Fuel drain and fill Vehicle Soak 6-36 hours Preconditioning drive 1 hour MAX Fuel drain and fill Diesel Only Precondition canister 12-36 hours Precondition canister Cold start exhaust test Cold start exhaust test 10 minutes 10 minutes Hot start exhaust test Hot start exhaust test 1-5 hours 7 minutes MAX Hot soak test Running loss test 68 - 86 °F ambient 7 minutes max Hot soak test 1 hour 90-100 °F ambient Vehicle soak 6-36 hours Diurnal emission test Vehicle soak 6-36 hours 2 heat builds in 48 hours Diurnal emission test 3 heat builds in 72 hours End

Figure 1 of § 1066.801-FTP test sequence

§ 1066.805 Road-load power, test weight, and inertia weight class determination.

(a) Simulate a vehicle's test weight on the dynamometer using the appropriate equivalent test weight shown in Table 1 of this section. Equivalent test weights are established according to each vehicle's test weight basis, as described in paragraph (b) of this section. Table 1 also specifies the inertia weight class corresponding to each equivalent test weight; the inertia weight class allows for grouping vehicles with a range of equivalent test weights. Table 1 follows:

TABLE 1 OF § 1066.805—EQUIVALENT TEST WEIGHTS (POUNDS)

Test weight	Equivalent test	Inertia weight
Up to 1062	1000	1000
1063 to 1187	1125	1000
1188 to 1312	1250	1250

TABLE 1 OF § 1066.805—EQUIVALENT TEST WEIGHTS (POUNDS)—Continued

Test weight	Equivalent test	Inertia weight
1313 to 1437	1375	1250
1438 to 1562	1500	1500
1563 to 1687	1625	1500
1688 to 1812	1750	1750
1813 to 1937	1875	1750
1938 to 2062	2000	2000
2063 to 2187	2125	2000
2188 to 2312	2250	2250
2313 to 2437	2375	2250
2438 to 2562	2500	2500
2563 to 2687	2625	2500
2688 to 2812	2750	2750
2813 to 2937	2875	2750
2938 to 3062		3000
3063 to 3187	3125	3000
3188 to 3312	3250	3000
3313 to 3437	3375	3500
3438 to 3562	3500	3500
3563 to 3687	3625	3500
3688 to 3812	3750	3500
3813 to 3937	3875	4000
3938 to 4125	4000	4000
4126 to 4375	4250	4000
4376 to 4625	4500	4500
4626 to 4875	4750	4500

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TABLE 1 OF § 1066.805—EQUIVALENT TEST WEIGHTS (POUNDS)—Continued

Test weight	Equivalent test	Inertia weight
4876 to 5125	5000	5000
5126 to 5375	5250	5000
5376 to 5750	5500	5500
5751 to 6250	6000	6000
6251 to 6750	6500	6500
6751 to 7250	7000	7000
7251 to 7750	7500	7500
7751 to 8250	8000	8000
8251 to 8750	8500	8500
8751 to 9250	9000	9000
9251 to 9750	9500	9500
9751 to 10250	10000	10000
10251 to 10750	10500	10500
10751 to 11250	11000	11000
11251 to 11750	11500	11500
11751 to 12250	12000	12000
12251 to 12750	12500	12500
12751 to 13250	13000	13000
13251 to 13750	13500	13500
13751 to 14000	14000	14000

- (b) The test weight basis for non-MDPV heavy-duty vehicles is "adjusted loaded vehicle weight". For all other vehicles, the test weight basis for establishing equivalent test weight is "loaded vehicle weight". These load terms are defined in 40 CFR 86.1803.
- (c) For FTP, SFTP, New York City Cycle, HFET, and LA-92 testing, determine road-load forces for each test vehicle at speeds between 9.3 and 71.5 miles per hour. The road-load force must represent vehicle operation on a smooth, level road with no wind or calm winds, no precipitation, an ambient temperature of approximately 20 °C, and atmospheric pressure of 98.21 kPa. You may extrapolate road-load force for speeds below 9.3 mph.

$\S \, 1066.810$ Vehicle preparation.

- (a) Include 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.
- (b) For preconditioning that involves loading an evaporative emission canister with butane, provide valving or other means to allow for purging and loading the canister.
- (c) For vehicles to be tested for running loss emissions (40 CFR 86.134), prepare the fuel tank for measuring temperature and pressure as specified in 40 CFR 86.107-98(e) and (f) and 40 CFR 86.134. Vapor temperature measure-

ment is optional during the running loss test.

- (d) For vehicles to be tested for running loss emissions, prepare the exhaust system by sealing or plugging all detectable sources of exhaust gas leaks. Inspect or test the exhaust system to ensure that there are no leaks that would cause exhaust hydrocarbon emissions to be detected as running losses.
- (e) The following provisions apply for preconditioning steps to reduce nonfuel emissions to normal vehicle background levels for vehicles subject to Tier 3 evaporative emission standards under 40 CFR 86.1813:
- (1) You must notify us in advance if you plan to perform such preconditioning. This notice must include a detailed description of the intended procedures and any measurements or thresholds for determining when stabilization is complete. You need not repeat this notification for additional vehicle testing in the same or later model years as long as your preconditioning practice conforms to these procedures.
- (2) You may precondition a vehicle as described in paragraph (e)(1) of this section only within 12 months after the vehicle's original date of manufacture, except that you may ask us to approve further preconditioning steps for any testing to address identifiable sources of nonfuel emissions beyond what would generally occur with an appropriately aged in-use vehicle. For example, you may clean up fluid leaks and you may perform further off-vehicle preconditioning for tires or other replacement parts that are less than 12 months old. You may also replace the spare tire with an aged spare tire, and you may replace the windshield washer fluid with water.

§ 1066.815 Exhaust emission test procedures for FTP testing.

- (a) General. The FTP exhaust emission test sequence consists of a cold-start test and a hot-start test as described in §1066.801.
- (b) *PM sampling options*. Collect PM using any of the procedures specified in paragraphs (b)(1) through (5) of this section and use the corresponding equation in §1066.820 to calculate FTP composite emissions. Testing must