehicle or engine being imported under this section; and

(2) The certificate holder's name has not been placed on a currently effective EPA list of certificate holders ineligible to import such modification/test vehicles, as described in paragraph (j) of this section.

(f) In calendar year 1992, a motor vehicle or motor vehicle engine originally produced in calendar year 1987 may be imported under this section by a certificate holder if:

(1) The certificate holder possesses a currently valid certificate of conformity for a vehicle or engine model originally produced in calendar year 1991 or 1992 and the make and fuel type of such certified model is the same as the make and fuel type of the vehicle or engine being imported under this section; and

(2) The certificate holder's name has not been placed on a currently effective EPA list of certificate holders ineligible to import such modification/test vehicles, as described in paragraph (j) of this section.

(g) A motor vehicle or motor vehicle engine conditionally imported under this section may be finally admitted into the United States upon approval of the certificate holder's application to the Administrator. Such application shall be made either by completing EPA forms or, if the applicant chooses, by submitting the data electronically to EPA's computer, in accordance with EPA instructions. Such application shall contain:

(1) The identification information required in § 85.1504;

(2) An attestation by the certificate holder that the vehicle or engine has been modified and/emission tested in accordance with the FTP at a laboratory within the United States;

(3) The results of any FTP;

(4) The deterioration factor assigned by EPA;

(5) The FTP results adjusted by the deterioration factor;

(6) An attestation by the certificate holder that emission testing and development of fuel economy data as required by § 85.1510 was performed after the vehicle or engine had been modified to conform to Department of Transportation safety standards;

(7) All information required under § 85.1510;

(8) An attestation by the certificate holder that the certificate holder is responsible for the vehicle's or engine's compliance with Federal emission requirements, regardless of whether the certificate holder owns the vehicle or engine imported under this section.

(9) The name, address and telephone number of the person who the certification holder prefers to receive EPA notification under § 85.1509(i).

(10) For any vehicle imported in accordance with paragraphs (b) through (f) of this section, an attestation by the certificate holder that the vehicle is of the same make and fuel type as the vehicle covered by a qualifying certificate as described in paragraphs (b) through (f) of this section, as applicable.

(11) Such other information as is deemed necessary by the Administrator.

(h) EPA approval for final admission of a vehicle or engine under this section shall be presumed not to have been granted if a vehicle's final FTP results, adjusted by the deterioration factor, if applicable, do not comply with applicable emission standards.

(i) Except as provided in § 85.1509(h), EPA approval for final admission of a vehicle or engine under this section shall be presumed to have been granted should the certificate holder not have received oral or written notice from EPA to the contrary within 15 working days of the date of EPA's receipt of the certificate holder's application under § 85.1509(g). Such EPA notice shall be made to an employee of the certificate holder. If application is made on EPA form, the date of a certified mail receipt shall be deemed to be the official date of notification to EPA. If application is made by submitting the data electronically, the date of acceptance by EPA's computer shall be deemed to

be the official date of notification to EPA. During this 15 working day period, the vehicle or engine must be stored at a location where the Administrator will have reasonable access to inspect the vehicle or engine.

(j) *EPA list of certificate holders ineligible to import vehicles for modification/test.* EPA shall maintain a current list of certificate holders who have been determined to be ineligible to import vehicles or engines under this section. Such determinations shall be made in accordance with the criteria and procedures in §85.1513(e) of this subpart.

(k) *Inspections.* Prior to final entry, vehicles or engines imported under this section are subject to special inspections as described in §85.1506 with these additional provisions:

(1) If a significant number of vehicles imported by a certificate holder fail to comply, in the judgment of the Administrator, with emission requirements upon inspection or retest, or if the certificate holder fails to comply with any provision of these regulations that pertain to vehicles imported pursuant to §85.1509, the certificate holder may be placed on the EPA list of certificate holders ineligible to import vehicles under this section as specified in paragraph (j) of this section and §85.1513(e);

(2) Individual vehicles or engines which fail an FTP retest or inspection must be repaired and retested, as applicable, to demonstrate compliance with emission requirements before final admission.

(3) Unless otherwise specified by EPA, the costs of all retesting under this subsection, including transportation, shall be borne by the certificate holder.

(l) *In-Use inspection and testing.* Vehicles or engines imported under this section may be tested or inspected by EPA at any time during the vehicle's or engine's useful life in accordance with §85.1508 (a) and (b). If, in the judgment of the Administrator, a significant number of properly maintained and used vehicles or engines imported by the certificate holder fail to meet emission requirements, the name of the certificate holder may be placed on the EPA list of certificate holders ineligible to import vehicles under the modification/test provision as specified in paragraph (j) of this section and §85.1513(e).

§85.1510 Maintenance instructions, warranties, emission labeling and fuel economy requirements.

The provisions of this section are applicable to all vehicles or engines imported under the provisions of §§85.1505 and 85.1509.

(a) *Maintenance Instructions.* (1) The certificate holder shall furnish to the purchaser or to the owner of each vehicle or engine imported under §85.1505 or §85.1509 of this section, written instructions for the maintenance and use of the vehicle or engine by the purchaser or owner. Each application for final admission of a vehicle or engine shall provide an attestation that such instructions have been or will be (if the ultimate producer is unknown) furnished to the purchaser or owner of such vehicle or engine at the time of sale or redelivery. The certificate holder shall maintain a record of having furnished such instructions.

(2) For each vehicle or engine imported under §85.1509, the maintenance and use instructions shall be maintained in a file containing the records for that vehicle or engine.

(3) Such instructions shall not contain requirements more restrictive than those set forth in part 86 (Maintenance Instructions), and shall be in sufficient detail and clarity that an automotive mechanic of average training and ability can maintain or repair the vehicle or engine.

(4) Certificate holders shall furnish with each vehicle or engine a list of the emission control parts, and emission-related parts added by the certificate holder and the emission control and emission related parts furnished by the OEM.

(b) *Warranties.* (1) Certificate holders shall provide to vehicle or engine owners emission warranties identical to those required by sections 207 (a) and (b) of the Act and 40 CFR part 85, subpart V. The warranty period for each vehicle or engine shall commence on the date the vehicle or engine is delivered by the certificate holder to the ultimate purchaser or owner.

(2) Certificate holders shall ensure that these warranties:

(i) Are insured by a prepaid mandatory service insurance policy underwritten by an independent insurance company;

(ii) Are transferable to each successive owner for the periods specified in sections 207 (a) and (b); and

(iii) Provide that in the absence of a certificate holder's facility being reasonably available (i.e., within 50 miles) for performance of warranty repairs, such warranty repairs may be performed anywhere.

(3) Certificate holders shall attest in each application for final admission that such warranties will be or have been provided. Copies of such warranties shall be maintained in a file containing the records for that vehicle or engine.

(c) *Emission labeling.* (1) The certificate holder shall affix a permanent legible label in a readily visible position in the engine compartment. The label shall meet all the requirements of part 86 and shall contain the following statement ''This vehicle or engine was originally produced in (month and year of original production). It has been imported and modified by (certificate holder's name, address and telephone number) to conform to U.S. emission regulations applicable to the (year) model year.'' If the vehicle or engine is owned by the certificate holder at the time of importation, the label shall also state ''this vehicle or engine is warranted for five years or 50,000 miles from the date of purchase, whichever comes first.'' If the vehicle or engine is not owned by the certificate holder at the time of importation, the label shall state ''this vehicle or engine is warranted for five years or 50,000 miles from the date of release to the owner, whichever comes first.'' For vehicles imported under § 85.1509, the label shall clearly state in bold letters that ''this vehicle has not been manufactured under a certificate of conformity but meets EPA air pollution control requirements under a modification/test program.'' In addition, for all vehicles, the label shall contain the vacuum hose routing diagram applicable to the vehicles.

(2) As part of the application to the Administrator for final admission of each individual vehicle or engine under § 85.1509, the certificate holder shall maintain a copy of such label for each vehicle or engine in a file containing the records for that vehicle or engine. Certificate holders importing under §§ 85.1505 or 85.1509 shall attest to compliance with the above labeling requirements in each application for final admission.

(d) *Fuel economy labeling.* (1) The certificate holder shall affix a fuel economy label that complies with the requirements of 40 CFR part 600, subpart D.

(2) For purposes of generating the fuel economy data to be incorporated on such label, each vehicle imported under § 85.1509 shall be considered to be a separate model type.

(3) As part of the application to the Administrator for final admission of each individual vehicle or engine imported under § 85.1509, the certificate holder shall maintain a copy of such label for each vehicle or engine in a file containing the records for that vehicle or engine. In each application for final admission of a vehicle or engine under §§ 85.1505 or § 85.1509, the certificate holder shall attest to compliance with the above labeling requirements.

(e) *Gas guzzler tax.* (1) Certificate holders shall comply with any applicable provisions of the Energy Tax Act of 1978, 26 U.S.C. 4064, for every vehicle imported under § 85.1505 and § 85.1509.

(2) For vehicles not owned by the certificate holder, the certificate holder shall furnish to the vehicle owner applicable IRS forms (currently numbered 720 (Quarterly Federal Excise Tax) and 6197 (Fuel Economy Tax Computation Form)) which relate to the collection of the gas guzzler tax under the Energy Tax Act of 1978, 26 U.S.C. 4064.

(3) As part of the certificate holder's application to EPA for final admission of each vehicle imported under § 85.1509, the certificate holder shall furnish any fuel economy data required by the Energy Tax Act of 1978, 15 U.S.C. 4064.

(f) *Corporate Average Fuel Economy (CAFE).* (1) Certificate holders shall comply with any applicable CAFE requirements of the Energy Policy and Conservation Act, 15 U.S.C. 2001 et seq., and 40 CFR part 600, for all vehicles imported under §§ 85.1505 and 85.1509.

§ 85.1511 Exemptions and exclusions.

(a) Individuals, as well as certificate holders, shall be eligible for importing vehicles into the United States under the provisions of this section, unless otherwise specified.

(b) Notwithstanding any other requirements of this subpart, a motor vehicle or motor vehicle engine entitled to one of the temporary exemptions of this paragraph may be conditionally admitted into the United States if prior written approval for such conditional admission is obtained from the Administrator. Conditional admission shall be under bond. A written request for approval from the Administrator shall contain the identification required in §85.1504(a)(1) (except for §85.1504(a)(1)(v)) and information that indicates that the importer is entitled to the exemption. Noncompliance with provisions of this section may result in the forfeiture of the total amount of the bond or exporation of the vehicle or engine. The following temporary exemptions are permitted by this paragraph:

(1) *Exemption for repairs or alterations.* Owners of fleet vehicles or engines may import such vehicles or engines solely for purposes of repairs or alterations. Such vehicles or engines may not be registered or licensed in the United States for use on public roads and highways. They may not be sold or leased in the United States and must be exported upon completion of the repairs or alterations.

(2) *Testing exemption.* Testing vehicles or engines may be imported by any person subject to the requirements of 40 CFR 85.1705 and 85.1708. Test vehicles or engines may be operated on and registered for use on public roads or highways provided that the operation is an integral part of the test. The exemption shall be limited to a period not exceeding one year from the date of importation unless a request is made by the appropriate importer concerning the vehicle in accordance with §85.1705(f) for a subsequent one-year period.

(3) *Precertification exemption.* Prototype vehicles for use in applying to EPA for certification may be imported by independent commercial importers subject to applicable provisions of 40 CFR 85.1706 and the following requirements:

(i) No more than one prototype vehicle for each engine family for which an independent commercial importer is seeking certification shall be imported by each independent commercial importer.

(ii) Unless a certificate of conformity is issued for the prototype vehicle, the total amount of the bond shall be forfeited or the vehicle must be exported within 180 days from the date of entry.

(4) *Display exemptions.* (i) Vehicles or engines intended solely for display may be imported subject to the requirements of 40 CFR 85.1707.

(ii) Display vehicles or engines may be imported by any person. Display vehicles or engines may not be sold in the United States and may not be registered or licensed for use on or operated on public roads or highways in the United States, unless an applicable certificate of conformity has been received.

(c) Notwithstanding any other requirements of this subpart, a motor vehicle or motor vehicle engine may be finally admitted into the United States under this paragraph if prior written approval for such final admission is obtained from the Administrator. Conditional admission of these vehicles is not permitted for the purpose of obtaining written approval from the Administrator. A request for approval shall contain the identification information required in §85.1504(a)(1) (except for §85.1504(a)(1)(v)) and information that indicates that the importer is entitled to the exemption or exclusion. The following exemptions or exclusions are permitted by this paragraph:

(1) *National security exemption.* Vehicles may be imported under the national security exemption found at 40 CFR 85.1708. Only persons who are manufacturers may import a vehicle under a national security exemption.

(2) *Hardship exemption.* The Administrator may exempt on a case-by-case basis certain motor vehicles from Federal emission requirements to accommodate unforeseen cases of extreme hardship or extraordinary circumstances. Some examples are as follows:

(i) Handicapped individuals who needs a special vehicle unavailable in a certified configuration;

(ii) Individuals who purchase a vehicle in a foreign country where resale is prohibited upon the departure of such as individual;

(iii) Individuals emigrating from a foreign country to the U.S. in circumstances of severe hardship.

(d) Foreign diplomatic and military personnel may import nonconforming vehicles without bond. At the time of admission, the importer shall submit to the Administrator the written report required in §85.1504(a)(1) (except for information required by §85.1504(a)(1)(v)). Such vehicles may not be be sold in the United States.

(e) *Racing exclusion*. Racing vehicles may be imported by any person provided the vehicles meet one or more of the exclusion criteria specified in 40 CFR 85.1703. Racing vehicles may not be registered or licensed for use on or operated on public roads and highways in the United States.

(f) *Exclusions/exemptions based on date of original manufacture.* (1) Notwithstanding any other requirements of this subpart, the following motor vehicles or motor vehicle engines are excluded from the requirements of the Act in accordance with section 216(3) of the Act and may be imported by any person:

(i) Gasoline-fueled light-duty vehicles and light-duty trucks originally manufactured prior to January 1, 1968.

(ii) Diesel-fueled light-duty vehicles originally manufactured prior to January 1, 1975.

(iii) Diesel-fueled light-duty trucks originally manufactured prior to January 1, 1976.

(iv) Motorcycles originally manufactured prior to January 1, 1978.

(v) Gasoline-fueled and diesel-fueled heavy-duty engines originally manufactured prior to January 1, 1970.

(2) Notwithstanding any other requirements of this subpart, a motor vehicle or motor vehicle engine not subject to an exclusion under §85.1511(f)(1) but greater than twenty OP years old is entitled to an exemption from the requirements of the Act, provided that it is imported into the United States by a certificate holder. At the time of admission, the certificate holder shall submit to the Administrator the written report required in §85.1504(a)(1) (except for information required by §85.1504(a)(1)(v)).

(g) Applications for exemptions and exclusions provided for in paragraphs (b) and (c) of this section shall be mailed to: Investigation/Imports Section (EN–340F), Office of Mobile Sources, U.S. Environmental Protection Agency, Washington, DC 20460.

(h) Vehicles conditionally or finally admitted under paragraphs (b)(2), (b)(4), (c)(1), (c)(2), and (f)(2) of this section must still comply with all applicable requirements, if any, of the Energy Tax Act of 1978, the Energy Policy and Conservation Act and any other Federal or state requirements.

[52 FR 36156, Sept. 25, 1987; 52 FR 43827, Nov. 16, 1987]

§ 85.1512 Admission of catalyst and O_2 sensor-equipped vehicles.

(a)(1) Notwithstanding other provisions of this subpart, any person may conditionally import a vehicle which:

(i) Was covered by a certificate of conformity at the time of original manufacture or had previously been admitted into the United States under §85.1505 or §85.1509 (after June 30, 1988).

(ii) Was certified, or previously admitted under §85.1505 or §85.1509 (after June 30, 1988), with a catalyst emission control system and/or O_2 sensor;

(iii) Is labeled in accordance with 40 CFR part 86, subpart A or, where applicable, §85.1510(c); and

(iv) Has been driven outside the United States, Canada and Mexico or such other countries as EPA may designate.

(2) Such vehicle must be entered under bond pursuant to 19 CFR 12.73 unless it is included in a catalyst and O_2 sensor control program approved by the Administrator upon such terms as may be deemed appropriate. Catalyst and O_2 sensor programs conducted by manufacturers may be approved each model year.

(b) For the purpose of this section, ''catalyst and O_2 sensor control program'' means a program instituted and maintained by a manufacturer, or any U.S. Government Agency for the purpose of preservation, replacement, or

initial installation of catalytic converters and cleaning and/or replacement of O_2 sensors and, if applicable, restricted fuel filler inlets.

(c) For the purpose of this section, ''driven outside the United States, Canada and Mexico'' does not include mileage accumulated on vehicles solely under the control of manufacturers of new motor vehicles or engines for the purpose of vehicle testing and adjustment, and preparation for shipment to the United States.

(d) Vehicles conditionally imported pursuant to this section and under bond must be modified in accordance with the certificate of conformity applicable at the time of manufacture. In the case of vehicles previously imported under §85.1509 or §85.1504 (prior to July 1, 1988), the replacement catalyst and O_2 sensor, if applicable, must be equivalent (in terms of emission reduction) to the original catalyst and O_2 sensor. Such vehicles may be granted final admission upon application to the Administrator, on forms specified by the Administrator. Such application shall contain the information required in §85.1504(a)(1) (i) through (v) and shall contain both an attestation by a qualified mechanic that the catalyst has been replaced and the O_2 sensor has been replaced, if necessary, and that both parts are functioning properly, and a copy of the invoice for parts and labor.

§85.1513 Prohibited acts; penalties.

(a) The importation of a motor vehicle or motor vehicle engine which is not covered by a certificate of conformity other than in accordance with this subpart and the entry regulations of the U.S. Customs Service at 19 CFR 12.73 is prohibited. Failure to comply with this section is a violation of section 203(a)(1) of the Act.

(b) Unless otherwise permitted by this subpart, during a period of conditional admission, the importer of a vehicle shall not:

(1) Operate the vehicle on streets or highways,

(2) Sell or offer the vehicle or engine for sale, or

(3) Store the vehicle on the premises of a dealer.

(c) Any vehicle or engine conditionally admitted pursuant to §§85.1504, 85.1511 or 85.1512, and not granted final admission within 120 days of such conditional admission, or within such additional time as the U.S. Customs Service may allow, shall be deemed to be unlawfully imported into the United States in violation of section 203(a)(1) of the Act, unless such vehicle or engine shall have been delivered to the U.S. Customs Service for export or other disposition under applicable Customs laws and regulations. Any vehicles or engines not so delivered shall be subject to seizure by the U.S. Customs Service.

(d) Any importer who violates section 203(a)(1) of the Act is subject to a civil penalty under section 205 of the Act of not more than $10,000 for each vehicle or engine subject to the violation. In addition to the penalty provided in the Act, where applicable, under the exemption provisions of §85.1511(b), or under §85.1512, any person or entity who fails to deliver such vehicle or engine to the U.S. Customs Service is liable for liquidated damages in the amount of the bond required by applicable Customs laws and regulations.

(e) (1) A certificate holder whose vehicles or engines imported under §85.1505 or §85.1509 fail to conform to Federal emission requirements after modification and/or testing under the Federal Test Procedure (FTP) or who fails to comply with applicable provisions of this subpart, may, in addition to any other applicable sanctions and penalties, be subject to any, or all, of the following sanctions:

(i) The certificate holder's currently held certificates of conformity may be revoked or suspended;

(ii) The certificate holder may be deemed ineligible to apply for new certificates for up to 3 years; and

(iii) The certificate holder may be deemed ineligible to import vehicles or engines under §85.1509 in the future and be placed on a list of certificate holders ineligible to import vehicles or engines under the provisions of §85.1509.

(2) Grounds for the actions described in paragraph (e)(1) of this section shall include, but not be limited to, the following:

(i) Action or inaction by the certificate holder or the laboratory performing the FTP on behalf of the certificate holder which results in fraudulent, deceitful or grossly inaccurate representation of any fact or condition which affects a vehicle's or engine's eligibility for admission to the U.S. under this subpart;

(ii) Failure of a significant number of vehicles or engines imported to comply with Federal emission requirements upon EPA inspection or retest; or

(iii) Failure by a certificate holder to comply with requirements of this subpart.

(3) The following procedures govern any decision to suspend, revoke, or refuse to issue certificates under this subpart:

(i) When grounds appear to exist for the actions described in paragraph (e)(1) of this section, the Administrator shall notify the certificate holder in writing of any intended suspension or revocation of a certificate, proposed ineligibility to apply for new certificates, or intended suspension of eligibility to conduct modification/testing under §85.1509, and the grounds for such action.

(ii) Except as provided by paragraph (e)(3)(iv) of this section, the certificate holder must take the following actions before the Administrator will consider withdrawing notice of intent to suspend or revoke the certificate holder's certificate or the certificate holder's eligibility to perform modification/testing under §85.1509:

(A) Submit a written report to the Administrator which identifies the reason for the noncompliance of the vehicle or engines, describes the proposed remedy, including a description of any proposed quality control and/or quality assurance measures to be taken by the certificate holder to prevent the future occurrence of the problem, and states the date on which the remedies will be implemented; or

(B) Demonstrate that the vehicles or engines do in fact comply with applicable regulations in this chapter by retesting such vehicles or engines in accordance with the FTP.

(iii) A certificate holder may request within 15 calendar days of the Administrator's notice of intent to suspend or revoke a certificate holder's eligibility to perform modification/testing or certificate that the Administrator grant such certificate holder a hearing:

(A) As to whether the tests have been properly conducted,

(B) As to any substantial factual issue raised by the Administrator's proposed action.

(iv) If, after the Administrator notifies a certificate holder of his/her intent to suspend or revoke a certificate holder's certificate of conformity or its eligibility to perform modification/testing under §85.1509 and prior to any final suspension or revocation, the certificate holder demonstrates to the Administrator's satisfaction that the decision to initiate suspension or revocation of the certificate or eligibility to perform modification/testing under §85.1509 was based on erroneous information, the Administrator will withdraw the notice of intent.

(4) Hearings on suspensions and revocations of certificates of conformity or of eligibility to perform modification/testing under §85.1509 shall be held in accordance with the following:

(i) Applicability. The procedures prescribed by this section shall apply whenever a certificate holder requests a hearing pursuant to subsection (e)(3)(iii).

(ii) Hearing under paragraph (e)(3)(iii) of this section shall be held in accordance with the procedures outlined in §88.613, where applicable, provided that where §86.612 is referred to in §86.613: Section 86.612(a) is replaced by §85.1513(d)(2); and §86.612(i) is replaced by §85.1513(d)(3)(iii).

(5) When a hearing is requested under this paragraph and it clearly appears from the data or other information contained in the request for a hearing, or submitted at the hearing, that there is no genuine and substantial question of fact with respect to the issue of whether the certificate holder failed to comply with this subpart, the Administrator will enter an order denying the request for a hearing, or terminating the hearing, and suspending or revoking the certificate of conformity or the certificate holder's eligibility to perform modification/testing under §85.1509.

(6) In lieu of requesting a hearing under paragraph (e)(3)(iii) of this section, a certificate holder may respond in writing to EPA's charges in the notice of intent to suspend or revoke. Such a written response must be received by EPA within 30 days of the date of EPA's notice of intent. No final decision to suspend or revoke will be made before that time.

§ 85.1514 Treatment of confidential information.

(a) Any importer may assert that some or all of the information submitted pursuant to this subpart is entitled to confidential treatment as provided by 40 CFR part 2, subpart B.

(b) Any claim of confidentiality must accompany the information at the time it is submitted to EPA.

(c) To assert that information submitted pursuant to this subpart is confidential, an importer must indicate clearly the items of information claimed confidential by marking, circling, bracketing, stamping, or otherwise specifying the confidential information. Furthermore, EPA requests, but does not require, that the submitter also provide a second copy of its submittal from which all confidential information has been deleted. If a need arises to publicly release nonconfidential information, EPA will assume that the submitter has accurately deleted the confidential information from this second copy.

(d) If a claim is made that some or all of the information submitted pursuant to this subpart is entitled to confidential treatment, the information covered by that confidentiality claim will be disclosed by the Administrator only to the extent and by means of the procedures set forth in part 2, subpart B, of this chapter.

(e) Information provided without a claim of confidentiality at the time of submission may be made available to the public by EPA without further notice to the submitter.

§ 85.1515 Emission standards and test procedures applicable to imported nonconforming motor vehicles and motor vehicle engines.

(a) Notwithstanding any other requirements of this subpart, any motor vehicle or motor vehicle engine conditionally imported pursuant to §85.1505 or §85.1509 and required to be emission tested shall be tested using the FCT at 40 CFR part 86 applicable to current model year motor vehicles and motor vehicle engines at the time of testing.

(b) The emission standards applicable to nonconforming light-duty vehicles and light-duty trucks imported pursuant to this subpart are outlined in tables 1 and 2 of this section, respectively. The useful life as specified in tables 1 and 2 of this section is applicable to imported light-duty vehicles and light-duty trucks, respectively.

(c) Nonconforming motor vehicles or motor vehicle engines of 1994 OP model year and later conditionally imported pursuant to §85.1505 or §85.1509 shall meet all of the emission standards specified in 40 CFR part 86 for the model year in which the motor vehicle or motor vehicle engine is modified. At the option of the ICI, the nonconforming motor vehicle may comply with the emissions standards in 40 CFR 86.1708–99 or 86.1709–99, as applicable to a light-duty vehicle or light light-duty truck, in lieu of the otherwise applicable emissions standards specified in 40 CFR part 86 for the model year in which the nonconforming motor vehicle is modified. The provisions of 40 CFR 86.1710–99 do not apply to imported nonconforming motor vehicles. The useful life specified in 40 CFR part 86 for the model year in which the motor vehicle or motor vehicle engine is modified is applicable where useful life is not designated in this subpart.

(d) ICIs may not participate in emission-related programs for emissions averaging, banking and trading, or noncompliance penalties.

TABLE 1 TO §85.1515.—EMISSION STANDARDS APPLICABLE TO IMPORTED LIGHT-DUTY MOTOR VEHICLES[1 2 3]

OP Year	Hydrocarbon	Carbon monoxide	Oxides of nitrogen	Particulate	Diesel hydrocarbon	Evaporative (years/miles)	Useful life
1968–76	1.5 gpm	15 gpm	3.1 gpm		6.0 g/test	5/50,000	
1977–79	1.5 gpm	15 gpm	2.0 gpm		6.0 g/test	5/50,000	

TABLE 1 TO § 85.1515.—EMISSION STANDARDS APPLICABLE TO IMPORTED LIGHT-DUTY MOTOR VEHICLES [1 2 3]—Continued

OP Year	Hydrocarbon	Carbon monoxide	Oxides of nitrogen	Particulate	Diesel hydrocarbon	Evaporative (years/miles)	Useful life
1980	0.41 gpm	7.0 gpm	2.0 gpm		6.0 g/test	5/50,000	
1981	0.41 gpm	3.4 gpm	1.0 gpm		2.0 g/test	5/50,000	
1982–86	0.41 gpm	3.4 gpm	1.0 gpm	0.60 gpm	2.0 g/test	5/50,000	
1987–93	0.41 gpm	3.4 gpm	1.0 gpm	0.20 gpm	2.0 g/test	5/50,000	
1994 and later	[4]	[4]	[4]	[4]	[4]	[4]	

[1] Diesel particulate standards apply only to diesel fueled light-duty vehicles. Evaporative hydrocarbon standards apply only to non-diesel fueled light-duty vehicles. For alternative fueled light-duty vehicles, the evaporative hydrocarbon standard is interpreted as organic material hydrocarbon equivalent grams carbon per test, as applicable.
[2] No crankcase emissions shall be discharged into the ambient atmosphere from any non-diesel fueled light-duty vehicle.
[3] All light-duty vehicles shall meet the applicable emission standards at both low and high-altitudes according to the procedures specified in 40 CFR part 86 for current model year motor vehicles at the time of testing.
[4] Specified in 40 CFR part 86 for the OP year of the vehicle, per 85.1515(c).

TABLE 2.—EMISSION STANDARDS APPLICABLE TO IMPORTED LIGHT-DUTY TRUCKS [1 2 3 4 5]

OP year	Hydrocarbon	Carbon monoxide	Oxides of nitrogen	Particulate	Diesel hydrocarbon	Evaporative (years/miles)	Useful life
1968–78	2.0 gpm	20 gpm	3.1 gpm		6.0 g/test	5/50,000	
1979–80	1.7 gpm	18 gpm	2.3 gpm		6.0 g/test	5/50,000	
1981	1.7 gpm	18 gpm	2.3 gpm		2.0 g/test	5/50,000	
1982–83	1.7 gpm	18 gpm	2.3 gpm	0.60 gpm	2.0 g/test	5/50,000	
	(2.0)	(26)	(2.3)	(0.60)	(2.6)		
1984	0.80 gpm	10 gpm	2.3 gpm	0.60 gpm	2.0 g/test	5/50,000	
	(1.0)	(14)	(2.3)	(0.60)	(2.6)		
1985–86	0.80 gpm	10 gpm	2.3 gpm	0.60 gpm	2.0 g/test	11/120,000	
	(1.0)	(14)	(2.3)	(0.60)	(2.6)		
1987	0.80 gpm	10 gpm	2.3 gpm	0.26 gpm	2.0 g/test	11/120,000	
	(1.0)	(14)	(2.3)	(0.26)	(2.6)		
1988–89	0.80 gpm	10 gpm	1.2 gpm[6]	0.26 gpm[7]	2.0 g/test	11/120,000	
	(1.0)	(14)	(1.2)	(2.0)	(2.6)		
	0.80 gpm	10 gpm	1.7 gpm[6]	0.45 gpm[7]	2.0 g/test	11/120,000	
	(1.0)	(14)	(1.7)	(0.26)	(2.6)		
	0.80 gpm	10 gpm	2.3 gpm[6]	0.45 gpm[7]	2.0 g/test	11/120,000	
	(1.0)	(14)	(2.3)	(0.26)	(2.6)		
1990–93	0.80 gpm	10 gpm	1.2 gpm[8]	0.26 gpm[7]	2.0 g/test	11/120,000	
	(1.0)	(14)	(1.2)	(0.26)	(2.6)		
	0.80 gpm	10 gpm	1.7 gpm[8]	0.45 gpm[7]	2.0 g/test	11/120,000	
	(1.0)	(14)	(1.7)	(0.26)	(2.6)		
1994 and later	[9]	[9]	[9]	[9]	[9]	[9]	

[1] Diesel particulate standards apply only to diesel fueled light-duty trucks. Evaporative hydrocarbon standards apply only to non-diesel fueled light-duty trucks. For alternative fueled light-duty trucks, the evaporative hydrocarbon standard is interpreted as organic material hydrocarbon equivalent grams carbon per test, as applicable.
[2] No crankcase emissions shall be discharged into the ambient atmosphere from any non-diesel fueled light-duty truck.
[3] A carbon monoxide standard of 0.50% of exhaust flow at curb idle is applicable to all 1984 and later model year light-duty trucks sold to, or owned by, an importer for principal use at other than a designated high-altitude location. This requirement is effective for light-duty trucks sold to, or owned by an importer for principal use at a designated high-altitude location beginning with the 1988 model year.
[4] All 1982 OP year and later light-duty trucks sold to, or owned by, an importer for principal use at a designated high-altitude location shall meet high-altitude emission standards according to the requirements specified in 40 CFR part 86 for current model year light-duty trucks at the time of testing.
[5] Standards in parentheses apply to motor vehicles sold to, or owned by, an importer for principal use at a designated high-altitude location. These standards must be met at high-altitude according to the procedures specified in 40 CFR part 86 for current model year motor vehicles at the time of testing.
[6] The oxides of nitrogen standard of 1.2 gpm applies to light-duty trucks up to and including 3,750 pounds loaded vehicle weight and 6,000 pounds or less gross vehicle weight the 1.7 gpm standard applies to light-duty trucks greater than 3,750 pound loaded vehicle weight and 6,000 pounds or less gross vehicle weight; the 2.3 gpm standard applies to light-duty trucks 6,001 pounds gross vehicle weight and greater.
[7] The diesel particulate standard of 0.26 gpm applies to light-duty trucks up to and including 3,750 pounds loaded vehicle weight; the 0.45 gpm standard applies to light-duty trucks 3,751 pounds and greater loaded vehicle weight.
[8] The oxides of nitrogen standard of 1.2 gpm applies to light-duty trucks up to and including 3,750 pounds loaded vehicle weight; the 1.7 gpm standard applies to light-duty trucks 3,751 pounds and greater loaded vehicle weight.
[9] Specified in 40 CFR part 86 for the OP year of the vehicle, per 85.1515(c).

[61 FR 5842, Feb. 14, 1996, as amended at 62 FR 31232, June 6, 1997; 63 FR 964, Jan. 7, 1998]

Subpart Q—Preemption of State Standards and Waiver Procedures for Nonroad Engines and Nonroad Vehicles

SOURCE: 59 FR 36987, July 20, 1994, unless otherwise noted.

§ 85.1601 Applicability.

The requirements of this subpart are applicable to nonroad engines and nonroad vehicles.

§ 85.1602 Definitions.

As used in this subpart, all terms not defined shall have the meaning given them in the Clean Air Act, as amended.

Commercial means an activity engaged in as a vocation.

Construction equipment or vehicle means any internal combustion engine-powered machine primarily used in construction and located on commercial construction sites.

Engine used in a locomotive means either an engine placed in the locomotive to move other equipment, freight, or passenger traffic, or an engine mounted on the locomotive to provide auxiliary power.

Farm equipment or vehicle means any internal combustion engine-powered machine primarily used in the commercial production and/or commercial harvesting of food, fiber, wood, or commercial organic products or for the processing of such products for further use on the farm.

Locomotive. The definition of *locomotive* specified in 40 CFR 92.2 applies to this subpart.

New means a domestic or imported nonroad vehicle or nonroad engine the equitable or legal title to which has never been transferred to an ultimate purchaser. Where the equitable or legal title to an engine or vehicle is not transferred to an ultimate purchaser until after the engine or vehicle is placed into service, then the engine or vehicle will no longer be new after it is placed into service. A nonroad engine or vehicle is placed into service when it is used for its functional purposes. The term *ultimate purchaser* means, with respect to any new nonroad vehicle or new nonroad engine, the first person who in good faith purchases such *new* nonroad vehicle or new nonroad engine for purposes other than resale. This definition of *new* shall not apply to locomotives or engines used in locomotives.

New engine used in a locomotive means new locomotive engine, as defined in 40 CFR 92.2.

New locomotive. The definition of *new locomotive* specified in 40 CFR 92.2 applies to this subpart.

Nonroad engine means:

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is any internal combustion engine:

(i) In or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers); or

(ii) In or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers); or

(iii) That, by itself or in or on a piece of equipment, is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a nonroad engine if:

(i) The engine is used to propel a motor vehicle or a vehicle used solely for competition, or is subject to standards promulgated under section 202 of the Act; or

(ii) The engine is regulated by a federal New Source Performance Standard promulgated under section 111 of the Act; or

(iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period. An engine located at a

seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three (or more) each year. This paragraph does not apply to an engine after the engine is removed from the location.

Primarily used means used 51 percent or more.

[59 FR 36987, July 20, 1994, as amended at 63 FR 18998, Apr. 16, 1998]

§ 85.1603 Application of definitions; scope of preemption.

(a) For equipment that is used in applications in addition to farming or construction activities, if the equipment is primarily used as farm and/or construction equipment or vehicles, as defined in this subpart, it is considered farm or construction equipment or vehicles.

(b) States and any political subdivisions thereof are preempted from adopting or enforcing standards or other requirements from new engines smaller than 175 horsepower, that are primarily used in farm or construction equipment or vehicles, as defined in this subpart.

(c)(1) States and any political subdivisions thereof are preempted from adopting or enforcing standards or other requirements relating to the control of emissions from new locomotives and new engines used in locomotives.

(2) During a period equivalent in length to 133 percent of the useful life, expressed as MW-hrs (or miles where applicable), beginning at the point at which the locomotive or engine becomes new, those standards or other requirements which are preempted include, but are not limited to, the following: emission standards, mandatory fleet average standards, certification requirements, aftermarket equipment requirements, and nonfederal in-use testing requirements. The standards and other requirements specified in the preceding sentence are preempted whether applicable to new or other locomotives or locomotive engines.

(d) No state or any political subdivisions thereof shall enforce any standards or other requirements relating to the control of emissions from nonroad engines or vehicles except as provided for in this subpart.

[59 FR 36987, July 20, 1994, as amended at 62 FR 67736, Dec. 30, 1997; 63 FR 18998, Apr. 16, 1998]

§ 85.1604 Procedures for California nonroad authorization requests.

(a) California shall request authorization to enforce its adopted standards and other requirements relating to the control of emissions from nonroad vehicles or engines that are otherwise not preempted by §85.1603(b) or §85.1603(c) from the Administrator of EPA and provide the record on which the state rulemaking was based.

(b) After receipt of the authorization request, the Administrator shall provide notice and opportunity for a public hearing regarding such requests.

[59 FR 36987, July 20, 1994, as amended at 62 FR 67736, Dec. 30, 1997]

§ 85.1605 Criteria for granting authorization.

(a) The Administrator shall grant the authorization if California determines that California standards will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards.

(b) The authorization shall not be granted if the Administrator finds that:

(1) The determination of California is arbitrary and capricious;

(2) California does not need such California standards to meet compelling and extraordinary conditions; or

(3) California standards and accompanying enforcement procedures are not consistent with section 209.

§ 85.1606 Adoption of California standards by other states.

Any state other than California which has plan provisions approved under Part D of Title I of the Clean Air Act may adopt and enforce emission standards for any period, for nonroad vehicles and engines subject to the following requirements:

(a) The state must provide notice to the Administrator that it has adopted such standards.

(b) Such standards shall not apply to new engines which are used in construction equipment or vehicles or used in farm equipment or vehicles and which are smaller than 175 horsepower or to new locomotives or new engines used in locomotives.

(c) Such standards and implementation and enforcement shall be identical, for the period concerned, to the California standards authorized by the Administrator.

(d) The state shall adopt such standards at least two years before commencement of the period for which the standards take effect.

(e) California shall have adopted such standards two years before commencement of the period for which the standards take effect in the state that is adopting under section 209(e)(2)(B).

[59 FR 36987, July 20, 1994, as amended at 62 FR 67736, Dec. 30, 1997]

Subpart R—Exclusion and Exemption of Motor Vehicles and Motor Vehicle Engines

AUTHORITY: Secs. 208(b)(1), 216(2), and 301, Clean Air Act (42 U.S.C. 7522, 7550, and 7061).

SOURCE: 39 FR 32611, Sept. 10, 1974, unless otherwise noted.

§ 85.1701 General applicability.

(a) The provisions of this subpart regarding exemption are applicable to new and in-use motor vehicles and motor vehicle engines.

(b) The provisions of this subpart regarding exclusion are applicable after the effective date of these regulations.

§ 85.1702 Definitions.

(a) As used in this subpart, all terms not defined herein shall have the meaning given them in the Act:

(1) *Export exemption* means an exemption granted by statute under section 203(b)(3) of the Act for the purpose of exporting new motor vehicles or new motor vehicle engines.

(2) *National security exemption* means an exemption which may be granted under section 203(b)(1) of the Act for the purpose of national security.

(3) *Pre-certification vehicle* means an uncertified vehicle which a manufacturer employs in fleets from year to year in the ordinary course of business for product development, production method assessment, and market promotion purposes, but in a manner not involving lease or sale.

(4) *Pre-certification vehicle engine* means an uncertified heavy-duty engine owned by a manufacturer and used in a manner not involving lease or sale in a vehicle employed from year to year in the ordinary course of business for product development, production method assessment and market promotion purposes.

(5) *Testing exemption* means an exemption which may be granted under section 203(b)(1) for the purpose of research investigations, studies, demonstrations or training, but not including national security.

[39 FR 32611, Sept. 10, 1974, as amended at 45 FR 13733, Mar. 3, 1980; 47 FR 30484, July 14, 1982]

§ 85.1703 Application of section 216(2).

(a) For the purpose of determining the applicability of section 216(2), a vehicle which is self-propelled and capable of transporting a person or persons or any material or any permanently or temporarily affixed apparatus shall be deemed a motor vehicle, unless any one or more of the criteria set forth below are met, in which case the vehicle shall be deemed not a motor vehicle and excluded from the operation of the Act:

(1) The vehicle cannot exceed a maximum speed of 25 miles per hour over level, paved surfaces; or

(2) The vehicle lacks features customarily associated with safe and practical street or highway use, such features including, but not being limited to, a reverse gear (except in the case of motorcycles), a differential, or safety features required by state and/or federal law; or

(3) The vehicle exhibits features which render its use on a street or highway unsafe, impractical, or highly unlikely, such features including, but not being limited to, tracked road contact means, an inordinate size, or features ordinarily associated with military combat or tactical vehicles such as armor and/or weaponry.

(b) The Administrator will, from time to time, publish in the FEDERAL REGISTER a list of vehicles which have been determined to be excluded. This list will be in appendix VI of 40 CFR part 85.

[39 FR 32611, Sept. 10, 1974, as amended at 45 FR 13733, Mar. 3, 1980]

§ 85.1704 Who may request an exemption.

(a) Any person may request a testing exemption.

(b) Any manufacturer may request a national security exemption under § 85.1708.

