§86.131-00

§86.131-00 Vehicle preparation.

Section 86.131-00 includes text that specifies requirements that differ from \$86.131-96. Where a paragraph in \$86.131-96 is identical and applicable to \$86.131-00, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see \$86.131-96."

(a)-(e) [Reserved]. For guidance see §86.131-96.

(f) For vehicles to be tested for aggressive driving emissions (US06), provide a throttle position sensing signal that is compatible with the test dynamometer. This signal provides the input information that controls dynamometer dynamic inertia weight adjustments (see §§ 86.108-00(b)(2)(ii) and 86.129-00(f)(2)). If a manufacturer chooses not to implement dynamic inertia adjustments for a portion or all of their product line, this requirement is not applicable.

[61 FR 54893, Oct. 22, 1996]

$\S 86.131-90$ Vehicle preparation.

(a) For gasoline-fueled and methanol-fueled vehicles prepare the fuel tank(s) for recording the temperature of the prescribed test fuel at the approximate mid-volume of the fuel.

(b) Provide additional fittings and adapters, as required, to accommodate a fuel drain at the lowest point possible in the tank(s) as installed on the vehicle.

[54 FR 14527, Apr. 11, 1989]

$\S 86.131-96$ Vehicle preparation.

(a) For gasoline- and methanol-fueled vehicles prepare the fuel tank(s) for recording the temperature of the prescribed test fuel, as described in \$86.107-96(e).

(b) Provide additional fittings and adapters, as required, to accommodate a fuel drain at the lowest point possible in the tank(s) as installed on the vehicle.

(c) For preconditioning that involves loading the evaporative emission canister(s) with butane, provide valving or other means as necessary to allow purging and loading of the canister(s).

(d) For vehicles to be tested for running loss emissions, prepare the fuel tank(s) for measuring and recording

the temperature and pressure of the fuel tank as specified in §86.107–96 (e) and (f). Measurement of vapor temperature is optional during the running loss test. If vapor temperature is not measured, fuel tank pressure need not be measured.

(e) For vehicles to be tested for running loss emissions, prepare the exhaust system by sealing or plugging all detectable sources of exhaust gas leaks. The exhaust system shall be tested or inspected to ensure that detectable exhaust hydrocarbons are not emitted into the running loss enclosure during the running loss test.

[58 FR 16037, Mar. 24, 1993, as amended at 60 FR 43895, Aug. 23, 1995]

§86.132-00 Vehicle preconditioning.

Applicability. Section 86.132-96 through (c)(1) and (d) through (m) and paragraph (c)(2) of this section are applicable to FTP and evaporative emission testing. Paragraphs (n) and (o) of this section are applicable to vehicles tested for the SFTP supplemental tests of aggressive driving (US06) and air conditioning (SC03). Section 86.132-00 includes text that specifies requirements that differ from §86.132–96. Where a paragraph in §86.132-96 is identical and applicable to §86.132-00, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see § 86.132-96.

(a)-(c)(1) [Reserved]. For guidance see §86.132-96.

(c)(2)(i) Once a test vehicle has completed the refueling and vehicle soak steps specified in §86.132-96 (b) and (c)(1), these steps may be omitted in subsequent testing with the same vehicle and the same fuel specifications, provided the vehicle remains under laboratory ambient temperature conditions for at least 6 hours before starting the next test. In such cases, each subsequent test shall begin with the preconditioning drive specified in §86.132-96(c)(1). The test vehicle may not be used to set dynamometer horse-power.

(ii) The SFTP test elements of aggressive driving (US06) and air conditioning (SC03) can be run immediately or up to 72 hours after the official FTP

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and/or evaporative test sequence without refueling provided the vehicle has remained under laboratory ambient temperature conditions. If the time interval exceeds 72 hours or the vehicle leaves the ambient temperature conditions of the laboratory, the manufacturer must repeat the refueling operation.

- (d)-(m) [Reserved]. For guidance see $\S 86.132-96$.
- (n) Aggressive Driving Test (US06) Preconditioning. (1) If the US06 test follows the exhaust emission FTP or evaporative testing, the refueling step may be deleted and the vehicle may be preconditioned using the fuel remaining in the tank (see paragraph (c)(2)(ii) of this section). The test vehicle may be pushed or driven onto the test dynamometer. Acceptable cycles for preconditioning are as follows:
- (i) If the soak period since the last exhaust test element is less than or equal to two hours, preconditioning may consist of a 505, 866, highway, US06, or SC03 test cycles.
- (ii) If the soak period since the last exhaust test element is greater than two hours, preconditioning consists of one full Urban Dynamometer Driving Cycle. Manufacturers, at their option, may elect to use the preconditioning in paragraph (n)(1)(i) of this section when the soak period exceeds two hours.
- (iii) If a manufacturer has concerns about fuel effects on adaptive memory systems, a manufacturer may precondition a test vehicle on test fuel and the US06 cycle. Upon request from a manufacturer, the administrator will also perform the preconditioning with the US06 cycle.
- (iv) The preconditioning cycles for the US06 test schedule are conducted at the same ambient test conditions as the certification US06 test.
- (2) Following the preconditioning specified in paragraphs (n)(1)(i), (ii), and (iii) of this section, the test vehicle is returned to idle for one to two minutes before the start of the official US06 test cycle.
- (o) Air Conditioning Test (SC03) Preconditioning. (1) If the SC03 test follows the exhaust emission FTP or evaporative testing, the refueling step may be deleted and the vehicle may be preconditioned using the fuel remain-

ing in the tank (see paragraph (c)(2)(ii) of this section). The test vehicle may be pushed or driven onto the test dynamometer. Acceptable cycles for preconditioning are as follows:

- (i) If the soak period since the last exhaust test element is less than or equal to two hours, preconditioning may consist of a 505, 866, or SC03 test cycles.
- (ii) If the soak period since the last exhaust test element is greater than two hours, preconditioning consists of one full Urban Dynamometer Driving Cycle. Manufacturers, at their option, may elect to use the preconditioning in paragraph (o)(1)(i) of this section when the soak period exceeds two hours.
- (2) Following the preconditioning specified in paragraphs (o)(1)(i) and (ii) of this section, the test vehicle is turned off, the vehicle cooling fan(s) is turned off, and the vehicle is allowed to soak for 10 minutes prior to the start of the official SC03 test cycle.
- (3) The preconditioning cycles for the SC03 air conditioning test and the 10 minute soak are conducted at the same ambient test conditions as the SC03 certification air conditioning test.

[61 FR 54893, Oct. 22, 1996]

§86.132-90 Vehicle preconditioning.

- (a) The vehicle shall be moved to the test area and the following operations performed:
- (1) The fuel tank(s) shall be drained through the provided fuel tank(s) drain(s) and filled to the prescribed "tank fuel volume" with the specified test fuel, §86.113. For the above operations the evaporative emission control system shall neither be abnormally purged nor abnormally loaded.
- (2) Within one hour of being fueled the vehicle shall be placed, either by being driven or pushed, on a dynamometer and operated through one Urban Dynamometer Driving Schedule test procedure, see §86.115 and appendix I. A test vehicle may not be used to set dynamometer horsepower.
- (3) For those unusual circumstances where additional preconditioning is desired by the manufacturer, such preconditioning may be allowed with the advance approval of the Administrator.