

18 May 1988

AGREEMENT

CONCERNING THE ADOPTION OF UNIFORM CONDITIONS OF APPROVAL
AND RECIPROCAL RECOGNITION OF APPROVAL
FOR MOTOR VEHICLE EQUIPMENT AND PARTS

done at Geneva on 20 March 1958

Addendum 39: Regulation No. 40

Date of entry into force as an annex to the Agreement
1 September 1979

Amendment 1

01 series of amendments entered into force on 31 May 1988

UNIFORM PROVISIONS CONCERNING THE APPROVAL OF MOTOR CYCLES
EQUIPPED WITH A POSITIVE -IGNITION ENGINE WITH REGARD TO THE EMISSION
OF GASEOUS POLLUTANTS BY THE ENGINE



UNITED NATIONS

Paragraph 4.3 , amend to read:

" ... first two digits (at present 01 corresponding to the 01 series of amendments which entered into force on 31 May 1988) shall indicate ..."

Table I and Table II, amend to read as follows:

"Table I
 LIMITS IN TERMS OF REFERENCE WEIGHT R FOR
 MOTOR CYCLES WITH TWO-STROKE ENGINES

	Type approval	Conformity of production
<u>Carbon monoxide</u>		
R < 100 kg	CO = 12.8 g/km	CO = 16 g/km
100 kg ≤ R ≤ 300 kg	CO = 12.8+19.2. $\frac{R-100}{200}$ g/km	CO = 16 + 24. $\frac{R-100}{200}$ g/km
R > 300 kg	CO = 32 g/km	CO = 40 g/km
<u>Unburnt hydrocarbons</u>		
R < 100 kg	HC = 8 g/km	HC = 10.4 g/km
100 kg ≤ R ≤ 300 kg	HC = 8 + 4. $\frac{R-100}{200}$ g/km	HC = 10.4+6.4 $\frac{R-100}{200}$ g/km
R > 300 kg	HC = 12 g/km	HC = 16.8 g/km

Table II
 LIMITS IN TERMS OF REFERENCE WEIGHT R FOR
 MOTOR CYCLES WITH FOUR-STROKE ENGINES

	Type approval	Conformity of production
<u>Carbon monoxide</u>		
R < 100 kg	CO = 17.5 g/km	CO = 21 g/km
100 kg ≤ R ≤ 300 kg	CO = 17.5+ 17.5 $\frac{R-100}{200}$	CO = 21 + 21. $\frac{R-100}{200}$
R > 300 kg	CO = 35 g/km	CO = 42 g/km
<u>Unburnt hydrocarbons</u>		
R < 100 kg	HC = 4.2 g/km	HC = 6 g/km
100 kg ≤ R ≤ 300 kg	HC =4.2 + 1.8. $\frac{R-100}{200}$	HC =6 + 2.4. $\frac{R-100}{200}$
R > 300 kg	HC = 6 g/km	HC = 8.4 g/km

Annex 3

Model A

1. Replace "R-002439" by "R-012439"
2. Replace old text by the following:

"The above approval mark affixed to a vehicle shows that the vehicle type concerned has, with regard to the emission of gaseous pollutants of the engine, been approved in the Netherlands (E 4) pursuant to Regulation No. 40. The first two digits of the approval number indicate that Regulation No. 40 already included the 01 series of amendments when the approval was granted."

Model B

1. Replace "002439" by "012439"
2. Replace the old text by the following:

"The approval mark affixed to a vehicle shows that the vehicle type concerned has been approved in the Netherlands (E 4) pursuant to Regulations Nos. 40 and 33. */ The approval numbers indicate that, at the dates when the respective approvals were granted, Regulation No. 40 included the 01 series of amendments but Regulation No. 33 was still in its original form."

(The footnote remains unchanged.)

Annex 4

Paragraph 2.3.1, amend to read as follows:

"The gearbox of the motor cycles shall be used as follows:"

Annex 6 amend to reads

"Annex 6

SPECIFICATIONS OF REFERENCE FUELS

1. Technical data of the reference fuel to be used for testing vehicles equipped with positive ignition engines.

(a) CEC reference fuel RF-01-A-80 (Type: premium gasoline, leaded)

	<u>Limits and Units</u>	<u>ASTM <u>1/</u> method</u>
Research octane number	min. 98.0	D 2699
Density at 15°C	min. 0.741 kg/l max. 0.755	D 1298
Reid vapor pressure	min. 0.56 bar max. 0.64	D 323
Distillation (2)		D 86
- Initial boiling point	min. 24 °C max. 40	
- 10 vol. - per cent - point	min. 42 °C max. 58	
- 50 vol. - per cent - point	min. 90 °C max. 110	
- 90 vol. - per cent - point	min. 150 max. 170	
- Final boiling point	min. 185 max. 205	
Hydrocarbon analysis		D 1319
- Olefins	max. 20 % vol.	
- Aromatics	max. 45 % vol.	
- Saturates	balance	
Oxidation stability	min. 400 minutes	D 525
Existent gum	max. 4 mg/100 ml	D 381
Sulphur content	max. 0.04 % mass	D 1266, D 2622 or D 2785
Lead content	min. 0.10 g/l max. 0.40 g/l	D 3341
Nature of scavenger	motor mix	
Nature of lead alkyl	not specified	
Carbon/hydrogen ratio	Report	

1/ Initials of the American Society for Testing Materials, 1916 Race Street, Philadelphia, Pennsylvania 19105, United States of America.

(b) Reference fuel No. 2: CEC RF 08-A-85 (Type: premium petrol, lead-free)

	Limits and units		ASTM method
	min.	Max.	
Research octane number	95.0		D 2699
Motor octane number	85.0		D 2700
Density at 15°C	0.748	0.762	D 1298
Reid vapor pressure	0.56 bar	0.64 bar	D 323
Distillation			
Initial boiling point	24°C	40°C	D 86
10 vol. % point	42°C	58°C	D 86
50 vol. % point	90°C	110°C	D 86
90 vol. % point	155°C	180°C	D 86
Final boiling point	190°C	215°C	D 86
Residue		2%	D 86
Hydrocarbon analysis			
Alkenes		20 vol. %	D 1319
Aromatics	(included inq 5 vol. % max. benzol*)	45 vol. %	D 1319 *D 3606/D 2267
Alkanes		balance	D 1319
Ratio hydrocarbon/ hydrogen		ratio	
Oxidation stability	480 min.		D525
Existent gum		4 mg/100 ml	D 381
Sulphur content		0.04% mass	D 1266/D 2622/ D 2785
Copper corrosion at 50°C		1	D 130
Lead content		0.005 g/l	D 3237
Phosphorus content		0.0013 g/l	D 3231

Note: Addition of oxygen containing components prohibited."