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(Acts whose publication is not obligatory)

COMMISSION

COMMISSION DIRECTIVE

of 7 November 1973

adapting to technical progress the Council Directive of 6 February 1970 on the approximation of the laws of the Member States relating to the permissible sound level and the exhaust system of motor vehicles

(73/350/EEC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community;

Having regard to the Council Directive of 6 February 1970⁽¹⁾ on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers (70/156/EEC), as amended by the Act⁽²⁾ annexed to the Treaty concerning the Accession of new Member States to the EEC and EAEC signed in Brussels on 22 January 1972, and in particular to Articles 11, 12 and 13 thereof;

Having regard to the Council Directive of 6 February 1970⁽³⁾ on the approximation of the laws of the Member States relating to the permissible sound level and the exhaust system of motor vehicles (70/157/EEC), as amended by the Act annexed to the Treaty concerning the Accession of new Member States to the EEC and EAEC signed in Brussels on 22 January 1972, and in particular to Article 3 thereof;

Whereas a vehicle must be designed and built in such a way that its sound level does not exceed the pres-

cribed limits; whereas this principle applies especially to exhaust systems (silencers);

Whereas in the light of technical progress it is now possible to test exhaust systems under conditions which correspond to their normal operating state in road traffic; whereas in consequence methods shall be adopted which enable new types of silencers to be tested under these conditions; whereas the testing of silencers may be effected by continuous road-testing or by special bench tests; whereas since all the effects of continuous on-the-road, operation cannot always be produced, it is necessary where there is any doubt, to have recourse to the test bench;

Whereas the provisions of this Directive are in conformity with the Opinion of the Committee on the adaptation to technical progress of the Directives on the removal of technical barriers to trade in the motor vehicle sector,

HAS ADOPTED THIS DIRECTIVE:

Article 1

In the Annex to the Council Directive of 6 February 1970 (70/157/EEC), heading II, entitled 'exhaust system (silencers)', is replaced by the text contained in the Annex to the present Directive.

⁽¹⁾ OJ No L 42, 23. 2. 1970, p. 1.

⁽²⁾ OJ No L 73, 27. 3. 1972, pp. 115 and 157.

⁽³⁾ OJ No L 42, 23. 2. 1970, p. 16.

Article 2

1. With effect from 1 March 1974 the Member States shall not, on grounds relating to the permissible sound level and the exhaust system :

— refuse EEC type-approval, or the delivery of the document referred to in Article 10 (1), second indent, of the Council Directive of 6 February 1970 (70/156/EEC) or the national type-approval for any type of motor vehicle

— or prohibit the entry into service of vehicles,

if the sound level and the exhaust system of this type of vehicle or of these vehicles comply with the provisions of the Council Directive of 6 February 1970 (70/157/EEC) as last amended by this Directive.

2. With effect from 1 October 1974 the Member States :

— shall no longer issue the document envisaged in Article 10 (1), second indent, of the Council Directive of 6 February 1970 (70/156/EEC) for a type of vehicle the sound level and the exhaust system of which do not comply with the provisions of the Council Directive of 6 February 1970 (70/157/EEC) as last amended by this Directive,

— may refuse the national type-approval of a type of vehicle the sound level and the exhaust system of

which do not comply with the provisions of the Council Directive of 6 February 1970 (70/157/EEC) as last amended by this Directive.

3. With effect from 1 October 1975 the Member States may prohibit the first entry into service of vehicles the sound level and exhaust system of which do not comply with the provisions of the Council Directive of 6 February 1970 (70/157/EEC) as last amended by this Directive.

4. The Member States shall adopt and publish the provisions necessary in order to comply with this Directive before 1 March 1974 and shall forthwith inform the Commission thereof.

Article 3

This Directive is addressed to all the Member States.

Done at Brussels, 7 November 1973.

For the Commission

The President

François-Xavier ORTOLI

ANNEX

II. EXHAUST SYSTEM (SILENCERS)

II.1. If a vehicle is fitted with devices designed to reduce exhaust noise (silencers), the requirements contained in this heading II shall be met. If the engine air intake is fitted with an air filter which is necessary in order to conform to the permissible noise level, this filter shall be considered to form part of the silencer and the requirements of this heading II shall also apply to this filter.

II.2. A diagram of the exhaust system shall be appended to the type-approval certificate for the vehicle.

II.3. The silencer shall bear a clearly legible, indelible indication of its mark and type.

II.4. Fibrous absorbing materials shall not be used in the construction of silencers unless suitable measures are undertaken at the design or production stages to ensure that the efficiency to comply with the limits imposed in Heading I is achieved on the road. Such a silencer shall be considered to be efficient on the road if:

II.4.1. the silencer on the prototype vehicle tested in accordance with the requirements of items 1.3 and 1.4 has been put into a normal state for road use before the noise level measurements are taken.

This can be carried out:

II.4.1.1. by continuous operation on the road for 10 000 km;

II.4.1.1.1. about one half of this operation shall consist in town driving and the other half in long-distance runs at high speed; the continuous operation on the road may be replaced by a corresponding programme of track tests;

II.4.1.1.2. Care must be taken to alternate several times between the two ranges of road speed;

II.4.1.1.3. The complete test programme must include a minimum of 10 breaks of at least three hours' duration in order to reproduce the effects of cooling and of any condensation which may occur;

II.4.1.2. or by bench tests under the following conditions:

II.4.1.2.1. using standard parts and observing the vehicle manufacturer's instructions, the silencer shall be fitted to the engine, which itself is coupled to a dynamometer;

II.4.1.2.2. The tests shall be performed in six six-hours periods with a break of at least 12 hours between each period in order to reproduce the effects of cooling and of any condensation which may occur;

II.4.1.2.3. During each six-hours period the engine shall be run successively under the following conditions:

1. five-minute sequence at idling speed;
2. one-hour sequence under 1/4 load at 3/4 of the peak power speed;
3. one-hour sequence under 1/2 load at 3/4 of the peak power speed;
4. ten-minute sequence under full load at 3/4 of the peak power speed;
5. fifteen-minute sequence under 1/2 load at peak power speed;
6. thirty-minute sequence under 1/4 load at peak power speed;

The phrase 'peak power speed' means that to be quoted by the manufacturer.

Total length of the 6 sequences: 3 hours.

Each period shall comprise two sets of the six sequences above;

- II.4.1.2.4. During the tests the silencer shall not be cooled by any forced draught simulating the slip-stream about the vehicle.
Nevertheless cooling may be authorized at the request of the manufacturer in order not to exceed the temperature recorded at the silencer inlet when the vehicle is travelling at maximum speed ;
 - II.4.1.3. or by the removal of the fibrous matter from the silencer.
 - II.4.1.4. After the conditioning of the silencer as described under Item II.4.1, the noise measurement shall be carried out in conformity with the requirements of Item I.4.1, above. The measured noise level shall not exceed that laid down in Item I.1 for the category to which the vehicle belongs.
 - II.5. In cases where Article 8 (3) of the Council Directive concerning 'type-approval' must be applied, the method of testing specified in Item II.4.1.2 above shall be the valid method.
 - II.6. Suitable attachments shall ensure that the fibrous absorbing materials remain in position throughout the operating life of the silencer.
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