(c) For manufacturers, vehicles or engines for export purposes are exempt without application, subject to the provisions of § 85.1709. For eligible manufacturers, as determined by § 85.1706, vehicles or engines for pre-certification purposes are exempt without application, subject to the provisions of § 85.1706(a).

[45 FR 13733, Mar. 3, 1980, as amended at 47 FR 30484, July 14, 1982]

§ 85.1705 Testing exemption.

(a) Any person requesting a testing exemption must demonstrate the following:

(1) That the proposed test program has a purpose which constitutes an appropriate basis for an exemption in accordance with section 203(b)(1);

(2) That the proposed test program necessitates the granting of an exemption;

(3) That the proposed test program exhibits reasonableness in scope; and

(4) That the proposed test program exhibits a degree of control consonant with the purpose of the program and the Environmental Protection Agency's (hereafter EPA) monitoring requirements. Paragraphs (b), (c), (d), and (e) of this section describe what constitutes a sufficient demonstration for each of the four above identified elements.

(b) With respect to the purpose of the proposed test program, an appropriate purpose is one which is consistent with one or more of the bases for exemption set forth under section 203(b)(1), namely, research, investigations, studies, demonstrations, or training, but not including national security. A concise statement of purpose is a required item of information.

(c) With respect to the necessity that an exemption be granted, necessity arises from an inability to achieve the stated purpose in a practicable manner without performing or causing to be performed one or more of the prohibited acts under section 203(a). In appropriate circumstances time constraints may be a sufficient basis for necessity, but the cost of certification alone, in the absence of extraordinary circumstances, is not a basis for necessity.

(d) With respect to reasonableness, a test program must exhibit a duration of reasonable length and affect a reasonable number of vehicles or engines. In this regard, required items of information include:

(1) An estimate of the program's duration;

(2) The maximum number of vehicles or engines involved; and

(e) With respect to control, the test program must incorporate procedures consistent with the purpose of the test and be capable of affording EPA monitoring capability. As a minimum, required items of information include:

(1) The technical nature of the test;

(2) The site of the test;

(3) The time or mileage duration of the test;

(4) The ownership arrangement with regard to the vehicles or engines involved in the test;

(5) The intended final disposition of the vehicles or engines;

(6) The manner in which vehicle identification numbers or the engine serial numbers will be identified, recorded, and made available; and

(7) The means or procedure whereby test results will be recorded.

(f) A manufacturer of new motor vehicles or new motor vehicle engines may request a testing exemption to cover any vehicles and/or engines intended for use in test programs planned or anticipated over the course of a subsequent one-year period. Unless otherwise required by the Director, Manufacturers Operations Division, a manufacturer requesting such an exemption need only furnish the information required by paragraphs (a)(1) and (d)(2) of

this section along with a description of the recordkeeping and control procedures that will be employed to assure that the vehicles and/or engines are used for purposes consistent with section 203(b)(1).

[39 FR 32611, Sept. 10, 1974, as amended at 45 FR 13733, Mar. 3, 1980; 47 FR 30484, July 14, 1982]

§ 85.1706 Pre-certification exemption.

(a) Except as provided in paragraph (b) of this section, any pre-certification vehicle or pre-certification vehicle engine, as defined by § 85.1702(a) (3) or (4), is exempt from section 203(a), without application, if the manufacturer complies with the following terms and conditions:

(1) The manufacturer shall create, maintain, and make available at reasonable times for review or copying by appropriate EPA employees records which provide each vehicle identification or engine serial number, indicate the use of the vehicle or engine on exempt status and indicate the final disposition of any vehicle or engine removed from exempt status; and

(2) Unless the requirement is waived or an alternative procedure is approved by the Director, Manufacturers Operations Division, the manufacturer shall permanently affix to each vehicle or engine on exempt status in a readily visible portion of the engine compartment (on a readily visible portion of a heavy-duty engine or in a readily accessible position on a motorcycle) a label which cannot be removed without destruction or defacement and which states in the English language, in block letters and numerals of a color that contrasts with the background of the label, the following information:

(i) The label heading: Emission Control Information;

(ii) Full corporate name and trademark of manufacturer;

(iii) Engine displacement, engine family identification and model year of vehicle or engine; or person or office to be contacted for further information about the vehicle or engine;

(iv) The statement: THIS VEHICLE OR ENGINE IS EXEMPT FROM THE PROHIBITIONS OF SECTIONS 203(a)(1), (3) and (4) OF THE CLEAN AIR ACT, AS AMENDED.

(3) No provision of paragraph (a)(2) of this section shall prevent a manufacturer from including any other information it desires on the label.

(b) Any manufacturer that desires a pre-certification exemption and is in the business of importing, modifying or testing uncertified vehicles for resale under the provisions of 40 CFR 85.1501, *et seq.*, must apply to the Director, Manufacturers Operations Division. The Director may require such manufacturers to submit information regarding the general nature of the fleet activities, the number of vehicles involved, and a demonstration that adequate record-keeping procedures for control purposes will be employed.

[47 FR 30484, July 14, 1982]

§ 85.1707 Display exemption.

Where an uncertified vehicle or engine is a display vehicle or engine to be used solely for display purposes, will not be operated on the public streets or highways except for that operation incident and necessary to the display purpose, and will not be sold unless an applicable certificate of conformity has been received, no request for exemption of the vehicle or engine is necessary.

[39 FR 32611, Sept. 10, 1974. Redesignated and amended at 47 FR 30484, July 14, 1982]

§ 85.1708 National security exemption.

A manufacturer requesting a national security exemption must state the purpose for which the exemption is required and the request must be endorsed by an agency of the Federal Government charged with responsibility for national defense.

[39 FR 32611, Sept. 10, 1974. Redesignated at 47 FR 30484, July 14, 1982]

§ 85.1709 Export exemptions.

(a) A new motor vehicle or new motor vehicle engine intended solely for export, and so labeled or tagged on the outside of the container and on the vehicle or engine itself, shall be subject to the provisions of section 203(a) of the Act, unless the importing country has new motor vehicle emission standards which differ from the USEPA standards.

(b) For the purpose of paragraph (a) of this section, a country having no standards, whatsoever, is deemed to be a country having emission standards which differ from USEPA standards.

(c) EPA shall periodically publish in the FEDERAL REGISTER a list of foreign countries which have in force emissions standards identical to USEPA standards and have so notified EPA. New motor vehicles or new motor vehicle engines exported to such countries shall comply with USEPA certification regulations.

(d) It is a condition of any exemption for the purpose of export under section 203(b)(3) of the Act, that such exemption shall be void ab initio with respect to a new motor vehicle or new motor vehicle engine intended solely for export where:

(1) Such motor vehicle or motor vehicle engine is sold, or offered for sale, to an ultimate purchaser in the United States for purposes other than export; and

(2) The motor vehicle or motor vehicle engine manufacturer had reason to believe that any such vehicle would be sold or offered for sale as described in paragraph (d)(1) of this section.

[39 FR 32611, Sept. 10, 1974. Redesignated at 47 FR 30484, July 14, 1982]

§ 85.1710 Granting of exemptions.

(a) If upon completion of the review of an exemption request, as required by §§ 85.1705 and 85.1708, the granting of an exemption is deemed appropriate, a memorandum of exemption will be prepared and submitted to the person requesting the exemption. The memorandum will set forth the basis for the exemption, its scope, and such terms and conditions as are deemed necessary. Such terms and conditions will generally, include, but are not limited to, agreements by the applicant to conduct the exempt activity in the manner described to EPA, create and maintain adequate records accessible to EPA at reasonable times, employ labels for the exempt engines or vehicles setting forth the nature of the exemption, take appropriate measures to assure that the terms of the exemption are met, and advise EPA of the termination of the activity and the ultimate disposition of the vehicles or engines.

(b) Any exemption granted pursuant to paragraph (a) of this section shall be deemed to cover any subject vehicle or engine only to the extent that the specified terms and conditions are complied with. A breach of any term or condition shall cause the exemption to be void ab initio with respect to any vehicle or engine. Consequently, the causing or the performing of an act prohibited under sections 203(a) (1) or (3) of the Clean Air Act other than in strict conformity with all terms and conditions of this exemption shall render the person to whom the exemption is granted, and any other person to whom the provisions of section 203 are applicable, liable to suit under sections 204 and 205 of the Act.

[39 FR 32611, Sept. 10, 1974, as amended at 45 FR 13733, Mar. 3, 1980. Redesignated and amended at 47 FR 30485, July 14, 1982]

§ 85.1711 Submission of exemption requests.

Requests for exemption or furtheinformation concerning exemptions and/or the exemption request review procedure should be addressed to:

Director
Manufacturers Operations Division (EN–340)
Environmental Protection Agency
401 M Street, S.W.,
Washington, D.C. 20460

[39 FR 32611, Sept. 10, 1974, as amended at 44 FR 61962, Oct. 29, 1979. Redesignated and amended at 47 FR 30485, July 14, 1982]

§ 85.1712 Treatment of confidential information.

(a) Any person or manufacturer may assert that some or all of the information submitted pursuant to this subpart is entitled to confidential treatment as provided by 40 CFR part 2, subpart B.

(b) Any claim of confidentiality must accompany the information at the time it is submitted to EPA.

(c) To assert that information submitted pursuant to this subpart is confidential, a person or manufacturer must indicate clearly the items of information claimed confidential by marking, circling, bracketing, stamping, or otherwise specifying the confidential information. Furthermore, EPA requests, but does not require,

that the submitter also provide a second copy of it submittal from which all confidential information has been deleted. If a need arises to publicly release nonconfidential information, EPA will assume that the submitter has accurately deleted the confidential information from this second copy.

(d) If a claim is made that some or all of the information submitted pursuant to ths subpart is entitled to confidential treatment, the information covered by that confidentiality claim will be disclosed by the Administrator only to the extent and by means of the procedures set forth in part 2, subpart B, of this chapter.

(e) Information provided without a claim of confidentiality at the time of submission may be made available to the public by EPA without further notice to the submitter, in accordance with 40 CFR 2.204(c)(2)(i)(A).

[50 FR 34797, Aug. 27, 1985]

Subpart S—Recall Regulations

AUTHORITY: Sec. 301(a), Clean Air Act, 81 Stat. 504, as amended by sec. 15(c), 84 Stat. 1713 (42 U.S.C. 1857g(a)). The regulations implement sec. 207(c) (1)–(2), Clean Air Act, 84 Stat. 1697 (42 U.S.C. 1847f–5a(c)(1)–(2)); sec. 208(a), Clean Air Act, 81 Stat. 501, as renumbered by sec. 8(a), 84 Stat. 1694 (42 U.S.C. 1857f–6(a)).

SOURCE: 39 FR 44375, Dec. 23, 1974, unless otherwise noted.

§ 85.1801 Definitions.

For the purposes of this subpart, except as otherwise provided, words shall be defined as provided for by sections 214 and 302 of the Clean Air Act, 42 U.S.C. 1857, as amended.

(a) *Act* shall mean the Clean Air Act, 42 U.S.C. 1857, as amended.

(b) *Days* shall mean calendar days.

§ 85.1802 Notice to manufacturer of nonconformity; submission of Remedial Plan.

(a) A manufacturer will be notified whenever the Administrator has determined that a substantial number of a class or category of vehicles or engines produced by that manufacturer, although properly maintained and used, do not conform to the regulations prescribed under section 202 of the Act in effect during (and applicable to) the model year of such vehicle. The notification will include a description of each class or category of vehicles or engines encompassed by the determination of nonconformity, will give the factual basis for the determination of nonconformity (except information previously provided the manufacturer by the Agency), and will designate a date, no sooner than 45 days from the date of receipt of such notification, by which the manufacturer shall have submitted a plan to remedy the nonconformity.

(b) Unless a hearing is requested pursuant to §85.1807, the remedial plan shall be submitted to the Administrator within the time limit specified in the Administrator's notification, provided that the Administrator may grant the manufacturer an extension upon good cause shown.

(c) If a manufacturer requests a public hearing pursuant to §85.1807, unless as a result of such hearing the Administrator withdraws his determination of nonconformity, the manufacturer shall submit the remedial plan within 30 days of the end of such hearing.

[39 FR 44375, Dec. 23, 1974, as amended at 42 FR 36456, July 15, 1977]

§ 85.1803 Remedial Plan.

(a) When any manufacturer is notified by the Administrator that a substantial number of any class or category of vehicles or engines, although properly maintained and used, do not conform to the regulations (including emission standards) or family particulate emission limits, as defined in part 86 promulgated under section 202 of the Act and in effect during (and applicable to) the model year of such class or classes of vehicles or engines, the manufacturer shall submit a plan to the Administrator to remedy such nonconformity. The plan shall contain the following:

(1) A description of each class or category of vehicle or engine to be recalled including the model year, the make, the model, and such other information as may be required to identify the vehicles or engines to be recalled.

(2) A description of the specific modifications, alterations, repairs, corrections, adjustments or other changes to

be made to bring the vehicles or engines into conformity including a brief summary of the data and technical studies which support the manufacturer's decision as to the particular remedial changes to be used in correcting the nonconformity.

(3) A description of the method by which the manufacturer will determine the names and addresses of vehicle or engine owners.

(4) A description of the proper maintenance or use, if any, upon which the manufacturer conditions eligibility for repair under the remedial plan, an explanation of the manufacturer's reasons for imposing any such condition, and a description of the proof to be required of a vehicle or engine owner to demonstrate compliance with any such condition. Eligibility may not be denied solely on the basis that the vehicle or engine owner used parts not manufactured by the original equipment vehicle manufacturer, or had repairs performed by outlets other than the vehicle manufacturer's franchised dealers. No maintenance or use condition may be imposed unless it is, in the judgement of the Administrator, demonstrably related to preventing the nonconformity.

(5) A description of the procedure to be followed by vehicle or engine owners to obtain correction of the nonconformity. This shall include designation of the date on or after which the owner can have the nonconformity remedied, the time reasonably necessary to perform the labor required to correct the nonconformity, and the designation of facilities at which the nonconformity can be remedied: *Provided,* That repair shall be completed within a reasonable time designated by the Administrator from the date the owner first tenders his vehicle or engine after the date designated by the manufacturer as the date on or after which the owner can have the nonconformity remedied.

(6) If some or all of the nonconforming vehicles or engines are to be remedied by persons other than dealers or authorized warranty agents of the manufacturer, a description of the class of persons other than dealers and authorized warranty agents of the manufacturer who will remedy the nonconformity, and a statement indicating that the participating members of the class will be properly equipped to perform such remedial action.

(7) Three copies of the letters of notification to be sent to vehicle or engine owners.

(8) A description of the system by which the manufacturer will assure that an adequate supply of parts will be available to perform the repair under the remedial plan including the date by which an adequate supply of parts will be available to initiate the repair campaign, the percentage of the total parts requirement of each person who is to perform the repair under the remedial plan to be shipped to initiate the campaign, and the method to be used to assure the supply remains both adequate and responsive to owner demand.

(9) Three copies of all necessary instructions to be sent to those persons who are to perform the repair under the remedial plan.

(10) A description of the impact of the proposed changes on fuel consumption, driveability, and safety of each class or category of vehicles or engines to be recalled and a brief summary of the data, technical studies, or engineering evaluations which support these conclusions.

(11) Any other information, reports or data which the Administrator may reasonably determine is necessary to evaluate the remedial plan.

(b)(1) Notification to vehicle or engine owners shall be made by first class mail or by such means as approved by the Administrator: *Provided,* That for good cause, the Administrator may require the use of certified mail to ensure an effective notification.

(2) The manufacture shall use all reasonable means necessary to locate vehicle or engine owners: *Provided,* That for good cause, the Administrator may require the manufacturer to use motor vehicle registration lists as available from State or commercial sources to obtain the names and addresses of vehicle or engine owners to ensure an effective notification.

(3) The Administrator reserves the right to require the manufacturer to send by first class mail or other reasonable means subsequent notification

to vehicle or engine owners: *Provided*, That for good cause, the Administrator may require the use of certified mail to ensure an effectctive notification.

(c)(1) The manufacturer shall require those who perform the repair under the remedial plan to affix a label to each vehicle or engine repaired or, when required, inspected under the remedial plan.

(2) The label shall be placed in such location as approved by the Administrator consistent with State law and shall be fabricated of a material suitable for the location in which it is installed and which is not readily removable intact.

(3) The label shall contain:

(i) The recall campaign number; and

(ii) A code designating the campaign facility at which the repair, or inspection for repair was performed.

(4) The Administrator reserves the right to waive any or all of the requirements of this paragraph if he determines that they constitute an unwarranted burden to the manufacturer.

(d) The Administrator may require the manufacturer to conduct tests on components and vehicles or engines incorporating a proposed change, repair, or modification reasonably designed and necessary to demonstrate the effectiveness of the change, repair, or modification.

NOTE: An interpretive ruling regarding §85.1803 is published in appendix A to this subpart.

[39 FR 44375, Dec. 23, 1974, as amended at 40 FR 28067, July 3, 1975; 42 FR 36456, July 15, 1977; 45 FR 36398, May 30, 1980; 48 FR 33462, July 21, 1983]

§ 85.1804 Approval of Plan: Implementation.

(a) If the Administrator finds that the remedial plan is designed and effective to correct the nonconformity, he will so notify the manufacturer in writing. If the remedial plan is not approved, the Administrator will provide the manufacturer notice of the disapproval and the reasons for the disapproval in writing.

(b) Upon receipt of notice from the Administrator that the remedial plan has been approved, the manufacturer shall commence implementation of the approved plan. Notification of vehicle or engine owners shall be in accordance with requirements of this subpart and shall proceed as follows:

(1) When no public hearing as described in §85.1807 is requested by the manufacturer, notification of vehicles or engine owners shall commence within 15 working days of the receipt by the manufacturer of the Administrator's approval unless otherwise specified by the Administrator.

(2) When a public hearing as described in §85.1807 is held, unless as a result of such hearing the Administrator withdraws the determination of nonconformity, the Administrator shall, within 60 days after the completion of such hearing, order the manufacturer to provide prompt notification of such nonconformity.

§ 85.1805 Notification to vehicle or engine owners.

(a) The notification of vehicle or engine owners shall contain the following:

(1) The statement: ''The Administrator of the U.S. Environmental Protection Agency has determined that your vehicle or engine may be emitting pollutants in excess of the Federal emission standards or family particulate emission limits, as defined in Part 86. These standards or family particulate emission limits, as defined in Part 86 were established to protect the public health or welfare from the dangers of air pollution.''

(2) A statement that the nonconformity of any such vehicles or engines which have been, if required by the remedial plan, properly maintained and used, will be remedied at the expense of the manufacturer.

(3) A description of the proper maintenance or use, if any, upon which the manufacturer conditions eligibility for repair under the remedial plan and a description of the proof to be required of a vehicle or engine owner to demonstrate compliance with such condition. Eligibility may not be denied solely on the basis that the vehicle or engine owner used parts not manufactured by the original equipment vehicle manufacturer, or had repairs performed by outlets other than the vehicle manufacturer's franchised dealers.

(4) A clear description of the components which will be affected by the remedy and a general statement of the measures to be taken to correct the nonconformity.

(5) A statement that such nonconformity if not repaired may cause the vehicle or engine to fail an emission inspection test when such tests are required under State or local law.

(6) A description of the adverse affects, if any, that an uncorrected nonconformity would have on the performance or driveability of the vehicle or engine.

(7) A description of the adverse affects, if any, that such nonconformity would have on the functions of other engine components.

(8) A description of the procedure which the vehicle or engine owner should follow to obtain correction of the nonconformity. This shall include designation of the date on or after which the owner can have the nonconformity remedied, the time reasonably necessary to perform the labor required to correct the nonconformity, and the designation of facilities at which the nonconformity can be remedied.

(9) A card to be used by a vehicle or engine owner in the event the vehicle or engine to be recalled has been sold. Such card should be addressed to the manufacturer and shall provide a space in which the owner may indicate the name and address of the person to whom the vehicle or engine was sold.

(10) The statement: ''In order to ensure your full protection under the emission warranty made applicable to your (vehicle or engine) by Federal law, and your right to participate in future recalls, it is recommended that you have (vehicle or engine) serviced as soon as possible. Failure to do so could legally be determined to be a lack of proper maintenance of your (vehicle or engine).''

(b) No notice sent pursuant to paragraph (a) of this section nor any other contemporaneous communication sent to vehicle or engine owners or dealers shall contain any statement or implication that the nonconformity does not exist or that the nonconformity will not degrade air quality.

(c) The manufacturer shall be informed of any other requirements pertaining to the notification under this section which the Administrator has determined are reasonable and necessary to ensure the effectiveness of the recall campaign.

[39 FR 44375, Dec. 23, 1974, as amended at 48 FR 33462, July 21, 1983]

§ 85.1806 Records and reports.

(a) The manufacturer shall provide to the Administrator a copy of all communications which relate to the remedial plan directed to dealers and other persons who are to perform the repair under the remedial plan. Such copies shall be mailed to the Administrator contemporaneously with their transmission to dealers and other persons who are to perform the repair under the remedial plan.

(b) The manufacturer shall provide for the establishment and maintenance of records to enable the Administrator to conduct a continuing analysis of the adequacy of the recall campaign. The records shall include, for each class or category of vehicle or engine, but need not be limited to, the following:

(1) Recall campaign number as designated by the manufacturer.

(2) Date owner notification was begun, and date completed.

(3) Number of vehicles or engines involved in the recall campaign.

(4) Number of vehicles or engines known or estimated to be affected by the nonconformity.

(5) Number of vehicles or engines inspected pursuant to the remedial plan.

(6) Number of inspected vehicles found to be affected by the nonconformity.

(7) Number of vehicles actually receiving repair under the remedial plan.

(8) Number of vehicles determined to be unavailable for inspection or repair under the remedial plan due to exportation, theft, scrapping or for other reasons (specify).

(9) Number of vehicles or engines determined to be ineligible for remedial action due to a failure to properly maintain or use such vehicles or engines.

(c) If the manufacturer determines that the original answers for paragraphs (b) (3) and (4) of this section are

incorrect, revised figures and an explanatory note shall be submitted. Answers to paragraphs (b) (5), (6), (7), and (8), and (9) of this section shall be cumulative totals.

(d) Unless otherwise directed by the Administrator, the information specified in paragraph (b) of this section shall be included in quarterly reports, with respect to each recall campaign, for six consecutive quarters beginning with the quarter in which the notification of owners was initiated, or until all nonconforming vehicles or engines involved in the campaign have been remedied, whichever occurs sooner. Such reports shall be submitted no later than 25 working days after the close of each calendar quarter.

(e) The manufacturer shall maintain in a form suitable for inspection, such as computer information storage devices or card files, lists of the names and addresses of vehicles or engine owners.

(1) To whom notification was given;

(2) Who received remedial repair or inspection under the remedial plan; and

(3) When eligibility for repair is conditioned on proper maintenance or use, that were determined not to qualify for such remedial action.

(f) The records described in paragraph (e) of this section shall be made available to the Administrator upon request.

(g) The records and reports required by this section shall be retained for not less than 5 years.

[39 FR 44375, Dec. 23, 1974; 40 FR 3447, Jan. 22, 1975]

§ 85.1807 Public hearings.

(a) *Definitions.* The following definitions shall be applicable to this section:

(1) ''Hearing Clerk'' shall mean the Hearing Clerk of the Environmental Protection Agency.

(2) ''Intervener'' shall mean a person who files a petition to be made an intervener pursuant to paragraph (g) of this section and whose petition is approved.

(3) ''Manufacturer'' refers to a manufacturer contesting a recall order directed at that manufacturer.

(4) ''Party'' shall include the Environmental Protection Agency, the manufacturer, and any interveners.

(5) ''Presiding Officer'' shall mean an Administrative Law Judge appointed pursuant to 5 U.S.C. 3105 (see also 5 CFR Part 930 as amended).

(6) ''Environmental Appeals Board'' shall mean the Board within the Agency described in §1.25 of this title. The Administrator delegates authority to the Environmental Appeals Board to issue final decisions in appeals filed under this subpart. Appeals directed to the Administrator, rather than to the Environmental Appeals Board, will not be considered. This delegation of authority to the Environmental Appeals Board does not preclude the Environmental Appeals Board from referring an appeal or a motion filed under this subpart to the Administrator for decision when the Environmental Appeals Board, in its discretion, deems it appropriate to do so. When an appeal or motion is referred to the Administrator, all parties shall be so notified and the rules in this part referring to the Environmental Appeals Board shall be interpreted as referring to the Administrator.

(b) *Request for public hearing.* (1)(i) If the manufacturer disagrees with the Administrator's finding of nonconformity he may request a public hearing as described in this section. Requests for such a hearing shall be filed with the Administrator not later than 45 days after the receipt of the Administrator's notification of nonconformity unless otherwise specified by the Administrator. Two copies of such request shall simultaneously be served upon the Director of the Manufacturers Operations Division and two copies filed with the Hearing Clerk. Failure of the manufacturer to request a hearing within the time provided shall constitute a waiver of his right to such a hearing. In such a case, the manufacturer shall carry out the recall order as required by §85.1803–6.

(ii) Subsequent to the expiration of the period for requesting a hearing as of right, the Administrator may, in his discretion and for good cause shown, grant the manufacturer a hearing to contest the nonconformity.

(2) The request for a public hearing shall contain:

(i) A statement as to which classes or categories of vehicles or engines are to be the subject of the hearing;

(ii) A concise statement of the issues to be raised by the manufacturer at the hearing for each class or category of engine or vehicle for which the manufacturer has requested the hearing; and

(iii) A statement as to reasons the manufacturer believes he will prevail on the merits on each of the issues so raised.

(3) A copy of all requests for public hearings shall be kept on file in the Office of the Hearing Clerk and shall be made available to the public during Agency business hours.

(c) *Filing and service.* (1) An original and two copies of all documents or papers required or permitted to be filed pursuant to this section shall be filed with the Hearing Clerk. Filing shall be deemed timely if mailed, as determined by the postmark, to the Hearing Clerk within the time allowed by this section. If filing is to be accomplished by mailing, the documents shall be sent to the address set forth in the notice of public hearing as described in paragraph (f) of this section.

(2) Except for requests to commence a hearing, at the same time a party files with the Hearing Clerk any additional issues for consideration at the hearing or any written testimony, documents, papers, exhibits, or materials, proposed to be introduced into evidence or papers filed in connection with any appeal, it shall serve upon all other parties copies thereof. A certificate of service shall be provided on or accompany each document or paper filed with the Hearing Clerk. Documents to be served upon the Director of the Manufacturers Operations Division shall be mailed to: Director, Manufacturers Operations Division, U.S. Environmental Protection Agency (EG–340), 401 M Street SW, WSM, Washington, D.C. 20460. Service by mail is complete upon mailing.

(d) *Time.* (1) In computing any period of time prescribed or allowed by this section, except as otherwise provided, the day of the act or event from which the designated period of time begins to run shall not be included. Saturdays, Sundays, and Federal legal holidays shall be included in computing any such period allowed for the filing of any document or paper, except that when such period expires on a Saturday, Sunday, or Federal legal holiday, such period shall be extended to include the next following business day.

(2) A prescribed period of time within which a party is required or permitted to do an act shall be computed from the time of service, except that when service is accomplished by mail, three days shall be added to the prescribed period.

(e) *Consolidation.* The Administrator or the Presiding Officer in his discretion may consolidate two or more proceedings to be held under this section for the purpose of resolving one or more issues whenever it appears that such consolidation will expedite or simplify consideration of such issues. Consolidation shall not affect the right of any party to raise issues that could have been raised if consolidation had not occurred.

(f) *Notice of public hearings.* (1) Notice of a public hearing under this section shall be given by publication in the FEDERAL REGISTER. Notice will be given at least 30 days prior to the commencement of such hearings.

(2) The notice of a public hearing shall include the following information:

(i) The purpose of the hearing and the legal authority under which the hearing is to be held;

(ii) A brief summary of the Administrator's determination of nonconformity;

(iii) A brief summary of the manufacturer's basis for contesting the Administrator's determination of nonconformity;

(iv) Information regarding the time and location of the hearing and the address to which all documents required or permitted to be filed should be sent;

(v) The address of the Hearing Clerk to whom all inquiries should be directed and with whom documents are required to be filed;

(vi) A statement that all petitions to be made an intervener must be filed with the Hearing Clerk within 25 days from the date of the notice of public

hearing and must conform to the requirements of paragraph (g) of this section.

(3) The notice of public hearing shall be issued by the Assistant Administrator for Enforcement and General Counsel.

(g) *Interveners.* (1) Any person desiring to intervene in a hearing to be held under section 207(c)(1) of the Act shall file a petition setting forth the facts and reasons why he thinks he should be permitted to intervene.

(2) In passing upon a petition to intervene, the following factors, among other things, shall be considered by the Presiding Officer:

(i) The nature of the petitioner's interest including the nature and the extent of the property, financial, environmental protection, or other interest of the petitioner;

(ii) The effect of the order which may be entered in the proceeding on petitioner's interest;

(iii) The extent to which the petitioner's interest will be represented by existing parties or may be protected by other means;

(iv) The extent to which petitioner's participation may reasonably be expected to assist materially in the development of a complete record;

(v) The effect of the intervention on the Agency's statutory mandate.

(3) A petition to intervene must be filed within 25 days following the notice of public hearing under section 207(c) (1) of the Act and shall be served on all parties. Any opposition to such petition must be filed within five days of such service.

(4) All petitions to be made an intervener shall be reviewed by the Presiding Officer using the criteria set forth in paragraph (g)(2) of this section and considering any oppositions to such petition. Where the petition demonstrates that the petitioner's interest is limited to particular issues, the Presiding Officer may, in granting such petition, limit petitioner's participation to those particular issues only.

(5) If the Presiding Officer grants the petition with respect to any or all issues, he shall so notify, or direct the Hearing Clerk to notify, the petitioner and all parties. If the Presiding Officer denies the petition he shall so notify, or direct the Hearing Clerk to notify, the petitioner and all parties and shall briefly state the reasons why the petition was denied.

(6) All petitions to be made an intervener shall include an agreement by the petitioner, and any person represented by the petitioner, to be subject to examination and cross-examination and to make any supporting and relevant records available at its own expense upon the request of the Presiding Officer, on his own motion or the motion of any party or other intervener. If the intervener fails to comply with any such request, the Presiding Officer may in his discretion, terminate his status as an intervener.

(h) *Intervention by motion.* Following the expiration of the time prescribed in paragraph (g) of this section for the submission of petitions to intervene in a hearing, any person may file a motion with the Presiding Officer to intervene in a hearing. Such a motion must contain the information and commitments required by paragraphs (g) (2) and (6) of this section, and, in addition, must show that there is good cause for granting the motion and must contain a statement that the intervener shall be bound by agreements, arrangements, and other determinations which may have been made in the proceeding.

(i) *Amicus Curiae.* Persons not parties to the proceedings wishing to file briefs may do so by leave of the Presiding Officer granted on motion. A motion for leave shall identify the interest of the applicant and shall state the reasons why the proposed amicus brief is desirable.

(j) *Presiding Officer.* The Presiding Officer shall have the duty to conduct a fair and impartial hearing in accordance with 5 U.S.C. 554, 556 and 557, to take all necessary action to avoid delay in the disposition of the proceedings and to maintain order. He shall have all power consistent with Agency rule and with the Administrative Procedure Act necessary to this end, including the following:

(1) To administer oaths and affirmations;

(2) To rule upon offers of proof and receive relevant evidence;

(3) To regulate the course of the hearings and the conduct of the parties and their counsel therein;

(4) To hold conferences for simplification of the issues or any other proper purpose;

(5) To consider and rule upon all procedural and other motions appropriate in such proceedings;

(6) To require the submission of direct testimony in written form with or without affidavit whenever, in the opinion of the Presiding Officer, oral testimony is not necessary for full and true disclosure of the facts. Testimony concerning the conduct and results of tests and inspections may be submitted in written form.

(7) To enforce agreements and orders requiring access as authorized by law;

(8) To require the filing of briefs on any matter on which he is required to rule;

(9) To require any party or any witness, during the course of the hearing, to state his position on any issue;

(10) To take or cause depositions to be taken whenever the ends of justice would be served thereby;

(11) To make decisions or recommend decisions to resolve the disputed issues of the record of the hearing.

(12) To issue, upon good cause shown, protective orders as described in paragraph (n) of this section.

(k) *Conferences.* (1) At the discretion of the Presiding Officer, conferences may be held prior to or during any hearing. The Presiding Officer shall direct the Hearing Clerk to notify all parties and interveners of the time and location of any such conference. At the discretion of the Presiding Officer, persons other than parties may attend. At a conference the Presiding Officer may:

(i) Obtain stipulations and admissions, receive requests and order depositions to be taken, identify disputed issues of fact and law, and require or allow the submission of written testimony from any witness or party;

(ii) Set a hearing schedule for as many of the following as are deemed necessary by the Presiding Officer:

(A) Oral and written statements;

(B) Submission of written direct testimony as required or authorized by the Presiding Officer;

(C) Oral direct and cross-examination of a witness where necessary as prescribed in paragraph (p) of this section;

(D) Oral argument, if appropriate.

(iii) Identify matters of which official notice may be taken;

(iv) Consider limitation of the number of expert and other witnesses;

(v) Consider the procedure to be followed at the hearing; and

(vi) Consider any other matter that may expedite the hearing or aid in the disposition of the issue.

(2) The results of any conference including all stipulations shall, if not transcribed, be summarized in writing by the Presiding Officer and made part of the record.

(l) *Primary discovery (exchange of witness lists and documents).* (1) At a prehearing conference or within some reasonable time set by the Presiding Officer prior to the hearing, each party shall make available to the other parties the names of the expert and other witnesses the party expects to call, together with a brief summary of their expected testimony and a list of all documents and exhibits which the party expects to introduce into evidence. Thereafter, witnesses, documents, or exhibits may be added and summaries of expected testimony amended upon motion by a party.

(2) The Presiding Officer, may, upon motion by a party or other person, and for good cause shown, by order (i) restrict or defer disclosure by a party of the name of a witness or a narrative summary of the expected testimony of a witness, and (ii) prescribe other appropriate measures to protect a witness. Any party affected by any such action shall have an adequate opportunity, once he learns the name of a witness and obtains the narrative summary of his expected testimony, to prepare for the presentation of his case.

(m) *Other discovery.* (1) Except as so provided by paragraph (l) of this section, further discovery, under this paragraph, shall be permitted only upon determination by the Presiding Officer:

(i) That such discovery will not in any way unreasonably delay the proceeding;

(ii) That the information to be obtained is not obtainable voluntarily; and

(iii) That such information has significant probative value. The Presiding Officer shall be guided by the procedures set forth in the Federal Rules of Civil Procedure, where practicable, and the precedents thereunder, except that no discovery shall be undertaken except upon order of the Presiding Officer or upon agreement of the parties.

(2) The Presiding Officer shall order depositions upon oral questions only upon a showing of good cause and upon a finding that:

(i) The information sought cannot be obtained by alternative methods; or

(ii) There is a substantial reason to believe that relevant and probative evidence may otherwise not be preserved for presentation by a witness at the hearing.

(3) Any party to the proceeding desiring an order of discovery shall make a motion or motions therefor. Such a motion shall set forth:

(i) The circumstances warranting the taking of the discovery;

(ii) The nature of the information expected to be discovered; and

(iii) The proposed time and place where it will be taken. If the Presiding Officer determines the motion should be granted, he shall issue an order for the taking of such discovery together with the conditions and terms thereof.

(4) Failure to comply with an order issued pursuant to this paragraph may lead to the inference that the information to be discovered would be adverse to the person or party from whom the information was sought.

(n) *Protective orders: in camera proceedings.* (1) Upon motion by a party or by the person from whom discovery is sought, and upon a showing by the movant that the disclosure of the information to be discovered, or a particular part thereof, (other than emission data) would result in methods or processes entitled to protection as trade secrets of such person being divulged, the Presiding Officer may enter a protective order with respect to such material. Any protective order shall contain such terms governing the treatment of the information as may be appropriate under the circumstances to prevent disclosure outside the hearing: *Provided,* That the order shall state that the material shall be filed separately from other evidence and exhibits in the hearing. Disclosure shall be limited to parties to the hearing, their counsel and relevant technical consultants, and authorized representatives of the United States concerned with carrying out the Act. Except in the case of the government, disclosure may be limited to counsel to parties who shall not disclose such information to the parties themselves. Except in the case of the government, disclosure to a party or his counsel shall be conditioned on execution of a sworn statement that no disclosure of the information will be made to persons not entitled to receive it under the terms of the protective order. (No such provision is necessary where government employees are concerned because disclosure by them is subject to the terms of 18 U.S.C. 1905.)

(2)(i) A party or person seeking a protective order may be permitted to make all or part of the required showing in camera. A record shall be made of such in camera proceedings. If the Presiding Officer enters a protective order following a showing in camera, the record of such showing shall be sealed and preserved and made available to the Agency or court in the event of appeal.

(ii) Attendance at any in camera proceeding may be limited to the Presiding Officer, the Agency, and the person or party seeking the protective order.

(3) Any party, subject to the terms and conditions of any protective order issued pursuant to paragraph (n)(1) of this section, desiring for the presentation of his case to make use of any in camera documents or testimony shall make application to the Presiding Officer by motion setting forth the justification therefor. The Presiding Officer, in granting any such motion, shall enter an order protecting the rights of the affected persons and parties and preventing unnecessary disclosure of such information, including the presentation of such information and oral testimony and cross-examination concerning it in executive session, as in his discretion is necessary and practicable.

(4) In the submittal of proposed findings, briefs, or other papers, counsel for all parties shall make a good faith attempt to refrain from disclosing the specific details of *in camera* documents and testimony. This shall not preclude references in such proposed findings, briefs, or other papers to such documents or testimony including generalized statements based on their contents. To the extent that counsel consider it necessary to include specific details in their presentations, such data shall be incorporated in separate proposed findings, briefs, or other papers marked ''confidential'', which shall become part of the *in camera* record.

(o) *Motions.* (1) All motions, except those made orally during the course of the hearing, shall be in writing and shall state with particularity the grounds therefor, shall set forth the relief or order sought, and shall be filed with the Hearing Clerk and served upon all parties.

(2) Within ten days after service of any motion filed pursuant to this section, or within such other time as may be fixed by the Environmental Appeals Board or the Presiding Officer, as appropriate, any party may serve and file an answer to the motion. The movant shall, if requested by the Environmental Appeals Board or the Presiding Officer, as appropriate, serve and file reply papers within the time set by the request.

(3) The Presiding Officer shall rule upon all motions filed or made prior to the filing of his decision or accelerated decision, as appropriate. The Environmental Appeals Board shall rule upon all motions filed prior to the appointment of a Presiding Officer and all motions filed after the filing of the decision of the Presiding Officer or accelerated decision. Oral argument of motions will be permitted only if the Presiding Officer or the Environmental Appeals Board, as appropriate, deems it necessary.

(p) *Evidence.* (1) The official transcripts and exhibits, together with all papers and requests filed in the proceeding, shall constitute the record. Immaterial or irrelevant parts of an admissible document shall be segregated and excluded so far as practicable. Documents or parts thereof subject to a protective order under paragraph (n) of this section shall be segregated. Evidence may be received at the hearing even though inadmissible under the rules of evidence applicable to judicial proceedings. The weight to be given evidence shall be determined by its reliability and probative value.

(2) The Presiding Officer shall allow the parties to examine and to cross-examine a witness to the extent that such examination and cross-examination is necessary for a full and true disclosure of the facts.

(3) Rulings of the Presiding Officer on the admissibility of evidence, the propriety of examination and cross-examination and other procedural matters shall appear in the record.

(4) Parties shall automatically be presumed to have taken exception to an adverse ruling.

(q) *Interlocutory appeal.* (1) An interlocutory appeal may be taken to the Environmental Appeals Board either (i) with the consent of the Presiding Officer and where he certifies on the record or in writing that the allowance of an interlocutory appeal is clearly necessary to prevent exceptional delay, expense or prejudice to any party or substantial detriment to the public interest, or (ii) absent the consent of the Presiding Officer, by permission of the Environmental Appeals Board.

(2) Applications for interlocutory appeal of any ruling or order of the Presiding Officer may be filed with the Presiding Officer within 5 days of the issuance of the ruling or order being appealed. Answers thereto by other parties may be filed within 5 days of the service of such applications.

(3) The Presiding Officer shall rule on such applications within 5 days of the filing of such application or answers thereto.

(4) Applications to file such appeals absent consent of the Presiding Officer shall be filed with the Environmental Appeals Board within 5 days of the denial of any appeal by the Presiding Officer.

(5) The Environmental Appeals Board will consider the merits of the appeal on the application and any answers thereto. No oral argument will be

heard nor other briefs filed unless the Environmental Appeals Board directs otherwise.

(6) Except under extraordinary circumstances as determined by the Presiding Officer, the taking of an interlocutory appeal will not stay the hearing.

(r) *Record.* (1) Hearings shall be stenographically reported and transcribed, and the original transcript shall be part of the record and the sole official transcript. Copies of the record shall be filed with the Hearing Clerk and made available during Agency business hours for public inspection. Any person desiring a copy of the record of the hearing or any part thereof shall be entitled to the same upon payment of the cost thereof.

(2) The official transcripts and exhibits, together with all papers and requests filed in the proceeding, shall constitute the record.

(s) *Proposed findings, conclusions.* (1) Within 20 days of the close of the reception of evidence, or within such longer time as may be fixed by the Presiding Officer, any party may submit for the consideration of the Presiding Officer proposed findings of fact, conclusions of law, and a proposed rule or order, together with reasons therefor and briefs in support thereof. Such proposals shall be in writing, shall be served upon all parties, and shall contain adequate references to the record and authorities relied on.

