

Environmental Protection Agency

§ 85.2123

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 (CO₂) and water (H₂O).

(B) "Conversion Efficiency" means the measure of the catalytic converter's ability to oxidize HC/CO to CO₂/H₂O 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 CO₂ and H₂O.

(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 Integrity" 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 SUBPART V OF PART 85—
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 \pm 13 mm (18.0 \pm 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 \pm 13 mm (18.0 \pm 0.5 inches) Hg. vacuum applied to unit, the diaphragm displacement shall be within \pm 1 mm (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 \pm 13 mm (18.0 \pm 0.5 inches) Hg. applied to the unit, the vacuum break diaphragm displacement shall occur within \pm 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 \pm 0.8 mm (\pm 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 \pm 35% of the original equipment specification for forces up to 142 grams (5 ounces) and shall be within \pm 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 \pm 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 44°C (80°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 \pm 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 \pm 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,