The Partial Amendment to Announcement of Specifying Details of the Safety Regulations for Road Vehicles

1. Background

For the sake of promoting the international harmonization of vehicle regulations for automotive parts and equipment without degrading the levels of the national safety and environmental regulations, the Government of Japan acceded to the Agreement Concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles, done at Geneva on 25 June 1998 (hereinafter, referred to as "the 1998 Agreement), in 1999, and has been working on the establishment of the Global Technical Regulations (gtr) under the 1998 Agreement so far.

The gtr regarding measurement procedure for two-wheeled motor cycles equipped with a positive or compression ignition engine with regard to the emission of gaseous pollutants, CO2 emission and fuel consumption (WMTC) was established in 2005.

Based on these, the Ministry of Land, Infrastructure, Transport and Tourism of Japan made necessary amendments to the national regulations as outlined below.

It is expected that these amendments will further seek smoothing the international distribution of vehicle and its equipments, reduction of costs for production and development, etc. and promote the effective measures for vehicle environment.

2. Summary of amendments

2.1 Scope

The amendments provided below will apply to the emission of two-wheeled motorcycles with an engine cylinder capacity exceeding 50 cm^3 or a maximum design speed exceeding 50 km/h.

2.2 Amendments

2.2.1 Introduction of exhaust gas measurement cycle

The WMTC (World-wide Motorcycle Test Cycle) gtr established in the World Forum For Harmonization of Vehicle Regulations (UN/ECE/WP29) will be introduced to national regulations as a new test cycle. (more details; see Appendix)

2.2.2 Modification of the regulation value

The current regulation value will be replaced to the equivalent value that is measured with the WMTC mode. (more details; see Appendix)

2.3 Lead time

The amendments will apply to;

- Type-Designated vehicle manufactured on or after 1 October, 2012 except imported vehicle.
- Type-Designated import vehicle manufactured on or after 1 September, 2013.

2.4 Schedule

The amendments are scheduled to be promulgated by the end of October 2010 and to be entered into force immediately.

1050

1200

1350

1500

Appendix

Test cycle and limit values under WMTC mode

1. Vehicle classification

<< Class 1 >> Vehicles that fulfill the following specifications belong to class 1:

 $\begin{array}{l} 50\ cm^3 < engine\ capacity \leq 150\ cm^3\ and\ v_{max} < 50\ km/h\ or\\ Engine\ capacity < 150\ cm^3\ and\ 50\ km/h \leq v_{max} < 100\ km/h, \end{array}$

<< Class 2>>

Vehicles that fulfill the following specifications belong to class 2:

Engine capacity $<150~cm^3$ and 100 km/h $\leq v_{max} < 115$ km/h or

Engine capacity $\geq 150 \text{ cm}^3$ and $v_{max} < 115 \text{ km/h}$ subclass 2-1,

2.2

2-1

750

 $\mathbf{2}$

engine capacity in cm³

900

600

115 km/h \leq v_{max} < 130 km/h

<< Class3>>

Vehicles that fulfill the following specifications belong to class 3:

$$130 \le v_{max} < 140 \text{ km/h}$$

 $v_{max} \ge 140 \text{ km/h}$

150 140 130

120 110 100

30 20 10

0

150

300

450

max. vehicle speed in km/h



subclass 3-2.

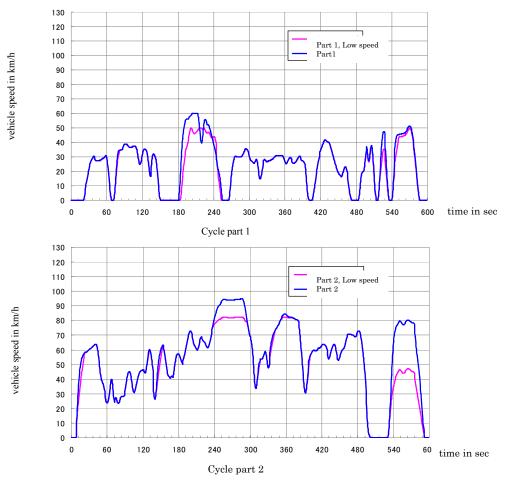
subclass 3-1,

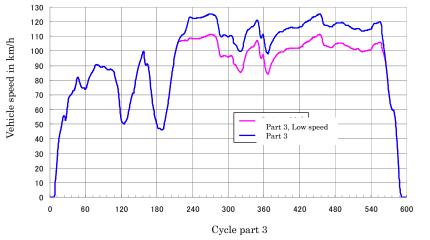
subclass 2-2

Vehicle class		Cycle		Weighting
Class 1		Part 1, Low Speed	Cold	50%
		Part 1, Low Speed	Hot	50%
Class 2	subclass 2-1	Part 1, Low Speed	Cold	30%
		Part 2, Low Speed	Hot	70%
	subclass 2-2	Part 1	Cold	30%
		Part 2	Hot	70%
Class 3	subclass 3-1	Part 1	Cold	25%
		Part 2	Hot	50%
		Part 3, Low Speed	Hot	25%
	subclass 3-2	Part 1	Cold	25%
		Part 2	Hot	50%
		Part 3	Hot	25%

2. Weighting factors for the final emissions

3. Driving Schedule





time in sec

4. Limit values under WMTC mode

Engine capacity	CO (g/km)	THC (g/km)	NOx (g/km)
Engine capacity $\leq 125 \text{ cm}^3$	2.2	0.45	0.16
Engine capacity > 125 cm ³	2.62	0.27	0.21

The above limit values are the values in which the weight was added to the value of the test result.