(2) The record shall show the Presiding Officer's ruling on the proposed findings and conclusions except when his order disposing of the proceeding otherwise informs the parties of the action taken by him thereon.

(t) *Decision of the Presiding Officer.* (1) Unless extended by the Environmental Appeals Board, the Presiding Officer shall issue and file with the Hearing Clerk his decision within 30 days after the period for filing proposed findings as provided for in paragraph (s) of this section has expired.

(2) The Presiding Officer's decision shall become the opinion of the Environmental Appeals Board (i) when no notice of intention to appeal as described in paragraph (u) of this section is filed, 30 days after the issuance thereof, unless in the interim the Environmental Appeals Board shall have taken action to review or stay the effective date of the decision; or (ii) when a notice of intention to appeal is filed but the appeal is not perfected as required by paragraph (u) of this section, 5 days after the period allowed for perfection of an appeal has expired unless within that 5 day period, the Environmental Appeals Board shall have taken action to review or stay the effective date of the decision.

(3) The Presiding Officer's decision shall include a statement of findings and conclusions, as well as the reasons or basis therefor, upon all the material issues of fact or law presented on the record and an appropriate rule or order. Such decision shall be supported by substantial evidence and based upon a consideration of the whole record.

(4) At any time prior to the issuance of his decision, the Presiding Officer may reopen the proceeding for the reception of further evidence. Except for the correction of clerical errors, the jurisdiction of the Presiding Officer is terminated upon the issuance of his decision.

(u) *Appeal from the Decision of the Presiding Officer.* (1) Any party to a proceeding may appeal the Presiding Officer's decision to the Environmental Appeals Board, *Provided,* That within 10 days after issuance of the Presiding Officer's decision such party files a notice of intention to appeal and an appeal brief within 30 days of such decision.

(2) When an appeal is taken from the decision of the Presiding Officer, any party may file a brief with respect to such appeal. The brief shall be filed within 20 days of the date of the filing of the appellant's brief.

(3) Any brief filed pursuant to this paragraph shall contain in the order indicated, the following:

(i) A subject index of the matter in the brief, with page references, and a table of cases (alphabetically arranged), textbooks, statutes, and other material cited, with page references thereto;

(ii) A specification of the issues intended to be urged;

(iii) The argument presenting clearly the points of fact and law relied upon in support of the position taken on

each issue, with specific page references to the record and the legal or other material relied upon; and

(iv) A proposed form of rule or order for the Environmental Appeals Board's consideration if different from the rule or order contained in the Presiding Officer's decision.

(4) No brief in excess of 40 pages shall be filed without leave of the Environmental Appeals Board.

(5) Oral argument will be allowed in the discretion of the Environmental Appeals Board.

(v) *Review of the Presiding Officer's Decision in Absence of Appeal.* (1) If, after the expiration of the period for taking an appeal as provided for by paragraph (u) of this section, no notice of intention to appeal the decision of the Presiding Officer has been filed, or if filed, not perfected, the Hearing Clerk shall so notify the Environmental Appeals Board.

(2) The Environmental Appeals Board, upon receipt of notice from the Hearing Clerk that no notice of intention to appeal has been filed, or if filed, not perfected pursuant to paragraph (u) of this section, may, on its own motion, within the time limits specified in paragraph (t)(2) of this section, review the decision of the Presiding Officer. Notice of the intention of the Environmental Appeals Board to review the decision of the Presiding Officer shall be given to all parties and shall set forth the scope of such review and the issue which shall be considered and shall make provision for filing of briefs.

(w) *Decision on appeal or review*. (1) Upon appeal from or review of the Presiding Officer's decision, the Environmental Appeals Board shall consider such parts of the record as are cited or as may be necessary to resolve the issues presented and, in addition shall to the extent necessary or desirable exercise all the powers which it could have exercised if it had presided at the hearing.

(2) In rendering its decision, the Environmental Appeals Board shall adopt, modify, or set aside the findings, conclusions, and rule or order contained in the decision of the Presiding Officer and shall set forth in its decision a statement of the reasons or bases for its action.

(3) In those cases where the Environmental Appeals Board determines that it should have further information or additional views of the parties as to the form and content of the rule or order to be issued, the Environmental Appeals Board, in its discretion, may withhold final action pending the receipt of such additional information or views, or may remand the case to the Presiding Officer.

(x) *Reconsideration*. Within twenty (20) days after issuance of the Environmental Appeals Board's decision, any party may file with the Environmental Appeals Board a petition for reconsideration of such decision, setting forth the relief desired and the grounds in support thereof. Any petition filed under this subsection must be confined to new questions raised by the decision or the final order and upon which the petitioner had no opportunity to argue before the Presiding Officer or the Environmental Appeals Board. Any party desiring to oppose such a petition shall file and answer thereto within ten (10) days after the filing of the petition. The filing of a petition for reconsideration shall not operate to stay the effective date of the decision or order or to toll the running of any statutory time period affecting such decision or order unless specifically so ordered by the Environmental Appeals Board.

(y) *Accelerated decision: Dismissal.* (1) The Presiding Officer, upon motion of any party or *sua sponte,* may at any time render an accelerated decision in favor of the Agency or the manufacturer as to all or any part of the proceeding, without further hearing or upon such limited additional evidence such as affidavits as he may require, or dismiss any party with prejudice, under any of the following conditions:

(i) Failure to state a claim upon which relief can be granted, or direct or collateral estoppel;

(ii) There is no genuine issue of material fact and a party is entitled to judgment as a matter of law; or

(iii) Such other and further reasons as are just, including specifically failure to obey a procedural order of the Presiding Officer.

(2) If under this paragraph an accelerated decision is issued as to all the issues and claims joined in the proceeding, the decision shall be treated for the purposes of these procedures as the decision of the Presiding Officer as provided in paragraph (p) of this section.

(3) If under this paragraph, judgment is rendered on less than all issues or claims in the proceeding, the Presiding Officer shall determine what material facts exist without substantial controversy and what material facts are actually and in good faith controverted. He shall thereupon issue an order specifying the facts which appear without substantial controversy, and the issues and claims upon which the hearing will proceed.

(z) *Conclusion of hearing.* (1) If, after the expiration of the period for taking an appeal as provided for by paragraph (u) of this section, no appeal has been taken from the Presiding Officer's decision, and, after the expiration of the period for review by the Environmental Appeals Board on its own motion as provided for by paragraph (v) of this section, the Environmental Appeals Board does not move to review such decision, the hearing will be deemed to have ended at the expiration of all periods allowed for such appeal and review.

(2) If an appeal of the Presiding Officer's decision is taken pursuant to paragraph (u) of this section, or if, in the absence of such appeal, the Environmental Appeals Board moves to review the decision of the Presiding Officer pursuant to paragraph (v) of this section, the hearing will be deemed to have ended upon the rendering of a final decision by the Environmental Appeals Board.

(aa) *Judicial Review.* (1) The Administrator hereby designates the Deputy General Counsel, Environmental Protection Agency as the officer upon whom copy of any petition for judicial review shall be served.

Such officer shall be responsible for filing in the court the record on which the order of the Environmental Appeals Board is based.

(2) Before forwarding the record to the court, the Agency shall advise the petitioner of costs of preparing it and as soon as payment to cover fees is made shall forward the record to the court.

[39 FR 44375, Dec. 23, 1974; 40 FR 3447, Jan. 22, 1975, as amended at 44 FR 61962, Oct. 29, 1979; 57 FR 5329, Feb. 13, 1992]

§ 85.1808 Treatment of confidential information.

(a) Any manufacturer may assert that some or all of the information submitted pursuant to this subpart is entitled to confidential treatment as provided by 40 CFR part 2, subpart B.

(b) Any claim of confidentiality must accompany the information at the time it is submitted to EPA.

(c) To assert that information submitted pursuant to this subpart is confidential, a person or manufacturer must indicate clearly the items of information claimed confidential by marking, circling bracketing, stamping, or otherwise specifying the confidential information. Furthermore, EPA requests, but does not require, that the submitter also provide a second copy of its submittal from which all confidential information has been deleted. If a need arises to publicly release nonconfidential information, EPA will assume that the submitter has accurately deleted the confidential information from this second copy.

(d) If a claim is made that some or all of the information submitted pursuant to this subpart is entitled to confidential treatment, the information covered by that confidentiality claim will be disclosed by the Environmental Appeals Board only to the extent and by means of the procedures set forth in part 2, subpart B, of this chapter.

(e) Information provided without a claim of confidentiality at the time of submission may be made available to the public by EPA without further notice to the submitter, in accordance with 40 CFR 2.204(c)(2)(i)(A).

[50 FR 34797, Aug. 27, 1985, as amended at 57 FR 5330, Feb. 13, 1992]

APPENDIX A TO SUBPART S—INTERPRETIVE RULING FOR § 85.1803—REMEDIAL PLANS

The purpose of this rule is to set forth EPA's interpretation regarding one aspect of a motor vehicle or motor vehicle engine manufacturer's recall liability under section 207(c)(1) of the Clean Air Act, 42 U.S.C.

7641(c)(1). This rule will provide guidance to vehicle and engine manufacturers to better enable them to submit acceptable remedial plans.

Section 207(c)(1) requires the Administrator to base a recall order on a determination that a substantial number of in-use vehicles or engines within a given class or category of vehicles or engines, although properly maintained and used, fail to conform to the regulations prescribed under section 202 when in actual use throughout their useful lives. After making such a determination, he shall require the manufacturer to submit a plan to remedy the nonconformity of any such vehicles or engines. The plan shall provide that the manufacturer will remedy, at the manufacturer's expense, all properly maintained and used vehicles which experienced the nonconformity during their useful lives regardless of their age or mileage at the time of repair.

(Secs. 207 and 301(a), Clean Air Act, as amended, 42 U.S.C. 7541 and 7601(a))

[45 FR 36398, May 30, 1980]

Subpart T—Emission Defect Reporting Requirements

AUTHORITY: Secs. 208(a) and 301(a), Clean Air Act, as amended (42 U.S.C. 1857f–6(a) and 1857g(a)).

SOURCE: 42 FR 28128, June 2, 1977, unless otherwise noted.

§ 85.1901 Applicability.

The requirements of this subpart shall be applicable to all 1972 and later model year vehicles and engines. The requirement to report emission-related defects affecting a given class or category of vehicles or engines shall remain applicable for five years from the end of the model year in which such vehicles or engines were manufactured.

§ 85.1902 Definitions.

For the purposes of this subpart and unless otherwise noted:

(a) *Act* shall mean the Clean Air Act, 42 U.S.C. 1857, as amended.

(b) The phrase *emission-related defect* shall mean a defect in design, materials, or workmanship in a device, system, or assembly described in the approved Application for Certification (required by 40 CFR 86.077–22 and like provisions of part 85 and part 86 of title 40 of the Code of Federal Regulations) which affects any parameter or specification enumerated in appendix VIII.

(c) The phrase *useful life* shall be given the meaning ascribed to it by section 202(d) of the Act and regulations promulgated thereunder.

(d) The phrase *Voluntary Emissions Recall* shall mean a repair, adjustment, or modification program voluntarily initiated and conducted by a manufacturer to remedy any emission-related defect for which direct notification of vehicle or engine owners has been provided.

(e) The phrase *ultimate purchaser* shall be given the meaning ascribed to it by section 214 of the Act.

(f) The term *manufacturer* shall be given the meaning ascribed to it by section 214 of the Act.

§ 85.1903 Emissions defect information report.

(a) A manufacturer shall file a defect information report whenever, on the basis of data obtained subsequent to the effective date of these regulations:

(1) The manufacturer determines in accordance with procedures established by the manufacturer to identify safety related defects (pursuant to 15 U.S.C. 1381 et seq., as amended) that a specific emission-related defect exists; and

(2) That the specific emission-related defect exists in twenty-five or more vehicles or engines of the same model year.

No report shall be filed under this paragraph for any emission-related defect corrected prior to the sale of the affected vehicles or engines to an ultimate purchaser.

(b) Defect information reports required under paragraph (a) of this section shall be submitted not more than 15 working days after an emission-related defect is found to affect twenty-five vehicles or engines of the same model year. Items of information required by paragraph (c) of this section that are either not available within that period or are significantly revised shall be submitted as they become available.

(c) Except as provided in paragraph (b) of this section, each defect report shall contain the following information in substantially the format outlined below:

(1) The manufacturer's corporate name.

(2) A description of the defect.

(3) A description of each class or category of vehicles or engines potentially affected by the defect including make, model, model year, and such other information as may be required to identify the vehicles or engines affected.

(4) For each class or category of vehicle or engine described in response to paragraph (c)(3) of this section, the following shall also be provided:

(i) The number of vehicles or engines known or estimated to have the defect and an explanation of the means by which this number was determined.

(ii) The address of the plant(s) at which the potentially defective vehicles or engines were produced.

(5) An evaluation of the emissions impact of the defect and a description of any driveability problems which a defective vehicle might exhibit.

(6) Available emissions data which relate to the defect.

(7) An indication of any anticipated manufacturer follow-up.

§ 85.1904 Voluntary emissions recall report; quarterly reports.

(a) When any manufacturer initiates a voluntary emissions recall campaign involving twenty-five or more vehicles or engines, the manufacturer shall submit a report describing the manufacturer's voluntary emissions recall plan as prescribed by this section within 15 working days of the date owner notification was begun. The report shall contain the following:

(1) A description of each class or category of vehicle or engine recalled including the number of vehicles to be recalled, the model year, the make, the model, and such other information as may be required to identify the vehicles or engines recalled.

(2) A description of the specific modifications, alterations, repairs, corrections, adjustments, or other changes to be made to correct the vehicles or engines affected by the emission-related defect.

(3) A description of the method by which the manufacturer will determine the names and addresses of vehicle or engine owners and the method by which they will be notified.

(4) A description of the proper maintenance or use, if any, upon which the manufacturer conditions eligibility for repair under the remedial plan, an explanation of the manufacturer's reasons for imposing any such condition, and a description of the proof to be required of a vehicle or engine owner to demonstrate compliance with any such condition.

(5) A description of the procedure to be followed by vehicle or engine owners to obtain correction of the nonconformity. This shall include designation of the date on or after which the owner can have the nonconformity remedied, the time reasonably necessary to perform the labor to remedy the defect, and the designation of facilities at which the defect can be remedied.

(6) If some or all of the nonconforming vehicles or engines are to be remedied by persons other than dealers or authorized warranty agents of the manufacturer, a description of the class of persons other than dealers and authorized warranty agents of the manufacturer who will remedy the defect.

(7) Three copies of the letters of notification to be sent to vehicle or engine owners.

(8) A description of the system by which the manufacturer will assure that an adequate supply of parts will be available to perform the repair under the remedial plan including the date by which an adequate supply of parts will be available to initiate the repair campaign, the percentage of the total parts requirement of each person who is to perform the repair under the remedial plan to be shipped to initiate the campaign, and the method to be used to assure the supply remains both adequate and responsive to owner demand.

(9) Three copies of all necessary instructions to be sent to those persons who are to perform the repair under the remedial plan.

(10) A description of the impact of the proposed changes on fuel consumption, driveability, and safety of each class or category of vehicles or engines to be recalled.

(11) A sample of any label to be applied to vehicles or engines which participate in the voluntary recall campaign.

(b) Unless otherwise specified by the Administrator, the manufacturer shall report on the progress of the recall campaign by submitting subsequent reports for six consecutive quarters commencing with the quarter after the voluntary emissions recall campaign actually begins. Such reports shall be submitted no later than 25 working days after the close of each calendar quarter. For each class or category of vehicle or engine subject to the voluntary emissions recall campaign, the quarterly report shall contain the:

(1) Emission recall campaign number, if any, designated by the manufacturer.

(2) Date owner notification was begun, and date completed.

(3) Number of vehicles or engines involved in the voluntary emissions recall campaign.

(4) Number of vehicles or engines known or estimated to be affected by the emission-related defect and an explanation of the means by which this number was determined.

(5) Number of vehicles or engines inspected pursuant to the voluntary emissions recall plan.

(6) Number of inspected vehicles found to be affected by the emission-related defect.

(7) Number of vehicles actually receiving repair under the remedial plan.

(8) Number of vehicles determined to be unavailable for inspection or repair under the remedial plan due to exportation, theft, scrapping, or for other reasons (specify).

(9) Number of vehicles or engines determined to be ineligible for remedial action due to a failure to properly maintain or use such vehicles or engines.

(10) Three copies of any service bulletins transmitted to dealers which relate to the defect to be corrected and which have not previously been reported.

(11) Three copies of all communications transmitted to vehicle or engine owners which relate to the defect to be corrected and which have not previously been submitted.

(c) If the manufacturer determines that any of the information requested in paragraph (b) of this section has changed or was incorrect, revised information and an explanatory note shall be submitted. Answers to paragraphs (b)(5), (6), (7), (8), and (9) of this section shall be cumulative totals.

(d) The manufacturer shall maintain in a form suitable for inspection, such as computer information storage devices or card files, the names and addresses of vehicles or engine owners:

(1) To whom notification was given;

(2) Who received remedial repair or inspection under the remedial plan; and

(3) Who were determined not to qualify for such remedial action when eligibility is conditioned on proper maintenance or use.

(e) The records described in paragraph (d) of this section shall be made available to the Administrator upon request.

§ 85.1905 Alternative report formats.

(a) Any manufacturer may submit a plan for making either of the reports required by §§ 85.1903 and 85.1904 on computer cards, magnetic tape or other machine readable format. The proposed plan shall be accompanied by sufficient technical detail to allow a determination that data requirements of these sections will be met and that the data in such format will be usable by EPA.

(b) Upon approval by the Administrator of the proposed reporting system, the manufacturer may utilize such system until otherwise notified by the Administrator.

§ 85.1906 Report filing: Record retention.

(a) The reports required by §§ 85.1903 and 85.1904 shall be sent to: Director, Manufacturers Operations Division (EN 340), Environmental Protection Agency, 401 M St. SW., Washington, D.C. 20460.

(b) The information gathered by the manufacturer to compile the reports required by § 85.1903 and § 85.1904 shall be retained for not less than five years from the date of the manufacture of the vehicles or engines and shall be

made available to duly authorized officials of the EPA upon request.

[42 FR 28128, June 2, 1977, as amended at 44 FR 61962, Oct. 29, 1979]

§ 85.1907 Responsibility under other legal provisions preserved.

The filing of any report under the provisions of this subpart shall not affect a manufacturer's responsibility to file reports or applications, obtain approval, or give notice under any provision of law.

§ 85.1908 Disclaimer of production warranty applicability.

(a) The act of filing an Emission Defect Information Report pursuant to § 85.1903 is inconclusive as to the existence of a defect subject to the Production Warranty provided by section 207 (a) of the Act.

(b) A manufacturer may include on each page of its Emission Defect Information Report a disclaimer stating that the filing of a Defect Information Report pursuant to these regulations is not conclusive as to the applicability of the Production Warranty provided by section 207(a) of the Act.

§ 85.1909 Treatment of confidential information.

(a) Any manufacturer may assert that some or all of the information submitted pursuant to this subpart is entitled to confidential treatment as provided by 40 CFR part 2, subpart B.

(b) Any claim of confidentiality must accompany the information at the time it is submitted to EPA.

(c) To assert that information submitted pursuant to this subpart is confidential, a manufacturer must indicate clearly the items of information claimed confidential by marking, circling, bracketing, stamping, or otherwise specifying the confidential information. Furthermore, EPA requests, but does not require, that the submitter also provide a second copy of its submittal from which all confidential information has been deleted. If a need arises to publicly release nonconfidential information, EPA will assume that the submitter has accurately deleted all confidential information from this second copy.

(d) If a claim is made that some or all of the information submitted pursuant to this subpart is entitled to confidential treatment, the information covered by that confidentiality claim will be disclosed by the Administrator only to the extent and by means of the procedures set forth in part 2, subpart B, of this chapter.

(e) Information provided without a claim of confidentiality at the time of submission may be made available to the public by EPA without further notice to the submitter, in accordance with 40 CFR 2.204(c)(2)(i)(A).

[50 FR 34798, Aug. 27, 1985]

Subpart U [Reserved]

Subpart V—Emissions Control System Performance Warranty Regulations and Voluntary Aftermarket Part Certification Program

AUTHORITY: Secs. 203, 207, 208, and 301(a), Clean Air Act, as amended (42 U.S.C. 7522, 7541, 7542, and 7601(a)).

SOURCE: 45 FR 34839, May 22, 1980, unless otherwise noted.

EDITORIAL NOTE: Nomenclature changes affecting subpart V appear at 54 FR 32587, Aug. 8, 1989, and were corrected at 55 FR 25836, June 25, 1990.

§ 85.2101 General applicability.

Sections 85.2101 through 85.2111 are applicable to all 1981 and later model year light-duty vehicles and light-duty trucks.

§ 85.2102 Definitions.

(a) As used in §§ 85.2101 through 85.2111 all terms not defined herein shall have the meaning given them in the Act:

(1) *Act* means Part A of Title II of the Clean Air Act, 42 U.S.C. 7421 et seq. (formerly 42 U.S.C. 1857 et seq.), as amended.

(2) *Office Director* means the Director for the Office of Mobile Sources—Office of Air and Radiation of the Environmental Protection Agency or other authorized representative of the Office Director.

(3) *Certified Part* means a part certified in accordance with the

aftermarket part certification regulations contained in this subpart.

(4) *Emission Performance Warranty* means that warranty given pursuant to this subpart and section 207(b) of the Act.

(5) *Office Director–Approved Emission Test* or *Emission Short Test* means any test prescribed under 40 CFR 85.2201 et seq., and meeting all of the requirements thereunder.

(6) *Model Year* means the manufacturer's annual production period (as determined by the Office Director) which includes January 1 of such calendar year; however, if the manufacturer has no annual production period, the term ''model year'' shall mean the calendar year.

(7) *Original Equipment Part* means a part present in or on a vehicle at the time the vehicle is sold to the ultimate purchaser, except for components installed by a dealer which are not manufactured by the vehicle manufacturer or are not installed at the direction of the vehicle manufacturer.

(8) *Owner* means the original purchaser or any subsequent purchaser of a vehicle.

(9) *Owner's Manual* means the instruction booklet normally provided to the purchaser of a vehicle.

(10) *Useful Life* means that period established pursuant to section 202(d) of the Act and regulations promulgated thereunder.

(11) *Vehicle* means a light duty vehicle or a light duty truck.

(12) *Warranty Booklet* means a booklet, separate from the owner's manual, containing all warranties provided with the vehicle.

(13) *Written Instructions for Proper Maintenance and Use* means those maintenance and operation instructions specified in the owner's manual as being necessary to assure compliance of a vehicle with applicable emission standards for the useful life of the vehicle that are:

(i) In accordance with the instructions specified for performance on the manufacturer's prototype vehicle used in certification (including those specified for vehicles used under special circumstances), and

(ii) In compliance with the requirements of §86.XXX–38 (as appropriate for the applicable model year vehicle/engine classification), and

(iii) In compliance with any other regulations promulgated by the Office Director governing maintenance and use instructions.

(14) *Emission Related Parts* means those parts installed for the specific purpose of controlling emissions or those components, systems, or elements of design which must function properly to assure continued vehicle emission compliance.

(15) *Objective Evidence* of an emission related repair means all diagnostic information and data, the actual parts replaced during repair, and any other information directly used to support a warranty claim, or to support denial of such a claim.

(16) *Valid Emission Performance Warranty Claim* means a claim in which there is no evidence that the vehicle had not been properly maintained and operated in accordance with manufacturer instructions, the vehicle failed to conform to applicable emission standards as measured by an Office Director-approved type of emission warranty test during its useful life and the owner is subject to sanction as a result of the test failure.

(17) *Reasonable Expense* means any expense incurred due to repair of a warranty failure caused by a non-original equipment certified part, including, but not limited to, all charges in any expense categories that would be considered payable by the involved vehicle manufacturer to its authorized dealer under a similar warranty situation where an original equipment part was the cause of the failure. Included in ''reasonable expense'' are any additional costs incurred specifically due to the processing of a claim involving a certified aftermarket part or parts as covered in these regulations. The direct parts and labor expenses of carrying out repairs is immediately chargeable to the part manufacturer. All charges beyond the actual parts and labor repair expenses must be amortized over the number of claims and/or over a number of years in a manner that would be considered consistent with generally accepted accounting principles. These expense categories shall include but are not limited to the

cost of labor, materials, record keeping, special handling, and billing as a result of replacement of a certified aftermarket part.

(18) *MOD Director* means Director of Manufacturers Operations Division, Office of Mobile Sources—Office of Air and Radiation of the Environmental Protection Agency.

[45 FR 34839, May 22, 1980, as amended at 54 FR 32587, Aug. 8, 1989]

§ 85.2103 Emission performance warranty.

(a) The manufacturer of each vehicle to which this subpart applies shall warrant in writing that if:

(1) The vehicle is maintained and operated in accordance with the written instructions for proper maintenance and use and

(2) The vehicle fails to conform at any time during its useful life to the applicable emission standards or family emission limits as determined by an EPA-approved emission test, and

(3) Such nonconformity results or will result in the vehicle owner having to bear any penalty or other sanction (including the denial of the right to use the vehicle) under local, State or Federal law, then the manufacturer shall remedy the nonconformity at no cost to the owner; *except that,* if the vehicle has been in operation for more than 24 months or 24,000 miles, the manufacturer shall be required to remedy only those nonconformities resulting from the failure of components which have been installed in or on the vehicle for the sole or primary purpose of reducing vehicle emissions and that were not in general use prior to model year 1968.

(b) The warranty period shall begin on the date the vehicle is delivered to its ultimate purchaser, or if the vehicle is first placed in service as a ''demonstrator'' or ''company'' car prior to delivery, on the date it is first placed in service.

[45 FR 34839, May 22, 1980, as amended at 54 FR 32587, Aug. 8, 1989]

§ 85.2104 Owners' compliance with instructions for proper maintenance and use.

(a) An emission performance warranty claim may be denied on the basis of noncompliance by a vehicle owner with the written instructions for proper maintenance and use.

(b) When determining whether an owner has complied with the written instructions for proper maintenance and use, a vehicle manufacturer may require an owner to submit evidence of compliance only with those written maintenance instructions for which the manufacturer has an objective reason for believing:

(1) Were not performed; and

(2) If not performed could be the cause of the particular vehicle's exceeding applicable emission standards.

(c) Evidence of compliance with a maintenance instruction may consist of:

(1) A maintenance log book which has been validated at the approximate time or mileage intervals specified for service by someone who regularly engages in the business of servicing automobiles for the relevant maintenance instruction(s); or

(2) A showing that the vehicle has been submitted for scheduled maintenance servicing at the approximate time or mileage intervals specified for service to someone who regularly engages in the business of servicing automobiles for the purpose of performing the relevant maintenance; or

(3) A statement by the vehicle owner that he or she performed the maintenance at the approximate time or mileage interval specified including a showing,

(i) That the owner purchased and used proper parts, and

(ii) Upon request by the vehicle manufacturer, that the owner is able to perform the maintenance properly.

(d) Except as provided in paragraph (e) of this section, the time/mileage interval for scheduled maintenance services shall be the service interval specified for the part in the written instructions for proper maintenance and use.

(e) For certified parts having a maintenance or replacement interval different from that specified in the written instructions for proper maintenance and use, the time/mileage interval shall be the service interval for which the part was certified.

(f) The owner may perform maintenance or have maintenance performed

more frequently then required in the maintenance instructions.

(g) Except as provided in paragraph (h) of this section, a manufacturer may deny an emission performance warranty claim on the basis of noncompliance with the written instructions for proper maintenance and use only if:

(1) An owner is not able to comply with a request by a manufacturer for evidence pursuant to paragraph (c) of this section; or

(2) Notwithstanding the evidence presented pursuant to paragraph (c) of this section, the manufacturer is able to prove that the vehicle failed an emission short test because:

(i) The vehicle was abused, or

(ii) An instruction for the proper maintenance and use was performed in a manner resulting in a component's being improperly installed or a component or related parameter's being adjusted substantially outside of the manufacturer's specifications, or

(iii) Unscheduled maintenance was performed on a vehicle which resulted in the removing or rendering inoperative of any component affecting the vehicle's emissions.

(h) In no case may a manufacturer deny an emission performance warranty claim on the basis of:

(1) Warranty work or predelivery service performed by any facility authorized by the vehicle manufacturer to perform such work or service; or

(2) Work performed in an emergency situation to rectify an unsafe condition, including an unsafe driveability condition, attributable to the manufacturer, provided the vehicle owner has taken steps to put the vehicle back in a conforming condition in a timely manner; or

(3) The use of any uncertified part or non-compliance with any written instruction for proper maintenance and use which is not relevant to the reason that the vehicle failed to comply with applicable emission standards; or

(4) Any cause attributable to the vehicle manufacturer; or

(5) The use of any fuel which is commonly available in the geographical area in which the vehicle or engine is located, unless the written instructions for proper maintenance and use specify that the use of that fuel would adversely affect the emission control devices and systems of the vehicle, and there is commonly available information for the owner to identify the proper fuel to be used.

[45 FR 34839, May 22, 1980, as amended at 54 FR 32587, Aug. 8, 1989]

§ 85.2105 Aftermarket parts.

(a) No valid emission performance warranty claim shall be denied on the basis of the use of a properly installed certified aftermarket part in the maintenance or repair of a vehicle. A vehicle manufacturer that honors a valid emission performance warranty claim involving a certified aftermarket part may seek reimbursement for reasonable expenses incurred in honoring the claim by following the warranty claim procedures listed in § 85.2107(c).

(b) Except as provided in § 85.2104(h), a vehicle manufacturer may deny an emission performance warranty claim on the basis of an uncertified aftermarket part used in the maintenance or repair of a vehicle if the vehicle manufacturer can demonstrate that the vehicle's failure to meet emission standards was caused by use of the uncertified part. A warranty claim may be denied if the vehicle manufacturer submits a written document to the vehicle owner that the vehicle owner is unable or unwilling to refute. The document must:

(1) Establish a causal connection between the emissions short test failure and use of the uncertified part, and,

(2) Assert that:

(i) Removal of the uncertified part and installation of any comparable certified or original equipment part previously removed or replaced during installation of the uncertified part will resolve the observed emissions failure in the vehicle, and/or

(ii) Use of the uncertified part has caused subsequent damage to other specified certified components such that replacement of these components would also be necessary to resolve the observed vehicle emissions failure, and,

(3) List all objective evidence as defined in § 85.2102 that was used in the determination to deny warranty. This evidence must be made available to the vehicle owner or EPA upon request, and

(c) A part not required to be replaced at a definite interval in accordance with the written instructions for maintenance and use shall be warranted for the full term of any warranty mandated by the Act. Instructions to replace a component only if checked and found to be operating below specification shall have no bearing on warrranty coverage, unless an owner did not follow such an instruction prior to the short test failure and noncompliance with that instruction caused the failure of another vehicle component relevant to the nonconformity.

[45 FR 34839, May 22, 1980, as amended at 54 FR 32587, Aug. 8, 1989]

§ 85.2106 Warranty claim procedures.

(a) A claim under the emission performance warranty may be raised immediately upon the failure of an EPA-approved emission test if, as a result of that failure, an owner is required to take action of any kind in order to avoid imposition of a penalty or sanction. An owner need not suffer the loss of the right to use a vehicle, be fined, incur repair expenses, or actually bear any penalty or sanction to satisfy the requirement of §85.2103(a)(3). That requirement shall be met if a test failure sets a procedure in motion under which the owner will bear a penalty or sanction if a vehicle is not brought into conformity or repaired to some specified extent within some specified period of time.

(b) A warranty claim may be submitted by bringing a vehicle to:

(1) Any repair facility authorized by the vehicle manufacturer to service that model vehicle, or

(2) Any repair facility authorized by the vehicle manufacturer to perform emission performance warranty repairs for that model vehicle.

(c) To the extent required by any Federal or State law, whether statutory or common law, a vehicle manufacturer shall be required to provide a means for non-franchised repair facilities to perform emission performance warranty repairs.

(d) The manufacturer of each vehicle to which the warranty is applicable shall establish procedures as to the manner in which a claim under the emission performance warranty is to be processed. The procedures shall:

(1) Provide for a final decision by the vehicle manufacturer within a reasonable time, not to exceed 30 days from the time at which the vehicle is initially presented for repair or within the time period during which an owner is required by local, State or federal law to have the vehicle repaired without incurring further penalties or sanctions (whichever is shorter), unless a delay

(i) Is requested by the vehicle owner, or

(ii) Is caused by an event not attributable to the vehicle manufacturer or the warranty repair facility; and

(2) Require that if the facility at which the vehicle is initially presented for repair is unable for any reason to honor the particular claim, then, unless this requirement is waived in writing by the vehicle owner, the repair facility shall forward the claim to an individual or office authorized to make emission performance warranty determinations for the manufacturer.

(e) Within the time period specified in paragraph (d) of this section the manufacturer shall:

(1) Notify the owner that it will honor the claim; or

(2) Provide the owner, in writing, with an explanation of the basis upon which the claim is being denied; or

(3) If the basis of the claim denial involves use of an uncertified part, provide the owner in writing with an explanation of the basis upon which the claim is being denied according to all criteria specified in §85.2105(b).

(f) Failure to notify an owner within the required time period (as determined under paragraph (d) of this section) for reasons that are not attributable to the vehicle owner or events which are not beyond the control of the vehicle manufacturer or the repair facility, shall result in the vehicle manufacturer being responsible for repairing the warranted items free of charge to the vehicle owner.

(g) The vehicle manufacturer shall incur all costs associated with a determination that an emission performance warranty claim is valid.

[45 FR 34839, May 22, 1980, as amended at 54 FR 32588, Aug. 8, 1989]

§ 85.2107 Warranty remedy.

(a) The manufacturer's obligation under the emission performance warranty shall be to make all adjustments, repairs or replacements necessary to assure that the vehicle complies with applicable emission standards of the U.S. Environmental Protection Agency, that it will continue to comply for the remainder of its useful life (if proper maintenance and operation are continued), and that it will operate in a safe manner. The manufacturer shall bear all costs incurred as a result of the above obligation, *except that* after the first 24 months or 24,000 miles (whichever first occurs) the manufacturer shall be responsible only for:

(1) The adjustment, repair or replacement of those components which have been installed in or on a vehicle for the sole or primary purpose of reducing vehicle emissions, and which were not in general use prior to model year 1968; and

(2) All other components which must be adjusted, repaired or replaced to enable a component repaired or replaced under paragraph (a)(1) of this section to perform properly.

(b) Under the Emissions Performance Warranty, the manufacturer shall be liable for the total cost of the remedy for any vehicle validly presented for repair to any authorized service facility authorized by the vehicle manufacturer. State or local limitations as to the extent of the penalty or sanction imposed upon an owner of a failed vehicle shall have no bearing on this liability.

(c) The remedy provided under paragraph (a) of this section shall include the repair or replacement of certified parts as required in § 85.2105(a). To seek reimbursement from the involved certified aftermarket part manufacturer for reasonable expenses incurred due to the certified aftermarket parts determined to be the cause of a performance warranty failure, the vehicle manufacturer must:

(1) Retain all parts replaced during the performance warranty repair, and

(2) Follow the procedures laid out in § 85.2117.

(d) If a manufacturer is unable (for reasons not attributable to the vehicle owner or events beyond the control of the vehicle manufacturer or an authorized repair facility) to repair a vehicle within the time period specified under § 85.2106(d) after the initial presentation of the vehicle to an authorized repair facility, then the owner shall be entitled to have the warranty remedy performed, at the expense of the manufacturer, by any repair facility of the owner's choosing.

(e) The vehicle manufacturer may deny warranty for a failure caused by an uncertified part in accordance with the criteria in § 85.2105.

[45 FR 34839, May 22, 1980, as amended at 54 FR 32588, Aug. 8, 1989]

§ 85.2108 Dealer certification.

(a) Upon the delivery of each new light-duty motor vehicle, the dealer shall furnish to the purchaser a certificate which states that:

(1) Based upon written notification furnished by the manufacturer, the dealer has knowledge that the vehicle is covered by an EPA Certificate of Conformity;

(2) Based upon a visual inspection of emissions control devices, there are no apparent deficiencies in the installation of such devices by the manufacturer. The visual inspection required by this subsection is limited to those emission control devices or portions thereof which are visible without removal or adjustment of any component or system of the vehicle, whether emissions related or otherwise.

(3) The dealer has performed all emission control system preparation required by the manufacturer prior to the sale of the vehicle, as set forth in the current predelivery service manual furnished by the manufacturer.

(b) The certificate shall further state that if the vehicle fails an EPA-approved emission test prior to the expiration of three months or 4,000 miles (whichever occurs first) from the date or mileage at the time of delivery of the vehicle to the ultimate purchaser, and the vehicle has been maintained and used in accordance with the written instructions for proper maintenance and use, then the vehicle manufacturer shall remedy the nonconformity under the emission performance warranty.

(c) For the purpose of this section, the term emission control devices shall be limited to all devices installed on a vehicle for the sole or primary purpose of controlling vehicle emissions and which were not in general use prior to 1968.

(d) A vehicle manufacturer shall provide the §85.2108 remedy free of charge to the vehicle owner for any vehicle which, although maintained in accordance with the written instructions for proper maintenance and use, fails an emission short test prior to the expiration of three months or 4,000 miles from the time of sale to the ultimate purchaser, without regard to whether a penalty or sanction is imposed because of the emissions short-test failure.

(e) The dealer certification required by this section shall not be construed as either a representation or a warranty, express or implied, by the dealer that the emission control system or any part thereof is without defect nor that the system will properly perform.

[46 FR 38692, July 29, 1981]

§85.2109 Inclusion of warranty provisions in owners' manuals and warranty booklets.

(a) A manufacturer shall furnish with each new motor vehicle, a full explanation of the Emission Performance Warranty, including at a minimum the following information:

(1) A basic statement of the coverage of the emissions performance warranty as set out in §85.2103. This shall be separated from any other warranty given by the manufacturer and shall be prefaced by the title ''Emissions Performance Warranty'' set in bold face type; and

(2) A list of all items which are covered by the emission performance warranty for the full useful life of the vehicle. This list shall contain all components which have been installed in or on a vehicle solely or primarily for the purpose of reducing vehicle emissions, except those components which were in general use prior to model year 1968. All items listed pursuant to this subsection shall be described in the same manner as they are likely to be described on a service facility work receipt for that vehicle; and

(3) A list or a reference to the location of the instructions for proper maintenance and use, together with the time and/or mileage interval at which such instructions are to be performed; and

(4) An explanation of the effect that the use of certified parts will have on the emission performance warranty. This explanation shall comport with the provisions of §85.2105 (b) and (c), including a statement in boldface type that maintenance, replacement, or repair of the emission control devices and systems may be performed by any automotive repair establishment or individual using any certified part; and

(5) Complete instructions as to when and how an owner may bring a claim under the emissions performance warranty, as governed by §§85.2104 and 85.2106. These instructions shall include:

(i) An explanation of the point in time at which a claim may be raised; and

(ii) Complete procedures as to the manner in which a claim may be raised; and

(iii) The provisions for manufacturer liability contained in §85.2106(f) if the manufacturer fails to respond within the time period set in accordance with §85.2106(d);

(6) An explanation that an owner may obtain further information concerning the emission performance warranty or that an owner may report violations of the terms of the Emission Performance Warranty by contacting the Director, Field Operations and Support Division (6406J), Environmental Protection Agency, 401 ''M'' Street, SW., Washington, DC 20460 (Attention: Warranty Claim).

(b) The warranty information shall be provided in the same document as other warranties provided with the vehicle.

(c) If a separate warranty booklet is provided with the vehicle, the owner's manual shall contain, at a minimum, the following information:

(1) A general list of all warranties covering the vehicle; and

(2) A statement that detailed warranty information can be found in the warranty booklet.

(d) If a separate warranty booklet is not provided with the vehicle, the information specified in paragraph (a) of this section shall be contained in the owner's manual.

[45 FR 34839, May 22, 1980, as amended at 58 FR 65554, Dec. 15, 1993]

§ 85.2110 Submission of owners' manuals and warranty statements to EPA.

(a) The manufacturer of each vehicle to which this subpart applies shall submit a copy to EPA of both the owner's manual and warranty booklet (if applicable) for each model vehicle, *except that*, if the same warranty information is to be provided for more than one model vehicle, the manufacturer may submit copies for a single model vehicle with a statement that such copies are complete and accurate representation of the warranty information provided with all other specified models.

(1) The owner's manuals and warranty booklets should be received by EPA 60 days prior to the introduction of the vehicle for sale.

(2) If the manuals and warranty booklets are not in their final printed format 60 days prior to the introduction of the vehicle for sale, a manufacturer may submit the most recent draft at that time, provided that final versions are submitted within 15 days of the final printing.

(b) All materials described in paragraph (a) of this section shall be sent to: Director, Field Operations and Support Division (6406J), Environmental Protection Agency, 401 ''M'' Street, SW., Washington, DC 20460 (Attention: Warranty Booklet).

[45 FR 34839, May 22, 1980, as amended at 58 FR 65554, Dec. 15, 1993]

§ 85.2111 Warranty enforcement.

