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- (3) Any oxygen sensor is replaced with a deteriorated or defective oxygen sensor, or the operation of such a sensor is simulated, resulting in an increase in emissions of 0.2 g/mi HC or 1.7 g/mi CO or 0.5 g/mi NO $_{\rm X}$  on a normal temperature (20 to 30 °C) emission certification test.
- (4) The electronic evaporative purge control device (if equipped) is disconnected or the operation of any emission-related powertrain component connected to a computer results in an increase in emissions of 0.2 g/mi HC or 1.7 g/mi CO or 0.5 g/mi NO $_{\rm X}$  on a normal temperature (20 to 30 °C) emission certification test.

[58 FR 4037, Jan. 12, 1993, as amended at 58 FR 9487, Feb. 19, 1993; 60 FR 15247, Mar. 23, 1995]

# §86.095-35 Labeling.

Section 86.095-35 includes text that specifies requirements that differ from §86.092-35. Where a paragraph in §86.092-35 is identical and applicable to §86.095-35, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see §86.092-35." Where a corresponding paragraph of §86.092-35 is not applicable, this is indicated by the statement "[Reserved]."

- (a) The manufacturer of any motor vehicle (or motor vehicle engine) subject to the applicable emission standards (and family emission limits, as appropriate) of this subpart, shall, at the time of manufacture, affix a permanent legible label, of the type and in the manner described below, containing the information hereinafter provided, to all production models of such vehicles (or engines) available for sale to the public and covered by a Certificate of Conformity under §86.091-30(a).
- (1) Light-duty vehicles. (i) A permanent, legible label shall be affixed in a readily visible position in the engine compartment.
- (ii) The label shall be affixed by the vehicle manufacturer who has been issued the Certificate of Conformity for such vehicle, in such 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 such vehicle.

- (iii) The label shall contain the following information lettered in the English language in block letters and numerals, which shall be of a color that contrasts with the background of the label:
- (A) The label heading: Vehicle Emission Control Information;
- (B) Full corporate name and trademark of manufacturer;
- (C) Engine displacement (in cubic inches or liters), engine family identification, and evaporative family identification:
- (D) Engine tune-up specifications and adjustments, as recommended by the manufacturer in accordance with the applicable emission standards (or family emission limits, as applicable), including but not limited to idle speed(s), ignition timing, the idle air-fuel mixture setting procedure and value (e.g., idle CO, idle air-fuel ratio, idle speed drop), high idle speed, initial injection timing and valve lash (as applicable), as well as other parameters deemed necessary by the manufacturer. These specifications should indicate the proper transmission position during tuneup and what accessories (e.g., air conditioner), if any, should be in operation;
- (E) An unconditional statement of compliance with the appropriate model year U.S. Environmental Protection Agency regulations which apply to light-duty vehicles;
- (F) The exhaust emission standards (or family emission limits, if applicable) to which the engine family is certified, and the corresponding exhaust emission standards (or family emission limits, if applicable) which the engine family must meet in-use;
- (G) For vehicles that have been exempted from compliance with the emission standards at high altitude, as specified in §86.090-8(h):
- (1) A highlighted statement (e.g., underscored or boldface letters) that the vehicle is certified to applicable emission standards at low altitude only;
- (2) A statement that the vehicle's unsatisfactory performance under highaltitude conditions makes it unsuitable for principal use at high altitude; and
- (3) A statement that the emission performance warranty provisions of 40 CFR part 85, subpart V do not apply

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when the vehicle is tested at high altitude:

