Environmental Protection Agency

§1066.260

$$I_{\text{berror}} = \frac{I_{\text{bref}} - I_{\text{bact}}}{I_{\text{bref}}} \cdot 100 \%$$

Eq. 1066.250-2

Example: $I_{\text{bref}} = 32.96 \text{ lbm}$ $\overline{I}_{\text{bact}} = 33.01 \text{ lbm}$

$$I_{\text{berror}} = \frac{32.96 - 33.01}{32.96} \cdot 100 \%$$

 $I_{\rm berror} = -0.15\%$

(8) Calculate the inertia error for each mean value of base inertia from paragraph (c)(6) of this section. Use Equation 1066.265-2, substituting the mean base inertias associated with each acceleration and deceleration rate for the individual base inertias.

(d) *Performance evaluation*. The dynamometer must meet the following specifications to be used for testing under this part:

(1) The base inertia error determined under paragraph (c)(7) of this section may not exceed $\pm 0.50\%$ relative to any individual value.

(2) The base inertia error determined under paragraph (c)(8) of this section may not exceed $\pm 0.20\%$ relative to any mean value.

§1066.255 Parasitic loss verification.

(a) Overview. Verify and correct the dynamometer's parasitic loss. This procedure determines the dynamometer's internal losses that it must overcome to simulate road load. These losses are characterized in a parasitic loss curve that the dynamometer uses to apply compensating forces to maintain the desired road-load force at the roll surface.

(b) *Scope and frequency*. Perform this verification upon initial installation, within 7 days of testing, and after major maintenance.

(c) *Procedure.* Perform this verification by following the dynamometer manufacturer's specifications to establish a parasitic loss curve, tak-

ing data at fixed speed intervals to cover the range of vehicle speeds that will occur during testing. You may zero the load cell at the selected speed if that improves your ability to determine the parasitic loss. Parasitic loss forces may never be negative. Note that the torque transducers must be zeroed and spanned prior to performing this procedure.

(d) Performance evaluation. In some cases, the dynamometer automatically updates the parasitic loss curve for further testing. If this is not the case, compare the new parasitic loss curve to the original parasitic loss curve from the dynamometer manufacturer or the most recent parasitic loss curve you programmed into the dynamometer. You may reprogram the dynamometer to accept the new curve in all cases, and you must reprogram the dynamometer if any point on the new curve departs from the earlier curve by more than $\pm 4.5 \text{ N} (\pm 1.0 \text{ lbf})$.

§1066.260 Parasitic friction compensation evaluation.

(a) *Overview*. This section describes how to verify the accuracy of the dynamometer's friction compensation.

(b) Scope and frequency. Perform this verification upon initial installation, within 7 days before testing, and after major maintenance. Note that this procedure relies on proper verification or calibration of speed and torque, as described in §§1066.235 and1066.240. You must also first verify the