The following acts are prohibited and may subject a manufacturer to up to a $25,000 civil penalty for each offense:

(a) Selling or leasing a light duty vehicle without providing in writing the warranty information required by § 85.2109;

(b) Failing or refusing to comply with the terms and conditions of the Emission Performance Warranty with respect to any vehicle to which this subpart applies. Acts constituting such a failure or refusal shall include, but are not limited to, the following,

(1) Failure to honor a valid warranty claim,

(2) Performance of a warranty repair in a manner which cannot reasonably be expected to allow the vehicle to meet applicable emission standards for the remainder of its useful life,

(3) Failure of a manufacturer to reimburse a dealer or other designated agent for performance of a vehicle repair made pursuant to this subpart, and

(4) Failure of a manufacturer to supply a part necessary to perform a warranty repair within the time limit specified under § 85.2106(d), unless such failure is for a reason not attributable to the vehicle manufacturer or the warranty repair facility;

(c) To provide directly or indirectly in any communication to the ultimate purchaser or any subsequent purchaser that the emission performance warranty coverage is conditioned upon the use of any name brand part, component, or system or upon service (other than a component or service provided without charge under the terms of the purchase agreement), unless the communication is made pursuant to a written waiver by the Office Director.

[45 FR 34839, May 22, 1980, as amended at 58 FR 65554, Dec. 15, 1993]

§ 85.2112 Applicability.

The provisions of §§ 85.2112 through 85.2122 apply to emission related automotive aftermarket parts which are to be installed in or on 1968 and later model year light-duty vehicles and light-duty trucks.

[54 FR 32588, Aug. 8, 1989]

§ 85.2113 Definitions.

As used in this subpart, all terms not defined shall have the meaning given them in the Act:

(a) *Act* means Part A of Title II of the Clean Air Act, 42 U.S.C. 7421 *et seq.* (formerly 42 U.S.C. 1857 *et seq.*) as amended.

(b) *Aftermarket Part* means any part offered for sale for installation in or on a motor vehicle after such vehicle has left the vehicle manufacturer's production line.

(c) *Aftermarket Part Manufacturer* means:

(1) A manufacturer of an aftermarket part or,

(2) A party that markets aftermarket parts under its own brand name, or,

(3) A rebuilder of original equipment or aftermarket parts, or

(4) A party that licenses others to sell its parts.

(d) *Agency* means the Environmental Protection Agency.

(e) *Certified Aftermarket Part* means any aftermarket part which has been certified pursuant to this subpart.

(f) *Emission Warranty* means those warranties given by vehicle manufacturers pursuant to section 207 of the Act.

(g) *Emission-Critical Parameters* means those critical parameters and tolerances which, if equivalent from one part to another, will not cause the vehicle to exceed applicable emission standards with such parts installed.

(h) *Engine Family* means the basic classification unit of a vehicle's product line for a single model year used for the purpose of emission-data vehicle or engine selection and as determined in accordance with 40 CFR 86.078–24.

(i) *Vehicle or Engine Configuration* means the specific subclassification unit of an engine family or certified part application group as determined by engine displacement, fuel system, engine code, transmission and inertia weight class, as applicable.

(j) *Certification Vehicle Emission Margin* for a certified engine family means the difference between the EPA emission standards and the average FTP emission test results of that engine family's emission-data vehicles at the projected applicable useful life mileage point (i.e., useful life mileage for light-duty vehicles is 50,000 miles and for light-duty trucks is 120,000 miles for 1985 and later model years or 50,000 miles for 1984 and earlier model years).

(k) *Applications* means all vehicle or engine configurations for which one part is being certified as set forth in the aftermarket part manufacturer's notification of intent to certify pursuant to §85.2115(a)(1).

[45 FR 78458, Nov. 25, 1980, as amended at 54 FR 32588, Aug. 8, 1989]

§85.2114 Basis of certification.

(a) *Prior to certifying,* the aftermarket part manufacturer must determine:

(1) Whether the part to be certified is an emission related part as defined in §85.2102. The MOD Director shall deny certification to any parts which he or she determines is not an emission related part.

(2) The vehicle or engine configurations for which this part is being certified. These are the vehicle and engine designs for which the aftermarket part manufacturer intends to sell the certified aftermarket part.

(3) Whether the part qualifies under one of the part categories, listed in §85.2122 of this subpart that are eligible to certify using emission critical parameters and, if so, whether the manufacturer elects to demonstrate certification using emission critical parameters. An aftermarket part may be certified under this category only if the part's emission-critical parameters, as set forth in §85.2122, are equivalent to those of the original equipment or previously certified part it is to replace. Compliance with the emission-critical parameters discussed in paragraph (b) of this section may be demonstrated by compliance with the relevant test procedures and criteria specified in appendix I to this subpart. The requirements of this paragraph apply to all on-road vehicles and engines. Alternatively, the manufacturer may elect to demonstrate certification compliance according to the emission test procedures described in paragraph (c) of this section.

(b) *For parts eligible to certify using emission-critical parameters, certification compliance can be demonstrated as follows.* (1) The durability procedure contained in appendix I to this subpart can be used. As an alternative, the aftermarket part manufacturer may use a different durability procedure if it can demonstrate to the MOD Director that the alternative procedure results in an improved technical evaluation of the part's influence on vehicle or engine emissions for its useful life mileage interval, or results in a significant cost savings to the aftermarket part manufacturer with no loss in technical validity compared to the recommended durability procedure. The

aftermarket part manufacturer shall receive the written approval from the MOD Director prior to implementation of the alternative procedures.

(2) Compliance with certification requirements is based on conformance with all emission-critical parameters in § 85.2122. This shall be accomplished by performing such procedures, tests, or analyses described in appendix I, or other procedures subject to the MOD Director's approval, necessary to ascertain with a high degree of certainty the emission-critical parameter specifications and tolerances for the aftermarket part and the original equipment or previously certified part for which an equivalent aftermarket certified part is to be used.

(i) If information is available in Appendix I of this subpart to identify the applicable emission-critical parameters, the aftermarket part certifier must use such information.

(ii) If sampling and analysis of original equipment or previously certified parts is relied upon, the aftermarket part certifier must use sound statistical sampling techniques to ascertain the mean and range of the applicable emission parameters.

(iii) If an aftermarket part replaces more than one part on the same application, it may be certified only if the aftermarket part meets the applicable emission-critical parameters of § 85.2122 for each part or parts which the aftermarket part is to replace. If an aftermarket part is to replace more than one part or an entire system, compliance must be demonstrated for all emission-critical parameters involved, except those which relate solely to the interface between the parts being replaced by the aftermarket part.

(c) *For parts certifying on the basis of emission test results, durability demonstration testing shall be conducted as follows.* (1) Prior to certification emission testing, the actual aftermarket part used for certification testing must meet the durability demonstration requirements of this paragraph for at least the part's useful life mileage interval.

(i) If an original equipment part has no scheduled replacement interval, then the useful life mileage interval of the aftermarket part of that type or which replaces the function of that part may be certified with a service interval less than the useful life of the motor vehicle or motor vehicle engine, or

(ii) If any provision of 40 CFR part 86 establishes a minimum replacement or service interval for an original equipment part during vehicle or engine certification, then the useful life mileage interval of the aftermarket part of that type or which replaces the function of that part is said minimum interval.

(2) The part manufacturer must decide whether it can demonstrate to the MOD Director that, during normal vehicle operation, the candidate part will not accelerate deterioration of any original equipment emission related parts. This demonstration must be based on technical rationale that shows that the candidate part has no significant physical or operational effect on any original emission components or system which would be different than that experienced by the vehicle operating with all original equipment emission system parts. The part's effect on each major emission system must be addressed separately in the demonstration.

(i) If the aftermarket part to be certified accelerates deterioration of any existing emission related parts then certification shall be carried out as specified under the paragraph (c)(3) of this section for parts that accelerate deterioration of existing emission related parts.

(ii) If the aftermarket part manufacturer can demonstrate that the part to be certified will not accelerate deterioration of any existing emission related components, then the manufacturer can certify according to paragraph (c)(4) in this section for parts demonstrated to not accelerate deterioration of existing emission related parts.

(3) *For aftermarket parts that accelerate deterioration of existing emission related parts during normal operation.* (i) The aftermarket test part can be installed on the durability test vehicle and aged for 50,000 miles using the vehicle durability driving schedules contained in part 86, appendix IV. As an alternative, the aftermarket part manufacturer may use a different durability procedure if it can demonstrate to the MOD

Director that the alternative procedure results in an improved technical evaluation of the part's influence on vehicle or engine emissions for the part's useful life mileage interval, or results in a significant cost savings to the aftermarket part manufacturer with no loss in technical validity compared to the recommended durability schedules in part 86, appendix IV. The aftermarket part manufacturer shall receive the written approval from the MOD Director prior to implementation of the alternative procedures.

NOTE: At the time of certification emission testing, the same part and vehicle combination used for mileage accumulation shall be used for emission testing.

(ii) Where the comparable original equipment part has a recommended replacement interval of less than 50,000 miles, the test part shall be replaced no sooner than its useful life mileage interval during the required 50,000 mile durability demonstration.

NOTE: At the time of certification emission testing, one of the aftermarket parts that accumulated at least its useful life mileage during the aging process under this paragraph shall be installed on the durability test vehicle that has accumulated 50,000 miles.

(4) *For aftermarket parts demonstrated not to accelerate deterioration on existing emission related parts during normal operation,* the part manufacturer must determine whether the part will cause a noticeable change in vehicle driveability.

(i) Parts that cause no noticeable change in vehicle driveability, performance, and/or fuel economy when the part fails, the durability driving schedules contained in part 86, appendix IV can be used. As an alternative, the aftermarket part manufacturer may use a different durability procedure if it can demonstrate to the MOD Director that the alternative procedure results in an improved technical evaluation of the part's influence on vehicle or engine emissions for its useful life mileage interval, or results in a significant cost savings to the aftermarket part manufacturer with no loss in technical validity compared to the durability schedules in part 86, appendix IV. The aftermarket part manufacturer shall receive the written approval from the MOD Director prior to implementation of the alternative procedures.

(ii) Parts demonstrated to cause a noticeable change in vehicle driveability, performance, and/or fuel economy when the part fails, are exempt from aging if the part manufacturer can demonstrate to the MOD Director that the primary failure mode of the aftermarket component or system affects the driveability, performance, and/or fuel economy of the vehicle at a level readily detectable by the driver and likely to result in near term repair of failing components and correction of the emissions failure. (Use of on-board diagnostics and malfunction indicators as covered in paragraph (g) of this section is not necessarily an adequate demonstration that the certified part will be replaced. The part manufacturer must demonstrate that the diagnostic and malfunction indicator system will routinely result in repair or replacement of the part in use).

(5) *For parts which only affect evaporative emissions performance,* the aftermarket part manufacturer shall determine and demonstrate to the MOD Director the appropriate durability procedure to age its part. The demonstration shall include all documentation, analyses, and test results that support this determination, and the documentation that support the durability procedure results shall be submitted with the notification of intent to certify as per § 85.2115 and is subject to MOD Director's review.

(6) *Durability demonstration vehicle selection.* The demonstration vehicle used must represent the ''worst case'' of all the configurations for which the aftermarket part is being certified. The worst case configuration shall be that configuration which will likely cause the most deterioration in the performance characteristics of the aftermarket part which influence emissions during the part's useful life mileage. The worst case configuration shall be selected from among those configurations for which the aftermarket part is to be certified. One of the following two methods shall be used to select the worst case durability demonstration vehicle(s):

(i) In the first method, the selection shall be based on a technical judgment by the aftermarket part manufacturer of the impact of the particular design, or calibration of a particular parameter or combination of parameters, and/or an analysis of appropriate data, or

(ii) In the second alternative method, the selection shall be made from among those vehicle configurations with the heaviest equivalent test weight, and within that group, the largest displacement engine.

(d) *For parts certifying on the basis of emission test results, certification compliance shall be demonstrated as follows.* (1) The emission test to be used is the Federal Test Procedure as set forth in the applicable portions of 40 CFR part 86. Certification emission testing must be carried out using representative production aftermarket parts as provided in paragraph (e) of this section. The test results must demonstrate that the proper installation of the certified aftermarket part will not cause the vehicle to fail to meet any applicable Federal emission requirements under section 202 of the Act.

(2) The following portions of the Federal Test Procedure are not required to be performed when certifying a part using emission testing:

(i) The evaporative emissions portion, if the aftermarket manufacturer has an adequate technical basis for believing that the part has no effect on the vehicle's evaporative emissions;

(ii) The exhaust emissions portion, if the part manufacturer has an adequate technical basis for believing that the part has no affect on the vehicle's exhaust emissions; and

(iii) Other portions therein which the part manufacturer believes are not relevant; *Provided, That* the part manufacturer has requested and been granted a waiver in writing by the MOD Director for excluding such portion.

(3) Exhaust Emission Testing. Certification exhaust emission testing for aftermarket parts shall be carried out in the following manner:

(i) For light duty vehicle parts that accelerate deterioration of existing emission related parts, at least one emission test is required. The test(s) shall be performed according to the Federal Test Procedure on the same test vehicle and aftermarket part combination that was previously aged as required. The results of all tests performed shall be averaged for each emission constituent. The average values shall meet all applicable Federal emission requirements under section 202 of the Act.

(A) For aftermarket parts where the comparable original equipment part has no recommended replacement interval, the same part and vehicle combination used for the durability demonstration shall be used for certification exhaust emission testing.

(B) For aftermarket parts where the comparable original equipment part has a recommended replacement interval of less than 50,000 miles, one of the aftermarket parts that accumulated at least the part's useful life mileage during the durability demonstration must be installed on the durability demonstration vehicle that has accumulated 50,000 miles for certification exhaust emission testing.

(ii) For light duty truck parts that accelerate deterioration of existing emission related parts.

(A) An emission test shall be performed on emission test vehicles at 4000 miles and at 50,000 miles, with the part installed. Exhaust emission deterioration factors for the test vehicle shall be calculated from these two test results. The aftermarket part manufacturer may elect to perform other emission tests at interim mileages. However, any interim tests must be spaced at equal mileage intervals. If more than one test is performed at any one mileage point, then all tests at this point shall be averaged prior to determining the deterioration factor. The deterioration factor shall be calculated using the least squares straight line method, in accordance with § 86.088–28(a). The deterioration factor for each emission constituent shall be used to linearly project the 50,000 mile test result out to 120,000 miles. The projected 120,000 mile test result shall meet light duty truck emission standards.

(B) As an option, the light-duty truck part manufacturer may durability age the test vehicle and aftermarket part to 120,000 miles, and

then perform one Federal Test Procedure test. The actual test results in this case must pass all Federal emission standards.

(iii) For parts demonstrated to not accelerate deterioration of existing emission related parts during normal operation:

(A) If parts cause no noticeable change in vehicle driveability, performance, and/or fuel economy when the part fails, the certification exhaust emission test vehicle need not be the same vehicle as that used for durability demonstration. Upon completion of aging, one Federal Test Procedure test shall be performed with the aged aftermarket part installed on a test vehicle that has just completed one Federal Test Procedure test in the original equipment configuration (i.e., before the aftermarket part or system is installed). If more than one test is performed either before or after the aftermarket part is installed, then an equivalent number of tests must be performed in both configurations. The results of all tests performed before the part is installed shall be averaged and the results of all tests performed after the part is installed shall be averaged for each emission constituent. The difference in Federal Test Procedure emission results between the tests with the aged aftermarket part installed and the test vehicle in the original equipment configuration shall be less than or equal to the certification vehicle emission margin of any and all of the certification test vehicles from the various configurations for which the aftermarket part is being certified.

(B) For parts demonstrated to cause a noticeable change in vehicle driveability, performance, and/or fuel economy when the part fails, no durability aging of the part is required before certification emission testing. One Federal Test Procedure test shall be performed on the test vehicle in its original equipment configuration (i.e., before the aftermarket part or system is installed) and one test with an aftermarket part representative of production (as provided in paragraph (e) of this section) installed on the test vehicle. If more than one test is performed either before or after the aftermarket part is installed, then an equivalent number of tests must be performed in both configurations. The results of all tests performed with the aftermarket part installed shall be averaged and the results of all tests performed in the original equipment configuration shall be averaged for each emission constituent. The difference in Federal Test Procedure emission results between the tests with the aftermarket part installed and the test vehicle in the original equipment configuration shall be less than or equal to the certification vehicle emission margin of any and all of the certification test vehicles from the various configurations for which the aftermarket part is being certified.

(4) Evaporative emission testing. For parts determined by the part manufacturer (with appropriate technical rationale) to affect only evaporative emissions performance, at least one evaporative emissions portion of the Federal Test Procedure test shall be performed on the vehicle in its original equipment configuration and at least one with the aftermarket part installed. Both the original equipment and aftermarket part shall be aged according to paragraph (c)(5) of this section prior to testing. If more than one test is performed either before or after the aftermarket part is installed, then an equivalent number of tests must be performed in both configurations. The emission results of all tests performed before the part is installed shall be averaged and the emission results of all tests performed after the part is installed shall be averaged. The difference in Federal Test Procedure emission results between the tests with the aged aftermarket part installed and the test vehicle in the original equipment configuration shall be less than or equal to the certification vehicle emission margin of any and all of the certification test vehicles from the various configurations for which the aftermarket part is being certified.

(5) Emission test vehicle selection: The test vehicle used must represent the ''worst case'' with respect to emissions of all those configurations for which the aftermarket part is being certified. The worst case configuration shall be that configuration which, having the aftermarket part installed, is

least likely to meet the applicable emission standards among all those configurations on which the aftermarket part is intended to be installed as a certified aftermarket part. One of the following two methods shall be used to select the worst case emission test vehicle(s):

(i) In the first method, the selection shall be based on a technical judgment by the aftermarket part manufacturer of the impact of the particular design or calibration of a particular parameter or combination of parameters and/or an analysis of appropriate data, or

(ii) In the second alternative method, two defined worst case test vehicles shall be selected from the vehicle configurations using the following criteria:

(A) The first test vehicle is that engine family for which the largest number of parts are projected to be sold. Within that family the manufacturer shall select the configurations with the heaviest equivalent test weight, and then within that group the configuration with the largest displacement engine.

(B) The second test vehicle shall be from a different vehicle manufacturer than the first test vehicle, or if the aftermarket part applies to only one vehicle manufacturer, from a different engine family. Engine families are determined by the vehicle manufacturer or when certifying under 40 CFR part 86. Within that group, the second test vehicle is selected from the vehicle configurations with the heaviest equivalent test weight, and then, within that group, the configuration with the largest displacement engine. If a part applies to only one engine family then only the vehicle specified in paragraph (d)(5)(ii)(A), of this section, is required to be tested.

(iii) The results of certification tests using the worst case vehicle selections made in this section shall only be applicable for configurations that are required to meet the same or less stringent (numerically higher) emission standards than those of the worst case configuration.

(iv) The worst case test vehicle(s) selected for certification emission testing is(are) not required to meet Federal emission standards in its original configuration. However, each test vehicle shall have representative emissions performance that is close to the standards and have no obvious emission defects. Each test vehicle shall be tuned properly and set to the vehicle manufacturer's specifications before testing is performed. Any excessively worn or malfunctioning emission related part shall be repaired prior to testing.

(e) *Test part selection.* Certification shall be based upon tests utilizing representative production aftermarket parts selected in a random manner in accordance with accepted statistical procedures.

(f) *Replacing original equipment parts.* Installation of any certified aftermarket part shall not result in the removal or rendering inoperative of any original equipment emission related part other than the part(s) being replaced. Furthermore, installation of any certified aftermarket part shall not require the readjustment of any other emission related part to other than the vehicle manufacturer specifications, cause or contribute to an unreasonable risk to the public health, welfare or safety, or result in any additional range of parameter adjustability or accessibility to adjustment than that of the vehicle manufacturer's emission related parts.

(g) *Affects on vehicle on board diagnostic system.* Installation of any certified aftermarket part shall not alter or render inoperative any feature of the on-board diagnostic system incorporated by the vehicle manufacturer. The certified part may integrate with the existing diagnostic system if it does not alter or render inoperative any features of the system. However, use of on-board diagnostics or warning indicators to alert the driver to part failure is not sufficient by itself to qualify the part for exemption from aging under paragraph (c)(4)(ii) of this section. The part manufacturer must demonstrate that the diagnostic and malfunction indicator system will routinely result in repair or replacement of the aftermarket part in use.

[54 FR 32588, Aug. 8, 1989]

§ 85.2115 Notification of intent to certify.

(a) At least 45 days prior to the sale of any certified automotive aftermarket part, notification of the intent to certify must be received by the Office Director.

(1) The notification shall include:

(i) Identification of each part to be certified; and.

(ii) Identification of all vehicle or engine configurations for which the part is being certified including make(s), model(s), year(s), engine size(s) and all other specific configuration characteristics necessary to assure that the part will not be installed in any configuration for which it has not been certified; and

(iii) All determinations, demonstrations, technical rationale, and documentation provided in § 85.2114; and

(iv) Any and all written waivers and approvals obtained from the MOD director as provided in § 85.2114, and any correspondence with EPA regarding certification of that part; and

(v) A description of the tests, techniques, procedures, and results utilized to demonstrate compliance with § 85.2114(b) applicable to parts eligible to certify using emission-critical parameters, except that, if the procedure utilized is recommended in appendix I of this subpart, then only a statement to this effect is necessary. A description of all statistical methods and analyses used to determine the emission-critical parameters of the original equipment parts and compliance of the certified part(s) with those parameters including numbers of parts tested, selection criteria, means, variance, etc; and

(vi) All results and documentation of tests and procedures used by the part manufacturer as evidence of compliance with the durability and emission requirements specified in § 85.2114; and

(vii) A discussion of the technical basis(es) for foregoing any portion of the Federal Test Procedure when applicable; and

(viii) A description of the test part selection criteria used, and a statement that the test part(s) used for certification testing is(are) a representative production aftermarket part(s) consistent with § 85.2114(e); and

(ix) A description of the test and demonstration vehicle selection criteria used, and rationale that supports the technical judgment that the vehicle configurations used for emission testing and durability demonstration represent worst case with respect to emissions of all those configurations for which the aftermarket part is being certified, and all data that supports that conclusion; and

(x) The service intervals of the part, including maintenance and replacement intervals in months and/or miles, as applicable, and a statement indicating whether it is different than the service, maintenance, and replacement interval of the original equipment requirements; and

(xi) A statement, if applicable, that the part will not meet the labeling requirements of § 85.2119(a) and the description of the markings the aftermarket manufacturer intends to put on the part in order to comply with § 85.2119(b); and

(xii) A statement that the aftermarket part manufacturer accepts, as a condition of certification, the obligation to comply with the warranty requirements and dispute resolution procedures provided in § 85.2117; and

(xiii) A statement of commitment and willingness to comply with all the relevant terms and conditions of this subpart; and

(xiv) A statement by the aftermarket part manufacturer that use of its certified part will not cause a substantial increase to vehicle emissions in any normal driving mode not represented during certification or compliance testing; and

(xv) The office or officer of the aftermarket part manufacturer authorized to receive correspondence regarding certification requirements pursuant to this subpart.

(2) The notification shall be signed by an individual attesting to the accuracy and completeness of the information supplied in the notification.

(3) Notification to the Agency shall be by certified mail or another method by which date of receipt can be established.

(4) Two complete and identical copies of the notification and any subsequent

industry comments on any such notification shall be submitted by the aftermarket manufacturer to: Mod Director, MOD (EN-340F), Attention: Aftermarket Parts, 401 ''M'' St. SW., Washington, DC 20460.

(5) A copy of the notification submitted under paragraph (a)(4) of this section will be placed in a public docket. Comments on any notice in the public docket may be made to the MOD Director.

(b) The MOD Director reserves the right to review an application to determine if the submitted documents adequately meet all the requirements for certification specified in §§85.2114 and 85.2115. A part may be sold as certified 45 days after the receipt by the Agency of the notification given pursuant to this subsection provided that the Office Director has not notified the part manufacturer otherwise.

[54 FR 32591, Aug. 8, 1989]

§ 85.2116 Objections to certification.

(a) At any time prior to the end of the 45-day period after a notification of intent to certify an aftermarket part is received as specified in §85.2115, the MOD Director may notify the manufacturer of the aftermarket part that such aftermarket part may not be certified pending further investigation. The basis upon which this notification shall be made may include, but not be limited to, information or test results which indicate:

(1) Compliance with the applicable emission-critical parameters was not achieved or that the testing methods used to demonstrate compliance with the emission-critical parameters were inadequate;

(2) The part is to be certified on the basis of emission testing, and the procedure used in such tests was not in compliance with those portions of the Federal Test Procedure not waived pursuant to §85.2114(d)(2).

(3) Use of the certified part may cause a vehicle to exceed any applicable emission requirements;

(4) The durability requirement of §85.2114 has not been complied with;

(5) Use of the certified part could cause or contribute to an unreasonable risk to public health, welfare or safety in its operation or function;

(6) Installation of the certified part requires procedures or equipment which would likely cause it to be improperly installed under normal conditions or would likely result in a vehicle being misadjusted; or

(7) Information and/or data required to be in the notification of intent to certify as provided by §85.2115 have not been provided or may be inadequate; or,

(8) Documentation submitted under §85.2114(c)(4)(ii) was determined inadequate for durability exemption.

(b) The aftermarket part manufacturer must respond in writing to the statements made in the notification by the MOD Director, or the aftermarket part manufacturer shall withdraw its notification of intent to certify.

(1) Any party interested in the outcome of a decision as to whether a part may be certified may provide the MOD Director with any relevant written information up to ten days after the manufacturer responds to the MOD Director's objection.

(2) Any interested party may request additional time to respond to the information submitted by the part manufacturer. The MOD Director upon a showing of good cause by the interested party may grant an extension of time to reply up to 30 days.

(3) The part manufacturer may reply to information submitted by interested parties. Notification of intent to reply shall be submitted to the MOD Director within 10 days of the date information from interested parties is submitted to the MOD Director.

(4) The MOD Director may, at his or her discretion, allow oral presentations by the aftermarket manufacturer or any interested party in connection with a contested part certification.

(c) If an objection has been sent to an aftermarket part manufacturer pursuant to paragraph (a) of this section, the MOD Director shall, after reviewing all pertinent data and information, render a decision and inform the aftermarket part manufacturer in writing as to whether such part may be certified and, if so, under what conditions the part may be certified. The written decision shall include an explanation of the reasons therefor.

(1) The decision by the MOD Director shall be provided to the manufacturer within 30 working days of receipt of all necessary information by the manufacturer or interested parties, or of the date of any oral presentation regarding the certification, whichever occurs second.

(2) A copy of the decision shall be sent to all identified interested parties.

(3) Within 20 days of receipt of a decision made pursuant to this subsection, any party may file a written appeal to the Office Director. The Office Director may, in his or her discretion, allow additional oral or written submissions, prior to rendering a final decision. The schedule for such submission shall be in accordance with the schedule specified in § 85.2116(b).

(4) If no party files an appeal with the Office Director within 20 days, then the decision of the MOD Director shall be final.

(5) The Office Director shall make a final decision regarding the certification of a part within 30 working days of receipt of all necessary information by the part manufacturer or from the date of any oral presentation, whichever occurs later.

(6) A copy of all final decisions made under this section shall be published in the FEDERAL REGISTER.

[45 FR 78460, Nov. 25, 1980, as amended at 54 FR 32592, Aug. 8, 1989]

§ 85.2117 Warranty and dispute resolution.

(a) *Warranty.* (1) As a condition of certification, the aftermarket part manufacturer shall warrant that if the certified part is properly installed it will not cause a vehicle to exceed Federal emission requirements as determined by an emission test approved by EPA under section 207(b)(1) of the Act. This aftermarket part warranty shall extend for the remaining performance warranty period of any vehicle on which the part is installed, or for the warranty period specified for an equivalent original equipment component, if this period is shorter than the remaining warranty period of the vehicle.

(2) The aftermarket part manufacturer's minimum obligation under this warranty shall be to reimburse vehicle manufacturers for all reasonable expenses incurred as a result of honoring a valid emission performance warranty claim which arises because of the use of the certified aftermarket part.

(3) The procedure used to process a certified aftermarket part warranty claim is as follows. The time requirements are in units of calendar days.

(i) The vehicle manufacturer shall submit, by certified mail or another method by which date of receipt can be established, a bill for reasonable expenses incurred to the part manufacturer for reimbursement. Accompanying the bill shall be a letter to the part manufacturer with an explanation of how the certified part caused the failure and a copy of the warranty repair order or receipt establishing the date that the performance repair was initiated by the vehicle owner.

(ii) The parts retained pursuant to § 85.2107(c)(1) shall be retained until the reimbursement process is resolved. The vehicle manufacturer shall store these parts or transfer these parts to the involved certified part manufacturer for storage. If the vehicle manufacturer transfers these parts to the certified part manufacturer, the part manufacturer shall retain these parts:

(A) For at least one year from the date of repair involving these parts, if the part manufacturer does not receive a bill from the vehicle manufacturer within that time period, or

(B) Until the claim reimbursement process has been resolved, if the part manufacturer receives a bill from the vehicle manufacturer within one year of the date of repair involving these parts.

(iii) If the vehicle manufacturer transfers the parts retained pursuant to paragraph (a)(3)(ii) of this section to the part manufacturer, a bill shall be submitted to the part manufacturer within one year of the date of initiation of the actual repair by the vehicle owner. If this requirement is not met, the vehicle manufacturer shall forfeit all rights to the reimbursement provisions provided in this regulation.

(iv) Storage costs are not reimbursable as part of a performance warranty claim.

(b) *Dispute resolution.* (1) The part manufacturer shall respond to the vehicle manufacturer within 30 days of

receipt of the bill by paying the claim or requesting a meeting to resolve any disagreement. A meeting shall occur within the next two week period. At this meeting the parties shall, in all good faith, attempt to resolve their disagreement. Discussions should be completed within 60 days of receipt of the bill for the warranty claim by the part manufacturer.

(2) If the parties cannot resolve their disagreement within 60 days, either party may file for arbitration. Neither party may file for arbitration within 60 days unless both parties agree to seek arbitration prior to the end of the 60-day period. If, after 60 days, either party files, then both parties shall submit to arbitration.

(3) This arbitration shall be carried out pursuant to the Arbitration Rules contained in appendix II of this subpart which are based on Commercial Arbitration Rules published by the American Arbitration Association, revised and in effect as of September 1, 1988. The Arbitration Rules detail the procedures to be followed by the parties and the arbitrator in resolving disputes under this section. They can be varied only with the agreement of both parties. If either involved manufacturer refuses to participate in the arbitration process, that party is treated as if it had lost the arbitration and is required to pay all reasonable expenses.

(4) Any party losing the arbitration has the right to resort to an appropriate federal district court or state court, subject to the established rules of that court regarding subject matter jurisdiction and personal jurisdiction.

(5) If the vehicle manufacturer wins the arbitration, the part manufacturer must provide reimbursement in accordance with the arbitrator's award and decision. Such reimbursement must be made within 30 days of the award and decision.

(6)(i) If the part manufacturer refuses to pay a lost arbitration award, the involved part will be decertified pursuant to 40 CFR 85.2121, provided that if the part manufacturer resorts to a court of competent jurisdiction, decertification will be withheld pending the outcome of such judicial determination.

(ii) In addition, under these circumstances, the vehicle manufacturer has the right to bring an enforcement action on the arbitration award and decision in the appropriate federal district court or state court, subject to the established rules of that court regarding subject matter jurisdiction and personal jurisdiction. If this court agrees with the arbitrator's award and decision, reimbursement shall be made within 30 days of the court's decision unless the court orders otherwise.

[54 FR 32592, Aug. 8, 1989]

§ 85.2118 Changes after certification.

The aftermarket part manufacturer shall be required to recertify any part which:

(a) Was certified pursuant to § 85.2114(b) and to which modifications are subsequently made which could affect the results of any test or judgment made that the part meets all of the applicable Emission-Critical Parameters;

(b) Was certified pursuant to § 85.2114(c) and to which modifications are made which are likely to affect emissions or the capability of the part to meet any other requirement of this subpart; or

(c) Was certified and is subsequently modified in a manner affecting the durability of the part or any emission control device, engine or the vehicle upon which such part is installed.

[45 FR 78461, Nov. 25, 1980, as amended at 54 FR 32593, Aug. 8, 1989]

§ 85.2119 Labeling requirements.

(a) Except as specified in paragraph (b) of this section, each part certified pursuant to these regulations shall have ''Certified to EPA Standards'' and the name of the aftermarket part manufacturer or other party designated to determine the validity of warranty claims placed on the part. The name of the aftermarket part manufacturer or other party and the statement, ''Certified to EPA Standards,'' must be made durable and readable for at least the useful life mileage interval of the part.

(b) In lieu of the name of the aftermarket part manufacturer or other party and ''Certified to EPA Standards,'' the part may contain unique identification markings. A description of the marking and statement

that such marking is intended in lieu of the name of the aftermarket part manufacturer or other party and ''Certified to EPA Standards,'' shall be made to the Agency in the notification of intent to certify. The unique symbol shall not be used on any uncertified or decertified part built or assembled after the date of decertification.

(c) The package in which the certified aftermarket part is contained must have the following information conspicuously placed thereon:

(1) The statement ''Certified by (name of manufacturer or warranter) to EPA Emission Standards'',

(2) A list of the vehicles or engines (in accordance with §85.2115(a)(1)(ii)) for which the part has been certified,

(3) A statement of the maintenance or replacement interval for which the part has been certified, if the interval is of a shorter duration than the interval specified in the written instructions for proper maintenance and use for the original equipment,

(4) A description of the maintenance necessary to be performed on the part in the proper maintenance and use of the part, if such maintenance is in addition to or different from that maintenance necessary on the original equipment part, and

(5) The instructions for proper installation if different from the vehicle manufacturer's recommended installation instruction for that part.

(d) The information required by paragraphs (c)(4) and (5) of this section may be provided on a written insert with the certified aftermarket part if the insert also contains the information required in paragraphs (c) (1), (2) and (3) of this section.

(e) The information required by paragraph (c)(2) of this section may be provided in a catalog rather than on the package or on an insert: *Provided,* That access to the catalog is readily available to purchasers and installers of the part.

(f) When an aftermarket part manufacturer desires to certify existing in-service stocks of its products, it may do so provided:

(1) The part does not differ in any operational or durability characteristic from the aftermarket parts specified in the notification made pursuant to §85.2115, and

(2) A supplemental information sheet is made available to all parties selling the part.

(i) The supplemental sheet shall be made available in sufficient quantities so that it can be provided with all parts sold as certified, and

(ii) The supplemental sheet shall contain all of the information specified in paragraph (c) of this section.

[45 FR 78461, Nov. 25, 1980, as amended at 54 FR 32593, Aug. 8, 1989]

§85.2120 Maintenance and submittal of records.

(a) For each certified aftermarket part, the aftermarket part manufacturer must establish, maintain and retain for 5 years the following adequately organized and indexed records:

(1) Detailed production drawings showing all dimensions, tolerances, performance requirements and material specifications and any other information necessary to completely describe the part;

(2) A description of the testing program, including all production part sampling techniques used to verify compliance of the certified aftermarket part with the applicable Emission-Critical Parameters and durability requirements;

(3) All data obtained during testing of the part and subsequent analyses based on that data, including the milege and the vehicle or engine configuration determinants if emission testing is utilized as the basis for certification;

(4) All information used in determining those vehicles for which the part is represented as being equivalent from an emissions standpoint to the original equipment part;

(5) A description of the quality control plan used to monitor production and assure compliance of the part with the applicable certification requirements;

(6) All data taken in implementing the quality control plan, and any subsequent analyses of that data;

(7) A description of all the methodology, analysis, testing and/or sampling

techniques used to ascertain the emission critical parameter specifications of the originial equipment part; and

(8) All in-service data, analyses performed by the manufacturer and correspondence with vendors, distributors, consumers, retail outlets or vehicle manufacturers regarding any design, production or in-service problems associated with 25 or more of any certified part.

(b) The records required to be maintained in paragraph (a) of this section shall be made available to the Agency upon the written request of the MOD Director.

(c) For parts certified only for vehicles with less than 5 years of emission performance warranty coverage remaining, records must be kept for 3 years or until they determine that approximately 80% of the applicable vehicles are outside the warranty period, whichever occurs second.

(d) This section shall expire 5 years from the effective date of this regulation unless renewed prior to that date.

[45 FR 78461, Nov. 25, 1980]

§ 85.2121 Decertification.

(a) The MOD Director may notify an aftermarket part manufacturer that the Agency has made a preliminary determination that one or more parts should be decertified.

(1) Such a preliminary determination may be made if there is reason to believe that the part manufactured has failed to comply with §§ 85.2112 through 85.2122. Information upon which such a determination will be made includes but is not limited to the following.

(i) Tests required to be performed to demonstrate compliance of the part with the applicable Emission-Critical Parameters

(A) Were not performed on the part(s), or

(B) Were insufficient to demonstrate compliance;

(ii) The part was certified on the basis of emission tests, and

(A) The procedures used in such tests were not in substantial compliance with a portion or portions of the Federal Test Procedure which were not waived pursuant to § 85.2114(d);

(B) The emission results were not in compliance with the requirements of § 85.2114(d); or

(C) The procedures used for part aging for durability demonstration were not in substantial compliance with the durability cycle required by § 85.2114.

(iii) Use of the certified part is causing vehicle emissions to exceed emission requirements for any regulated pollutant;

(iv) Use of the certified part causes or contributes to an unreasonable risk to public health, welfare or safety or severely degrades drivability operation or function;

(v) The part has been modified in a manner requiring recertification pursuant to § 85.2118; or

(vi) The manufacturer of such parts has not established, maintained or retained the records required pursuant to § 85.2120 or fails to make the records available to the MOD Director upon written request pursuant to § 85.2120.

(vii) Documentation required to support the type of durability demonstration used for a part under § 85.2114:

(A) Were not submitted for the part, or

(B) Were insufficient to justify a claim of durability exemption status.

(viii) The aftermarket part manufacturer failed to pay a lost arbitration settlement within 30 days of the arbitrator's decision or within 30 days after completion of judicial review, if any.

(2) Notice of a preliminary determination to decertify shall contain:

(i) A description of the noncomplying part(s);

(ii) The basis for the MOD Director's preliminary decision; and

(iii) The date by which the manufacturer must

(A) Terminate the sale of the part as a certified part, or

(B) Make the necessary change (if so recommended by the Agency), and

(C) Request an opportunity in writing to dispute the allegations of the preliminary decertification.

(b) If the aftermarket part manufacturer requests an opportunity to respond to the preliminary determination, the manufacturer and other parties interested in the MOD Director's decision whether to decertify a part

may, within 15 days of the date of the request, submit written presentations, including the relevant information and data, to the MOD Director. The MOD Director, in his or her discretion, may provide an opportunity for oral presentations.

(1) Any interested party may request additional time to respond to the information submitted by the part manufacturer. The MOD Director upon a showing of good cause by the interested party may grant an extension of time to reply up to 30 days.

(2) The part manufacturer may have an extension of up to 30 days to reply to information submitted by interested parties. Notification of intent to reply shall be submitted to the MOD Director within 10 days of the date information from interested parties is submitted to the MOD Director.

(c) If a part manufacturer has disputed the allegations of the preliminary decisions, the MOD Director shall, after reviewing any additional information, notify the aftermarket part manufacturer of his or her decision whether the part may continue to be sold as certified. This notification shall include an explanation upon which the decision was made and the effective date for decertification, where appropriate.

(d) Within 20 days from the date of a decision made pursuant to paragraph (c) of this section, any adversely affected party may appeal the decision to the Office Director.

(1) A petition for appeal to the Office Director must state all of the reasons why the decision of the MOD Director should be reversed.

(2) The Office Director may, in his or her discretion, allow additional oral or written testimony.

(3) If no appeal is filed with the Office Director within the permitted time period, the decision of the MOD Director shall be final.

(e) If a final decision is made to decertify a part under paragraph (d) of this section, the manufacturer of such part shall notify his immediate customers (other than retail customers) that, as of the date of the final determination, the part in question has been decertified. The part manufacturer shall offer to replace decertified parts in the customer's inventory with certified replacement parts or, if unable to do so, shall at the customer's request repurchase such inventory at a reasonable price.

(f) Notwithstanding the requirements of paragraph (e) of this section, a part purchased by a vehicle owner as certified, shall be considered certified pursuant to this subpart.

[45 FR 78462, Nov. 25, 1980, as amended at 54 FR 32593, Aug. 8, 1989]

§ 85.2122 Emission-critical parameters.

(a) The following parts may be certified in accordance with § 85.2114(b):

(1) *Carburetor Vacuum Break (Choke Pull-Off).* (i) The emission-critical parameters for carburetor vacuum breaks are:

(A) Diaphragm Displacement.

(B) Timed Delay.

(C) Modulated Stem Displacement.

(D) Modulated Stem Displacement Force.

(E) Vacuum Leakage.

(ii) For the purposes of this paragraph:

(A) ''Diaphragm Displacement'' means the distance through which the center of the diaphragm moves when activated. In the case of a non-modulated stem, diaphragm displacement corresponds to stem displacement.

(B) ''Timed Delay'' means a delayed diaphragm displacement controlled to occur within a given time period.

(C) ''Modulated Stem Displacement'' means the distance through which the modulated stem may move when actuated independent of diaphragm displacement.

(D) ''Modulated Stem Displacement Force'' means the amount of force required at start and finish of a modulated stem displacement.

(E) ''Vacuum Leakage'' means leakage into the vacuum cavity of a vacuum break.