- (H) For vehicles that have been exempted from compliance with the emission standards at low altitude, as specified in §86.094-8(i):
- (1) A highlighted statement (e.g., underscore or boldface letters) that the vehicle is certified to applicable emission standards at high altitude only; and
- (2) A statement that the emission performance warranty provisions of 40 CFR part 85, subpart V do not apply when the vehicle is tested at low altitude;
- (I) The vacuum hose routing diagram applicable to the vehicles if the vehicles are equipped with vacuum actuated emission and emission-related components. The manufacturer may, at its option, use a separate label for the vacuum hose routing diagram provided that the vacuum hose diagram is placed in a visible and accessible position as provided in this section;
- (J) Vehicles granted final admission under §85.1505 of this chapter must comply with the labeling requirements contained in §85.1510 of this chapter.
- (K) Vehicles which have been certified under the provisions of §86.094-8(j) must comply with the labeling requirements contained in §86.1606.
- (L) If applicable, a statement that the vehicle is exempt from cold temperature carbon monoxide standards.
- (2) Light-duty truck and heavy-duty vehicles optionally certified in accordance with the light-duty truck provisions. (i) A legible, permanent label shall be affixed in a readily visible position in the engine compartment.
- (ii) The label shall be affixed by the vehicle manufacturer who has been issued the certificate of conformity for such vehicle, 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 such vehicle.
- (iii) The label shall contain the following information lettered in the English language in block letters and numerals, which shall be of a color that contrasts with the background of the label.
- (A) The label heading: Important Vehicle Information;

- (B) Full corporate name and trademark of the manufacturer;
- (C) Engine displacement (in cubic inches or liters), engine family identification, and evaporative family;
- (D) Engine tune-up specifications and adjustments, as recommended by the manufacturer in accordance with the applicable emission standards (or family emission limits, as appropriate), including but not limited to idle speed(s), ignition timing, the idle air-fuel mixture setting procedure and value (e.g., idle CO, idle air-fuel ratio, idle speed drop), high idle speed, initial injection timing, as well as other parameters deemed necessary by the manufacturer. These specifications should indicate the proper transmission position during tune-up and what accessories (e.g., air conditioner), if any, should be in operation;
- (E)(1) Light-duty trucks. The prominent statement, "This vehicle conforms to U.S. EPA regulations applicable to 19XX Model Year New Light-Duty Trucks."
- (2) Heavy-duty vehicles optionally certified in accordance with the light-duty truck provisions. The prominent statement, "This heavy-duty vehicle conforms to the U.S. EPA regulations applicable to 19XX Model Year Light-Duty Trucks under the special provision of 40 CFR 86.092-1(b).";
  - (F) [Reserved]
- (G) For light-duty trucks that have been exempted from compliance with the emission standards at high altitude, as specified in §86.094-9(h):
- (1) A highlighted statement (e.g., underscored or boldface letters) that the vehicle is certified to applicable emission standards at low altitude only:
- (2) A statement that the vehicle's unsatisfactory performance under highaltitude conditions makes it unsuitable for principal use at high altitude; and
- (3) A statement that the emission performance warranty provisions of 40 CFR part 85, subpart V do not apply when the vehicle is tested at high altitude:
- (H) For light-duty trucks that have been exempted from compliance with the emission standards at low altitude, as specified in §86.094-9(i):
- (1) A highlighted statement (e.g., underscored or boldface letters) that the

vehicle is certified to applicable emission standards at high altitude only; and

- (2) A statement that the emission performance warranty provisions of 40 CFR part 85, subpart V do not apply when the vehicle is tested at low altitude:
- (I) Light-duty trucks which have been certified under the provisions of §86.094-9(j) must comply with the labeling requirements contained in §86.1606;
- (J) The exhaust emission standards (or family emission limits, if applicable) to which the engine family is certified, and the corresponding exhaust emission standards (or family emission limits, if applicable) which the engine family must meet in-use.
- (K) The vacuum hose routing diagram applicable to the vehicles if the vehicles are equipped with vacuum actuated emission and emission-related components. The manufacturer may, at its option, use a separate label for the vacuum hose routing diagram provided that the vacuum hose diagram is placed in a visible and accessible position as provided by this section.
  - (L) [Reserved]
- (M) Vehicles granted final admission under §85.1505 of this chapter must comply with the labeling requirements contained in §85.1510 of this chapter.
- (N) If applicable, a statement that the vehicle is exempt from cold temperature carbon monoxide standards.
- (3) Heavy-duty engines. (i) A permanent legible label shall be affixed to the engine in a position in which it will be readily visible after installation in the vehicle.
- (ii) The label shall be attached to an engine part necessary for normal engine operation and not normally requiring replacement during engine life.
- (iii) The label shall contain the following information lettered in the English language in block letters and numerals which shall be of a color that contrasts with the background of the label:
- (A) The label heading: "Important Engine Information.";
- (B) Full corporate name and trademark of manufacturer;
- (C) Engine displacement (in cubic inches or liters) and engine family and model designations;

