Constituent	Volume percent	Parts per million
Nitrogen = Balance		

*Propylene/propane ratio = 2/1.

Appendix A to Subpart D of Part 90—Tables

TABLE 1.—SYMBOLS USED IN SUBPART D

Symbol	Term	Unit
CO	Carbon monoxide.	
CO_2	Carbon dioxide.	
NO	Nitric oxide.	
NO_2	Nitrogen dioxide.	
NO_X	Oxides of nitrogen.	
O_2	Oxygen.	
conc	Concentration (ppm by volume)	ppm
f	Engine specific parameter considering atmospheric conditions.	
F_{FCB}	Fuel specific factor for the carbon balance calculation.	
F_{FD}	Fuel specific factor for exhaust flow calculation on dry basis.	
F_{FH}	Fuel specific factor representing the hydrogen to carbon ratio.	
F_{FW}	Fuel specific factor for exhaust flow calculation on wet basis.	
G_{AIRW}	Intake air mass flow rate on wet basis	kg/h
G_{AIRD}	Intake air mass flow rate on dry basis	kg/h
G_{EXHW}	Exhaust gas mass flow rate on wet basis	kg/h
G_{Fuel}	Fuel mass flow rate	kg/h
H	Absolute humidity (water content related to dry air)	gr/kg
i	Subscript denoting an individual mode.	
K_H	Humidity correction factor.	
L	Percent torque related to maximum torque for the test mode	percent
mass	Pollutant mass flow	g/h
$n_{d,i}$	Engine speed (average at the i'th mode during the cycle)	1/min
P_s	Dry atmospheric pressure	kPa
P_d	Test ambient saturation vapor pressure at ambient temperature	kPa
P	Gross power output uncorrected	kW
P_{AUX}	Declared total power absorbed by auxiliaries fitted for the test	kW
P_M	Maximum power measured at the test speed under test conditions	kW
P_i	$P_i = P_{M,i} + P_{AUX,\ i}$.	
P_B	Total barometric pressure (average of the pre-test and post-test values)	kPa
R_a	Relative humidity of the ambient air	percent
T	Absolute temperature at air inlet	C
T_{be}	Air temperature after the charge air cooler (if applicable) (average)	C
T_{clout}	Coolant temperature outlet (average)	C
T_{Dd}	Absolute dew point temperature	C
$T_{d,i}$	Torque (average at the i'th mode during the cycle)	N-m
T_{SC}	Temperature of the intercooled air	C
$T_{ref.}$	Reference temperature	C
V_{EXHD}	Exhaust gas volume flow rate on dry basis	m^3/h
V_{AIRW}	Intake air volume flow rate on wet basis	m^3/h
P_B	Total barometric pressure	kPa
V_{EXHW}	Exhaust gas volume flow rate on wet basis	m^3/h
WF	Weighing factor.	
WF_E	Effective weighing factor.	

TABLE 2.—MEASUREMENT CALIBRATION ACCURACY AND FREQUENCY

No.	Item	Permissible deviation from reading*		Calibration frequency
		Non-idle	Idle	
1	Engine speed	± 2 %	Same	Monthly or within one month prior to the certification test.
2	Torque	± 2 %		Monthly or within one month prior to the certification test.
3	Fuel consumption	± 2 %	±5%	Monthly or within one month prior to the certification test.
4	Air consumption	± 2 %	±5%	As required.
5	Coolant temperature	± 2° C	Same	As required.
6	Lubricant temperature	± 2° C	Same	As required.
7	Exhaust back pressure	± 5 %	Same	As required.
8	Inlet depression	± 5 %	Same	As required.
9	Exhaust gas temperature	± 15° C	Same	As required.
10	Air inlet temperature (combustion air).	± 2° C	Same	As required.
11	Atmospheric pressure	± 0.5 %	Same	As required.