

## § 86.131-00

## 40 CFR Ch. I (7-1-10 Edition)

### § 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]

### § 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 de-

tectable 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 (a) 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 horsepower.

(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 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 § 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) Preconditioning may consist of a 505, 866, highway, US06 or SC03 test cycles.

(ii) [Reserved]

(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 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, 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, as amended at 74 FR 61547, Nov. 25, 2009]

#### § 86.132-96 Vehicle preconditioning.

(a) Fuel tank cap(s) of gasoline- and methanol-fueled vehicles shall be removed during any period that the vehicle is parked outdoors awaiting testing, to prevent unusual loading of the canisters. During this time care must be taken to prevent entry of water or other contaminants into the fuel tank. During storage in the test area while awaiting testing, the fuel tank cap(s) may be in place. The vehicle shall be moved into the test area and the following operations performed.

(b)(1) *Gasoline- and Methanol-Fueled Vehicles.* Drain the fuel tank(s) and fill with test fuel, as specified in § 86.113, to the "tank fuel volume" defined in § 86.082-2. The fuel cap(s) shall be installed within one minute after refueling.

(2) *Gaseous-Fueled Vehicles.* Vehicle fuel tanks to be filled with fuel that meets the specifications in § 86.113. Fuel tanks shall be filled to a minimum of 75% of service pressure for natural gas-fueled vehicles or a minimum of 75% of available fill volume for liquefied petroleum gas-fueled vehicles. Prior draining of the fuel tanks is not called for if the fuel in the tanks already meets the specifications in § 86.113.

(c)(1) Gasoline- and methanol-fueled vehicles shall be soaked for at least 6 hours after being refueled. Petroleum-fueled diesel vehicles and gaseous-fueled vehicles shall be soaked for at least 1 hour after being refueled. Following this soak period, the test vehicle shall be placed, either by being driven or pushed, on a dynamometer and operated through one Urban Dynamometer Driving Schedule (UDDS), specified in § 86.115 and appendix I of this part.

(2) Once a test vehicle has completed the refueling and vehicle soak steps