- (D) Date of engine manufacture (month and year). The manufacturer may, in lieu of including the date of manufacture on the engine label, maintain a record of the engine manufacture dates. The manufacturer shall provide the date of manufacture records to the Administrator upon request;
- (E) Engine specifications and adjustments as recommended by the manufacturer. These specifications should indicate the proper transmission position during tune-up and what accessories (e.g., air conditioner), if any, should be in operation;
- (F) For Otto-cycle engines the label should include the idle speed, ignition timing, and the idle air-fuel mixture setting procedure and value (e.g., idle CO, idle air-fuel ratio, idle speed drop), and valve lash;
- (G) For diesel engines the label should include the advertised hp at rpm, fuel rate at advertised hp in mm<sup>3</sup>/ stroke, valve lash, initial injection timing, and idle speed;
- (H) The prominent statement: "This engine conforms to U.S. EPA regulations applicable to 19XX Model Year New Heavy-Duty Engines.";
- (I) If the manufacturer is provided with an alternate useful life period under the provisions of §86.094-21(f), the prominent statement: "This engine has been certified to meet U.S. EPA standards for a useful-life period of XXX miles or XXX hours of operation, whichever occurs first. This engine's actual life may vary depending on its service application." The manufacturer may alter this statement only to express the assigned alternate useful life in terms other than miles or hours (e.g., years, or hours only);
- (J) For diesel engines. The prominent statement: "This engine has a primary intended service application as a XXX heavy-duty engine." (The primary intended service applications are light, medium, and heavy, as defined in §86.902-2.);
- (K) *For Otto-cycle engines.* One of the following statements, as applicable:
- (1) For engines certified to the emission standards under §86.091-10 (a)(1)(i) or (iii), the statement: "This engine is certified for use in all heavy-duty vehicles.":

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- (2) For gasoline-fueled engines certified under the provisions of \$86.091-10(a)(3)(i), the statement: "This engine is certified for use in all heavy-duty vehicles under the special provision of 40 CFR 86.091-10(a)(3)(i).";
- (3) For engines certified to the emission standards under §86.091-10(a)(1) (ii) or (iv), the statement: "This engine is certified for use only in heavy-duty vehicles with a gross vehicle weight rating above 14,000 lbs.";
- (L) For diesel engines which are included in the diesel heavy-duty particulate averaging program, the family particulate emission limit to which the engine is certified;
- (M) For any heavy-duty engines which are included in the heavy-duty  $NO_X$  averaging program, the family  $NO_X$  emission limit to which the engine is certified:
- (N) Engines granted final admission under \$85.1505 of this chapter must comply with the labeling requirements contained in \$85.1510 of this chapter.
- (O) For diesel engines which have been certified to comply with the urban bus particulate standard of 40 CFR 86.094-11(a)(1)(iv)(A), the statement "This engine is certified for use in an urban bus as defined at 40 CFR 86.093-2." Unless waived by the Administrator on the basis of impracticality, for diesel engines not certified to comply with the urban bus particulate standard, the statement "This engine is not certified for use in an urban bus as defined at 40 CFR 86.093-2. Sales of this engine for use in an urban bus is a violation of Federal law under the Clean Air Act."
- (iv) The label may be made up of one or more pieces: Provided, That all pieces are permanently attached to the same engine or vehicle part as applicable.
- (4) Heavy-duty vehicles employing a fuel or fuels covered by evaporative emission standards. (i) A permanent, legible label shall be affixed in a readily visible position in the engine compartment. If such vehicles do not have an engine compartment, the label required in paragraphs (a) (4) and (g) (1) of this section shall be affixed in a readily available position on the operator's enclosure or on the engine.