(F) ''Vacuum Break'' (''Choke Pull-off'') means a vacuum-operated device to open the carburetor choke plate a predetermined amount on cold start.

(G) ''Modulated Stem'' means a stem attached to the vacuum break diaphragm in such a manner as to allow stem displacement independent of diaphragm displacement.

(H) ''Vacuum Purge System'' means a vacuum system with a controlled air flow to purge the vacuum system of undesirable manifold vapors.

(2) *Carburetor Choke Thermostats.* (i) The emission-critical parameters for all Choke Thermostats are:

(A) Thermal Deflection Rate.

(B) Mechanical Torque Rate.

(C) Index Mark Position.

(ii) The emission-critical parameters for Electrically-Heated Choke Thermostats are:

(A) Those parameters set forth in paragraph (a)(2)(i) of this section

(B) Time to rotate coil tang when electrically energized

(C) Electrical circuit resistance

(D) Electrical switching temperature

(iii) For the purpose of this paragraph:

(A) ''Choke'' means a device to restrict air flow into a carburetor in order to enrich the air/fuel mixture delivered to the engine by the carburetor during cold-engine start and cold-engine operation.

(B) ''Thermostat'' means a temperature-actuated device.

(C) ''Electrically-heated Choke'' means a device which contains a means for applying heat to the thermostatic coil by electrical current.

(D) ''Thermostatic Coil'' means a spiral-wound coil of thermally-sensitive material which provides rotary force (torque) and/or displacement as a function of applied temperature.

(E) ''Thermostatic Switch'' means an element of thermally-sensitive material which acts to open or close an electrical circuit as a function of temperature.

(F) ''Mechanical Torque Rate'' means a term applied to a thermostatic coil, defined as the torque accumulation per angular degree of deflection of a thermostatic coil.

(G) ''Thermal Deflection Rate'' means the angular degrees of rotation per degree of temperature change of the thermostatic coil.

(H) ''Index or Index Mark'' means a mark on a choke thermostat housing, located in a fixed relationship to the thermostatic coil tang position to aid in assembly and service adjustment of the choke.

(I) ''PTC Type Choke Heaters'' means a positive termperature coefficient resistant ceramic disc capable of providing heat to the thermostatic coil when electrically energized.

(3) *Carburetor Accelerator Pumps.* (i) The emission-critical parameter for accelerator pumps (plungers or diaphragms) is the average volume of fuel delivered per stroke by the pump within prescribed time limits.

(ii) For the purpose of this paragraph an ''Accelerator Pump (Plunger or Diaphragm)'' means a device used to provide a supplemental supply of fuel during increasing throttle opening as required.

(4) *Positive Crankcase Ventilation (PCV) Valves.* (i) The emission-critical parameter for a PCV valve is the volume of flow as a function of pressure differential across the valve.

(ii) For the purposes of this paragraph a ''PCV Valve'' means a device to control the flow of blow-by gasses and fresh air from the crankcase to the fuel induction system of the engine.

(5) *Breaker Points.* (i) The emission-critical parameters for breaker points are:

(A) Bounce.

(B) Dwell Angle.

(C) Contact Resistance.

(ii) For the purposes of this paragraph:

(A) ''Breaker Point'' means a mechanical switch operated by the distributor cam to establish and interrupt the primary ignition coil current.

(B) ''Bounce'' means unscheduled point contact opening(s) after initial closure and before scheduled reopening.

(C) ''Dwell Angle'' means the number of degrees of distributor mechanical rotation during which the breaker points are conducting current.

(D) ''Contact Resistance'' means the opposition to the flow of current between the mounting bracket and the insulated terminal.

(6) *Capacitors/Condensers.* (i) The emission-critical parameters for capacitors/condensers are:

(A) Capacitance.

(B) Series Resistance.

(C) Breakdown Voltage.

(ii) For the purposes of this paragraph:

(A) ''Capacitance'' means the property of a device which permits storage of electrically-separated charges when differences in electrical potential exist between the conductors and measured as the ratio of stored charge to the difference in electrical potential between conductors.

(B) ''Series Resistance'' means the sum of resistances from the condenser plates to the condenser's external connections.

(C) ''Breakdown Voltage'' means the voltage level at which the capacitor fails.

(D) ''Capacitor/Condenser'' means a device for the storage of electrical energy consisting of two oppositely charged conducting plates separated by a dielectric and which resists the flow of direct current.

(7) *Distributor Caps and/or Rotors.* (i) The emission-critical parameters for distributor caps and/or rotors are:

(A) Physical and Thermal Integrity.

(B) Dielectric Strength.

(C) Flashover.

(ii) For the purposes of this paragraph:

(A) ''Flashover'' means the discharge of ignition voltage across the surface of the distributor cap and/or rotor rather than at the spark plug gap.

(B) ''Dielectric Strength'' means the ability of the material of the cap and/or rotor to resist the flow of electric current.

(C) ''Physical and Thermal Integrity'' means the ability of the material of the cap and/or rotor to resist physical and thermal breakdown.

(8) *Spark Plugs.* (i) The emission critical parameters for spark plugs are:

(A) Heat Rating.

(B) Gap Spacing.

(C) Gap Location.

(D) Flashover.

(E) Dielectric Strength.

(ii) For the purposes of this paragraph:

(A) ''Spark Plug'' means a device to suitably deliver high tension electrical ignition voltage to the spark gap in the engine combustion chamber.

(B) ''Heat Rating'' means that measurement of engine indicated mean effective pressure (IMEP) value obtained on the engine at a point when the supercharge pressure is 25.4mm (one inch) Hg below the preignition point of the spark plug, as rated according to SAE J549A Recommended Practice.

(C) ''Gap Spacing'' means the distance between the center electrode and the ground electrode where the high voltage ignition arc is discharged.

(D) ''Gap Location'' means the position of the electrode gap in the combustion chamber.

(E) ''Dielectric Strength'' means the ability of the spark plug's ceramic insulator material to resist electrical breakdown.

(F) ''Flashover'' means the discharge of ignition voltage at any point other than at the spark plug gap.

(9) *Inductive System Coils.* (i) The emission-critical parameters for inductive system coils are:

(A) Open Circuit Voltage Output.

(B) Dielectric Strength.

(C) Flashover.

(D) Rise Time.

(ii) For the purposes of this paragraph:

(A) ''Coil'' means a device used to provide high voltage in an inductive ignition system.

(B) ''Flashover'' means the discharge of ignition voltage across the coil.

(C) ''Dielectric Strength'' means the ability of the material of the coil to resist electrical breakdown.

(D) ''Rise Time'' means the time required for the spark voltage to increase from 10% to 90% of its maximum value.

(10) *Primary Resistors.* (i) The emission-critical parameter for primary resistors is the DC resistance.

(ii) For the purpose of this paragraph, a ''Primary Resistor'' means a device used in the primary circuit of an inductive ignition system to limit the flow of current.

(11) *Breaker Point Distributors.* (i) The emission-critical parameters for breaker point distributors are:

(A) Spark Timing.

(*1*) Centrifugal Advance Characteristics.

(*2*) Vacuum Advance Characteristics.

(B) Dwell Angle.

(C) Breaker point contact operation.

(D) Electrical resistance to ground.

(E) Capacity for compatibility with generally available original equipment and certified replacement parts listed in §85.2112(a) (5), (6), (7), and (9).

(ii) For the purposes of this paragraph:

(A) ''Distributor'' means a device for directing the secondary current from the induction coil to the spark plugs at the proper intervals and in the proper firing order.

(B) ''Distributor Firing Angle'' means the angular relationship of breaker point opening from one opening to the next in the firing sequence.

(C) ''Dwell Angle'' means the number of degrees of distributor mechanical rotation during which the breaker points are capable of conducting current.

(12) Engine Valves [Reserved].

(13) Camshafts [Reserved].

(14) Pistons [Reserved].

(15) *Oxidizing Catalytic Converter.* (i) The emission-critical parameters for oxidizing catalytic converters are:

(A) Conversion Efficiency.

(B) Light-off Time.

(C) Mechanical and Thermal Integrity.

(ii) For the purposes of this paragraph including the relevant test procedures in the Appendix:

(A) ''Catalytic Converter'' means a device installed in the exhaust system of an internal combustion engine that utilizes catalytic action to oxidize hydrocarbon (HC) and carbon monoxide (CO) emissions to carbon dioxide (CO_2) and water (H_2O).

(B) ''Conversion Efficiency'' means the measure of the catalytic converter's ability to oxidize HC/CO to CO_2/H_2O under fully warmed-up conditions stated as a percentage calculated by the following formula:

$$\frac{\text{Inlet conc.} - \text{outlet conc.}}{\text{Inlet conc.}} \times 100$$

(C) ''Light-off Time'' or ''LOT'' means the time required for a catalytic converter (at ambient temperature 68–86°F) to warm-up sufficiently to convert 50% of the incoming HC and CO to CO_2 and H_2O.

(D) ''Peak Air Flow'' means the maximum engine intake mass air flow rate measure during the 195 second to 202 second time interval of the Federal Test Procedure.

(E) ''Feed Gas'' means the chemical composition of the exhaust gas measured at the converter inlet.

(F) ''Aged Catalytic Converter'' means a converter that has been installed on a vehicle or engine stand and operated thru a cycle specifically designed to chemically age, including exposure to representative lead concentrations, and mechanically stress the catalytic converter in a manner representative of in-use vehicle or engine conditions.

(G) ''Mechanical and Thermal Intergrity'' means the ability of a converter to continue to operate at its previously determined efficiency and light-off time and be free from exhaust leaks when subject to thermal and mechanical stresses representative of the intended application.

(16) *Air Cleaner Filter Element.* (i) The emission-critical parameters for Air Cleaner Filter Elements are:

(A) Pressure drop.

(B) Efficiency.

(ii) For the purpose of this paragraph:

(A) ''Air Cleaner Filter Element'' means a device to remove particulates from the primary air that enters the air induction system of the engine.

(B) ''Pressure Drop'' means a measure, in kilopascals, of the difference in static pressure measured immediately upstream and downstream of the air filter element.

(C) ''Efficiency'' means the ability of the air cleaner or the unit under test to remove contaminant.

(17) *Electronic Inductive Ignition System and Components* [Reserved].

(18) *Electronic Inductive Distributors* [Reserved].

(b) Additional part standards. [Reserved]

[45 FR 78462, Nov. 25, 1980, as amended at 54 FR 32593, Aug. 8, 1989]

§ 85.2123 Treatment of confidential information.

(a) Any manufacturer may assert that some or all of the information submitted pursuant to this subpart is entitled to confidential treatment as provided by 40 CFR part 2, subpart B.

(b) Any claim of confidentiality must accompany the information at the time it is submitted to EPA.

(c) To assert that information submitted pursuant to this subpart is confidential, a manufacturer must indicate clearly the items of information claimed confidential by marking, circling, bracketing, stamping, or otherwise specifying the confidential information. Furthermore, EPA requests, but does not require, that the submitter also provide a second copy of its submittal from which all confidential information shall be deleted. If a need arises to publicly release nonconfidential information, EPA will assume that the submitter has accurately deleted all confidential information from this second copy.

(d) If a claim is made that some or all of the information submitted pursuant to this subpart is entitled to confidential treatment, the information covered by that confidentiality claim will be disclosed by the Administrator only to the extent and by means of the procedures set forth in part 2, subpart B, of this chapter.

(e) Information provided without a claim of confidentiality at the time of submission may be made available to the public by EPA without further notice to the submitter, in accordance with 40 CFR 2.204(c)(2)(i)(A).

[50 FR 34798, Aug. 27, 1985]

APPENDIX I TO PART 85 OF SUBPART V—RECOMMENDED TEST PROCEDURES AND TEST CRITERIA AND RECOMMENDED DURABILITY PROCEDURES TO DEMONSTRATE COMPLIANCE WITH EMISSION CRITICAL PARAMETERS

A. CARBURETOR VACUUM BREAK (CHOKE PULL-OFF)

1. *Test Procedure and Criteria*

a. Vacuum leakage: Apply 457±13mm (18.0±0.5 inches) Hg. vacuum to the vacuum unit to achieve full diaphragm displacement. Seal vacuum source to unit. There shall be no visible loss of diaphragm displacement or drop in vacuum gauge reading after a 15 second observation. Vacuum purge system and diaphragm displacement adjusting screw holes should be temporarily sealed during this test when applicable.

b. Diaphragm displacement: At stabilized temperature of − 29°C and 121°C (− 20°F and 250°F) with 457±13mm (18.0±0.5 inches) Hg. vacuum applied to unit, the diaphragm displacement shall be within ±1mm (0.04 inches) of the nominal original equipment displacement. The vacuum purge system must be open during this test when applicable. Adjusting screws that limit displacement should be temporarily removed and adjusting screw holes temporarily sealed during this test.

c. Timed delay (when applicable): With 457±13mm (18.0±0.5 inches) Hg. applied to the unit, the vacuum break diaphragm displacement shall occur within ±20% of the original equipment time over the specified range of displacement. The diaphragm displacement shall be timed over the same distance for the original equipment as the replacement part and shall not be less than 60% of the total displacement range. The vacuum purge system must be open and the adjusting screw holes should be temporarily sealed during this test when applicable.

d. Modulated stem displacement (when applicable): With a force sufficient to extend the modulated stem to its full displacement, the displacement shall be within ±0.8mm (±0.03 inches) of the original equipment specification.

e. Modulated stem displacement force (when applicable): The force required to start and finish the modulated stem displacement shall be within±35% of the original equipment specification for forces up to 142 grams (5 ounces) and shall be within ±20% of the original equipment specification for forces exceeding 142 grams (5 ounces).

2. *Durability Procedures:* After 250,000 full displacement cycles (from atmospheric pressure to a minimum of 530mm (21 inches) Hg. vacuum at a temperature of 79°C (175°F)) in air, the following conditions shall be met:

a. Diaphragm displacement shall not degrade more than 10% from the original test measurements of paragraph 1.b. above.

b. Timed delay shall not degrade more than 10% from the original test measurement in paragraph 1.c. above.

c. Following these tests, the units must be free of visible defects.

B. CARBURETOR CHOKE THERMOSTATS

1. *Test Procedures and Criteria*

a. All chokes

i. *Thermal deflection rate*

When tested on a suitable fixture, the deflection rate shall be within ±6% of the original equipment value. The initial temperature and final temperature for purposes of this test may vary but shall exhibit a test temperature range of at least 44deg;C (80deg;F). Recommended test equipment, test procedures, and associated calculations are outlined in ASTM B389 (latest revision) or American National Standards Institute Z155–20.

ii. *Mechanical torque rate*

When tested on a suitable fixture, the torque rate shall be within ±12% of the mean original equipment value. Recommended test equipment, test procedures, and associated

calculations are outlined in ASTM B362 (latest revision) or American National Standards Institute Z155–18 (latest revision).

iii. *Index mark position*

When stabilized for four hours at room temperature, the relative position of the thermostatic coil outer tang or loop and the index mark, when corrected to 24°C (75°F), shall be within ±5 angular degrees of the mean original equipment positions.

b. Electrically-heated Chokes

i. *Time to rotate coil tang*

When tested on a suitable fixture, the time to rotate through a prescribed angle at a prescribed temperature and prescribed voltage, for the specfic choke device under test shall be within ±12 seconds or ±25% of the mean original equipment value whichever is greater.

ii. *Electrical circuit resistance*

In an electrically-heated choke utilizing PTC type choke heater, the circuit resistance shall be within ±1.5 ohms of the mean original equipment value at 24±3°C (75°±5deg;F) unenergized.

iii. *Electrical switching temperature*

In an electrically heated choke thermostat utilizing a thermostatic disc switch in the electrical circuit, the temperature to open the circuit shall be within ±5.5°C (10°F) and the temperature to close the circuit shall be within ±11°C (20°F) of the mean original equipment value. Circuit opening temperature shall be measured on a decreasing temperature change, and the circuit closing temperature shall be measured on an increasing temperature change.

C. Carburetor Accelerator Pumps

1. *Test Procedure and Criteria*

a. Expose plunger or diaphragm assembly to temperatures of −30°C (−20°F) for 70 hours and at 70°C (158°F) for 24 hours, with a commercial grade fuel or equivalent.

b. Within one hour after temperature exposure of 1.a. above, each plunger or diaphragm assembly, when installed in an applicable carburetor or test fixture, shall at room temperature deliver a volume of test fluid (Stoddard solvent or equivalent) from a 10 stroke cycle,* within ±30% of the volume from a 10 stroke cycle of an original equipment plunger or diaphragm assembly.

2. *Durability Procedure:* After 250,000 operational cycles, at approximately 30 cycles per minute at room temperature in test fluid, the output of the plunger/diaphragm shall not drop below 90% of the low limit as established in 1.b.

D. Positive Crankcase Ventilation (PCV) Valve

1. *Test Procedure and Criteria*

a. Measure the flow of the PCV valve in standard cubic feet per minute (SCFM) vs. pressure differential across the valve over a range of operating pressures from 4–22 inches Hg., at standard atmospheric conditions (21.1° C (70° F) at 755mm (29.92 inches).

b. A PCV valve shall flow within the vehicle manufacturer's specifications or shall meet the following criteria: Whenever the mean of the original equipment flow curve is below 1 SCFM, a maximum deviation of the mean replacement PCV valve shall not exceed ±0.1 SCFM. Whenever the mean original equipment curve is equal to or greater than 1 SCFM, a maximum deviation of the mean of the replacement PCV valve shall not exceed ±10%. The total flow tolerance of the replacement valve shall not exceed the original equipment variation from the mean, at any pressure differential.

2. *Durability Procedure:* The flow of any specific PCV valve must not deviate from the flow curve of the original equipment PCV valve by more than the total original allowable tolerance when each is similarly operated in the intended vehicle application over the service interval stated by the certifier.

E. Breaker Points

1. *Test Procedures and Criteria*

a. Set up test system circuit and equipment per Figure 1 with an OE breaker point assembly. Connect the primary to a 14±.5 V DC regulated power supply.

b. Record dwell angle and open-circuit output voltage at 300 and 500 distributor rpm and at 500 rpm intervals up to the maximum speed of the intended application.

c. Insert the replacement part in the test system and repeat the observations per b above under identical test conditions.

d. The data observed with the replacement part in the system must meet the following criteria:

(1) The dwell angle change: Not to exceed that of the original equipment by more than ±2° at all measured rpm intervals.

**10 stroke cycle:* 10 strokes from closed throttle plate position to wide open throttle plate position occurring within a 15–25 second time period.

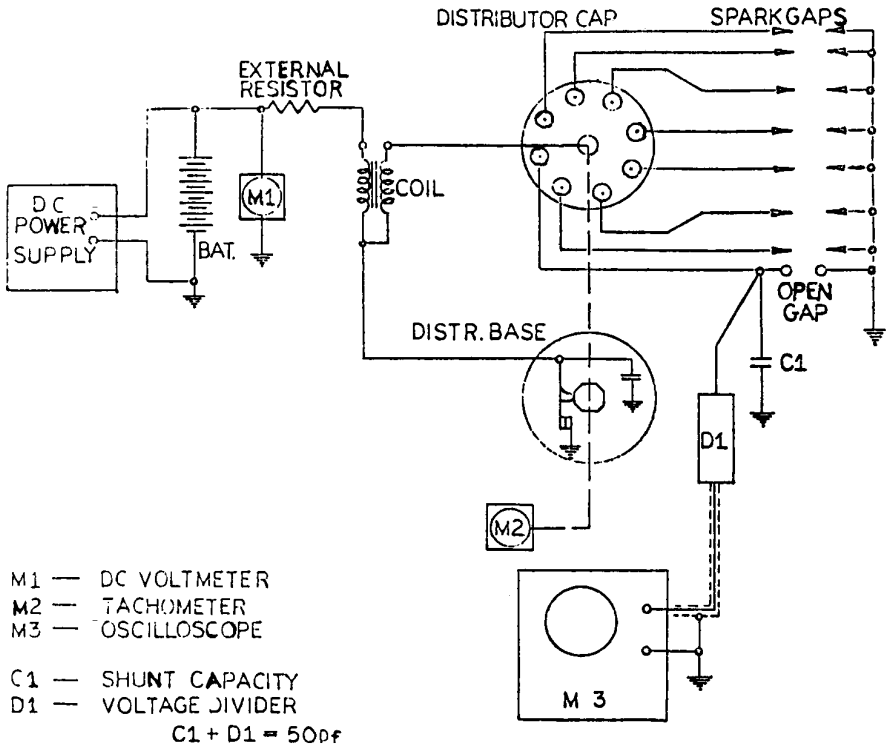

FIGURE I

(2) The open circuit output voltage (M–3): Not less than 90% of the OE breaker point assembly at any measured rpm.

e. Repeat step c above at −40°C (−40°F) and 100°C (212°F).

f. The breaker points shall operate without evidence of point bounce at all test speeds and temperatures and shall operate easily without binding when operated manually.

2. *Durability Procedures*

a. Set up a bench ignition system using an applicable distributor or electro-mechanical equivalent.

b. Install the breaker point assembly under test in the distributor, lubricate and adjust per applicable vehicle manufacturer's specifications. Use applicable coil, primary resistor, capacitor, cap and rotor.

c. Connect the primary of the test system with a power supply regulated at 14±0.5 V DC for a 12V system.

d. The secondary portion of the test system is to be connected to a 12±2KV spark gap.

e. An external heat source shall generate an ambient temperature of 70° (158°F) for the distributor.

f. Drive the distributor at 1750±50 rpm for 200 hours. After each 50 hour interval, run the distributor for 5 minutes with one open circuit spark gap instead of a 12KV gap.

g. The replacement breaker point assembly must have the capability of performing throughout the duration of the test without evidence of any failure resulting in loss of spark in the 12KV spark gap.

h. After the 200 hours repeat step 1.c. above. The open circuit output voltage must be at least 90% of that measured in 1.c.

F. CAPACITORS/CONDENSERS

1. *Test Procedures and Criteria*

a. The electrostatic capacitance of the replacement condenser shall be within ±20% of the value of the original part at 20±3°C (68±5°F). The capacitance is to be measured

on a capacitance bridge having an accuracy of ±1% at 1 KHz frequency.

b. Set up the test system in accordance with Figure 1. The condenser series resistance shall be such that the output voltage at 500 distributor rpm with the replacement condenser shall not be less than 90% of the output voltage (M–3) with the original equipment condenser.

c. The capacitor must be able to withstand a minimum test voltage of 500V DC for a minimum of 0.1 seconds without failure.

d. (1) Measure capacitance after 4 hours minimum soak at 70° (158°F).

(2) After one hour at room temperature, place capacitor at −18°C (0°F) for 4 hours minimum and measure capacitance.

(3) Place capacitor at room temperature for 4 hours minimum and measure capacitance.

e. After thermal cycling, repeat 1.a. and b. The results must be within ±10 percent of the intital measurements.

2. *Durability Procedure*

a. Set up a bench ignition system using an applicable distributor or an electro-mechanical equivalent.

b. Install the capacitor under test in the distributor adjusted to applicable vehicle manufacturer's specifications. Use applicable coil, primary resistor, breaker points, cap and rotor.

c. Connect the primary of the test system with a power supply regulated at 14±0.5V DC for 12V system.

d. The secondary portion of the test system is to be connected to a 12±2KV spark gap.

e. An external heat source shall generate an ambient temperature of 70°C (158°F) for the distributor.

f. Drive the distributor at 1750±50 rpm for 200 hours. After each 50 hour interval, run the distributor for 5 minutes with one open circuit spark gap instead of a 12KV gap.

g. The replacement part must have the capability of performing throughout the duration of the test without evidence of any failure resulting in loss of spark in the 12KV spark gap.

h. After the 200 hours, the condenser shall be within 10 percent of the capacitance and voltage measured in 1.a. and b. respectively.

G. Distributor Caps and/or Rotors

1. *Test Procedures and Criteria*

a. Set up test system in accordance with the circuit and equipment per Figure 1 with OE distributor cap and/or rotor. Connect the primary to a 14±.5V DC regulated power supply.

b. Record open circuit output voltage (M–3) at 300 and 500 distributor rpm and at intervals of 500 distributor rpm up to the maximum speed of the intended application.

c. Insert the intended replacement part(s) in the system and repeat step b. above under identical test conditions.

d. Subject the intended replacement part to the following thermal sequence through five complete cycles:

1. 12 hours at −40°C (−40°F)
2. 2 hours at room temperature
3. 4 hours at 100°C (212°F)
4. 2 hours at room temperature.

e. Repeat step b. above with the replacement part(s).

f. The output voltages measured with the replacement part(s) in the system must be at least 90% of the output voltage with the OE cap and/or rotor.

2. *Durability Procedures*

a. Set up test system in accordance with circuit and equipment per Figure 1.

b. Install the cap and/or rotor under test in distributor, lubricate and adjust per applicable vehicle manufacturer's specifications. Use equivalent coil, primary resistor, breaker points and capacitor.

c. Connect the primary of the test system with a power supply regulated at 14±0.5 V D.C.

1. In breaker point operated systems, connect secondary to a 12 KV±2 KV gap.

2. In electronic ignition systems, connect secondary to a gap equivalent to at least 50% of peak open-circuit voltage.

d. An external heat source shall generate an ambient temperature of 70° (158° F) for the distributor.

e. Distributor shall be driven at 1750±50 rpm for 200 hours. After each 50 hours interval, run the distributor for 5 minutes with one open-circuit spark gap instead of a 12KV gap.

f. The replacement part(s) must have the capability of performing throughout the duration of the test without evidence of any failure resulting in loss of spark at the spark gap.

g. Repeat step 1.c. above. The open circuit output voltage must be at least 90% of that measured in step 1.c.

h. The replacement cap and/or rotor must be free of any visual cracks, arcing or melting.

H. Spark Plugs

1. *Test Procedures and Criteria*

a. Heat rating: When comparatively rated in the SAE 17.6 Spark Plug Rating engine according to the SAE J549A Recommended Practice, the comparative average rating of at least five (5) replacement spark plugs shall be within 15 percent of the average IMEP of at least five (5) OE spark plugs.

b. Gap spacing: The electrode spark gap shall be equivalent or adjustable to the recommended gap for the original equipment spark plug.

c. Gap location: The electrode gap position in the chamber shall be the same as specified by the vehicle manufacturer.

d. Flashover: The spark plug terminal end, with the properly fitted connecting boot, shall not flash-over at peak anticipated voltage for the intended application when electrode gap is 15% larger than vehicle manufacturer's gap specifications.

I. INDUCTIVE SYSTEM COILS

1. *Test Procedures and Criteria*

a. Set up the circuit in accordance with Figure 1. Operate the circuit by an applicable distributor or equivalent triggering device and applicable primarly resistor with a 50 pf load at 14.0±0.50 volts DC input as applicable and stabilized at an ambient temperature of 20°C±3°C (68°F±5°F).

b. With the original equipment coil installed, record the predominant minimum peak voltage and rise time at 300 and 500 distributor rpm, and at 500 rpm intervals up to the maximum intended operating speed. The measurement is to be taken after 4 minutes operation at each speed.

c. Install the replacement coil to be tested and repeat step b. above.

d. The replacement coil shall have an open-circuit output voltage (M–3) at least 90% of the OE coil output voltage and a rise time not to exceed 110% of original equipment coil at each distributor test speed.

2. *Durability Procedure*

a. Install the replacement ignition coil in the ignition system using the applicable rotor, cap, capacitor, breaker points, and primary resistor.

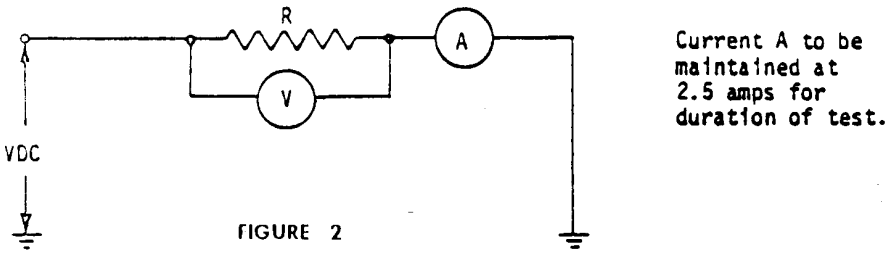

FIGURE 2

b. Operate the circuit with a regulated power supply of 14.0 ±.5 volts DC connected to the primary at an ambient temperature of 70°C (158°F) at 1750 ±50 distributor rpm for a duration of 200 hours. After each 50 hour interval, run the distributor for 5 minutes with one open-circuit spark gap instead of a 12KV gap.

c. The ignition coil shall perform throughout the test without any evidence of coil failure which would result in the loss of the spark in the 12 KV spark gap.

d. Repeat Step 1.c. above. The open-circuit output voltage must be at least 90% of that measured in 1.c.

J. PRIMARY RESISTORS

1. *Test Procedures and Criteria.*

a. Configure the circuit shown in Figure 2, using the original equipment resistor.

b. At 20 ±3°C (68 ± 5°F), apply voltage for 15 minutes; maintain current at 2.5 amps. At conclusion of 15 minutes, read voltage and current. Calculate resistance using the relationship

R=E/I,

where:

R=Resistance in ohms,

E=Voltage (V) in volts,

I=Current (A) in amps.

c. Replace OE test sample with part to be certified and repeat step b. above.

d. Resistance of the part shall be within ±20% of original equipment resistance.

2. *Durability Procedure.*

a. Using the circuit shown in Figure 1, apply current at 70°C (150°F), for 200 hours.

b. After 200 hours retest as in step 1.c. above, and verify that resistance is within ±20% of the value as measured in step 1.b. above.

K. DISTRIBUTORS—BREAKER POINT

1. *Test Procedures and Criteria.*

a. Using an appropriate test installation, operate the distributor through its intended speed range.

b. The advance mechanism shall function within the tolerance of the vehicle manufacturer's original specification over the speed range of the intended application as to vacuum and centrifugal advance.

c. The advance mechanism shall repeatedly return to the zero setting

±0.5 distributor degrees after advancing and retarding through the operating range.

d. The distributor firing angle accuracy shall remain within the originally specified tolerances throughout the speed range of the intended application.

e. The distributor shall be capable of maintaining the dwell angle of the original equipment specification with ±2 degrees throughout the speed range of the intended application.

f. The distributor shall be capable of open-circuit output voltage (M–3) equal to at leat 90 percent of the voltage produced by the original equipment system over the speed range of the intended application.

2. *Durability Procedure.*

a. At an ambient temperature of 70° C (150° F), operate the distributor at 1750 ±50 rpm for 200 hours.

b. The distributor must meet the requirements of paragraph 1.b. through f. after the 200 hours.

L. RESERVED FOR ENGINE VALVES

M. RESERVED FOR CAMSHAFTS

N. RESERVED FOR PISTONS

O. OXIDIZING CATALYTIC CONVERTERS

1. *Test Procedures and Criteria.*

(a) The fresh and aged conversion efficiencies of the replacement oxidizing catalytic converter shall be equal to or exceed those of the original equipment converter for CO and HC emissions. The fresh and aged Light-off Time (LOT) of the replacement converter shall be equal to or less than those of the original equipment converter for CO and HC emissions. These parameters shall be determined for both fresh and aged converters under the same conditions using the following steady state feed gas concentrations and conditions for LOT and Conversion Efficiency respectively:

	LOT	Conversion efficiency
Exhaust mass flow rate.	See note (2)	See note (1).
Total hydrocarbons	See note (3)	See note (3).
Carbon monoxide ..	1.0 to 2.5%	1.0 to 2.5%.
Hydrogen	0.33×% CO maximum.	0.33×% CO maximum.
Oxygen	1.5×% CO minimum.	1.5×% CO minimum.
Converter inlet gas temperature.	650°F to 850°F	650°F to 850°F.

NOTE 1: Not less than peak air flow of the vehicle or engine configuration being certified for. If more than one vehicle or engine application is to be covered by a generic converter, the greatest peak vehicle or engine air flow shall be used.

NOTE 2: Between 0.10 and 0.40 times the value determined in Note 1.

NOTE 3: 500–2000 parts per million by volume minimum based on Methane calibration. If a non-engine simulator gas source is used, a mixture ratio of 10% propane to 90% propylene by volume will constitute an acceptable synthetic for total exhaust hydrocarbons.

(i) LOT tests shall be conducted by exposing the converter to a step change in temperature, from ambient to that specified above: 650°–850°F. Converter inlet and outlet exhaust emissions as measured. Light-off Time is then determined by recording the time required for the converter to reduce the outlet emissions (HC and CO) to 50% of the inlet emissions, on a volumetric concentration basis, measured from the step temperature change.

(ii) Conversion efficiency measurements shall be obtained by passing stabilized-feed gas through the converter (at conditions specified above) and making simultaneous measurements of inlet and outlet emission volume concentrations. The conversion efficiency for CO and HC is then calculated.

(iii) The particular conditions for which LOT and conversion efficiency are measured (i.e., exhaust mass flow rate, total hydrocarbons, carbon monoxide, hydrogen, oxygen, and converter inlet temperature) for the replacement converter and original equipment converter tests must not vary from one another by more than 10%.

(b) Fresh and aged catalytic converters may be obtained by operating the converter on individual vehicle or engine application for which it is intended on the Federal Test Procedure road durability driving cycle. A fresh converter results when the converter has operated between 2000 and 5000 miles or equivalent hours. An aged converter results when the converter has been operated for the warranted life of the original equipment converter.

(c) Where one generic converter is intended to cover multiple vehicle or engine configurations, converter aging may be obtained per Paragraph (b) above, on a vehicle or engine which represents the greatest peak air flow of the group of vehicle configurations to be covered, and whose calibration and feed gas concentrations are representative of the vehicle or engine configurations being certified for.

2. *Other Considerations.*

(a) Replacement converter must fit within the width and length space envelope of the original equipment converter. Converter spacing from the underbody and for ground clearance must be the same or greater than the original equipment converter application.

(b) Pressure drop measured between inlet and outlet pipe interconnecting points on the replacement converter shall be within ±25% of similar measurements for the original equipment converter being replaced,

when measured at each of three flow conditions 50 SCFM, 100 SCFM, and 150 SCFM with a suitable fluid medium such as air. Maximum allowable exhaust gas leakage from the replacement coverter shall be 0.4 cubic feet per minute measured at 4.0 pounds per square inch differential. All measurements must be normalized to equal density conditions.

(c) Converter skin temperature shall be measured during the converter efficiency test. The skin temperature for the replacement converter must equal or be less than that for the original equipment converter.

P. AIR CLEANER FILTER ELEMENT

1. *Test Procedures and Criteria.*

(a) Using test equipment and procedures specified in SAE–J726c, perform:

(i) Air Flow and Pressure Drop Test (2.3) at 200 SCFM, record test conditions and pressure drop.

(ii) Efficiency Test (2.4) to measure full life efficiency at 200 SCFM to a total pressure drop of 9 inches of water, record test conditions and test duration from first to last addition of standard dust, weigh test element and absolute filter at end of test using three randomly selected original equipment air filter elements.

(b) Perform tests as in (a) above, under conditions controlled to within ±10% of the corresponding original equipment test conditions, for three randomly selected replacement air filter elements.

(c) The replacement air filter element average recorded test results. The pressure drop in (i) and absolute filter weight in (ii) must be equal to or less than those average results for the original equipment test results. The replacement air filter averaged test results for element weight in (ii) must be equal to or larger than averaged result for the original equipment averaged test results.

2. *Durability Procedure.*

(a) After use in the intended vehicle or engine application for the recommended service interval, the replacement element shall evidence an increase in pressure drop (as measured in 1 (a)(i) above) equal to or less than that of the original equipment air filter element tested in the identical manner.

[45 FR 78464, Nov. 25, 1980, as amended at 54 FR 32593, Aug. 8, 1989]

APPENDIX II TO PART 85 OF SUBPART V—ARBITRATION RULES

Part A—Pre-Hearing

Section 1: Initiation of Arbitration

Either party may commence an arbitration under these rules by filing at any regional office of the American Arbitration Association (the AAA) three copies of a written submission to arbitrate under these rules, signed by either party. It shall contain a statement of the matter in dispute, the amount of money involved, the remedy sought, and the hearing locale requested, together with the appropriate administrative fee as provided in the Administrative Fee Schedule of the AAA in effect at the time the arbitration is filed. The filing party shall notify the MOD Director in writing within 14 days of when it files for arbitration and provide the MOD Director with the date of receipt of the bill by the part manufacturer.

Unless the AAA in its discretion determines otherwise and no party disagrees, the Expedited Procedures (as described in Part E of these Rules) shall be applied in any case where no disclosed claim or counterclaim exceeds $25,000, exclusive of interest and arbitration costs. Parties may also agree to the Expedited Procedures in cases involving claims in excess of $25,000.

All other cases, including those involving claims not in excess of $25,000 where either party so desires, shall be administered in accordance with Parts A through D of these Rules.

Section 2: Qualification of Arbitrator

Any arbitrator appointed pursuant to these Rules shall be neutral, subject to disqualification for the reasons specified in Section 6. If the parties specifically so agree in writing, the arbitrator shall not be subject to disqualification for said reasons.

The term ''arbitrator'' in these rules refers to the arbitration panel, whether composed of one or more arbitrators.

Section 3: Direct Appointment by Mutual Agreement of Parties

The involved manufacturers should select a mutually-agreeable arbitrator through which they will resolve their dispute. This step should be completed within 90 days from the date of receipt of the warranty claim bill by the part manufacturer.

Section 4: Appointment From Panel

If the parties have not appointed an arbitrator and have not provided any other method of appointment, the arbitrator shall be appointed in the following manner: 90 days from the date of receipt of the warranty claim bill by the part manufacturer, the AAA shall submit simultaneously to each party to the dispute an identical list of names of persons chosen from the National Panel of Commercial Arbitrators, established and maintained by the AAA.

Each party to the dispute shall have ten days from the mailing date in which to cross off any names objected to, number the remaining names in order of preference, and return the list to the AAA. If a party does not return the list within the time specified, all persons named therein shall be deemed

acceptable. From among the persons who have been approved on both lists, and in accordance with the designated order of mutual preference, the AAA shall invite the acceptance of an arbitrator to serve. If the parties fail to agree on any of the persons named, or if acceptable arbitrators are unable to act, or if for any other reason the appointment cannot be made from the submitted lists, the AAA shall have the power to make the appointment from among other members of the panel without the submission of additional lists.

Section 5: Number of Arbitrators; Notice to Arbitrator of Appointment

The dispute shall be heard and determined by one arbitrator, unless the AAA in its discretion, directs that a greater number of arbitrators be appointed.

Notice of the appointment of the arbitrator shall be mailed to the arbitrator by the AAA, together with a copy of these rules, and the signed acceptance of the arbitrator shall be filed with the AAA prior to the opening of the first hearing.

Section 6: Disclosure and Challenge Procedure

Any person appointed as an arbitrator shall disclose to the AAA any circumstance likely to affect impartiality, including any bias or any financial or personal interest in the result of the arbitration or any past or present relationship with the parties or their representatives. Upon receipt of such information from the arbitrator or another source, the AAA shall communicate the information to the parties and, if it deems it appropriate to do so, to the arbitrator and others. Upon objection of a party to the continued service of an arbitrator, the AAA shall determine whether the arbitrator should be disqualified and shall inform the parties of its decision, which shall be conclusive.

Section 7: Vacancies

If for any reason an arbitrator should be unable to perform the duties of the office, the AAA may, on proof satisfactory to it, declare the office vacant. Vacancies shall be filled in accordance with the applicable provisions of these rules.

In the event of a vacancy in a panel of arbitrators after the hearings have commenced, the remaining arbitrator or arbitrators may continue with the hearing and determination of the controversy, unless the parties agree otherwise.

Section 8: Interpretation and Application of Rules

The arbitrator shall interpret and apply these rules insofar as they relate to the arbitrator's powers and duties. When there is more than one arbitrator and a difference arises among them concerning the meaning or application of these rules, it shall be decided by a majority vote. If that is unobtainable, either an arbitrator or a party may refer the question to the AAA for final decision. All other rules shall be interpreted and applied by the AAA.

Section 9: Administrative Conference and Preliminary Hearing

At the request of any party or at the discretion of the AAA, an administrative conference with the AAA and the parties and/or their representatives will be scheduled in appropriate cases to expedite the arbitration proceedings.

In large or complex cases, at the request of any party or at the discretion of the arbitrator or the AAA, a preliminary hearing with the parties and/or their representatives and the arbitrator may be scheduled by the arbitrator to specify the issues to be resolved, stipulate to uncontested facts, and to consider any other matters that will expedite the arbitration proceedings. Consistent with the expedited nature of arbitration, the arbitrator may, at the preliminary hearing, establish (i) the extent of and the schedule for the production of relevant documents and other information, (ii) the identification of any witnesses to be called, and (iii) a schedule for further hearings to resolve the dispute.

Section 10: Fixing of Locale

The parties may mutually agree on the locale where the arbitration is to be held. If any party requests that the hearing be held in a specific locale and the other party files no objection thereto within ten days after notice of the request has been mailed to it by the AAA, the locale shall be the one requested. If a party objects to the locale requested by the other party, the AAA shall have the power to determine the locale and its decision shall be final and binding.

Part B—The Hearing

Section 1: Date, Time, and Place of Hearing

The arbitrator shall set the date, time, and place for each hearing. The AAA shall mail to each party notice thereof at least ten days in advance, unless the parties by mutual agreement waive such notice or modify the terms thereof.

Section 2: Representation

Any party may be represented by counsel or other authorized representative. A party intending to be so represented shall notify the other party and the AAA of the name and address of the representative at least three days prior to the date set for the hearing at which that person is first to appear.

