

(g) *Engine starting and restarting.* (1) If the engine is not running at the initiation of the highway fuel economy test (preconditioning cycle), the start-up procedure must be according to the manufacturer's recommended procedures.

(2) False starts and stalls during the preconditioning cycle must be treated as in 40 CFR 86.136 (d) and (e). If the vehicle stalls during the measurement cycle of the highway fuel economy test, the test is voided, corrective action may be taken according to 40 CFR 86.079-25 or 40 CFR 86.1834-01 as applicable, and the vehicle may be rescheduled for test. The person taking the corrective action shall report the action so that the test records for the vehicle contain a record of the action.

(h) *Dynamometer test run.* The following steps must be taken for each test:

(1) Place the drive wheels of the vehicle on the dynamometer. The vehicle may be driven onto the dynamometer.

(2) Open the vehicle engine compartment cover and position the cooling fans(s) required. Manufacturers may request the use of additional cooling fans for additional engine compartment or under-vehicle cooling and for controlling high tire or brake temperatures during dynamometer operation.

(3) Preparation of the CVS must be performed before the measurement highway driving cycle.

(4) Equipment preparation. The provisions of §86.137(b)(3) through (6) of this chapter apply for highway fuel economy test except that only one exhaust sample collection bag and one dilution air sample collection bag need be connected to the sample collection systems.

(5) Operate the vehicle over one Highway Fuel Economy Driving Schedule cycle according to the dynamometer driving schedule specified in §600.109(b).

(6) When the vehicle reaches zero speed at the end of the preconditioning cycle, the driver has 17 seconds to prepare for the emission measurement cycle of the test. Reset and enable the roll revolution counter.

(7) Operate the vehicle over one Highway Fuel Economy Driving Schedule cycle according to the dynamometer

driving schedule specified in §600.109(b) while sampling the exhaust gas.

(8) Sampling must begin two seconds before beginning the first acceleration of the fuel economy measurement cycle and must end two seconds after the end of the deceleration to zero. At the end of the deceleration to zero speed, the roll or shaft revolutions must be recorded.

(i) For methanol dual fuel automobiles, the procedures of §600.111 (a) and (b) shall be performed for each of the required test fuels:

(1) Gasoline or diesel fuel as specified in §600.107 (a) and (b); and

(2) Methanol fuel as specified in §600.107 (c) and (d); and

(3) A mixture containing 50% gasoline or diesel and 50% methanol by volume, applicable during model years 1993 through 1995; or

(4) In lieu of testing using the mixture containing 50% gasoline or diesel and 50% methanol by volume, the manufacturer must provide a written statement attesting that the equal or superior energy efficiency is attained while using the 50% gasoline or diesel and 50% methanol mixture compared to using gasoline.

[59 FR 39652, Aug. 3, 1994, as amended at 64 FR 23975, May 4, 1999]

#### §600.112-78 Exhaust sample analysis.

The exhaust sample analysis must be performed according to §86.140 of this chapter.

#### §600.113-78 Fuel economy calculations.

The calculations of vehicle fuel economy values require the weighted grams/mile values for HC, CO, and CO<sub>2</sub> for the city fuel economy test and the grams/mile values for HC, CO, and CO<sub>2</sub> for the highway fuel economy test. The city and highway fuel economy values must be calculated by the procedures of this section. A sample calculation appears in appendix II to this part.

(a) Calculate the weighted grams/mile values for the city fuel economy test for HC, CO, and CO<sub>2</sub> as specified in §86.144 of this chapter.

(b)(1) Calculate the mass values for the highway fuel economy test for HC, CO, and CO<sub>2</sub> as specified in paragraph (b) of §86.144 of this chapter.