- (ii) The label shall be affixed by the vehicle manufacturer who has been issued the Certificate of Conformity for such vehicle, 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 such vehicle.
- (iii) The label shall contain the following information lettered in the English language in block letters and numerals, which shall be of a color that contrasts with the background of the label:
- (A) The label heading: Vehicle Emission Control Information;
- (B) Full corporate name and trademark of manufacturer;
- (C) Evaporative family identification;
- (D) The maximum nominal fuel tank capacity (in gallons) for which the evaporative control system is certified (this requirement does not apply to vehicles whose evaporative control system efficiency is not dependent on fuel tank capacity); and
- (E) An unconditional statement of compliance with the appropriate model year U.S. Environmental Protection Agency regulations which apply to XXX-fueled heavy-duty vehicles.
- (F) Vehicles granted final admission under §85.1505 of this chapter must comply with the labeling requirements contained in §85.1510 of this chapter.
- (b) The provisions of this section shall not prevent a manufacturer from also reciting on the label that such vehicle (or engine) conforms to any applicable state emission standards for new motor vehicles (or new motor vehicle engines) or any other information that such manufacturer deems necessary for, or useful to, the proper operation and satisfactory maintenance of the vehicle (or engine).
- (c)(1) The manufacturer of any light-duty vehicle or light-duty truck subject to the emission standards (or family emission limits, as appropriate) of this subpart shall, in addition and subsequent to setting forth those statements on the label required by the Department of Transportation (DOT) pursuant to 49 CFR 567.4, set forth on the DOT label or an additional label located in proximity to the DOT label and affixed as described in 49 CFR

567.4(b), the following information in the English language, lettered in block letters and numerals not less than three thirty-seconds of an inch high, of a color that contrasts with the background of the label:

(i) The heading: "Vehicle Emission Control Information."

(ii)(A) For light-duty vehicles, the statement: "This Vehicle Conforms to U.S. EPA Regulations Applicable to XXX-Fueled 19XX Model Year New Motor Vehicles."

(B) For light-duty trucks, (1) the statement: "This vehicle conforms to U.S. EPA regulations applicable to XXX-Fueled 19XX Model Year New Light-Duty Trucks."

(2) [Reserved]

(iii) One of the following statements, as applicable, in letters and numerals not less than six thirty-seconds of an inch high and of a color that contrasts with the background of the label:

(A) For all vehicles certified as noncatalyst-equipped: "NON-CATALYST";

- (B) For all vehicles certified as catalyst-equipped which are included in a manufacturer's catalyst control program for which approval has been given by the Administrator: "CATALYST—APPROVED FOR IMPORT";
- (C) For all vehicles certified as catalyst-equipped which are not included in a manufacturer's catalyst control program for which prior approval has been given by the Administrator: "CATA-LYST".
- (2) In lieu of selecting either of the labeling options of paragraph (c)(1) of this section, the manufacturer may add the information required by paragraph (c)(1)(iii) of this section to the label required by paragraph (a) of this section. The required information will be set forth in the manner prescribed by paragraph (c)(1)(iii) of this section.

(d) Incomplete light-duty trucks or incomplete heavy-duty vehicles optionally certified in accordance with the light-duty truck provisions shall have one of the following prominent statements, as applicable, printed on the label required by paragraph (a)(2) of this section in lieu of the statement required by paragraph (a)(2)(iii)(E) of this section.

(1) Light-duty trucks. The statement, "This vehicle conforms to U.S. EPA

regulations applicable to 19XX Model Year New Light-Duty Trucks when it does not exceed XX pounds in curb weight, XX pounds in gross vehicle weight rating, and XX square feet in frontal area."