When such a representative initiates an arbitration or responds for a party, notice is deemed to have been given.

Section 3: Attendance at Hearings

The arbitrator shall maintain the privacy of the hearings unless the law provides to the contrary. Representatives of the MOD director, and any persons having a direct interest in the arbitration are entitled to attend hearings. The arbitrator shall otherwise have the power to require the exclusion of any witness, other than a party or other essential person, during the testimony of any other witness. It shall be discretionary with the arbitrator to determine the propriety of the attendance of any other person.

Section 4: Oaths

Before proceeding with the first hearing, each arbitrator may take an oath of office and, if required by law, shall do so. The arbitrator may require witnesses to testify under oath administered by any duly qualified person and, if it is required by law or requested by any party, shall do so.

Section 5: Majority Decision

All decisions of the arbitrators must be by a majority. The award must also be made by a majority.

Section 6: Order of Proceedings and Communication with Arbitrator

A hearing shall be opened by the filing of the oath of the arbitrator, where required; by the recording of the date, time, and place of the hearing, and the presence of the arbitrator, the parties and their representatives, if any; and by the receipt by the arbitrator of the statement of the claim and the answering statement, if any.

The arbitrator may, at the beginning of the hearing, ask for statements clarifying the issues involved. In some cases, part or all of the above will have been accomplished at the preliminary hearing conducted by the arbitrator pursuant to Part A Section 9 of these Rules.

The complaining party shall then present evidence to support its claim. The defending party shall then present evidence supporting its defense. Witnesses for each party shall submit to questions or other examination. The arbitrator has the discretion to vary this procedure but shall afford a full and equal opportunity to all parties for the presentation of any material and relevant evidence.

Exhibits, when offered by either party, may be received in evidence by the arbitrator.

The names and addresses of all witnesses and a description of the exhibits in the order received shall be made a part of the record.

There shall be no direct communication between the parties and an arbitrator other than at oral hearing, unless the parties and the arbitrator agree otherwise. Any other oral or written communication from the parties to the neutral arbitrator shall be directed to the AAA for transmittal to the arbitrator.

Section 7: Evidence

The parties may offer such evidence as is relevant and material to the dispute and shall produce such evidence as the arbitrator may deem necessary to an understanding and determination of the dispute. An arbitrator or other person authorized by law to subpoena witnesses or documents may do so upon the request of any party or independently.

The arbitrator shall be the judge of the relevance and materiality of the evidence offered, and conformity to legal rules of evidence shall not be necessary. All evidence shall be taken in the presence of all of the arbitrators and all of the parties, except where any of the parties is absent, in default, or has waived the right to be present.

Section 8: Evidence by Affidavit and Post-hearing Filing of Documents or Other Evidence

The arbitrator may receive and consider the evidence of witnesses by affidavit, but shall give it only such weight as the arbitrator deems it entitled to after consideration of any objection made to its admission.

If the parties agree or the arbitrator directs that documents or other evidence be submitted to the arbitrator after the hearing, the documents or other evidence shall be filed with the AAA for transmission to the arbitrator. All parties shall be afforded an opportunity to examine such documents or other evidence.

Section 9: Closing of Hearing

The arbitrator shall specifically inquire of all parties whether they have any further proofs to offer or witnesses to be heard. Upon receiving negative replies or if satisfied that the record is complete, the arbitrator shall declare the hearing closed and a minute thereof shall be recorded. If briefs are to be filed, the hearing shall be declared closed as of the final date set by the arbitrator for the receipt of briefs. If documents are to be filed as provided for in Part B Section 9 and the date set for their receipt is later than that set for the receipt of briefs, the later date shall be the date of closing the hearing. The time limit within which the arbitrator is required to make the award shall commence to run, in the absence of other agreements by the parties, upon the closing of the hearing.

Section 10: Reopening of Hearing

The hearing may be reopened on the arbitrator's initiative, or upon application of a party, at any time before the award is made. The arbitrator may reopen the hearing and shall have 30 days from the closing of the reopened hearing within which to make an award.

Section 11: Waiver of Oral Hearing

The parties may provide, by written agreement, for the waiver of oral hearings.

Section 12: Waiver of Rules

Any party who proceeds with the arbitration after knowledge that any provision or requirement of these rules has not been complied with and who fails to state an objection thereto in writing, shall be deemed to have waived the right to object.

Section 13: Extensions of Time

The parties may modify any period of time by mutual agreement. The AAA or the arbitrator may for good cause extend any period of time established by these rules, except the time for making the award. The AAA shall notify the parties of any extension.

Section 14: Serving of Notice

Each party shall be deemed to have consented that any papers, notices, or process necessary or proper for the initiation or continuation of an arbitration under these rules; for any court action in connection therewith; or for the entry of judgment on any award made under these rules may be served on a party by mail addressed to the party or its representative at the last known address or by personal service, inside or outside the state where the arbitration is to be held, provided that reasonable opportunity to be heard with regard thereto has been granted to the party.

The AAA and the parties may also use facsimile transmission, telex, telegram, or other written forms of electronic communication to give the notices required by these rules.

Part C—Award and Decision

Section 1: Time of Award

The award shall be made promptly by the arbitrator and, unless otherwise agreed by the parties or specified by law, no later than 30 days from the date of closing the hearing, or, if oral hearings have been waived, from the date of the AAA's transmittal of the final statements and proofs to the arbitrator.

Section 2: Form of Award

The award shall be in writing and shall be signed by the arbitrator, or if a panel is utilized, a majority of the arbitrators. It shall be accompanied by a written decision which sets forth the reasons for the award. Both the award and the decision shall be filed by the arbitrator with the MOD Director.

Section 3: Scope of Award

The arbitrator may grant to the vehicle manufacturer any repair expenses that he or she deems to be just and equitable.

Section 4: Award upon Settlement

If the parties settle their dispute during the course of the arbitration, the arbitrator may set forth the terms of the agreed settlement in an award. Such an award is referred to as a consent award. The consent award shall be filed by the arbitrator with the MOD Director.

Section 5: Delivery of Award to Parties

Parties shall accept as legal delivery of the award, the placing of the award, or a true copy thereof in the mail addressed to a party or its representative at the last known address, personal service of the award, or the filing of the award in any other manner that is permitted by law.

Section 6: Release of Documents for Judicial Proceedings

The AAA shall, upon the written request of a party, furnish to the party, at its expense, certified copies of any papers in the AAA's possession that may be required in judicial proceedings relating to the arbitration.

Part D—Fees and Expenses

Section 1: Administrative Fee

The AAA shall be compensated for the cost of providing administrative services according to the AAA Administrative Fee Schedule and the AAA Refund Schedule. The Schedules in effect at the time the demand for arbitration or submission agreement is received shall be applicable.

The administrative fee shall be advanced by the initiating party or parties, subject to final allocation at the end of the case.

When a claim or counterclaim is withdrawn or settled, the refund shall be made in accordance with the Refund Schedule. The AAA may, in the event of extreme hardship on the part of any party, defer or reduce the administrative fee.

Section 2: Expenses

The loser of the arbitration is liable for all arbitration expenses unless determined otherwise by the arbitrator.

Section 3: Arbitrator's Fee

An arrangement for the compensation of an arbitrator shall be made through discussions by the parties with the AAA and not directly between the parties and the arbitrator. The terms of compensation of arbitrators on a panel shall be identical.

Section 4: Deposits

The AAA may require the parties to deposit in advance of any hearings such sums of money as it deems necessary to defray the expense of the arbitration, including the arbitrator's fee, if any, and shall render an accounting to the parties and return any unexpended balance at the conclusion of the case.

Part E—Expedited Procedures

Section 1: Notice by Telephone

The parties shall accept all notices from the AAA by telephone. Such notices by the AAA shall subsequently be confirmed in writing to the parties. Should there be a failure to confirm in writing any notice hereunder, the proceeding shall nonetheless be valid if notice has, in fact, been given by telephone.

Section 2: Appointment and Qualifications of Arbitrator

The AAA shall submit simultaneously to each party an identical list of five proposed arbitrators drawn from the National Panel of Commercial Arbitrators, from which one arbitrator shall be appointed.

Each party may strike two names from the list on a preemptory basis. The list is returnable to the AAA within seven days from the date of the AAA's mailing of the list to the parties.

If for any reason the appointment of an arbitrator cannot be made from the list, the AAA may make the appointment from among other members of the panel without the submission of additional lists.

The parties will be given notice by the AAA by telephone of the appointment of the arbitrator, who shall be subject to disqualification for the reasons specified in Part A, Section 6. The parties shall notify the AAA, by telephone, within seven days of any objection to the arbitrator appointed. Any objection by a party to the arbitrator shall be confirmed in writing to the AAA with a copy to the other party or parties.

Section 3: Date, Time, and Place of Hearing

The arbitrator shall set the date, time, and place of the hearing. The AAA will notify the parties by telephone, at least seven days in advance of the hearing date. Formal Notice of Hearing will be sent by the AAA to the parties and the MOD Director.

Section 4: The Hearing

Generally, the hearing shall be completed within one day, unless the dispute is resolved by the submission of documents. The arbitrator, for good cause shown, may schedule an additional hearing to be held within seven days.

Section 5: Time of Award

Unless otherwise agreed by the parties, the award shall be rendered not later than 14 days from the date of the closing of the hearing.

Section 6: Applicability of Rules

Unless explicitly contradicted by the provisions of this part, provisions of other parts of the Rules apply to proceedings conducted under this part.

[54 FR 32593, Aug. 8, 1989]

Subpart W—Emission Control System Performance Warranty Short Tests

AUTHORITY: Secs. 207, 301(a), Clean Air Act as amended (42 U.S.C. 7541(b) and 7601(a)).

§ 85.2201 Applicability.

(a) This subpart contains the short tests and standards to be employed in conjunction with the Emissions Performance Warranty, subpart V.

(b) *Calendar and model year limitations.* Certain test procedures contained in this subpart are subject to calendar and model year limitations. Otherwise, unless specifically indicated, the provisions of this subpart may be used to establish warranty eligibility for any 1981 and later model year light-duty vehicle and light-duty truck when tested during its useful life as prescribed under the Emissions Performance Warranty, in subpart V of this part.

(c) *Special recommendations for Ford Motor Company and Honda Prelude vehicles.* Due to unique emission control systems, 1981 through 1987 model year vehicles manufactured by Ford Motor Company and 1984 through 1985 model year Honda Preludes must be tested with procedures that either incorporate a special engine restart feature or utilize a dynamometer to simulate a road load. The Agency has included short tests with the special engine restart feature in this subpart even

though these vehicles are no longer eligible for the Emissions Performance Warranty, to ensure they are properly tested by state or other I/M authorities. Short tests incorporating the restart feature are the Engine restart 2500 rpm/Idle test—EPA 81 (§ 85.2210), Engine restart idle test—EPA 81 (§ 85.2211), Idle test—EPA 91 (§ 85.2213), Two speed idle test—EPA 91 (§ 85.2215), Preconditioned idle test—EPA 91 (§ 85.2218), Idle test with loaded preconditioning—EPA 91 (§ 85.2219), and Preconditioned two speed idle test—EPA 91 (§ 85.2220). Short tests utilizing a dynamometer are the Loaded test—EPA 81 (§ 85.2216) and Loaded test—EPA 91 (§ 85.2217). This recommendation does not apply to tests conducted at altitudes above 4000 feet. Any of the short test procedures may be used for other vehicles which are similarly no longer eligible for performance warranty coverage.

[49 FR 24323, June 12, 1984, as amended at 58 FR 58400, Nov. 1, 1993]

§ 85.2202 General provisions.

The definitions and abbreviations in subpart A of part 86 of this chapter apply to this subpart.

[49 FR 24323, June 12, 1984]

§ 85.2203 Short test standards for 1981 and later model year light-duty vehicles.

(a) For light-duty vehicles for which the test procedures described in §§ 85.2209, 85.2210, 85.2211, 85.2212, 85.2214, or 85.2216 are used to establish Emissions Performance Warranty eligibility (that is, 1981 and later model year light-duty vehicles at low altitude and 1982 and later model year vehicles at high altitude to which high altitude certification standards of 1.5 g/mile HC and 15 g/mile CO or less apply), short test emissions for all tests and test modes may not exceed the standards listed in paragraphs (a)(1) and (2) of this section.

(1) Hydrocarbons: 220 ppm as hexane.

(2) Carbon monoxide: 1.2%.

(b) For light-duty vehicles for which the test procedure described in § 85.2214 is used to establish Emissions Performance Warranty eligibility (that is, 1981 and later model year light-duty vehicles at low altitude and 1982 and later model year vehicles at high altitude to which high altitude certification standards of 1.5 g/mile HC and 15 g/mile CO or less apply), the lowest readings from the two idle modes must be used to determine compliance. Short test emissions may not exceed the standards listed in paragraphs (b)(1) and (2) of this section.

(1) Hydrocarbons: 200 ppm as hexane.

(2) Carbon monoxide: 1.0%.

(c) For gasoline-fueled light-duty vehicles for which any of the test procedures described in §§ 85.2213, 85.2215, 85.2217, 85.2218, 85.2219, or 85.2220 are utilized to establish Emissions Performance Warranty eligibility (that is, 1981 and later model year light-duty vehicles at low altitude and 1982 and later model year vehicles at high altitude to which high altitude certification standards of 1.5 g/mile HC and 15 g/mile CO or less apply), short test emissions for all tests and test modes may not exceed the standards listed in paragraphs (c)(1) and (2) of this section.

(1) Hydrocarbons: 220 ppm as hexane.

(2) Carbon monoxide: 1.2%.

[58 FR 58401, Nov. 1, 1993]

§ 85.2204 Short test standards for 1981 and later model year light-duty trucks.

(a) For light-duty trucks for which the test procedures described in § 85.2209, 85.2210, 85.2211, 85.2212, 85.2214, or 85.2216 are used to establish Emissions Performance Warranty eligibility (that is, 1981 and later model year light-duty trucks at low altitude and 1982 and later model year trucks at high altitude to which high altitude certification standards of 2.0 g/mile HC and 26 g/mile CO or less apply), short test emissions may not exceed the standards listed in paragraphs (a)(1) and (2) of this section.

(1) Hydrocarbons: 220 ppm as hexane.

(2) Carbon monoxide: 1.2%.

(b) For light-duty trucks for which the test procedure described in § 85.2214 is used to establish Emissions Performance Warranty eligibility (that is, 1981 and later model year light-duty trucks at low altitude and 1982 and later model year trucks at high altitude to which high altitude certification standards of 2.0 g/mile HC and 26 g/mile CO

or less apply), the lowest readings from the two idle modes must be used to determine compliance. Short test emissions may not exceed the standards listed in paragraphs (b)(1) and (2) of this section.

(1) Hydrocarbons: 200 ppm as hexane.

(2) Carbon monoxide: 1.0%.

(c) For 1981 and later model year gasoline-fueled light-duty trucks for which any of the test procedures described in §85.2213, 85.2215, 85.2217, 85.2218, 85.2219, or 85.2220 are utilized to establish Emissions Performance Warranty eligibility (that is, 1981 and later model year light-duty trucks at low altitude and 1982 and later model year trucks at high altitude to which high altitude certification standards of 2.0 g/mile HC and 26 g/mile CO or less apply), short test emissions for all tests and test modes may not exceed the standards listed in paragraphs (c)(1) and (2) of this section.

(1) Hydrocarbons: 220 ppm as hexane.

(2) Carbon monoxide: 1.2%.

[58 FR 58401, Nov. 1, 1993]

§§ 85.2205–85.2206 [Reserved]

§ 85.2207 On-board diagnostics test standards.

(a) [Reserved]

(b) A vehicle shall fail the on-board diagnostics test if it is a 1996 or newer vehicle and the vehicle connector is missing, has been tampered with, or is otherwise inoperable.

(c) A vehicle shall fail the on-board diagnostics test if the malfunction indicator light is commanded to be illuminated and it is not visually illuminated according to visual inspection.

(d) A vehicle shall fail the on-board diagnostics test if the malfunction indicator light is commanded to be illuminated and any of the following OBD codes, as defined by SAE J2012 are present (where X refers to any digit). The procedure shall be done in accordance with SAE J2012 Diagnostic Trouble Code Definitions, (MAR92). This incorporation of reference was approved by the Director of the Federal Register in accordance with 5 U.S.C.552(a) and 1 CFR part 51. Copies of SAE J2012 may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096–0001. Copies may be inspected at the EPA Docket No. A–94–21 at EPA's Air Docket, (LE–131) Room 1500 M, 1st Floor, Waterside Mall, 401 M Street SW, Washington, DC, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(1) Any PX1XX Fuel and Air Metering codes.

(2) Any PX2XX Fuel and Air Metering codes.

(3) Any PX3XX Ignition System or Misfire codes.

(4) Any PX4XX Auxiliary Emission Controls codes.

(5) P0500 Vehicle Speed Sensor Malfunction.

(6) P0501 Vehicle Speed Sensor Range/Malfunction.

(7) P0502 Vehicle Speed Sensor Circuit Low Input.

(8) P0503 Vehicle Speed Sensor Intermittent/Erratic/High.

(9) P0505 Idle Control System Malfunction.

(10) P0506 Idle Control System RPM Lower Than Expected.

(11) P0507 Idle Control System RPM Higher Than Expected.

(12) P0510 Closed Throttle Position Switch Malfunction.

(13) P0550 Power Steering Pressure Sensor Circuit Malfunction.

(14) P0551 Power Steering Pressure Sensor Circuit Malfunction.

(15) P0552 Power Steering Pressure Sensor Circuit Low Input.

(16) P0553 Power Steering Pressure Sensor Circuit Intermittent.

(17) P0554 Power Steering Pressure Sensor Circuit Intermittent.

(18) P0560 System Voltage Malfunction.

(19) P0561 System Voltage Unstable.

(20) P0562 System Voltage Low.

(21) P0563 System Voltage High.

(22) Any PX6XX Computer and Output Circuits codes.

(23) P0703 Brake Switch Input Malfunction.

(24) P0705 Transmission Range Sensor Circuit Malfunction (PRNDL Input).

(25) P0706 Transmission Range Sensor Circuit Range/Performance.

(26) P0707 Transmission Range Sensor Circuit Low Input.

(27) P0708 Transmission Range Sensor Circuit High Input.

(28) P0709 Transmission Range Sensor Circuit Intermittent.
(29) P0719 Torque Converter/Brake Switch ''B'' Circuit Low.
(30) P0720 Output Speed Sensor Circuit Malfunction.
(31) P0721 Output Speed Sensor Circuit Range/Performance.
(32) P0722 Output Speed Sensor Circuit No Signal.
(33) P0723 Output Speed Sensor Circuit Intermittent.
(34) P0724 Torque Converter/Brake Switch ''B'' Circuit High.
(35) P0725 Engine Speed Input Circuit Malfunction.
(36) P0726 Engine Speed Input Circuit Range/Performance.
(37) P0727 Engine Speed Input Circuit No Signal.
(38) P0728 Engine Speed Input Circuit Intermittent.
(39) P0740 Torque Converter Clutch System Malfunction.
(40) P0741 Torque Converter System Performance or Stuck Off.
(41) P0742 Torque Converter Clutch System Stuck On.
(42) P0743 Torque Converter Clutch System Electrical.
(43) P0744 Torque Converter Clutch Circuit Intermittent.
(e) [Reserved]

[61 FR 40946, Aug. 6, 1996, as amended at 63 FR 24433, May 4, 1998]

§ 85.2208 Alternative standards and procedures.

(a)(1) As a part of the certification process, as set forth in § 86.078 et seq., a manufacturer may request an alternative short test standard or short test procedure for any vehicle or engine for which the standards or procedures specified in this subpart are not appropriate. The requestor shall supply relevant test data and technical support to substantiate the claim and shall also recommend alternative test procedures and/or standards for the Administrator's consideration. Upon an acceptable showing that the general standards or procedures are not appropriate, the Administrator shall set alternative standards or procedures through rulemaking. The administrative provisions of the certification process [see § 86.078 et seq.], apply to such a request for alternative standards or procedures.

(2) Any such alternative standards or test procedures must be specified on the emission control information label to be effective for that particular vehicle or engine. The Administrator may waive this requirement if it is determined that a given model year of production for which an alternative test procedure is promulgated is too far advanced at the time of promulgation to make such a requirement practical.

(3) Alternative test procedures may be approved if the Administrator finds that:

(i) Such procedures are in accordance with good engineering practice, including errors of commission (at cutpoints corresponding to equivalent emission reductions) no higher than the tests they would replace;

(ii) Such procedures show a correlation with the Federal Test Procedure (with respect to their ability to detect high emitting vehicles and ensure their effective repair) equal to or better than the tests they would replace; and

(iii) Such procedures would produce equivalent emission reductions in combination with other program elements.

(b) A State or other I/M authority conducting or supervising tests under this subpart may request to use quality control procedures which are different than those in § 85.2217. After an appropriate opportunity for public comment, the Administrator may approve the requested procedures provided the requested procedures are equivalent to those in § 85.2217. The requestor shall supply relevant test data and technical support to substantiate the claim that the procedures are equivalent to the specifications described in § 85.2217. Following a preliminary determination by the Administrator that an alternative procedure is equvalent, a FEDERAL REGISTER notice will be published announcing the request and explaining EPA's preliminary determination. All information relevant to the preliminary determination will be made available for comment in the public docket. Interested parties will be given 30 days to submit comments, and if EPA concludes that the preliminary determination was not in error, a final FEDERAL REGISTER notice will be published granting the State permission to use the alternative procedure.

(c)(1) A state or other I/M authority conducting or supervising tests under this subpart may request to use alternative short test standards or procedures. The requester must supply relevant test data and technical support to substantiate the claim and must also recommend alternative standards or test procedures for the Administrator's consideration. If the Administrator determines that the alternative standards or procedures satisfy the provisions of the Clean Air Act, 42 U.S.C. 7541 paragraphs (b)(i), (b)(ii), and (b)(iii) of this section, the Administrator will set alternative standards or procedures through rulemaking.

(2) Alternative test procedures may be approved if the Administrator finds that:

(i) Such procedures are in accordance with good engineering practice, including errors of commission (at cutpoints corresponding to equivalent emission reductions) no higher than the tests they would replace;

(ii) Such procedures show a correlation with the Federal Test Procedure (with respect to their ability to detect high emitting vehicles and ensure their effective repair) equal to or better than the tests they would replace; and

(iii) Such procedures would produce equivalent emission reductions in combination with other program elements.

[49 FR 24323, June 12, 1984, as amended at 58 FR 58401, Nov. 1, 1993]

§ 85.2209 2500 rpm/idle test—EPA 81.

(a)(1) *General calendar year applicability.* The test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1993, except as allowed in paragraph (a)(2) of this section.

(2) *Special calendar and model year applicability.* (i) The extended applicability described in paragraphs (a)(2) (ii) through (iv) of this section is restricted to 1995 and earlier model year vehicles or engines.

(ii) In a state for which the Administrator has approved a State Implementation Plan revision providing for the implementation of a basic decentralized program meeting the requirements of part 51, subpart S of this chapter, according to the schedule specified in §51.373 of this chapter, the test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1993.

(iii) In a state for which the Administrator has approved a State Implementation Plan revision providing for the 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 test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through June 30, 1994.

(iv) In a state for which the Administrator has approved a State Implementation Plan revision providing for the 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 test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1995.

(b) *General requirements.* Vehicles shall be tested in as-received condition. Engines shall be at normal operating temperature and not overheating (as indicated by gauge, warning light or boiling radiator) with all accessories off.

(c) *Test sequence.* (1) Analyzers shall be warmed-up, in stabilized operating condition and adjusted as required in §85.2217.

(2) Attach tachometer pick up.

(3) With engine idling and transmission in neutral, the sample probe shall be inserted into the tailpipe.

(4) The engine speed shall be increased to 2500 ± 300 rpm, with transmission in neutral. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. This process shall be repeated as necessary for multiple exhaust pipes, or hardware which is capable of simultaneously sampling multiple tailpipes may be used. However, if this hardware is not used, exhaust concentrations from each pipe shall be measured within the 30 second period if stable readings can be obtained from both pipes before the 30

seconds have elapsed. If this is not possible, the procedures shall be conducted through step (5) for the first pipe and then the entire procedure beginning from step (3) shall be repeated for the second pipe. Neither multiple readings nor simultaneous sampling hardware is necessary for exhaust systems in which the exhaust pipes originate from a common point.

(5) The engine speed shall be reduced to free idle with transmission in neutral. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. Repeat as specified in paragraph (b)(4) of this section for multiple exhaust pipes, unless hardware capable of simultaneous sampling of multiple exhaust pipes is used.

(6) For vehicles with multiple exhaust pipes, the separate results from each pipe for each mode (as specified in paragraphs (c)(4) and (5) of this section) must be numerically averaged for each pollutant, unless hardware which is capable of simultaneously sampling multiple exhaust pipes has been used.

(7) Exhaust concentration measurements from both the idle mode and the high speed mode are required.

[49 FR 24323, June 12, 1984, as amended at 58 FR 58402, Nov. 1, 1993]

§ 85.2210 Engine restart 2500 rpm/idle test—EPA 81.

(a)(1) *General calendar year applicability.* The test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1993, except as allowed in paragraph (a)(2) of this section.

(2) *Special calendar and model year applicability.* (i) The extended applicability described in paragraphs (a)(2) (ii) through (iv) of this section is restricted to 1995 and earlier model year vehicles or engines.

(ii) In a state for which the Administrator has approved a State Implementation Plan revision providing for the implementation of a basic decentralized program meeting the requirements of part 51, subpart S of this chapter, according to the schedule specified in § 51.373 of this chapter, the test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1993.

(iii) In a state for which the Administrator has approved a State Implementation Plan revision providing for the 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 test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through June 30, 1994.

(iv) In a state for which the Administrator has approved a State Implementation Plan revision providing for the 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 test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1995.

(b) *General requirements.* Vehicles shall be tested in as-received condition. Engines shall be at normal operating temperature and not overheating (as indicated by gauge, warning light or boiling radiator) with all accessories off.

(c) *Test sequence.* (1) Analyzers shall be warmed-up, in stabilized operating condition and adjusted as required in § 85.2217.

(2) Attach tachometer pick up.

(3) The engine shall be turned off and then restarted.

(4) With engine idling and transmission in neutral, the sample probe shall be inserted into the tailpipe.

(5) The engine speed shall be increased to 2500 ±300 rpm, with the transmission in neutral. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. This process shall be repeated as necessary for multiple exhaust pipes, or hardware which is capable of simultaneously sampling vehicles with multiple tailpipes may be used. However, if this hardware is not used, exhaust concentrations from each pipe shall be measured within the 30 second period if stable readings can be obtained from both pipes before the 30 seconds have

elapsed. If this is not possible, the procedure shall be conducted through step (6) for the first pipe and then the entire procedure beginning from step (3) shall be repeated for the second pipe. Neither multiple readings nor simultaneous sampling hardware is necessary for exhaust pipes originating from a common point.

(6) The engine speed shall be reduced to free idle with transmission in neutral. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. This process shall be repeated as necessary for multiple exhaust pipes, or hardware which is capable of simultaneously sampling vehicles with multiple tailpipes may be used. However, if this hardware is not used, exhaust concentrations from both pipes shall be measured in this step (6) within the 30 second period if stable readings can be obtained before the 30 seconds have elasped. If this is not possible, the entire procedure beginning from step (3) shall be repeated for the second pipe. For vehicles with multiple exhaust pipes only one of which was measured in step (5) before the 30 seconds at 2500 ±300 rmp had elapsed, the entire procedure beginning from step (3) shall be repeated for the second pipe after this step (6) is completed for the first pipe. Neither multiple readings nor simultaneous sampling hardware is necessary for exhaust pipes originating from a common point.

(7) For vehicles with multiple exhaust pipes, the separate results from each pipe for each mode (as specified in paragraphs (c) (5) and (6) of this section) must be numerically averaged for each pollutant, unless hardware which is capable of simultaneously sampling multiple exhaust pipes has been used.

(8) Exhaust concentration measurements from both the idle mode and the high speed mode are required.

[49 FR 24323, June 12, 1984, as amended at 58 FR 58402, Nov. 1, 1993]

§ 85.2211 Engine restart idle test—EPA 81.

(a)(1) *General calendar year applicability.* The test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1993, except as allowed in paragraph (a)(2) of this section.

(2) *Special calendar and model year applicability.* (i) The extended applicability described in paragraphs (a)(2) (ii) through (iv) of this section is restricted to 1995 and earlier model year vehicles or engines.

(ii) In a state for which the Administrator has approved a State Implementation Plan revision providing for the implementation of a basic decentralized program meeting the requirements of part 51, subpart S of this chapter, according to the schedule specified in §51.373 of this chapter, the test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1993.

(iii) In a state for which the Administrator has approved a State Implementation Plan revision providing for the 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 test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through June 30, 1994.

(iv) In a state for which the Administrator has approved a State Implementation Plan revision providing for the 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 test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1995.

(b) *General requirements.* Vehicles shall be tested in as-received condition. Engines shall be at normal operating temperature and not overheating (as indicated by gauge, warning light or boiling radiator) with all accessories off.

(c) *Test sequence.* (1) Analyzers shall be warmed-up, in stabilized operation condition and adjusted as required in §85.2217.

(2) Attach tachometer pick up.

(3) The engine shall be turned off and then restarted.

(4) With engine idling and transmission in neutral, the sample probe shall be inserted into the tailpipe.

(5) The engine speed shall be increased to 2500 rpm ±300 rpm, with transmission in neutral, for 30 seconds.

(6) The engine speed shall be reduced to free idle with transmission in neutral. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. This process shall be repeated as necessary for multiple exhaust pipes, or hardware which is capable of simultaneously sampling vehicles with multiple tailpipes may be used. However, if this type of hardware is not used, exhaust concentrations from each pipe shall be measured within the 30 second period if stable readings can be obtained from both pipes before the 30 seconds have elapsed. If this is not possible, the entire procedure beginning from step (3) shall be repeated for the second pipe. Neither multiple readings nor simultaneous sampling hardware is necessary for exhaust systems in which the exhaust pipes originate from a common point.

(7) Multiple readings from multiple exhaust pipes shall be numerically averaged, if taken.

[49 FR 24323, June 12, 1984, as amended at 58 FR 58402, Nov. 1, 1993]

§ 85.2212 Idle test—EPA 81.

(a)(1) *General calendar year applicability.* The test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1993, except as allowed in paragraph (a)(2) of this section.

(2) *Special calendar and model year applicability.* (i) The extended applicability described in paragraphs (a)(2) (ii) through (iv) of this section is restricted to 1995 and earlier model year vehicles or engines.

(ii) In a state for which the Administrator has approved a State Implementation Plan revision providing for the implementation of a basic decentralized program meeting the requirements of part 51, subpart S of this chapter, according to the schedule specified in § 51.373 of this chapter, the test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1993.

(iii) In a state for which the Administrator has approved a State Implementation Plan revision providing for the 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 test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through June 30, 1994.

(iv) In a state for which the Administrator has approved a State Implementation Plan revision providing for the 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 test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1995.

(b) *General requirements.* Vehicles shall be tested in as-received condition. Engines shall be at normal operating temperature and not overheating (as indicated by gauge, warning light or boiling radiator) with all accessories off.

(c) *Test sequence.* (1) Analyzers shall be warmed-up, in stabilized operating condition and adjusted as required in § 85.2217.

(2) *Optional:* The engine may be preconditioned by operating it at 2500 ±300 rpm for up to 30 seconds.

(3) With engine idling and transmission in neutral, the sample probe shall be inserted into the tailpipe. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. This process shall be repeated as necessary for multiple exhaust pipes, or hardware which is capable of simultaneously sampling vehicles with multiple tailpipes may be used. Neither multiple readings nor simultaneous sampling hardware is necessary for exhaust systems in which the exhaust pipes originate from a common point.

(4) Multiple readings from multiple exhaust pipes shall be numerically averaged, if taken.

[49 FR 24323, June 12, 1984, as amended at 58 FR 58403, Nov. 1, 1993]

§ 85.2213 Idle test—EPA 91.

(a) *General requirements*—(1) *Exhaust gas sampling algorithm.* The analysis of exhaust gas concentrations must begin ten seconds after the applicable test mode begins. Exhaust gas concentrations must be analyzed at a minimum rate of once every 0.75 second. The measured value for pass/fail determinations is a simple running average of the measurements taken over five seconds.

(2) *Pass/fail determination.* A pass or fail determination is made for each applicable test mode based on a comparison of the short test standards contained in §§ 85.2203 and 85.2204, and the measured value for HC and CO as described in paragraph (a)(1) of this section. A vehicle passes the test mode if any pair of simultaneous measured values for HC and CO are below or equal to the applicable short test standards. A vehicle fails the test mode if the values for either HC or CO, or both, in all simultaneous pairs of values are above the applicable standards.

(3) *Void test conditions.* The test immediately terminates and any exhaust gas measurements are voided if the measured concentration of CO plus CO_2 falls below six percent or the vehicle's engine stalls at any time during the test sequence.

(4) *Multiple exhaust pipes.* Exhaust gas concentrations from vehicle engines equipped with multiple exhaust pipes must be sampled simultaneously.

(5) The test is immediately terminated upon reaching the overall maximum test time.

(b) *Test sequence.* (1) The test sequence consists of a first-chance test and a second-chance test as described in paragraphs (b)(1) (i) and (ii) of this section.

(i) The first-chance test, as described under paragraph (c) of this section, consists of an idle mode.

(ii) The second-chance test as described under paragraph (d) of this section is performed only if the vehicle fails the first-chance test.

(2) The test sequence begins only after the requirements listed in paragraphs (b)(2) (i) through (iv) of this section are met.

(i) The vehicle is tested in as-received condition with the transmission in neutral or park and all accessories turned off. The engine must be at normal operating temperature (as indicated by a temperature gauge, temperature lamp, touch test on the radiator hose, or other visual observation indicating that overheating has not occurred).

(ii) For all pre-1996 model year vehicles, a tachometer shall be attached to the vehicle in accordance with the analyzer manufacturer's instructions. For 1996 and newer model year vehicles the OBD data link connector will be used to monitor RPM. In the event that an OBD data link connector is not available or that an RPM signal is not available over the data link connector, a tachometer shall be used instead.

(iii) The sample probe is inserted into the vehicle's tailpipe to a minimum depth of 10 inches. If the vehicle's exhaust system prevents insertion to this depth, a tailpipe extension must be used.

(iv) The measured concentration of CO plus CO_2 must be greater than or equal to six percent.

(c) *First-chance test.* The test timer starts (tt=0) when the conditions specified in paragraph (b)(2) of this section are met. The overall maximum test time for the first-chance test is 145 seconds (tt=145). The first-chance test consists of an idle mode only.

(1) The mode timer starts (mt=0) when the vehicle engine speed is between 350 and 1100 rpm. If engine speed exceeds 1100 rpm or falls below 350 rpm, the mode timer resets to zero and resumes timing. The minimum mode length is determined as described under paragraph (c)(2) of this section. The maximum mode length is 90 seconds elapsed time (mt=90).

(2) The pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the mode is terminated in accordance with paragraphs (c)(2) (i) through (v) of this section.

(i) The vehicle passes the idle mode and the test is immediately terminated

if, prior to an elapsed time of 30 seconds (mt=30), measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(ii) The vehicle passes the idle mode and the test terminates at the end of an elapsed time of 30 seconds (mt=30), if prior to that time the criteria of paragraph (c)(2)(i) of this section are not satisfied and the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(iii) The vehicle passes the idle mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 90 seconds (mt=90), the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(iv) The vehicle fails the idle mode and the test is terminated if none of the provisions of paragraphs (c)(2) (i), (ii), and (iii) of this section is satisfied by an elapsed time of 90 seconds (mt=90). Alternatively, the vehicle may be failed if the provisions of paragraphs (c)(2) (i) and (ii) of this section are not met within an elapsed time of 30 seconds.

(v) *Optional.* The vehicle may fail the first-chance test and the second-chance test may be omitted if no exhaust gas concentration lower than 1800 ppm HC is found by an elapsed time of 30 seconds (mt=30).

(d) *Second-chance test.* If the vehicle fails the first-chance test, the test timer resets to zero (tt=0) and a second-chance test is performed. The overall maximum test time for the second-chance test is 425 seconds (tt=425). The test consists of a preconditioning mode followed immediately by an idle mode.

(1) *Preconditioning mode.* The mode timer starts (mt=0) when the engine speed is between 2200 and 2800 rpm. The mode continues for an elapsed time of 180 seconds (mt=180). If engine speed falls below 2200 rpm or exceeds 2800 rpm for more than five seconds in any one excursion, or 15 seconds over all excursions, the mode timer resets to zero and resumes timing.

(2) *Idle mode*—(i) *Ford Motor Company and Honda vehicles.* The engines of 1981–1987 model year Ford Motor Company vehicles and 1984–1985 model year Honda Preludes must be shut off for not more than ten seconds and restarted. This procedure may also be used for 1988–1989 model year Ford Motor Company vehicles but may not be used for other vehicles. The probe may be removed from the tailpipe or the sample pump turned off if necessary to reduce analyzer fouling during the restart procedure.

(ii) The mode timer starts (mt=0) when the vehicle engine speed is between 350 and 1100 rpm. If engine speed exceeds 1100 rpm or falls below 350 rpm, the mode timer resets to zero and resumes timing. The minimum idle mode length is determined as described in paragraph (d)(2)(iii) of this section. The maximum idle mode length is 90 seconds elapsed time (mt=90).

(iii) The pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the idle mode is terminated in accordance with paragraphs (d)(2)(iii) (A) through (D) of this section.

(A) The vehicle passes the idle mode and the test is immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(B) The vehicle passes the idle mode and the test is terminated at the end of an elapsed time of 30 seconds (mt=30), if prior to that time the criteria of paragraph (d)(2)(iii)(A) of this section are not satisfied and the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(C) The vehicle passes the idle mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 90 seconds (mt=90), measured values are less than or equal to the applicable short test standards described in paragraph (a)(2) of this section.

(D) The vehicle fails the idle mode and the test is terminated if none of the provisions of paragraphs (d)(2)(iii)

(A), (B), and (C) of this section is satisfied by an elapsed time of 90 seconds (mt=90).

[58 FR 58403, Nov. 1, 1993, as amended at 61 FR 40947, Aug. 6, 1996]

§ 85.2214 Two speed idle test—EPA 81.

(a)(1) *General calendar year applicability.* The test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1993, except as allowed in paragraph (a)(2) of this section.

(2) *Special calendar and model year applicability.* (i) The extended applicability described in paragraphs (a)(2) (ii) through (iv) of this section is restricted to 1995 and earlier model year vehicles or engines.

(ii) In a state for which the Administrator has approved a State Implementation Plan revision providing for the implementation of a basic decentralized program meeting the requirements of part 51, subpart S of this chapter, according to the schedule specified in §51.373 of this chapter, the test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1993.

(iii) In a state for which the Administrator has approved a State Implementation Plan revision providing for the 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 test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through June 30, 1994.

(iv) In a state for which the Administrator has approved a State Implementation Plan revision providing for the 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 test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1995.

(b) *General requirements.* Vehicles shall be tested in as-received condition. Engines shall be at normal operating temperature and not overheating (as indicated by gauge, warning light or boiling radiator) with all accessories off.

(c) *Test sequence.* (1) Analyzers shall be warmed-up, in stabilized operating condition and adjusted as required in §85.2217.

(2) Attach tachometer pick up.

(3) With engine idling and transmission in neutral, the sample probe shall be inserted into the tailpipe. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. This process shall be repeated as necessary for multiple exhaust pipes, or hardware which is capable of simultaneously sampling vehicles with multiple tailpipes may be used. Neither multiple readings nor simultaneous sampling hardware is necessary for exhaust systems in which the exhaust pipes originate from a common point.

(4) The engine speed is increased to 2500±300 rpm, with transmission in neutral. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. Repeat as specified in paragraph (c)(3) of this section for multiple exhaust pipes, if necessary.

(5) The engine speed is reduced to free idle with transmission in neutral. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. Repeat as specified in paragraph (c)(3) of this section for multiple exhaust pipes, if necessary.

(6) For vehicles with multiple exhaust pipes, the separate results from each pipe for each mode (as specified in paragraphs (c)(3), (4), and (5) of this section) must be numerically averaged for each pollutant, unless hardware which is capable of simultaneously sampling multiple tailpipe vehicles has been used.

(7) The idle mode final results shall be the lowest HC and lowest CO readings from steps (3) and (5).

(d) Exhaust concentration measurements from both the idle mode and the high-speed mode are not required. The short test may be used to evaluate emissions from either mode alone or from both modes, the choice being made by the jurisdiction implementing

the inspection program. If exhaust concentrations are not measured on a given mode, the vehicle must be operated at the specified test condition for 15 to 30 seconds. The final idle mode, described in paragraph (c)(5) of this section, may be omitted if only high-speed mode exhaust concentrations are to be measured or if the vehicle is below idle standards on the first measurement, paragraph (c)(3) of this section. The high-speed mode may be omitted if only idle mode exhaust concentrations are to be measured and if the vehicle is below idle standards on the first measurement.

[49 FR 24323, June 12, 1984. Redesignated and amended at 58 FR 58403, 58404, Nov. 1, 1993]

§ 85.2215 Two speed idle test—EPA 91.

