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COMMISSION DIRECTIVE

of 24 March 1988

adapting to technical progress Council Directive 80/1269/EEC on the approximation of the laws of the Member States relating to the engine power of motor vehicles

(88/195/EEC)

(OJ L 92, 9.4.1988, p. 50)

Corrected by:

►**C1** Corrigendum, OJ L 105, 26.4.1988, p. 34 (88/195)

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COMMISSION DIRECTIVE

of 24 March 1988

adapting to technical progress Council Directive 80/1269/EEC on the approximation of the laws of the Member States relating to the engine power of motor vehicles

(88/195/EEC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community,

Having regard to Council Directive 80/1269/EEC of 16 December 1980 on the approximation of the laws of the Member States relating to the engine power of motor vehicles ([1]), and in particular Article 3 thereof,

whereas, in view of experience gained and of the state of the art, it is now appropriate to render more precise the test procedures laid down in Directive 80/1269/EEC, and in particular to align them with the latest developments made by the United Nations Economic Commission for Europe and the International Organization for Standardization (ISO);

Whereas the provisions of this Directive were in accordance with the opinion of the Committee for the Adaptation to Technical Progress of the Directives on Motor Vehicles,

HAS ADOPTED THIS DIRECTIVE:

Article 1

Annexes I and II to Directive 80/1269/EEC are hereby amended in accordance with the Annex to this Directive.

Article 2

1. As from 1 April 1988 no Member State may, on grounds relating to engine power:

— refuse, in respect of a type of vehicle, to grant EEC type-approval, or to issue the copy of the certificate provided for in the last indent of Article 10 (1) of Council Directive 70/156/EEC ([2]), or to grant national type-approval, or

— prohibit the entry into service of vehicles

where the engine power of such type of vehicle or of such vehicles has been determined in accordance with Directive 80/1269/EEC as last amended by this Directive.

2. As from 1 October 1988 Member States:

— shall no longer issue the copy of the certificate provided for in the last indent of Article 10 (1) of Directive 70/156/EEC in respect of a type of vehicle of which the engine power has not been determined in accordance with Directive 80/1269/EEC as last amended by this Directive,

— may refuse to grant national type-approval of a type of vehicle of which the engine power has not been determined in accordance with Directive 80/1269/EEC, as last amended by this Directive.

3. As from 1 October 1992 Member States may prohibit the entry into service of vehicles of which the engine power has not been determined in accordance with Directive 80/1269/EEC, as last amended by this Directive.

([1]) OJ No L 375, 31. 12. 1980, p. 46.
([2]) OJ No L 42, 23. 2. 1970, p. 1.

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Article 3

Before 1 April 1988, Member States shall bring into force the provisions necessary in order to comply with this Directive. They shall forthwith inform the Commission thereof.

Article 4

This Directive is addressed to the Member States.

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ANNEX

Annex I to Directive 80/1269/EECis replaced by the following:

'ANNEX 1

DETERMINATION OF ENGINE POWER

1. EEC TYPE-APPROVAL

1.1. **Application for EEC type-approval**

The application for EEC type-approval for a vehicle type in respect of the engine power is submitted by the vehicle manufacturer or his authorized representative.

1.1.1. It must be accompanied by three copies of the document mentioned below and of the following:

1.1.1.1. Information sheet duly completed,

1.1.1.2. Information required in Appendix 1 or 2.

1.1.2. If the technical service responsible for the type-approval tests carries out the tests itself, a vehicle representative of the vehicle type to be approved must be provided.

1.2. **Documents**

Where an application within the meaning of 1.1 is accepted, the competent authority must prepare the document, the model for which is contained in Annex II. In order to draw up this document, the competent authority of the Member State conducting the EEC type-approval tests may use the report prepared by an approved or recognized laboratory pursuant to the provisions of this Directive.

2. SCOPE

2.1. This method applies to internal-combustion engines used for the propulsion of category M and N vehicles as defined in Annex I to Directive 70/156/EEC, belonging to either of the following types.

2.1.1. Internal-combustion piston engines (positive ignition or compression ignition), excluding free-piston engines;

2.1.2. Rotary-piston engines.

2.2. This method applies to naturally aspirated or supercharged engines.

3. DEFINITIONS

For the purposes of this Directive,

3.1. "Net power" means the power obtained on the test-bed at the end of the crankshaft or its equivalent at the corresponding engine speed with the auxiliaries listed in Table 1. If the power measurement can be carried out with a mounted gearbox only, the efficiency of the gearbox is to be taken into account.

3.2. "Maximum net power" means the maximum value of the net power measured at full engine load.

3.3. "Standard-production equipment" means equipment provided by the manufacturer for a particular application.

4. ACCURACY OF THE MEASUREMENTS OF FULL LOAD POWER

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4.1. **Torque:** ± 1 % of measured torque (1).

4.2. **Engine speed**

The measurement must be accurate to within ± 0,5 %. Engine speed must be measured preferably with an automatically synchronized revolution counter and chronometer (or counter-timer).

4.3. **Fuel consumption:** ± 1 % of measured consumption.

4.4. **Fuel temperature:** ± 2 K.

4.5. **Engine inlet air temperature:** ± 2 K.

4.6. **Barometric pressure:** ± 100 Pa.

4.7. **Pressure in inlet manifold:** ± 50 Pa (see note 1a to Table 1).

4.8. ►C1 **Pressure in vehicle exhaust pipe:** ± 200 Pa ◄ (see note 1b to Table 1).

5. TEST FOR MEASURING NET ENGINE POWER

5.1. **Auxiliaries**

5.1.1. *Auxiliary equipment to be fitted*

During the test, the auxiliary equipment necessary for the engine operation in the intended application (as listed in Table 1) shall be installed on the test bench as far as possible in the same position as the intended application.

5.1.2. *Auxiliary equipment to be removed*

Certain vehicle accessories necessary only for the operation of the vehicle and which may be mounted on the engine shall be removed for the test.

The following non-exhaustive list is given as a sample:

— air compressor for brakes,
— power-steering compressor,
— suspension compressor,
— air-conditioning system.

Where accessories cannot be removed, the power absorbed by them in the unloaded condition may be determined and added to the measured engine power.

TABLE 1

Auxiliary equipment to be included for the test to determine net power of engine

No	Auxiliary equipment	Fitted for net power test
1	Intake system	
	Intake manifold	Yes, standard-production equipment
	Air filter 1a	
	Intake silencer 1a	
	Crankcase emission control system	
	Speed-limiting device (1a)	
2	Induction-heating device of intake manifold	Yes, standard-production equipment (if possible it shall be set in the most favourable position)

(1) The torque measuring system shall be calibrated to take friction losses into account. The accuracy in the lower half of the measuring range of the dynamometer bench may be ± 2 % of measured torque.