- (2) Heavy-duty vehicles optionally certified in accordance with the light-duty truck provisions. "This heavy-duty vehicle conforms to the U.S. EPA regulations applicable to 19XX Model Year Light-Duty Trucks under the special provision of 40 CFR 86.085–1(b) when it does not exceed XXX pounds in curb weight, XXX pounds in gross vehicle weight rating, and XXX square feet in frontal area."
- (e) Incomplete heavy-duty vehicles having a gross vehicle weight rating of 8,500 pounds or less shall have one of the following statements printed on the label required by paragraph (a)(3) of this section in lieu of the statement required by paragraph (a)(3)(iii)(H) of this section: "This engine conforms to U.S. EPA regulations applicable to 19XX Model Year Heavy-Duty Engines when installed in a vehicle completed at a curb weight of more than 6,000 pounds or with a frontal area of greater than 45 square feet."
- (f) The manufacturer of any incomplete light-duty vehicle or light-duty truck shall notify the purchaser of such vehicle of any curb weight, frontal area, or gross vehicle weight rating limitations affecting the emission certificate applicable to that vehicle. This notification shall be transmitted in a manner consistent with National Highway Traffic Safety Administration safety notification requirements published in 49 CFR part 568.
- (g) Incomplete vehicle fuel tank capacity. (1) Incomplete heavy-duty vehicles employing a fuel or fuels which are nominally liquid at normal atmospheric pressure and temperature for which evaporative emission standards exist shall have the following prominent statement printed on the label required in paragraph (a)(4) of this section: "Manufacturer's corporate name) has determined that this vehicle conforms to U.S. EPA regulations applicable to 19XX Model Year New XXX-Fueled Heavy-Duty Vehicles when

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completed with a nominal fuel tank capacity not to exceed XXX gallons. Persons wishing to add fuel tank capacity beyond the above maximum must submit a written statement to the Administrator that the hydrocarbon storage system has been upgraded according to the requirements of 40 CFR 86.095–35(g)(2)."

- (2) Persons wishing to add fuel tank capacity beyond the maximum specified on the label required in paragraph (g)(1) of this section shall:
- (i) Increase the amount of fuel tank vapor storage material according to the following function:

$$\operatorname{Cap}_{f} = \operatorname{Cap}_{i} \left( \frac{\operatorname{T. Vol.}}{\operatorname{Max. Vol.}} \right)$$

Where:

Cap,=final amount of fuel tank vapor storage material, grams.

Cap<sub>i</sub>=initial amount of fuel tank vapor storage material, grams.

 T. Vol.=total fuel tank volume of completed vehicle, gallons.

Max. Vol. = maximum fuel tank volume as specified on the label required in paragraph (g)(1) of this section, gallons.

- (ii) Use, if applicable, hosing for fuel vapor routing which is at least as impermeable to hydrocarbon vapors as that used by the primary manufacturer.
- (iii) Use vapor storage material with the same absorptive characteristics as that used by the primary manufacturer.
- (iv) Connect, if applicable, any new hydrocarbon storage device to the existing hydrocarbon storage device in series such that the original hydrocarbon storage device is situated between the fuel tank and the new hydrocarbon storage device. The original hydrocarbon storage device shall be sealed such that vapors cannot reach the atmosphere. The elevation of the original hydrocarbon storage device shall be equal to or lower than the new hydrocarbon storage device.
- (v) Submit a written statement to the Administrator that paragraphs (g)(2)(i) through (g)(2)(iv) of this section have been complied with.
- (3) If applicable, the Administrator will send a return letter verifying the receipt of the written statement re-

quired in paragraph (g)(2)(v) of this section.

- (h) Notification of nonconformance penalty. (1) Light-duty trucks and heavyduty vehicles and engines for which nonconformance penalties are to be paid in accordance with §86.1113-87(b) shall have the following information printed on the label required in paragraph (a) of this section. The manufacturer shall begin labeling production engines or vehicles within 10 days after the completion of the PCA. This statement shall read: "The manufacturer of this engine/vehicle will pay a nonconformance penalty to be allowed to introduce it into commerce at an emission level higher than the applicable emission standard. The compliance level (or new emission standard) for this engine/vehicle is XXX." (The manufacturer shall insert the applicable pollutant and compliance level calculated in accordance with §86.1112-87(a).)
- (2) If a manufacturer introduces an engine or vehicle into commerce prior to the compliance level determination of §86.1112-87(a), it shall provide the engine or vehicle owner with a label as described above to be affixed in a location in proximity to the label required in paragraph (a) of this section within 30 days of the completion of the PCA.
- (i) All light-duty vehicles and lightduty trucks shall comply with SAE Recommended Practices J1877 July 1994, "Recommended Practice for Bar-Coded Vehicle Identification Number Label," and J1892 October 1993, "Recommended Practice for Bar-Coded Vehicle Emission Configuration Label." SAE J1877 and J1892 are incorporated by reference. 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 may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001. Copies may be inspected at Docket No. A-90-35 at EPA's Air Docket (LE-131), Room 1500M, 1st Floor, Waterside Mall, 401 M St., SW., Washington, DC, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/