(a) *General requirements*—(1) *Exhaust gas sampling algorithm.* The analysis of exhaust gas concentrations begins ten seconds after the applicable test mode begins. Exhaust gas concentrations must be analyzed at a rate of once every 0.75 second. The measured value for pass/fail determinations is a simple running average of the measurements taken over five seconds.

(2) *Pass/fail determination.* A pass or fail determination is made for each applicable test mode based on a comparison of the short test standards contained in §§ 85.2203 and 85.2204, and the measured value for HC and CO as described in paragraph (a)(1) of this section. A vehicle passes the test mode if any pair of simultaneous values for HC and CO are below or equal to the applicable short test standards. A vehicle fails the test mode if the values for either HC or CO, or both, in all simultaneous pairs of values are above the applicable standards.

(3) *Void test conditions.* The test immediately terminates and any exhaust gas measurements are voided if the measured concentration of CO plus CO^2 falls below six percent or the vehicle's engine stalls at any time during the test sequence.

(4) *Multiple exhaust pipes.* Exhaust gas concentrations from vehicle engines equipped with multiple exhaust pipes must be sampled simultaneously.

(5) The test is immediately terminated upon reaching the overall maximum test time.

(b) *Test sequence.* (1) The test sequence consists of a first-chance test and a second-chance test as described in paragraphs (b)(1) (i) and (ii) of this section.

(i) The first-chance test, as described under paragraph (c) of this section, consists of an idle mode followed by a high-speed mode.

(ii) The second-chance high-speed mode, as described under paragraph (c) of this section, immediately follows the first-chance high-speed mode. It is performed only if the vehicle fails the first-chance test. The second-chance idle mode, as described under paragraph (d) of this section, follows the second-chance high-speed mode and is performed only if the vehicle fails the idle mode of the first-chance test.

(2) The test sequence begins only after the requirements listed in paragraphs (b)(2) (i) through (iv) of this section are met.

(i) The vehicle is tested in as-received condition with the transmission in neutral or park and all accessories turned off. The engine must be at normal operating temperature (as indicated by a temperature gauge, temperature lamp, touch test on the radiator hose, or other visual observation indicating that overheating has not occurred).

(ii) For all pre-1996 model year vehicles, a tachometer shall be attached to the vehicle in accordance with the analyzer manufacturer's instructions. For 1996 and newer model year vehicles the OBD data link connector will be used to monitor RPM. In the event that an OBD data link connector is not available or that an RPM signal is not available over the data link connector, a tachometer shall be used instead.

(iii) The sample probe is inserted into the vehicle's tailpipe to a minimum depth of 10 inches. If the vehicle's exhaust system prevents insertion to this depth, a tailpipe extension must be used.

(iv) The measured concentration of CO plus CO^2 must be greater than or equal to six percent.

(c) *First-chance test and second-chance high-speed mode.* The test timer starts (tt=0) when the conditions specified in paragraph (b)(2) of this section are met. The overall maximum test time for the

first-chance test and second-chance high-speed mode is 425 seconds (tt=425). The first-chance test consists of an idle mode followed immediately by a high-speed mode. This is followed immediately by an additional second-chance high-speed mode, if necessary.

(1) *First-chance idle mode.* (i) The mode timer starts (mt=0) when the vehicle engine speed is between 350 and 1100 rpm. If engine speed exceeds 1100 rpm or falls below 350 rpm, the mode timer resets to zero and resumes timing. The minimum idle mode length is determined as described in paragraph (c)(1)(ii) of this section. The maximum idle mode length is 90 seconds elapsed time (mt=90).

(ii) The pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the mode terminated as described in paragraphs (c)(1)(ii) (A) through (E) of this section.

(A) The vehicle passes the idle mode and the mode is immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(B) The vehicle passes the idle mode and the mode is terminated at the end of an elapsed time of 30 seconds (mt=30) if, prior to that time, the criteria of paragraph (c)(1)(ii)(A) of this section are not satisfied, and the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(C) The vehicle passes the idle mode and the mode is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 90 seconds (mt=90), the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(D) The vehicle fails the idle mode and the mode is terminated if none of the provisions of paragraphs (c)(1)(ii) (A), (B), and (C) of this section is satisfied by an elapsed time of 90 seconds (mt=90). Alternatively, the vehicle may be failed if the provisions of paragraphs (c)(1)(ii) (A) and (B) of this section are not met within an elapsed time of 30 seconds.

(E) *Optional.* The vehicle may fail the first-chance test and the second-chance test may be omitted if no exhaust gas concentration less than 1800 ppm HC is found by an elapsed time of 30 seconds (mt=30).

(2) *First-chance and second-chance high-speed modes.* This mode includes both the first-chance and second-chance high-speed modes, and follows immediately upon termination of the first-chance idle mode.

(i) The mode timer resets (mt=0) when the vehicle engine speed is between 2200 and 2800 rpm. If engine speed falls below 2200 rpm or exceeds 2800 rpm for more than two seconds in one excursion, or more than six seconds over all excursions within 30 seconds of the final measured value used in the pass/fail determination, the measured value is invalidated and the mode continued. If any excursion lasts for more than ten seconds, the mode timer resets to zero (mt=0) and timing resumes. The minimum high-speed mode length is determined as described under paragraphs (c)(2) (ii) and (iii) of this section. The maximum high-speed mode length is 180 seconds elapsed time (mt=180).

(ii) *Ford Motor Company and Honda vehicles.* For 1981–1987 model year Ford Motor Company vehicles and 1984–1985 model year Honda Preludes, the pass/fail analysis begins after an elapsed time of ten seconds (mt=10) using the following procedure. This procedure may also be used for 1988–1989 model year Ford Motor Company vehicles but may not be used for other vehicles.

(A) For vehicles that *passed* the idle mode, a pass or fail determination is used to determine whether the high-speed test should be terminated *prior* to or at the end of an elapsed time of 180 seconds (mt=180), as described in paragraphs (c)(2)(ii)(A) (*1*) through (*4*) of this section.

(*1*) The vehicle passes the high-speed mode and the test is immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), the measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(*2*) The vehicle passes the high-speed mode and the test is terminated at the end of an elapsed time of 30 seconds

(mt=30) if, prior to that time, the criteria of paragraph (c)(2)(ii)(A)(*1*) of this section are not satisfied, and the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(*3*) The vehicle passes the high-speed mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 180 seconds (mt=180), the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(*4*) *Restart.* If at an elapsed time of 90 seconds (mt=90) the measured values are greater than the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section, the vehicle's engine must be shut off for not more than ten seconds after returning to idle and then is restarted. The probe may be removed from the tailpipe or the sample pump turned off if necessary to reduce analyzer fouling during the restart procedure. The mode timer will stop upon engine shut off (mt=90) and resume upon engine restart. The pass/fail determination resumes as follows after 100 seconds have elapsed (mt=100).

(*i*) The vehicle passes the high-speed mode and the test is immediately terminated if, at any point between an elapsed time of 100 seconds (mt=100) and 180 seconds (mt=180), the measured values are less than or equal to the applicable short test standards described in paragraph (a)(2) of this section.

(*ii*) The vehicle fails the high-speed mode and the test is terminated if paragraph (c)(2)(ii)(A)(*4*)(*i*) of this section is not satisfied by an elapsed time of 180 seconds (mt=180).

(B) A pass or fail determination is made for vehicles that *failed* the idle mode and the high-speed mode terminated at the *end* of an elapsed time of 180 seconds (mt=180) as described in paragraphs (c)(2)(ii)(B) (*1*) and (*2*) of this section.

(*1*) The vehicle passes the high-speed mode and the mode is terminated at an elapsed time of 180 seconds (mt=180) if any measured values of HC and CO exhaust gas concentrations during the high-speed mode are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(*2*) *Restart.* If at an elapsed time of 90 seconds (mt=90) the measured values of HC and CO exhaust gas concentrations during the high-speed mode are greater than the applicable short test standards as determined by the procedure in paragraph (a)(2) of this section, the vehicle's engine must be shut off for not more than ten seconds after returning to idle and then is restarted. The probe may be removed from the tailpipe or the sample pump turned off if necessary to reduce analyzer fouling during the restart procedure. The mode timer will stop upon engine shut off (mt=90) and resume upon engine restart. The pass/fail determination resumes, as described in paragraphs (c)(2)(ii)(B)(*2*) (*i*) and (*ii*) of this section after 100 seconds have elapsed (mt=100).

(*i*) The vehicle passes the high-speed mode and the mode is terminated at an elapsed time of 180 seconds (mt=180) if any measured values of HC and CO exhaust gas concentrations during the high-speed mode are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(*ii*) The vehicle fails the high-speed mode and the test is terminated if paragraph (c)(2)(ii)(B)(*2*)(*i*) of this section is not satisfied by an elapsed time of 180 seconds (mt=180).

(iii) *All other light-duty motor vehicles.* The pass/fail analysis for vehicles not specified in paragraph (c)(2)(ii) of this section begins after an elapsed time of ten seconds (mt=10) using the procedure described in paragraphs (c)(2)(iii)(A) and (B) of this section.

(A) For vehicles that *passed* the idle mode, a pass or fail determination is used to determine whether the high-speed mode should be terminated *prior* to or at the end of an elapsed time of 180 seconds (mt=180), as described in paragraphs (c)(2)(iii)(A) (*1*) through (*4*) of this section.

(*1*) The vehicle passes the high-speed mode and the test is immediately terminated if, prior to an elapsed time of

30 seconds (mt=30), any measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(*2*) The vehicle passes the high-speed mode and the test is terminated at the end of an elapsed time of 30 seconds (mt=30) if, prior to that time, the criteria of paragraph (c)(2)(iii)(A)(*1*) of this section are not satisfied, and the measured values are less than or equal to the applicable short test standards as determined by the procedure in paragraph (a)(2) of this section.

(*3*) The vehicle passes the high-speed mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 180 seconds (mt=180), the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(*4*) The vehicle fails the high-speed mode and the test is terminated if none of the provisions of paragraphs (c)(2)(iii)(A) (*1*), (*2*), and (*3*) of this section is satisfied by an elapsed time of 180 seconds (mt=180).

(B) A pass or fail determination is made for vehicles that *failed* the idle mode and the high-speed mode terminated at the *end* of an elapsed time of 180 seconds (mt=180) as described in paragraphs (c)(2)(iii)(B) (*1*) and (*2*) of this section.

(*1*) The vehicle passes the high-speed mode and the mode is terminated at an elapsed time of 180 seconds (mt=180) if any measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(*2*) The vehicle fails the high-speed mode and the test is terminated if paragraph (c)(2)(iii)(B)(*1*) of this section is not satisfied by an elapsed time of 180 seconds (mt=180).

(d) *Second-chance idle mode.* If the vehicle fails the first-chance idle mode and passes the high-speed mode, the test timer resets to zero (tt=0) and a second-chance idle mode begins. The overall maximum test time for the second-chance idle mode is 145 seconds (tt=145). The test consists of an idle mode only.

(1) The engines of 1981–1987 model year Ford Motor Company vehicles and 1984–1985 model year Honda Preludes must be shut off for not more than ten seconds and restarted. The probe may be removed from the tailpipe or the sample pump turned off if necessary to reduce analyzer fouling during the restart procedure. This procedure may also be used for 1988–1989 model year Ford Motor Company vehicles but may not be used for other vehicles.

(2) The mode timer starts (mt=0) when the vehicle engine speed is between 350 and 1100 rpm. If the engine speed exceeds 1100 rpm or falls below 350 rpm the mode timer resets to zero and resumes timing. The minimum second-chance idle mode length is determined as described in paragraph (d)(3) of this section. The maximum second-chance idle mode length is 90 seconds elapsed time (mt=90).

(3) The pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the second-chance idle mode is terminated in accordance with paragraphs (d)(3) (i) through (iv) of this section.

(i) The vehicle passes the second-chance idle mode and the test is immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), any measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(ii) The vehicle passes the second-chance idle mode and the test is terminated at the end of an elapsed time of 30 seconds (mt=30) if, prior to that time, the criteria of paragraph (d)(3)(i) of this section are not satisfied, and the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(iii) The vehicle passes the second-chance idle mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 90 seconds (mt=90), the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(iv) The vehicle fails the second-chance idle mode and the test is terminated if none of the provisions of paragraphs (d)(3) (i), (ii), and (iii) of this

section is satisfied by an elapsed time of 90 seconds (mt=90).

[58 FR 58405, Nov. 1, 1993, as amended at 61 FR 40947, Aug. 6, 1996]

§ 85.2216 Loaded test—EPA 81.

(a)(1) *General calendar year applicability.* The test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1993, except as allowed in paragraph (a)(2) of this section.

(2) *Special calendar and model year applicability.* (i) The extended applicability described in paragraphs (a)(2) (ii) through (iv) of this section is restricted to 1995 and earlier model year vehicles or engines.

(ii) In a state for which the Administrator has approved a State Implementation Plan revision providing for the implementation of a basic decentralized program meeting the requirements of part 51, subpart S of this chapter, according to the schedule specified in § 51.373 of this chapter, the test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1993.

(iii) In a state for which the Administrator has approved a State Implementation Plan revision providing for the 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 test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through June 30, 1994.

(iv) In a state for which the Administrator has approved a State Implementation Plan revision providing for the 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 test procedure described in this section may be used to establish Emissions Performance Warranty eligibility through December 31, 1995.

(b) *General requirements.* Vehicles shall be tested in as-received condition. Engines shall be at normal operating temperature and not overheating (as indicated by gauge, warning light or boiling radiator) with all accessories off. An auxiliary cooling fan is optional

(c) *Test sequence.* (1) The dynamometer and analyzers shall be warmed-up, in stabilized operating condition and adjusted as required in §§ 85.2216 and 85.2217.

(2) The vehicle shall be placed on the dynamometer.

(3) The sample probe shall be inserted into the tailpipe.

(4) *Optional.* A high speed mode, maximum 50 mph and 30 seconds duration, is permitted if vehicle overheating does not occur.

(5) Drive for automatic or 3rd gear for manual transmissions shall be used. The vehicle shall be operated at 30±1 mph roll speed while measuring exhaust HC and CO. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. This process shall be repeated as necessary for multiple exhaust pipes, or hardware which is capable of simultaneously sampling vehicles with multiple tailpipes may be used. Neither multiple readings nor simultaneous sampling hardware is necessary for exhaust systems in which the exhaust pipes originate from a common point.

(6) The vehicle must be idled with transmission in neutral. Record exhaust concentrations after stabilized readings are obtained or at the end of 30 seconds, whichever occurs first. Repeat as specified in paragraph (c)(5) of this section for multiple exhaust pipes, if necessary.

(7) For vehicles with multiple exhaust pipes, the separate results from each pipe for each mode (as specified in paragraphs (c)(5) and (6) of this section) must be numerically averaged for each pollutant, unless hardware which is capable of simultaneously sampling multiple tailpipe vehicles has been used.

(d) Exhaust concentration measurements from both the loaded mode and the idle mode are not required. The short test may be used to evaluate emissions from either mode alone or from both modes, the choice being made by the jurisdiction implementing the inspection program. If exhaust concentrations are not measured on the

loaded mode the vehicle shall be operated at the specified test condition for 15 to 30 seconds. If idle exhaust concentrations are not measured, the idle mode may be omitted.

[49 FR 24323, June 12, 1984. Redesignated and amended at 58 FR 58403, 58407, Nov. 1, 1993]

§ 85.2217 Loaded test—EPA 91.

(a) *General requirements*—(1) *Exhaust gas sampling algorithm.* The analysis of exhaust gas concentrations begins ten seconds after the applicable test mode begins. Exhaust gas concentrations must be analyzed at a minimum rate of once every 0.75 seconds. The measured value for pass/fail determinations is a simple running average of the measurements taken over five seconds.

(2) *Pass/fail determination.* A pass or fail determination is made for each applicable test mode based on a comparison of the short test standards contained in §§ 85.2203 and 85.2204, and the measured value for HC and CO as described in paragraph (a)(1) of this section. A vehicle passes the test mode if any pair of simultaneous values for HC and CO are below or equal to the applicable short test standards. A vehicle fails the test mode if the values for either HC or CO, or both, in all simultaneous pairs of values are above the applicable standards.

(3) *Void test conditions.* The test immediately terminates and any exhaust gas measurements are voided if the measured concentration of CO plus CO_2 falls below six percent or the vehicle's engine stalls at any time during the test sequence.

(4) *Multiple exhaust pipes.* Exhaust gas concentrations from vehicle engines equipped with multiple exhaust pipes must be sampled simultaneously.

(5) The test is immediately terminated upon reaching the overall maximum test time.

(b) *Test sequence.* (1) The test sequence consists of a loaded mode using a chassis dynamometer followed immediately by an idle mode as described in paragraphs (c) (1) and (2) of this section.

(2) The test sequence begins only after the requirements described in paragraphs (b)(2) (i) through (v) of this section are met.

(i) The dynamometer must be warmed up, in stabilized operating condition, adjusted, and calibrated in accordance with the procedures of § 85.2233. Prior to each test, variable-curve dynamometers must be checked for proper setting of the road-load indicator or road-load controller.

(ii) The vehicle is tested in as-received condition with all accessories turned off. The engine must be at normal operating temperature (as indicated by a temperature gauge, temperature lamp, touch test on the radiator hose, or other visual observation indicating that overheating has not occurred).

(iii) The vehicle must be operated during each mode of the test with the gear selector in the position described in paragraphs (b)(2)(iii) (A) and (B) of this section.

(A) In drive for automatic transmissions and in second (or third if more appropriate) for manual transmissions for the loaded mode.

(B) In park or neutral for the idle mode.

(iv) The sample probe is inserted into the vehicle's tailpipe to a minimum depth of 10 inches. If the vehicle's exhaust system prevents insertion to this depth, a tailpipe extension must be used.

(v) The measured concentration of CO plus CO_2 must be greater than or equal to six percent.

(c) *Overall test procedure.* The test timer starts (tt=0) when the conditions specified in paragraph (b)(2) of this section are met and the mode timer initiates as specified in paragraph (c)(1) of this section. The overall maximum test time is 240 seconds (tt=240). The test is immediately terminated upon reaching the overall maximum test time.

(1) *Loaded mode*—(i) *Ford Motor Company and Honda vehicles.* (Optional.) The engines of 1981–1987 model year Ford Motor Company vehicles and 1984–1985 model year Honda Preludes must be shut off for not more than ten seconds and restarted. This procedure may also be used for 1988–1989 model year Ford Motor Company vehicles but may not be used for other vehicles. The probe may be removed from the tailpipe or the sample pump turned off if

necessary to reduce analyzer fouling during the restart procedure.

(ii) The mode timer starts (mt=0) when the dynamometer speed is within the limits specified for the vehicle engine size according to the following schedule. If the dynamometer speed falls outside the limits for more than five seconds in one excursion, or 15 seconds over all excursions, the mode timer resets to zero and resumes timing. The minimum mode length is determined as described in paragraph (c)(1)(iii)(A) of this section. The maximum mode length is 90 seconds elapsed time (mt=90).

DYNAMOMETER TEST SCHEDULE

Gasoline engine size, No. cylinders	Roll speed, mph (kph)	Normal loading, brake hp (kilowatts)
4 or less	22–25 (35–40)	2.8–4.1 (2.1–3.1)
5–6	29–32 (47–52)	6.8–8.4 (5.1–6.3)
7 or more	32–35 (52–56)	8.4–10.8 (6.3–8.1)

(iii) The pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the mode is terminated in accordance with paragraphs (c)(1)(iii)(A) through (C) of this section.

(A) The vehicle passes the loaded mode and the mode is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 90 seconds (mt=90), measured values are less than or equal to the applicable short test standard described in paragraph (a)(2) of this section.

(B) The vehicle fails the loaded mode and the mode is terminated if paragraph (c)(1)(iii)(A) of this section is not satisfied by an elapsed time of 90 seconds (mt=90).

(C) *Optional.* The vehicle may fail the loaded mode and any subsequent idle mode may be omitted if no exhaust gas concentration less than 1800 ppm HC is found by an elapsed time of 30 seconds (mt=30).

(2) *Idle mode*—(i) *Ford Motor Company and Honda vehicles.* (Optional.) The engines of 1981–1987 model year Ford Motor Company vehicles and 1984–1985 model year Honda Preludes must be shut off for not more than ten seconds and restarted. This procedure may also be used for 1988–1989 model year Ford Motor Company vehicles but may not be used for other vehicles. The probe may be removed from the tailpipe or the sample pump turned off if necessary to reduce analyzer fouling during the restart procedure.

(ii) The mode timer starts (mt=0) 5 seconds after the dynamometer speed has reached zero. The minimum idle mode length is determined as described in paragraph (c)(2)(iii) of this section. The maximum idle mode length is 90 seconds elapsed time (mt=90).

(iii) The pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the mode is terminated in accordance with paragraphs (c)(2)(iii) (A) through (D) of this section.

(A) The vehicle passes the idle mode and the test is immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(B) The vehicle passes the idle mode and the test is terminated at the end of an elapsed time of 30 seconds (mt=30) if, prior to that time, the criteria of paragraph (c)(2)(iii)(A) of this section are not satisfied, and the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(C) The vehicle passes the idle mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 90 seconds (mt=90), measured values are less than or equal to the applicable short test standards described in paragraph (a)(2) of this section.

(D) The vehicle fails the idle mode and the test terminates if none of the provisions of paragraphs (c)(2)(iii) (A), (B), and (C) of this section is satisfied by an elapsed time of 90 seconds (mt=90).

[58 FR 58407, Nov. 1, 1993]

§ 85.2218 Preconditioned idle test—EPA 91.

(a) *General requirements*—(1) *Exhaust gas sampling algorithm.* The analysis of exhaust gas concentrations begins ten seconds after the applicable test mode begins. Exhaust gas concentrations

must be analyzed at a minimum rate of once every 0.75 second. The measured value for pass/fail determinations is a simple running average of the measurements taken over five seconds.

(2) *Pass/fail determination.* A pass or fail determination is made for each applicable test mode based on a comparison of the short test standards contained in §§ 85.2203 and 85.2204, and the measured value for HC and CO as described in paragraph (a)(1) of this section. A vehicle passes the test mode if any pair of simultaneous values for HC and CO are below or equal to the applicable short test standards. A vehicle fails the test mode if the values for either HC or CO, or both, in all simultaneous pairs of values are above the applicable standards.

(3) *Void test conditions.* The test immediately terminates and any exhaust gas measurements are voided if the measured concentration of CO plus CO_2 falls below six percent or the vehicle's engine stalls at any time during the test sequence.

(4) *Multiple exhaust pipes.* Exhaust gas concentrations from vehicle engines equipped with multiple exhaust pipes must be sampled simultaneously.

(5) The test is immediately terminated upon reaching the overall maximum test time.

(b) *Test sequence.* (1) The test sequence consists of a first-chance test and a second-chance test as described in paragraphs (b)(1) (i) and (ii) of this section.

(i) The first-chance test, as described under paragraph (c) of this section, consists of a preconditioning mode followed by an idle mode.

(ii) The second-chance test as described under paragraph (d) of this section is performed only if the vehicle fails the first-chance test.

(2) The test sequence begins only after the requirements described in paragraphs (b)(2) (i) through (iv) of this section are met.

(i) The vehicle is tested in as-received condition with the transmission in neutral or park and all accessories turned off. The engine must be at normal operating temperature (as indicated by a temperature gauge, temperature lamp, touch test on the radiator hose, or other visual observation indicating that overheating has not occurred).

(ii) For all pre-1996 model year vehicles, a tachometer shall be attached to the vehicle in accordance with the analyzer manufacturer's instructions. For 1996 and newer model year vehicles the OBD data link connector will be used to monitor RPM. In the event that an OBD data link connector is not available or that an RPM signal is not available over the data link connector, a tachometer shall be used instead.

(iii) The sample probe is inserted into the vehicle's tailpipe to a minimum depth of 10 inches. If the vehicle's exhaust system prevents insertion to this depth, a tailpipe extension must be used.

(iv) The measured concentration of CO plus CO_2 must be greater than or equal to six percent.

(c) *First-chance test.* The test timer starts (tt=0) when the conditions specified in paragraph (b)(2) of this section are met. The overall maximum test time is 200 seconds (tt=200). The first-chance test consists of a preconditioning mode followed immediately by an idle mode.

(1) *Preconditioning mode.* The mode timer starts (mt=0) when the engine speed is between 2200 and 2800 rpm. The mode continues for an elapsed time of 30 seconds (mt=30). If engine speed falls below 2200 rpm or exceeds 2800 rpm for more than five seconds in any one excursion, or 15 seconds over all excursions, the mode timer resets to zero and resumes timing.

(2) *Idle mode.* (i) The mode timer starts (mt=0) when the vehicle engine speed is between 350 and 1100 rpm. If engine speed exceeds 1100 rpm or falls below 350 rpm, the mode timer resets to zero and resumes timing. The minimum idle mode length is determined as described in paragraph (c)(2)(ii) of this section. The maximum idle mode length is 90 seconds elapsed time (mt=90).

(ii) The pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the mode terminates as described in paragraphs (c)(2)(ii) (A) through (E) of this section.

(A) The vehicle passes the idle mode and the test is immediately terminated

if, prior to an elapsed time of 30 seconds (mt=30), measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(B) The vehicle passes the idle mode and the test terminates at the end of an elapsed time of 30 seconds (mt=30) if, prior to that time, the criteria of paragraph (c)(2)(ii)(A) of this section are not satisfied, and the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(C) The vehicle passes the idle mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 90 seconds (mt=90), measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(D) The vehicle fails the idle mode and the test terminates if none of the provisions of paragraphs (c)(2)(ii) (A), (B), and (C) of this section is satisfied by an elapsed time of 90 seconds (mt=90). Alternatively, the vehicle may be failed if the provisions of paragraphs (c)(2) (i) and (ii) of this section are not met within an elapsed time of 30 seconds.

(E) *Optional.* The vehicle may fail the first-chance test and the second-chance test may be omitted if no exhaust gas concentration less than 1800 ppm HC is found at an elapsed time of 30 seconds (mt=30).

(d) *Second-chance test.* If the vehicle fails the first-chance test, the test timer resets to zero and a second-chance test is performed. The overall maximum test time for the second-chance test is 425 seconds. The test consists of a preconditioning mode followed immediately by an idle mode.

(1) *Preconditioning mode.* The mode timer starts (mt=0) when engine speed is between 2200 and 2800 rpm. The mode continues for an elapsed time of 180 seconds (mt=180). If the engine speed falls below 2200 rpm or exceeds 2800 rpm for more than five seconds in any one excursion, or 15 seconds over all excursions, the mode timer resets to zero and resumes timing.

(2) *Idle mode*—(i) *Ford Motor Company and Honda vehicles.* The engines of 1981–1987 model year Ford Motor Company vehicles and 1984–1985 model year Honda Preludes must be shut off for not more than ten seconds and then restarted. The probe may be removed from the tailpipe or the sample pump turned off if necessary to reduce analyzer fouling during the restart procedure. This procedure may also be used for 1988–1989 model year Ford Motor Company vehicles but may not be used for other vehicles.

(ii) The mode timer starts (mt=0) when the vehicle engine speed is between 350 and 1100 rpm. If the engine speed exceeds 1100 rpm or falls below 350 rpm, the mode timer resets to zero and resumes timing. The minimum idle mode length is determined as described in paragraph (d)(2)(iii) of this section. The maximum idle mode length is 90 seconds elapsed time (mt=90).

(iii) The pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the mode is terminated in accordance with paragraphs (d)(2)(iii) (A) through (D) of this section.

(A) The vehicle passes the idle mode and the test immediately terminates if, prior to an elapsed time of 30 seconds (mt=30), measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(B) The vehicle passes the idle mode and the test is terminated at the end of an elapsed time of 30 seconds (mt=30) if, prior to that time, the criteria of paragraph (d)(2)(iii)(A) of this section are not satisfied, and the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(C) The vehicle passes the idle mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 90 seconds (mt=90), measured values are less than or equal to the applicable short test standards described in paragraph (a)(2) of this section.

(D) The vehicle fails the idle mode and the test is terminated if none of the provisions of paragraphs (d)(2)(iii)

(A), (B), and (C) of this section is satisfied by an elapsed time of 90 seconds (mt=90).

[58 FR 58408, Nov. 1, 1993, as amended at 61 FR 40947, Aug. 6, 1996]

§ 85.2219 Idle test with loaded preconditioning—EPA 91.

(a) *General requirements*—(1) *Exhaust gas sampling algorithm.* The analysis of exhaust gas concentrations begins ten seconds after the applicable test mode begins. Exhaust gas concentrations must be analyzed at a minimum rate of once every 0.75 second. The measured value for pass/fail determinations is a simple running average of the measurements taken over five seconds.

(2) *Pass/fail determination.* A pass or fail determination is made for each applicable test mode based on a comparison of the short test standards contained in §§ 85.2203 and 85.2204, and the measured value for HC and CO as described in paragraph (a)(1) of this section. A vehicle passes the test mode if any pair of simultaneous values for HC and CO are below or equal to the applicable short test standards. A vehicle fails the test mode if the values for either HC or CO, or both, in all simultaneous pairs of values are above the applicable standards.

(3) *Void test conditions.* The test immediately terminates and any exhaust gas measurements are voided if the measured concentration of CO plus CO_2 falls below 6 percent or the vehicle's engine stalls at any time during the test sequence.

(4) *Multiple exhaust pipes.* Exhaust gas concentrations from vehicle engines equipped with multiple exhaust pipes must be sampled simultaneously.

(5) The test is immediately terminated upon reaching the overall maximum test time.

(b) *Test sequence.* (1) The test sequence consists of a first-chance test and a second-chance test as described in paragraphs (b)(1) (i) and (ii) of this section.

(i) The first-chance test, as described under paragraph (c) of this section, consists of an idle mode.

(ii) The second-chance test as described under paragraph (d) of this section is performed only if the vehicle fails the first-chance test.

(2) The test sequence begins only after the requirements described in paragraphs (b)(2) (i) through (v) of this section are met.

(i) The dynamometer must be warmed up, in stabilized operating condition, adjusted, and calibrated in accordance with the procedures of § 85.2233. Prior to each test, variable-curve dynamometers must be checked for proper setting of the road-load indicator or road-load controller.

(ii) The vehicle is tested in as-received condition with all accessories turned off. The engine must be at normal operating temperature (as indicated by a temperature gauge, temperature lamp, touch test on the radiator hose, or other visual observation indicating that overheating has not occurred).

(iii) The vehicle must be operated during each mode of the test with the gear selector in the position described in paragraphs (b)(2)(iii) (A) and (B) of this section.

(A) In drive for automatic transmissions and in second (or third if more appropriate) for manual transmissions for the loaded preconditioning mode.

(B) In park or neutral for the idle mode.

(iv) The sample probe is inserted into the vehicle's tailpipe to a minimum depth of 10 inches. If the vehicle's exhaust system prevents insertion to this depth, a tailpipe extension must be used.

(v) The measured concentration of CO plus CO_2 must be greater than or equal to 6 percent.

(c) *First-chance test.* The test timer starts (tt=0) when the conditions specified in paragraph (b)(2) of this section are met. The overall maximum test time is 155 seconds (tt=155). The first-chance test consists of an idle mode only.

(1) The minimum mode length is determined as described in paragraph (c)(2) of this section. The maximum mode length is 90 seconds elapsed time (mt=90).

(2) The pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made

for the vehicle and the mode terminates in accordance with paragraphs (c)(2) (i) through (v) of this section.

(i) The vehicle passes the idle mode and the test is immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(ii) The vehicle passes the idle mode and the test is terminated at the end of an elapsed time of 30 seconds (mt=30) if, prior to that time, the criteria of paragraph (c)(2)(i) of this section are not satisfied, and the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(iii) The vehicle passes the idle mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 90 seconds (mt=90), the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(iv) The vehicle fails the idle mode and the test is terminated if none of the provisions of paragraphs (c)(2)(i), (ii), and (iii) of this section is satisfied by an elapsed time of 90 seconds (mt=90). Alternatively, the vehicle may be failed if the provisions of paragraphs (c)(2)(i) and (ii) of this section are not met within an elapsed time of 30 seconds.

(v) *Optional.* The vehicle may fail the first-chance test and the second-chance test may be omitted if no exhaust gas concentration less than 1800 ppm HC is found at an elapsed time of 30 seconds (mt=30).

(d) *Second-chance test.* If the vehicle fails the first-chance test, the test timer resets to zero (tt=0) and a second-chance test is performed. The overall maximum test time for the second-chance test is 200 seconds (tt=200). The test consists of a preconditioning mode using a chassis dynamometer, followed immediately by an idle mode.

(1) *Preconditioning mode.* (i) The mode timer starts (mt=0) when the dynamometer speed is within the limits specified for the vehicle engine size in accordance with the following schedule. The mode continues for a minimum elapsed time of 30 seconds (mt=30). If the dynamometer speed falls outside the limits for more than five seconds in one excursion, or 15 seconds over all excursions, the mode timer resets to zero and resumes timing.

DYNAMOMETER TEST SCHEDULE

Gasoline engine size, No. cylinders	Roll speed, mph (kph)	Normal loading, brake hp (kilowatts)
4 or less	22–25 (35–40)	2.8–4.1 (2.1–3.1).
5–6	29–32 (47–52)	6.8–8.4 (5.1–6.3).
7 or more	32–35 (52–56)	8.4–10.8 (6.3–8.1).

(2) *Idle mode*—(i) *Ford Motor Company and Honda vehicles.* (Optional.) The engines of 1981–1987 model year Ford Motor Company vehicles and 1984–1985 model year Honda Preludes must be shut off for not more than ten seconds and restarted. This procedure may also be used for 1988–1989 model year Ford Motor Company vehicles but may not be used for other vehicles. The probe may be removed from the tailpipe or the sample pump turned off if necessary to reduce analyzer fouling during the restart procedure.

(ii) The mode timer starts (mt=0) 5 seconds after the dynamometer speed has reached zero. The minimum idle mode length is determined as described in paragraph (d)(2)(iii) of this section. The maximum idle mode length is 90 seconds elapsed time (mt=90).

(iii) The pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the mode is terminated in accordance with paragraphs (d)(2)(iii) (A) through (D) of this section.

(A) The vehicle passes the idle mode and the test is immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(B) The vehicle passes the idle mode and the test is terminated at the end of an elapsed time of 30 seconds (mt=30) if, prior to that time, the criteria of paragraph (d)(2)(ii)(A) of this section are not satisfied, and the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(C) The vehicle passes the idle mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 90 seconds (mt=90), measured values are less than or equal to the applicable short test standards described in paragraph (a)(2) of this section.

(D) The vehicle fails the idle mode and the test is terminated if none of the provisions of paragraphs (d)(2)(ii)(A), (B), and (C) of this section is satisfied by an elapsed time of 90 seconds (mt=90).

[58 FR 58409, Nov. 1, 1993]

§ 85.2220 Preconditioned two speed idle test—EPA 91.

(a) *General requirements*—(1) *Exhaust gas sampling algorithm.* The analysis of exhaust gas concentrations begins ten seconds after the applicable test mode begins. Exhaust gas concentrations must be analyzed at a minimum rate of once every 0.75 second. The measured value for pass/fail determinations is a simple running average of the measurements taken over five seconds.

(2) *Pass/fail determination.* A pass or fail determination is made for each applicable test mode based on a comparison of the short test standards contained in §§ 85.2203 and 85.2204, and the measured value for HC and CO as described in paragraph (a)(1) of this section. A vehicle passes the test mode if any pair of simultaneous values for HC and CO are below or equal to the applicable short test standards. A vehicle fails the test mode if the values for either HC or CO, or both, in all simultaneous pairs of values are above the applicable standards.

(3) *Void test conditions.* The test immediately terminates and any exhaust gas measurements are voided if the measured concentration of CO plus CO_2 falls below six percent or the vehicle's engine stalls at any time during the test sequence.

(4) *Multiple exhaust pipes.* Exhaust gas concentrations from vehicle engines equipped with multiple exhaust pipes must be sampled simultaneously.

(5) The test is immediately terminated upon reaching the overall maximum test time.

(b) *Test sequence.* (1) The test sequence consists of a first-chance test and a second-chance test as described in paragraphs (b)(1) (i) and (ii) of this section.

(i) The first-chance test, as described under paragraph (c) of this section, consists of a first-chance high-speed mode followed immediately by a first-chance idle mode.

(ii) The second-chance test as described under paragraph (d) of this section is performed only if the vehicle fails the first-chance test.

(2) The test sequence begins only after the requirements described in paragraphs (b)(2) (i) through (iv) of this section are met.

(i) The vehicle is tested in as-received condition with the transmission in neutral or park and all accessories turned off. The engine must be at normal operating temperature (as indicated by a temperature gauge, temperature lamp, touch test on the radiator hose, or other visual observation indicating that overheating has not occurred).

(ii) For all pre-1996 model year vehicles, a tachometer shall be attached to the vehicle in accordance with the analyzer manufacturer's instructions. For 1996 and newer model year vehicles the OBD data link connector will be used to monitor RPM. In the event that an OBD data link connector is not available or that an RPM signal is not available over the data link connector, a tachometer shall be used instead.

(iii) The sample probe is inserted into the vehicle's tailpipe to a minimum depth of 10 inches. If the vehicle's exhaust system prevents insertion to this depth, a tailpipe extension must be used.

(iv) The measured concentration of CO plus CO2 must be greater than or equal to six percent.

(c) *First-chance test.* The test timer starts (tt=0) when the conditions specified in paragraph (b)(2) of this section are met. The overall maximum test time is 290 seconds (tt=290). The first-chance test consists of a high-speed mode followed immediately by an idle mode.

(1) *First-chance high-speed mode.* (i) The mode timer starts (mt=0) when the vehicle engine speed is between 2200 and 2800 rpm. If the engine speed falls below 2200 rpm or exceeds 2800 rpm for

more than two seconds in one excursion, or more than six seconds over all excursions within 30 seconds of the final measured value used in the pass/fail determination, the measured value is invalidated and the mode continued. If any excursion lasts for more than ten seconds, the mode timer resets to zero (mt=0) and timing resumes. The high-speed mode length is 90 seconds elapsed time (mt=90).

(ii) The pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the mode is terminated in accordance with paragraphs (c)(1)(ii)(A) through (C) of this section.

(A) The vehicle passes the high-speed mode and the mode is terminated at an elapsed time of 90 seconds (mt=90) if any measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(B) The vehicle fails the high-speed mode and the mode is terminated if the requirements of paragraph (c)(1)(ii)(A) of this section are not satisfied by an elapsed time of 90 seconds (mt=90).

(C) *Optional.* The vehicle may fail the first-chance test and any subsequent test may be omitted if no exhaust gas concentration lower than 1800 ppm HC is found at an elapsed time of 30 seconds (mt=30).

(2) *First-chance idle mode.* (i) The mode timer starts (mt=0) when the vehicle engine speed is between 350 and 1100 rpm. If the engine speed exceeds 1100 rpm or falls below 350 rpm, the mode timer resets to zero and resumes timing. The minimum first-chance idle mode length is determined as described in paragraph (c)(2)(ii) of this section. The maximum first-chance idle mode length is 90 seconds elapsed time (mt=90).

(ii) The pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the mode is terminated in accordance with paragraphs (c)(2)(ii) (A) through (D) of this section.

(A) The vehicle passes the idle mode and the test is immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(B) The vehicle passes the idle mode and the test is terminated at the end of an elapsed time of 30 seconds (mt=30) if, prior to that time, the criteria of paragraph (c)(2)(ii)(A) of this section are not satisfied, and the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(C) The vehicle passes the idle mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 90 seconds (mt=90), the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(D) The vehicle fails the idle mode and the test is terminated if none of the provisions of paragraphs (c)(2)(ii)(A), (B), and (C) of this section is satisfied by an elapsed time of 90 seconds (mt=90). Alternatively, the vehicle may be failed if the provisions of paragraphs (c)(2) (i) and (ii) of this section are not met within the elapsed time of 30 seconds.

(d) *Second-chance test.* (1) If the vehicle fails either mode of the first-chance test, the test timer resets to zero (tt=0) and a second-chance test begins. The second-chance test is performed based on the first-chance test failure mode or modes as described in paragraphs (d)(1)(i) through (iii) of this section.

(i) If the vehicle failed only the first-chance high-speed mode, the second-chance test consists of a second-chance high-speed mode as described in paragraph (d)(2) of this section. The overall maximum test time is 280 seconds (tt=280).

(ii) If the vehicle failed only the first-chance idle mode, the second-chance test consists of a second-chance preconditioning mode followed immediately by a second-chance idle mode as described in paragraphs (d) (3) and (4) of this section. The overall maximum test time is 425 seconds (tt=425).

(iii) If both the first-chance high-speed mode and first-chance idle mode were failed, the second-chance test consists of the second-chance high-speed mode followed immediately by

the second-chance idle mode as described in paragraphs (d) (2) and (4) of this section. However, if during this second-chance procedure, the vehicle fails the second-chance high-speed mode, then the second-chance idle mode may be eliminated. The overall maximum test time is 425 seconds (tt=425).

(2) *Second-chance high-speed mode*—(i) *Ford Motor Company and Honda vehicles.* The engines of 1981–1987 model year Ford Motor Company vehicles and 1984–1985 model year Honda Preludes must be shut off for not more than ten seconds and then restarted. The probe may be removed from the tailpipe or the sample pump turned off if necessary to reduce analyzer fouling during the restart procedure. This procedure may also be used for 1988–1989 model year Ford Motor Company vehicles but may not be used for other vehicles.

