

**§ 86.346-79**

(1) For gasoline-fueled engines, calculate the brake-specific emissions and fuel consumption for the complete test as follows:

$$\begin{aligned}
BSHC(T) &= 0.35 BSHC(1) + 0.65 BSHC(2) \\
BSCO(T) &= 0.35 BSCO(1) + 0.65 BSCO(2) \\
BSNO_x(T) &= 0.35 BSNO_x(1) + 0.65 BSNO_x(2) \\
WBSFC(T) &= 0.35 WBSFC(1) + 0.65 WBSFC(2)
\end{aligned}$$

**§ 86.346-79 Alternative NO<sub>x</sub> measurement technique.**

(a) Oxides of nitrogen (NO<sub>x</sub>) may be measured with the following "alternative instrumentation" for both Diesel and gasoline-fueled engines. The "alternative instrumentation" shall consist of:

- (1) A heated sample line maintained above the dew point;
- (2) An NO<sub>2</sub> to NO converter obtaining a sample directly from the heated sample line; and
- (3) A combination per 40 CFR 86.777 or 40 CFR 86.977, whichever is applicable of a water trap, dryer, flow controls, and an NO NDIR analyzer obtaining a sample from the converter.

(b) The provisions of 40 CFR 86 subpart D shall apply to the "alternative instrumentation", where applicable, with the following exceptions:

- (1) Analyzer specifications found in §§ 86.315, 86.321, and 86.322 do not apply to the "alternative instrumentation".
- (2) For the purposes of this section, the full-scale value specified in § 86.338 (a)(1) shall be 1,500 ppm for Diesel engines and 2,500 ppm for gasoline-fueled engines.

(c) The "alternative instrumentation" shall be calibrated per § 86.330.

(d) The NO NDIR analyzer shall meet the performance and interference specifications contained in 40 CFR 86.777 or 40 CFR 86.977, whichever is applicable.

(e) The operation of the dryer shall follow good engineering practice such that the test results are not altered. Proper preconditioning of the dryer is allowed.

**§ 86.347-79 Alternative calculations for diesel engines.**

(a) *This section applies to Diesel engines only.* Gasoline-fueled engines must use the calculations in § 86.345.

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(b) For Diesel engines, the calculations specified in 40 CFR 86.977-15 may be substituted for § 86.345.

(c) The modal *BSFC* and weighted *BSFC* shall be calculated per § 86.345.

(d) If the provisions of this section are used, a CO<sub>2</sub> measurement is not required.

(e) Both 40 CFR 86.977-15(a) and § 86.313 shall apply to air-flow measurements. For the purposes of this section, the air-flow measurement accuracy specified in § 86.313 shall be ±1 percent.

**§ 86.348-79 Alternative to fuel H/C analysis.**

(a) Fuel H/C analysis need not be performed if the following average H/C ratios are used for all calculations.

- (1) #1B1 Diesel: 1:93
- (2) #1B2 Diesel: 1:80
- (3) Gasoline: 1.85
- (b) [Reserved]

[46 FR 50496, Oct. 13, 1981, and 47 FR 49807, Nov. 2, 1982]

**Subpart E—Emission Regulations for 1978 and Later New Motorcycles, General Provisions**

SOURCE: 42 FR 1126, Jan. 5, 1977, unless otherwise noted.

**§ 86.401-2006 General applicability.**

This subpart applies to 1978 and later model year, new, gasoline-fueled motorcycles built after December 31, 1977, and to 1990 and later model year, new methanol-fueled motorcycles built after December 31, 1989 and to 1997 and later model year, new natural gas-fueled and liquefied petroleum gas-fueled motorcycles built after December 31, 1996 and to 2006 and later model year new motorcycles, regardless of fuel.

[69 FR 2435, Jan. 15, 2004]

**§ 86.401-97 General applicability.**

(a) This subpart applies to 1978 and later model year, new, gasoline-fueled motorcycles built after 31 December, 1977, and to 1990 and later model year, new, methanol-fueled motorcycles built after 31 December, 1989 and to 1997 and later model year, new, natural gas-fueled and liquefied petroleum gas-