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[56 FR 25755, June 5, 1991, as amended at 57 FR 31913, July 17, 1992; 58 FR 4037, Jan. 12, 1993; 58 FR 9487, Feb. 19, 1993; 58 FR 15799, Mar. 24, 1993; 58 FR 16020, Mar. 24, 1993; 58 FR 33209, June 16, 1993; 58 FR 34536, June 28, 1993; 59 FR 48499, Sept. 21, 1994; 63 FR 70694, Dec. 22, 1998]

#### §86.096-2 Definitions.

The definitions listed in this section apply beginning with the 1996 model year. The definitions of §86.094-2 continue to apply to 1996 and later model year vehicles.

Certification Short Test means the test, for gasoline-fueled Otto-cycle light-duty vehicles and light-duty trucks, performed in accordance with the procedures contained in 40 CFR part 86 subpart O.

Diurnal breathing losses means diurnal emissions.

*Diurnal emissions* means evaporative emissions resulting from the daily cycling of ambient temperatures.

*Hot soak emissions* means evaporative emissions after termination of engine operation.

Hot-soak losses means hot soak emissions.

Resting losses means evaporative emissions that may occur continuously, that are not diurnal emissions, hot soak emissions, running losses, or spitback emissions.

Running losses means evaporative emissions that occur during vehicle operation.

Spitback emissions means evaporative emissions resulting from the loss of liquid fuel that is emitted from a vehicle during a fueling operation.

Useful life means:

(1) For light-duty vehicles, and for light light-duty trucks not subject to the Tier 0 standards of \$86.094-9(a), intermediate useful life and/or full useful life. Intermediate useful life is a period of use of 5 years or 50,000 miles, whichever occurs first. Full useful life is a period of use of 10 years or 100,000 miles, whichever occurs first, except as otherwise noted in \$86.094-9. The useful life of evaporative emission control systems on the portion of these vehicles subject to the evaporative emis-

sion test requirements of §86.130-96 is defined as a period of use of 10 years or 100,000 miles, whichever occurs first.

- (2) For light light-duty trucks subject to the Tier 0 standards of §86.094-9(a), and for heavy light-duty truck engine families, intermediate and/or full useful life. Intermediate useful life is a period of use of 5 years or 50,000 miles, whichever occurs first. Full useful life is a period of use of 11 years or 120,000 miles, whichever occurs first. The useful life of evaporative emission control systems on the portion of these vehicles subject to the evaporative emission test requirements of §86.130-96 is also defined as a period of 11 years or 120,000 miles, whichever occurs first.
- (3) For an Otto-cycle heavy-duty engine family, a period of use of 8 years or 110,000 miles, whichever occurs first, except for the portion of evaporative emission control systems subject to the evaporative emission test requirements of §86.1230–96, for which the applicable period of use is 10 years or 110,000 miles, whichever occurs first.
- (4) For a diesel heavy-duty engine family:
- (i) For light heavy-duty diesel engines, period of use of 8 years or 110,000 miles, whichever occurs first.
- (ii) For medium heavy-duty diesel engines, a period of use of 8 years or 185,000 miles, whichever occurs first.
- (iii) For heavy heavy-duty diesel engines, a period of use of 8 years or 290,000 miles, whichever occurs first, except as provided in paragraph (4)(iv) of this definition.
- (iv) For heavy heavy-duty diesel engines used in urban buses, for the particulate standard, a period of use of 10 years or 290,000 miles, whichever occurs first.
- (5) As an option for both light-duty trucks under certain conditions and heavy-duty engine families, an alternative useful life period assigned by the Administrator under the provisions of §86.094-21(f).
- (6) The useful-life period for purposes of the emissions defect warranty and emissions performance warranty shall be a period of 5 years/50,000 miles, whichever occurs first, for light-duty trucks, Otto-cycle heavy-duty engines and light heavy-duty diesel engines. For all other heavy-duty diesel engines