(ii) The mode timer resets (mt=0) when the vehicle engine speed is between 2200 and 2800 rpm. If the engine speed falls below 2200 rpm or exceeds 2800 rpm for more than two seconds in one excursion, or more than six seconds over all excursions within 30 seconds of the final measured value used in the pass/fail determination, the measured value is invalidated and the mode continued. The minimum second-chance high-speed mode length is determined as described in paragraphs (d)(2) (iii) and (iv) of this section. If any excursion lasts for more than ten seconds, the mode timer resets to zero (mt=0) and timing resumes. The maximum second-chance high-speed mode length is 180 seconds elapsed time (mt=180).

(iii) In the case where the second-chance high-speed mode is not followed by the second-chance idle mode, the pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the mode is terminated in accordance with paragraphs (d)(2)(iii) (A) through (D) of this section.

(A) The vehicle passes the high-speed mode and the test is immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(B) The vehicle passes the high-speed mode and the test is terminated if at the end of an elapsed time of 30 seconds (mt=30) if, prior to that time, the criteria of paragraph (d)(2)(iii)(A) of this section are not satisfied, and the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(C) The vehicle passes the high-speed mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 180 seconds (mt=180), the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(D) The vehicle fails the high-speed mode and the test is terminated if none of the provisions of paragraphs (d)(2)(iii) (A), (B), and (C) of this section is satisfied by an elapsed time of 180 seconds (mt=180).

(iv) In the case where the second-chance high-speed mode is followed by the second-chance idle mode, the pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the mode is terminated in accordance with paragraphs (d)(2)(iv)(A) and (B) of this section.

(A) The vehicle passes the high-speed mode and the mode is terminated at the end of an elapsed time of 180 seconds (mt=180) if any measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(B) The vehicle fails the high-speed mode and the mode is terminated if paragraph (d)(2)(iv)(A) of this section is not satisfied by an elapsed time of 180 seconds (mt=180).

(3) *Second-chance preconditioning mode.* The mode timer starts (mt=0) when engine speed is between 2200 and 2800 rpm. The mode continues for an elapsed time of 180 seconds (mt=180). If the engine speed falls below 2200 rpm or exceeds 2800 rpm for more than five seconds in any one excursion, or 15 seconds over all excursions, the mode

timer resets to zero and resumes timing.

(4) *Second-chance idle mode*—(i) *Ford Motor Company and Honda vehicles.* The engines of 1981–1987 model year Ford Motor Company vehicles and 1984–1985 model year Honda Preludes must be shut off for not more than ten seconds and then restarted. The probe may be removed from the tailpipe or the sample pump turned off if necessary to reduce analyzer fouling during the restart procedure. This procedure may also be used for 1988–1989 model year Ford Motor Company vehicles but may not be used for other vehicles.

(ii) The mode timer starts (mt=0) when the vehicle engine speed is between 350 and 1100 rpm. If the engine speed exceeds 1100 rpm or falls below 350 rpm the mode timer resets to zero and resumes timing. The minimum second-chance idle mode length is determined as described in paragraph (d)(4)(iii) of this section. The maximum second-chance idle mode length is 90 seconds elapsed time (mt=90).

(iii) The pass/fail analysis begins after an elapsed time of ten seconds (mt=10). A pass or fail determination is made for the vehicle and the mode is terminated in accordance with paragraphs (d)(4)(iii) (A) through (D) of this section.

(A) The vehicle passes the second-chance idle mode and the test is immediately terminated if, prior to an elapsed time of 30 seconds (mt=30), measured values are less than or equal to 100 ppm HC and 0.5 percent CO.

(B) The vehicle passes the second-chance idle mode and the test is terminated at the end of an elapsed time of 30 seconds (mt=30) if, prior to that time, the criteria of paragraph (d)(4)(iii)(A) of this section are not satisfied, and the measured values are less than or equal to the applicable short test standards as determined by the procedure described in paragraph (a)(2) of this section.

(C) The vehicle passes the second-chance idle mode and the test is immediately terminated if, at any point between an elapsed time of 30 seconds (mt=30) and 90 seconds (mt=90), measured values are less than or equal to the applicable short test standards described in paragraph (a)(2) of this section.

(D) The vehicle fails the second-chance idle mode and the test is terminated if none of the provisions of paragraphs (d)(4)(iii) (A), (B), and (C) of this section is satisfied by an elapsed time of 90 seconds (mt=90).

[58 FR 58411, Nov. 1, 1993, as amended at 61 FR 40947, Aug. 6, 1996]

§ 85.2221 [Reserved]

§ 85.2222 On-board diagnostic test procedures.

The test sequence for the inspection of on-board diagnostic systems on 1996 and newer light-duty vehicles and light-duty trucks shall consist of the following steps:

(a) The on-board diagnostic inspection shall be conducted with key-on/engine-running (KOER).

(b) The inspector shall locate the vehicle connector and plug the test system into the connector.

(c) The test system shall send a Mode $01, PID $01 request in accordance with SAE J1979 to determine the evaluation status of the vehicle's on-board diagnostic system. The test system shall determine what monitors are supported by the on-board diagnostic system, and the readiness evaluation for applicable monitors in accordance with SAE J1979. The procedure shall be done in accordance with SAE J1979 ''E/E Diagnostic Test Modes,'' (DEC91). This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of SAE J1979 may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096–0001. Copies may be inspected at the EPA Docket No. A–94–21 at EPA's Air Docket (LE–131), Room 1500 M, 1st Floor, Waterside Mall, 401 M Street SW, Washington, DC, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC. Beginning January 1, 2001, if the readiness evaluation indicates that any on-board tests are not complete the customer shall be instructed to return after the vehicle has been run under conditions that allow completion of all

applicable on-board tests. If the readiness evaluation again indicates that any on-board test is not complete the vehicle shall be failed.

(d) The test system shall evaluate the malfunction indicator light status bit and record status information in the vehicle test record.

(1) If the malfunction indicator status bit indicates that the malfunction indicator light has been commanded to be illuminated the test system shall send a Mode $03 request to determine the stored emission related power train trouble codes. The system shall repeat this cycle until the number of codes reported equals the number expected based on the Mode 1 response. If any of the codes listed in §85.2207(d) are present they shall be recorded in the vehicle test record and the vehicle shall fail the on-board diagnostic inspection.

(2) If the malfunction indicator light bit is not commanded to be illuminated the vehicle shall pass the on-board diagnostic inspection, even if codes listed at §85.2207(d) are present.

(3) If the malfunction indicator light bit is commanded to be illuminated, the inspector shall visually inspect the malfunction indicator light to determine if it is illuminated. If the malfunction indicator light is commanded to be illuminated but is not, the vehicle shall fail the on-board diagnostic inspection.

[61 FR 40947, Aug. 6, 1996, as amended at 63 FR 24433, May 4, 1998]

§85.2223 On-board diagnostic test report.

(a) Motorists whose vehicles fail the on-board diagnostic test described in §85.2222 shall be provided with the on-board diagnostic test results, including the codes retrieved (as listed in paragraph (b) of this section), the status of the MIL illumination command, and the customer alert statement (as stated in paragraph (c) of this section).

(b) If any of the following codes are retrieved the corresponding component shall be listed on the test report in the following way:

Code	Component
PX1XX	Fuel and Air Metering.
PX2XX	Fuel and Air Metering.
PX3XX	Ignition System or Misfire.
PX4XX	Auxiliary Emission Controls.
P0500	Vehicle Speed Sensor.
P0501	Vehicle Speed Sensor.
P0502	Vehicle Speed Sensor.
P0503	Vehicle Speed Sensor.
P0505	Idle Control System.
P0506	Idle Control System.
P0507	Idle Control System.
P0510	Closed Throttle Position Switch.
P0550	Power Steering Pressure Sensor Circuit.
P0551	Power Steering Pressure Sensor Circuit.
P0552	Power Steering Pressure Sensor Circuit.
P0553	Power Steering Pressure Sensor Circuit.
P0554	Power Steering Pressure Sensor Circuit.
P0560	System Voltage.
P0561	System Voltage.
P0562	System Voltage.
P0563	System Voltage.
PX6XX	Computer and Output Circuits.
P0703	Brake Switch.
P0705	Transmission Range Sensor Circuit.
P0706	Transmission Range Sensor Circuit.
P0707	Transmission Range Sensor Circuit.
P0708	Transmission Range Sensor Circuit.
P0709	Transmission Range Sensor Circuit.
P0719	Torque Converter/Brake Switch.
P0720	Output Speed Sensor.
P0721	Output Speed Sensor.
P0722	Output Speed Sensor.
P0723	Output Speed Sensor.
P0724	Torque Converter/Brake Switch.
P0725	Engine Speed Input Circuit.
P0726	Engine Speed Input Circuit.
P0727	Engine Speed Input Circuit.
P0728	Engine Speed Input Circuit.
P0740	Torque Converter Clutch System.
P0741	Torque Converter System.
P0742	Torque Converter Clutch System.
P0743	Torque Converter Clutch System.
P0744	Torque Converter Clutch System.

(c) In addition to any codes which were retrieved, the test report shall include the following language:

Your vehicle's computerized self-diagnostic system (OBD) registered the fault(s) listed below. This fault(s) is probably an indication of a malfunction of an emission component. However, multiple and/or seemingly unrelated faults may be an indication of an emission-related problem that occurred previously but upon further evaluation by the OBD system was determined to be only temporary. Therefore, proper diagnosis by a qualified technician is required to positively identify the source of any emission-related problem.

[61 FR 40948, Aug. 6, 1996]

§85.2224 Exhaust analysis system—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 §85.2225 apply

concurrently until December 31, 1993, after which the requirements of §85.2225 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 this section 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 this section are concurrently in effect until December 31, 1995 for 1995 and earlier model year vehicles or engines.

(b) *Sampling system*—(1) *General requirements.* The exhaust sampling system shall consist of a sample probe, moisture separator and analyzers for HC and CO.

(2) *Dual sample probe requirements.* If used, a dual sample probe must provide equal flow in each leg. The equal flow criterion is considered to be met if the flow rate in each leg of the probe (or an identical model) has been measured under two sample flow rates (the normal rate and a rate equal to the onset of low flow), and if the flow rates in each of the legs are found to be equal to each other (±15%).

(c) *Analyzers*—(1) *Accuracy.* The HC analyzer shall have an accuracy of ±15 ppm at 200 to 220 ppm concentration HC (as hexane). The CO analyzer shall have an accuracy of ±0.1% CO from 1.0% to 1.2% concentration.

(2) *Response time.* Response time of the analyzers shall be 15 seconds to 95% of the final reading.

(3) *Drift.* Analyzer drift (up-scale and down-scale zero and span wander) shall not exceed ±0.1% CO and ±15 ppm HC (as hexane) on the lowest range capable of reading 1.0% or 200 ppm HC (as hexane) during a one-hour period.

[49 FR 24323, June 12, 1984. Redesignated and amended at 58 FR 58403, 58412, Nov. 1, 1993]

§85.2225 Steady state test exhaust analysis system—EPA 91.

(a) *Special calendar and model year applicability.* The requirements of §85.2224 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 §85.2224 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 §85.2224 are concurrently in effect until December 31, 1995, for 1995 and earlier model year vehicles or engines.

(b) *Sampling System*—(1) *General requirements.* The sampling system for steady state short tests consists, at a minimum, of a tailpipe probe; a flexible sample line; a water removal system; particulate trap; sample pump; flow control components; tachometer or dynamometer; analyzers for HC, CO, and CO2; and digital displays for exhaust concentrations of HC, CO, and CO2; and for engine rpm. Materials that are in contact with the gases sampled may not contaminate or change the character of the gases to be analyzed, including gases from alcohol-fueled vehicles. The probe must be capable of being inserted to a depth of at least ten inches into the tailpipe of the vehicle being tested or into an extension boot, if one is used. A digital display for dynamometer speed and load must be included if the test procedures described in §85.2217 or §85.2219 are conducted. Minimum specifications for optional NO analyzers are also described in this section. The analyzer system must be able to test, as specified in §§85.2213, 85.2215, 85.2217, 85.2218, 85.2219, and

85.2220 all model vehicles in service at the time of sale of the analyzer.

(2) *Temperature operating range.* The sampling system and all associated hardware must be of a design certified to operate within the performance specifications described in paragraph (c) of this section in ambient air temperatures ranging from 41 to 110 °F. The analyzer system must, where necessary, include features to keep the sampling system within the specified range.

(3) *Humidity operating range.* The sampling system and all associated hardware must be of a design certified to operate within the performance specifications described in paragraph (c) of this section at a minimum of 80 percent relative humidity throughout the required temperature range.

(4) *Barometric pressure compensation.* Barometric pressure compensation must be provided. Compensation is made for elevations up to 6000 feet (above mean sea level). At any given altitude and ambient conditions specified in paragraphs (b) (2) and (3) of this section, errors due to barometric pressure changes of ±2 inches of mercury may not exceed the accuracy limits specified in paragraph (c) of this section.

(5) *Dual sample probe requirements.* When testing a vehicle with dual exhaust pipes, a dual sample probe of a design certified by the analyzer manufacturer to provide equal flow in each leg must be used. The equal flow requirement is considered to be met if the flow rate in each leg of the probe has been measured under two sample pump flow rates (the normal rate and a rate equal to the onset of low flow), and if the flow rates in each of the legs are found to be equal to each other (within 15 percent of the flow rate in the leg having lower flow).

(6) *System lockout during warmup.* Functional operation of the gas sampling unit must remain disabled through a system lockout until the instrument meets stability and warmup requirements. The instrument is considered ''warmed up'' when the zero and span readings for HC, CO, and CO_2 have stabilized, within ±3 percent of the full range of low scale, for five minutes without adjustment.

(7) *Electromagnetic isolation and interference.* Electromagnetic signals found in an automotive service environment may not cause malfunctions or changes in the accuracy in the electronics of the analyzer system. The instrument design must ensure that readings do not vary as a result of electromagnetic radiation and induction devices normally found in the automotive service environment, including high energy vehicle ignition systems, radio frequency transmission radiation sources, and building electrical systems.

(8) *Vibration and shock protection.* System operation must be unaffected by the vibration and shock encountered under the normal operating conditions encountered in an automotive service environment.

(9) *Propane Equivalency Factor.* The Propane Equivalency Factor must be displayed in a manner that enables it to be viewed conveniently, while permitting it to be altered only by personnel specifically authorized to do so.

(c) *Analyzers*—(1) *Accuracy.* The analyzers must be of a design certified to meet the following accuracy requirements when calibrated to the span points specified in §85.2233(e)(2):

Channel	Range	Accuracy	Noise	Repeatability
HC, as hexane	0–400 ±12	6	8	
	401–1000±30	10	15	
	1001–2000±80	20	30	
CO, %	0–2.00±0.06	0.02	0.03	
	2.01–5.00±0.15	.06	.08	
	5.01–9.99±0.40	.10	.15	
CO_2,%	0–4.0±0.6	.2	.3	
	4.1–14.0±0.5	.2	.3	
	14.1–16.0±0.6	.2	.3	
NO, ppm	0–1000±32	16	20	
	1001–2000±60	25	30	
	2001–4000±120	50	60	

(2) *Minimum analyzer display resolution.* The analyzer electronics must have sufficient resolution to achieve the level of accuracy indicated in paragraphs (c)(2)(i) through (v) of this section.

(i) HC 1 ppm HC as hexane.

(ii) CO 0.01% CO.

(iii) CO2 0.1% CO_2.

(iv) NO 1 ppm NO.

(v) RPM 1 rpm.

(3) *Response time.* The response time from the probe to the display for HC, CO, and CO_2 analyzers may not exceed eight seconds to 90 percent of a step change in input. For NO analyzers, the response time may not exceed twelve seconds to 90 percent of a step change in input.

(4) *Display refresh rate.* Dynamic information being displayed must be refreshed at a minimum rate of twice per second.

(5) *Interference effects.* The interference effects for non-interest gases may not exceed ±10 ppm for hydrocarbons, ±0.05 percent for carbon monoxide, ±0.20 percent for carbon dioxide, and ±20 ppm for oxides of nitrogen.

(6) *Low flow indication.* The analyzer must provide an indication when the sample flow is below the acceptable level. The sampling system must be equipped with a flow meter (or equivalent) that indicates sample flow degradation when meter error exceeds three percent of full scale, or causes 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.

[58 FR 58413, Nov. 1, 1993; 59 FR 33913, July 1, 1994]

§§ 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 this section 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 this section 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.

[49 FR 24323, June 12, 1984. Redesignated and amended at 58 FR 58403, 58414, Nov. 1, 1993]

§ 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 a driving axle weight up to four thousand (4,000) pounds or greater.

(4) *Between roll wheel lifts.* For dual-roll dynamometers, these must be controllable and capable of lifting a minimum of four thousand (4,000) pounds.

(5) *Roll brakes.* Rolls must be locked when the wheel lift is up.

(6) *Speed indications.* The dynamometer speed display must have a range of 0 mph to 60 mph (or 0 kph to 100 kph), and a resolution and accuracy of at least 1 mph (or 1 kph).

(7) *Safety interlock.* A roll speed sensor and safety interlock circuit must be provided which prevents the application of the roll brakes and upward lift movement at any roll speed above 0.5 mph (0.8 kph).

(c) The dynamometer must produce the load speed relationships specified in §§85.2217 and 85.2219.

[58 FR 58414, Nov. 1, 1993]

§85.2231 On-board diagnostic test equipment requirements.

(a) The test system interface to the vehicle shall include a plug that conforms to SAE J1962 ''Diagnostic Connector.'' The procedure shall be done in accordance with SAE J1962 ''Diagnostic Connector'' (JUN92). This incorporation of reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552 (a) and 1 CFR part 51. Copies of SAE J1962 may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096–0001. Copies may be inspected at the EPA Docket No. A–94–21 at EPA's Air Docket, (LE–131) Room 1500 M, 1st Floor, Waterside Mall, 401 M Street SW., Washington, DC, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(b) The test system shall be capable of communicating with the standard data link connector of vehicles with certified OBD systems.

(c) The test system shall be capable of checking for the monitors supported by the on-board diagnostic system and the evaluation status of supported monitors (test complete/test not complete) in Mode $01 PID $01, as well as be able to request the diagnostic trouble codes, as specified in SAE J1979. In addition, the system shall have the capability to include bi-directional communication for control of the evaporative canister vent solenoid. SAE J1979 is incorporated by reference and approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of all the SAE documents cited above may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096–0001. Copies may be inspected at the EPA Docket No. A–94–21 at EPA's Air Docket, (LE–131) Room 1500 M, 1st Floor, Waterside Mall, 401 M Street SW., Washington, DC, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(d) The test system shall automatically make a pass, fail, or reject decision, as specified in the test procedure in § 85.2222.

[61 FR 40948, Aug. 6, 1996, as amended at 63 FR 24434, May 4, 1998]

§ 85.2232 Calibrations, adjustments—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 § 85.2233 apply concurrently until December 31, 1993, after which the requirements of § 85.2233 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 this section 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 this section are concurrently in effect until December 31, 1995 for 1995 and earlier model year vehicles or engines.

(b) Equipment shall be calibrated in accordance with the manufacturers' instructions.

(c) *Hourly checks.* Within one hour prior to a test, the analyzers shall be zeroed and spanned. Ambient air is acceptable as a zero gas; an electrical span check is acceptable. Zero and span checks shall be made on the lowest range capable of reading the short test standard. Analyzers that perform an automatic zero/span adjustment every time a test sequence is initiated are considered to meet the hourly checks.

(d) *Daily checks.* Within eight hours prior to a loaded test, the dynamometer shall be checked for proper power absorber settings.

(e) *Weekly checks*—(1) *Leak check.* For analyzers with a separate calibration or span port, CO readings using the span gas through the probe and through the calibration port shall be made and compared; discrepancies of over 3% shall require repair of leaks. No analyzer adjustments shall be permitted during this check. The leak check and the following gas span check may be combined into one operation.

(2) *Gas span check.* Within one week of the test, the analyzers shall have been spanned using calibration gases which meet the requirements in paragraph (d)(4) of this section and shall not have been readjusted since to a non-conforming gas. If the analyzer reads the span gas within 2% of the span gas value or within .05% CO and 6 ppm HC (use the larger of the two tolerances), then no adjustment of the analyzer is needed. For this check the span gas may be introduced either through the calibration port (if so equipped) or through the probe. This paragraph does not prevent those who wish to always adjust the analyzer to the exact span value from doing so.

(3) *Gas span adjustment.* If the analyzer fails to meet the gas span check specifications, then the analyzer shall be adjusted by the following procedures:

(i) For analyzers *without* a calibration port, perform a simple leak check (e.g., cap the probe). Repair any leaks before continuing with this procedure. Introduce the span gas through the probe for this adjustment.

(ii) For analyzers *with* a calibration port, introduce the span gas through the port for this adjustment.

(iii) Perform a zero adjustment and a flowing span gas adjustment. Iterate between span and zero, as necessary, to obtain stable readings within the gas span check specifications.

(iv) Check the electrical span *without* changing the zero or span adjustments set in step (iii). If the electrical span does not match the electrical span line or voltage level, locate the potentiometer that controls the relationship between the gas span and the electrical span. Adjust this control until the electrical span target is achieved.

(v) Following this procedure, if the gas span value cannot be held within the 2% tolerance (or .05% CO and 6 ppm HC) while also meeting the electrical span criteria, then the analysis system

and calibration bottle shall be removed from service until the problem is resolved and the adjustment tolerance met.

(vi) Automatic analyzers that perform either a substantially similar adjustment procedure or mathematical correction procedure are considered to meet this adjustment procedure.

(4) *Span gases.* The span gas used for the weekly check shall be traceable to NBS standards ±2% and have concentrations either:

(i) Between the standards specified in this subpart and the jurisdiction's inspection standards for the 1981 model year light duty vehicles, or

(ii) Within −50% to +100% of the standards in this subpart.

(f) *Other checks.* In addition to performing span and leak checks on a periodic basis, these checks shall also be used to verify system performance under the following special circumstances.

(1) *Gas span check.* Within one week of the test, the analyzers must have been spanned using calibration gases which met the requirements in paragraph (e)(4) of this section and must not have been readjusted since to a non-conforming gas. If the analyzer reads the span gas within two percent of the span gas value or within .05 percent of the CO and 6 ppm HC (use the larger of the two tolerances), then no adjustment of the analyzer is needed. (However, adjusting the analyzer to the exact span value is not precluded.) For this check the span gas may be introduced either through the calibration port, if so equipped, or through the probe.

(2) *Leak checks.* Each time the sample line integrity is broken, a leak check shall be performed prior to testing. A simple vacuum leak check (i.e., block the probe and check for low flow) is considered acceptable for these non-periodic checks.

[49 FR 24323, June 12, 1984. Redesignated and amended at 58 FR 58403, 58415, Nov. 1, 1993]

§ 85.2233 Steady state test equipment calibrations, adjustments, and quality control—EPA 91.

(a) *Special calendar and model year applicability.* The requirements of § 85.2232 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 § 85.2232 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 § 85.2232 are concurrently in effect until December 31, 1995 for 1995 and earlier model year vehicles or engines.

(b) Equipment must be calibrated in accordance with the manufacturers' instructions.

(c) *Prior to each test*—(1) *Hydrocarbon hang-up check.* Immediately prior to each test the analyzer automatically performs a hydrocarbon hang-up check. If the HC reading, when the probe is sampling ambient air, exceeds 20 ppm, the system must be purged with clean air or zero gas. The analyzer must be inhibited from continuing the test until HC levels drop below 20 ppm.

(2) *Automatic zero and span.* The analyzer conducts an automatic zero and span check prior to each test. The span check must include the HC, CO, and CO2 channels and, if present, the NO channel. If zero and/or span drift cause the signal levels to move beyond the adjustment range of the analyzer, it must lock out from testing.

(3) *Low flow.* The system locks out from testing if the sample flow is below the acceptable level as defined in § 85.2225(c)(6).

(d) *Leak check.* A system leak check is performed within 24 hours before the test in low volume stations (those performing less than 4,000 inspections per year) and within four hours in high-volume stations (4,000 or more inspections per year) and may be performed

in conjunction with the gas calibration described in paragraph (e)(1) of this section. If a leak check is not performed within the preceding 24 hours in low volume stations and within four hours in high-volume stations or if the analyzer fails the leak check, the analyzer must lock out from testing. The leak check must be a procedure demonstrated to effectively check the sample hose and probe for leaks and is performed in accordance with good engineering practices. An error of more than ±2 percent of the reading using low range span gas must cause the analyzer to lock out from testing, and requires repair of leaks.

(e) *Gas calibration.* (1) On each operating day in high-volume stations, analyzers must automatically require and successfully pass a two-point gas calibration for HC, CO, and CO2 and must continually compensate for changes in barometric pressure. Calibration must be checked within four hours before the test and the analyzer adjusted if the reading is more than two percent different from the span gas value. In low-volume stations, analyzers must undergo a two-point calibration within 72 hours before each test, unless changes in barometric pressure are compensated for automatically and statistical process control demonstrates equal or better quality control using different frequencies. Gas calibration is accomplished by introducing span gas that meets the requirements of paragraph (e)(3) of this section into the analyzer through the calibration port. No adjustment of the analyzer is necessary if the analyzer reads the span gas within the allowable tolerance range; that is, the square root of sum of the squares of the span gas tolerance (described in paragraph (e)(3) of this section) and the calibration tolerance (which is equal to two percent). The gas calibration procedure corrects readings that exceed the allowable tolerance range to the center of the allowable tolerance range. The pressure in the sample cell must be the same with the calibration gas flowing during calibration as with the sample gas flowing during sampling. If the system is not calibrated, or the system fails the calibration check, the analyzer must lock out from testing.

(2) *Span points.* A two-point gas calibration procedure must be followed. The span is accomplished at one of the pairs of span points listed in paragraphs (e)(2)(i) and (ii) of this section.

(i)(A) 300 ppm and 1200 ppm propane (HC).

(B) 1.0% and 4.0% carbon monoxide (CO).

(C) 6.0% and 12.0% carbon dioxide (CO_2).

(D) (if equipped for nitric oxide) 1000 ppm and 3000 ppm nitric oxide (NO).

(ii)(A) 0 ppm and 600 ppm propane (HC).

(B) 0.0% and 1.6% carbon monoxide (CO).

(C) 0.0% and 11.0% carbon dioxide (CO_2)

(D) (if equipped for nitric oxide) 0 ppm and 1200 ppm nitric oxide (NO).

(3) *Span gases.* The analyzed concentrations for the span gases used for calibration must be nominally within two percent of the span points specified in paragraph (d)(2) of this section and must be traceable to National Institute of Standards and Technology (NIST) standards within two percent. Zero gases must conform to the specifications given in §86.114–79 (a)(5) of this chapter.

(f) *Dynamometer checks*—(1) *Monthly check.* Within one month preceding each loaded test, the accuracy of the roll speed indicator must be verified and the dynamometer must be checked for proper power absorber settings.

(2) *Semi-annual check.* Within six months preceding each loaded test as described in §85.2217, the road-load response of the variable-curve dynamometer or the frictional power absorption of the dynamometer must be checked by a coast down procedure similar to that described in §86.118–78 of this chapter. The check is done at 30 mph (48 kph), and a power absorption load setting to generate a power of 4.1 horsepower (or 3.057 kilowatts). The actual coast down time from 45 mph to 15 mph (72 kph to 24 kph) must be within +1 second of the time calculated by the equation in paragraph (f)(2)(i) of this section for English system units or paragraph (f)(2)(ii) of this section for SI units.

(i) $$\text{Coast Down Time} = \frac{0.10932 \times W}{P}$$

where W is the total inertia weight as represented by the weight of the rollers (excluding free rollers), and any inertia flywheels used, measured in pounds, and P is power, measured in horsepower. If the coast down time is not within the specified tolerance the dynamometer must be taken out of service and corrective action must be taken.

(ii) $$\text{Coast Down Time} = \frac{0.17978 \times W}{P}$$

where W is the total inertia weight as represented by the weight of the rollers (excluding free rollers), and any inertia flywheels used, measured in kilograms, and P is power, measured in kilowatts. If the coast down time is not within the specified tolerance the dynamometer must be taken out of service and corrective action must be taken.

(g) *Other checks.* In addition to the other periodic checks described in this section, those described in paragraphs (g)(1) and (2) of this section are also used to verify system performance under the special circumstances described therein.

(1) *Gas calibration.* (i) Each time the analyzer electronic or optical systems are repaired or replaced, a gas calibration is performed prior to returning the unit to service.

(ii) In high-volume stations, monthly multi-point calibrations are performed. Low-volume stations must perform multi-point calibrations every six months. The calibration curve is checked at 20 percent, 40 percent, 60 percent, and 80 percent of full scale, and must be adjusted or repaired if the specifications in §85.2225(c)(1) are not met.

(2) *Leak checks.* Each time the sample line integrity is broken, a leak check is performed prior to testing.

[58 FR 58415, Nov. 1, 1993; 59 FR 33913, July 1, 1994]

§§ 85.2234–85.2236 [Reserved]

§ 85.2237 Test report—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 §85.2238 apply concurrently until December 31, 1993, after which the requirements of §85.2238 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 this section 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 this section are concurrently in effect until December 31, 1995, for 1995 and earlier model year vehicles or engines.

(b) Upon failure of a short test, the vehicle's operator or owner shall be furnished with a test report containing:

(1) Vehicle description, including either license plate or manufacturer identification number, and odometer readings.

(2) Date of test.

(3) Name of individual or organization performing the test and location thereof.

(4) Type of short test performed.

(5) Test results, exhaust concentrations for each mode measured.

(c) The test report shall certify that the short test was performed in accordance with these regulations and it shall be signed by an individual who either performed the test or has actual knowledge of the performance of the test.

(d) For purposes of this section, ''failure of a short test'' means that the vehicle exceeded the standards in this

subpart or the Inspection/Maintenance standards of the jurisdiction, whichever is less stringent.

[49 FR 24323, June 12, 1984. Redesignated and amended at 58 FR 58403, 58416, Nov. 1, 1993]

§ 85.2238 Test report—EPA 91.

(a) *Special calendar and model year applicability.* The requirements of § 85.2237 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 § 85.2237 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 § 85.2237 are concurrently in effect until December 31, 1995 for 1995 and earlier model year vehicles or engines.

(b) Upon failure of a short test, the vehicle's owner or operator must be furnished with a test report containing the information listed in paragraphs (b)(1) through (7) of this section.

(1) Vehicle description, including license plate number, vehicle identification number, weight class, and odometer reading.

(2) Date and time of test.

(3) Name or identification number of the individual performing the test and the location of the test station and lane.

(4) Type of emission test performed.

(5) Applicable emission test standards.

(6) Test results, including exhaust concentrations for each mode measured.

(i) The reported exhaust concentrations are that pair of passing exhaust concentrations or, if none are obtained, that pair of failing exhaust concentrations, for which the product of HC+(151*CO) is a minimum.

(ii) If a second-chance test is conducted the reported exhaust concentrations are those obtained from the second-chance test.

(7) A statement indicating the availability of warranty coverage as provided in section 207 of the Clean Air Act (42 U.S.C. 7541).

(c) The test report must certify that the short test was performed in accordance with these regulations and, in the case of service station based programs, it must be signed by the individual who performed the test.

[58 FR 58416, Nov. 1, 1993]

Subpart X—Determination of Model Year for Motor Vehicles and Engines Used in Motor Vehicles Under Section 177 and Part A of Title II of the Clean Air Act

SOURCE: 60 FR 4738, Jan. 24, 1995, unless otherwise noted.

§ 85.2301 Applicability.

The definitions provided by this subpart are effective February 23, 1995 and apply to all light-duty motor vehicles and trucks, heavy-duty motor vehicles and heavy-duty engines used in motor vehicles, and on-highway motorcycles as such vehicles and engines are regulated under section 177 and Title II part A of the Clean Air Act.

§ 85.2302 Definition of model year.

Model year means the manufacturer's annual production period (as determined under § 85.2304) which includes January 1 of such calendar year, provided, that if the manufacturer has no annual production period, the term ''model year'' shall mean the calendar year.

§ 85.2303 Duration of model year.

A specific model year must always include January 1 of the calendar year for which it is designated and may not include a January 1 of any other calendar year. Thus, the maximum duration of a model year is one calendar year plus 364 days.

§ 85.2304 Definition of production period.

(a) The ''annual production period'' for all models within an engine family of light-duty motor vehicles, heavy-duty motor vehicles and engines, and on-highway motorcycles begins either: when any vehicle or engine within the engine family is first produced; or on January 2 of the calendar year preceding the year for which the model year is designated, whichever date is later. The annual production period ends either: When the last such vehicle or engine is produced; or on December 31 of the calendar year for which the model year is named, whichever date is sooner.

(b) The date when a vehicle or engine is first produced is the ''Job 1 date,'' which is defined as that calendar date on which a manufacturer completes all manufacturing and assembling processes necessary to produce the first saleable unit of the designated model which is in all material respects the same as the vehicle or engine described in the manufacturer's application for certification. The ''Job 1 date'' may be a date earlier in time than the date on which the certificate of conformity is issued.

§ 85.2305 Duration and applicability of certificates of conformity.

(a) Except as provided in paragraph (b) of this section, a certificate of conformity is deemed to be effective and cover the vehicles or engines named in such certificate and produced during the annual production period, as defined in § 85.2304.

(b) Section 203 of the Clean Air Act prohibits the sale, offering for sale, delivery for introduction into commerce, and introduction into commerce, of any new vehicle or engine not covered by a certificate of conformity unless it is an imported vehicle exempted by the Administrator or otherwise authorized jointly by EPA and U.S. Customs Service regulations. However, the Act does not prohibit the production of vehicles or engines without a certificate of conformity. Vehicles or engines produced prior to the effective date of a certificate of conformity, as defined in paragraph (a) of this section, may also be covered by the certificate if the following conditions are met:

(1) The vehicles or engines conform in all material respects to the vehicles or engines described in the application for the certificate of conformity:

(2) The vehicles or engines are not sold, offered for sale, introduced into commerce, or delivered for introduction into commerce prior to the effective date of the certificate of conformity;

(3) The Agency is notified prior to the beginning of production when such production will start, and the Agency is provided full opportunity to inspect and/or test the vehicles during and after their production; for example, the Agency must have the opportunity to conduct selective enforcement auditing production line testing as if the vehicles had been produced after the effective date of the certificate.

(c) New vehicles or engines imported by an original equipment manufacturer after December 31 of the calendar year for which the model year was named are still covered by the certificate of conformity as long as the production of the vehicle or engine was completed before December 31 of that year. This paragraph does not apply to vehicles that may be covered by certificates held by independent commercial importers unless specifically approved by EPA.

(d) Vehicles or engines produced after December 31 of the calendar year for which the model year is named are not covered by the certificate of conformity for that model year. A new certificate of conformity demonstrating compliance with currently applicable standards must be obtained for these vehicles or engines even if they are identical to vehicles or engines built before December 31.

(e) The extended coverage period described here for a certificate of conformity (i.e., up to one year plus 364 days) is primarily intended to allow flexibility in the introduction of new models. Under no circumstances should it be interpreted that existing models may ''skip'' yearly certification by pulling ahead the production of every other model year.

APPENDICES TO PART 85

APPENDIX I–APPENDIX VII [RESERVED]

APPENDIX VIII—VEHICLE AND ENGINE PARAMETERS AND SPECIFICATIONS

A. LIGHT DUTY VEHICLE PARAMETERS AND SPECIFICATIONS

I. Basic Engine Parameters-Reciprocating Engines.
1. Compression ratio.
2. Cranking compression pressure.
3. Valves (intake and exhaust).
a. Head diameter dimension.
b. Valve lifter or actuator type and valve lash dimension.
4. Camshaft timing.
a. Valve opening (degrees BTDC).
b. Valve closing (degrees ATDC).
c. Valve overlap (inch-degrees).
II. Basic Engine Parameters—Rotary Engines.
1. Intake port(s).
a. Timing and overlap if exposed to the combustion chamber.
2. Exhaust port(s).
a. Timing and overlap if exposed to the combustion chamber.
3. Cranking compression pressure.
4. Compression ratio.
III. Air Inlet System.
1. Temperature control system calibration.
IV. Fuel System.
1. General.
a. Engine idle speed.
b. Engine idle mixture.
2. Carburetion.
a. Air-fuel flow calibration.
b. Transient enrichment system calibration.
c. Starting enrichment system calibration.
d. Altitude compensation system calibration.
e. Hot idle compensation system calibration.
3. Fuel injection.
a. Control parameters and calibration.
b. Fuel shutoff system calibration.
c. Starting enrichment system calibration.
d. Transient enrichment system calibration.
e. Air-fuel flow calibration.
f. Altitude compensation system calibration.
g. Operating pressure(s).
h. Injector timing calibrations.
V. Injection System.
1. Control parameters and calibration.
2. Initial timing setting.
3. Dwell setting.
4. Altitude compensation system calibration.
5. Spark plug voltage.
VI. Engine Cooling System.
1. Thermostat calibration.
VII. Exhaust Emission Control System.
1. Air injection system.
a. Control parameters and calibrations.
b. Pump flow rate.
2. EGR system.
a. Control parameters and calibrations.
b. EGR valve flow calibration.
3. Catalytic converter system.
a. Active surface area.
b. Volume of catalyst.
c. Conversion efficiency.
4. Backpressure.
VIII. Evaporative Emission Control System.
1. Control parameters and calibrations.
2. Fuel tank.
a. Pressure and vacuum relief settings.
IX. Crankcase Emission Control System.
1. Control parameters and calibrations.
2. Valve calibration.
X. Auxiliary Emission Control Devices (AECD).
1. Control parameters and calibrations.
2. Component calibration(s).
XI. Emission Control Related Warning Systems.
1. Control parameters and calibrations.
2. Component calibrations.
XII. Driveline Parameters.
1. Axle ratio(s).

B. HEAVY DUTY GASOLINE ENGINE PARAMETERS AND SPECIFICATIONS

I. Basic Engine Parameters.
1. Compression ratio.
2. Cranking compression pressure.
3. Supercharger/turbocharger calibration.
4. Valves (intake and exhaust).
a. Head diameter dimension.
b. Valve lifter or actuator type and valve lash dimension.
5. Camshaft timing.
a. Valve opening (degrees BTDC).
b. Valve closing (degrees ATDC).
c. Valve overlap (inch-degrees).
II. Air Inlet System.
1. Temperature control system calibration.
III. Fuel System.
1. General.
a. Engine idle speed.
b. Engine idle mixture.
2. Carburetion.
a. Air-fuel flow calibration.
b. Transient enrichment system calibration.
c. Starting enrichment system calibration.
d. Altitude compensation system calibration.
e. Hot idle compensation system calibration.
3. Fuel injection.
a. Control parameters and calibrations.
b. Fuel shutoff system calibration.
c. Starting enrichment system calibration.
d. Transient enrichment system calibration.

e. Air-fuel flow calibration.
f. Altitude compensation system calibration.
g. Operating pressure(s).
h. Injector timing calibration.
IV. Ignition System.
1. Control parameters and calibration.
2. Initial timing setting.
3. Dwell setting.
4. Altitude compensation system calibration.
5. Spark plug voltage.
V. Engine Cooling System.
1. Thermostat calibration.
VI. Exhaust Emission Control System.
1. Air injection system.
a. Control parameters and calibrations.
b. Pump flow rate.
2. EGR system.
a. Control parameters and calibrations.
b. EGR valve flow calibration.
3. Catalytic converter system.
a. Active surface area.
b. Volume of catalyst.
c. Conversion efficiency.
4. Backpressure.
VII. Evaporative Emission Control System.
1. Control parameters and calibrations.
2. Fuel tank.
a. Pressure and vacuum relief settings.
VIII. Crankcase Emission Control System.
1. Control parameters and calibrations.
2. Valve calibrations.
IX. Auxiliary Emission Control Devices (AECD).
1. Control parameters and calibrations.
2. Component calibrations.
X. Emission Control Related Warning Systems.
1. Control parameters and calibrations.
2. Component calibrations.

C. HEAVY DUTY DIESEL ENGINE PARAMETERS AND SPECIFICATIONS

I. Basic Engine Parameters-Four Stroke Cycle Reciprocating Engines.
1. Compression ratio.
2. Cranking compression pressure.
3. Supercharger/turbocharger calibration.
4. Valves (intake and exhaust).
a. Head diameter dimension.
b. Valve lifter or actuator type and valve lash dimension.
5. Camshaft timing.
a. Valve opening (degrees BTDC).
b. Valve closing (degrees ATDC).
c. Valve overlap (inch-degrees).
II. Basic Engine Parameters—Two-Stroke Cycle Reciprocating Engine.
1.–5. Same as Section C.I.
6. Intake port(s).
a. Timing in combustion cycle.
7. Exhaust port(s).
a. Timing in combustion cycle.
III. Air Inlet System.
1. Temperature control system calibration.
2. Maximum allowable air inlet restriction.
IV. Fuel System.
1. Fuel injection.
a. Control parameters and calibrations.
b. Transient enrichment system calibration.
c. Air-fuel flow calibration.
d. Altitude compensation system calibration.
e. Operating pressure(s).
f. Injector timing calibration.
V. Exhaust Emission Control System.
1. Maximum allowable backpressure.
VI. Crankcase Emission Control System.
1. Control parameters and calibrations.
2. Valve calibrations.
VII. Auxiliary Emission Control Devices (AECD).
1. Control parameters and calibrations.
2. Component calibration(s).

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