

§ 1066.275

40 CFR Ch. I (7-1-14 Edition)

(d) *Performance evaluation.* The coastdown force error determined in paragraph (c) of this section may not exceed the following:

(1) For vehicles at or below 20,000 pounds GVWR, calculate F_{errormax} for all speed and inertia settings from the following formula:

$$F_{\text{errormax}} (\%) = (2.2 \text{ lbf}/F_{\text{ref}}) \cdot 100$$

Eq. 1066.270-3

Example:

$$F_{\text{ref}} = 192 \text{ lbf}$$

$$F_{\text{errormax}} (\%) = (2.2/192) \cdot 100 = 1.14\%$$

(2) For vehicles above 20,000 pounds GVWR, the maximum allowable error, F_{errormax} , for all speed intervals and inertia settings is $\pm 1.0\%$ or $\pm 39.2 \text{ N}$, whichever is greater.

(e) *Remedy for nonconforming dynamometers.* If the dynamometer is not able to meet this requirement, diagnose and repair the dynamometer before continuing with emission testing. Diagnosis should include performing the verifications in §1066.255 and §1066.260.

§ 1066.275 Daily dynamometer readiness verification.

(a) *Overview.* This section describes how to verify that the dynamometer is ready for emission testing.

(b) *Scope and frequency.* Perform this verification upon initial installation, within 1 day before testing, and after major maintenance.

(c) *Procedure.* For dynamometers that have an automated process for this verification procedure, perform this evaluation by setting the initial speed and final speed and the inertial and road-load coefficients as required for the test, using good engineering judgment to ensure that these values properly represent in-use operation. Use the following procedure if your dynamometer does not perform this verification with an automated process:

(1) With the dynamometer in coastdown mode, set the dynamometer inertia to the base inertia with the road-load coefficient A set to 20 lbf (or a force that results in a coastdown time of less than 10 minutes) and coefficients B and C set to 0. Program the dynamometer to coast down for one 10

mph interval from 55 mph down to 45 mph. If your dynamometer is not capable of performing one discrete coastdown, then coast down with preset 10 mph intervals that include a 55 mph to 45 mph interval.

(2) Perform the coastdown.

(3) Determine the coastdown force and coastdown force error using Eqs. 1066.270-1 and 1066.270-2.

(d) *Performance evaluation.* The coastdown force error determined in paragraph (c) of this section may not exceed the following:

(1) For vehicles at or below 20,000 pounds GVWR, $\pm 1.0\%$ or $\pm 9.8 \text{ N}$ ($\pm 2.2 \text{ lbf}$), whichever is greater.

(2) For vehicles above 20,000 pounds GVWR, $\pm 1.0\%$ or $\pm 39.2 \text{ N}$ ($\pm 8.8 \text{ lbf}$), whichever is greater.

(e) *Remedy for nonconforming dynamometers.* If the verification results fail to meet the performance criteria in paragraph (d) of this section, perform the procedure up to two additional times. If the dynamometer is consistently unable to meet the performance criteria, diagnose and repair the dynamometer before continuing with emission testing. Diagnosis should include performing the verifications in §1066.255 and §1066.260.

§ 1066.290 Verification of speed accuracy for the driver's aid.

Use good engineering judgment to provide a driver's aid that facilitates compliance with the requirements of §1066.425. Verify the speed accuracy of the driver's aid as described in §1066.235.