

COUNCIL DIRECTIVE 92/55/EEC

of 22 June 1992

amending Directive 77/143/EEC on the approximation of the laws of the Member States relating to roadworthiness tests for motor vehicles and their trailers (exhaust emissions)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 75 thereof,

Having regard to the proposal from the Commission ⁽¹⁾,

Having regard to the opinion of the European Parliament ⁽²⁾,

Having regard to the opinion of the Economic and Social Committee ⁽³⁾,

Whereas Directive 77/143/EEC ⁽⁴⁾ provides that all categories of vehicles listed in Annex I thereto must be subject to regular roadworthiness testing;

Whereas that Directive provides for the adoption of separate directives to test the standards which the items listed in Annex II of that Directive must satisfy and for the establishment of technical committee to advise the Commission before it adopts measures to adjust roadworthiness tests to technical progress;

Whereas this Directive is intended to maintain emissions at a low level throughout the useful life of a vehicle by means of regular exhaust emission tests and to ensure that vehicles which are major polluters are withdrawn from service until they are brought to a proper state of maintenance;

Whereas most Member States have adopted procedures for testing heavy commercial vehicles with regard to the opacity of their exhaust fumes;

Whereas several Member States have national rules for testing the gaseous emissions from lighter vehicles, particularly passenger cars;

Whereas assessment of the type-approval procedures for testing gaseous emissions and fumes emitted by all types of vehicles shows that applying those procedures in the roadworthiness test presents some difficulty;

Whereas testing during the life cycle of a vehicle should be relatively simple, quick and inexpensive;

Whereas bad tuning and inadequate maintenance are detrimental not only to the engine but also to the environment since they cause increased pollution and fuel consumption;

Whereas it is important that environment-friendly transport be developed;

Whereas in the case of compression ignition (diesel engines) measurement of the opacity of the exhaust fumes is considered to be an adequate indicator of the condition of the vehicle's state of maintenance, with regard to emission;

Whereas for positive ignition petrol engines measurement of carbon monoxide emissions from the exhaust pipe when the engine is idling is considered to be an adequate indicator of the vehicle's state of maintenance, with regard to emission;

Whereas the failure rate in exhaust emission tests for vehicles which have not been regularly maintained may well be high;

Whereas in the case of petrol-engined vehicles for which the type-approval standards specify that they should be equipped with advanced emission control systems such as three-way catalytic converters which are lambda-probe controlled, the regular emission test standards will be more stringent than for conventional vehicles;

Whereas this Directive will be adapted from time to time to take account of developments in vehicle construction which facilitate in-service testing and in test methods which reflect more closely the actual conditions in which a vehicle is used.

HAS ADOPTED THIS DIRECTIVE:

Article 1

Annex II to Directive 77/143/EEC is hereby amended as follows:

- the two columns in section 8.2 (exhaust emissions) shall be replaced by the text set out in the Annex to this Directive;
- after section 8.2, the following headings shall be inserted above the 2 columns:

VEHICLES IN
CATEGORIES
1, 2, 3 and 4

VEHICLES IN
CATEGORIES
5 and 6

⁽¹⁾ OJ No L 189, 20. 7. 1991, p. 20.

⁽²⁾ OJ No C 150, 15. 6. 1992.

⁽³⁾ OJ No C 49, 24. 2. 1992, p. 64.

⁽⁴⁾ OJ No L 47, 18. 2. 1977, p. 47. Last amended by Directive 91/328/EEC (OJ No L 178, 6. 7. 1991, p. 29).

Article 2

1. Member States shall adopt and publish the laws, regulations and administrative measures necessary to comply with this Directive within one year from the date of its adoption. They shall forthwith inform the Commission thereof.
2. They shall implement these provisions at the latest by:
 - 1 January 1994 for the vehicles referred to in section 8.2.1 (a) of Annex II,
 - 1 January 1996 for the vehicles referred to in section 8.2.2 of Annex II;
 - 1 January 1997 for the vehicles referred to in section 8.2.1 (b) of Annex II;
3. When the Member States adopt the measures referred to in paragraph 1, they shall contain a reference to this

Directive or be accompanied by such reference on the occasion of their official publication. The methods of making such a reference shall be laid down by the Member States.

4. Member States shall communicate to the Commission the text of the provisions of domestic law which they adopt in the field governed by this Directive.

Article 3

This Directive is addressed to the Member States.

Done at Luxembourg, 22 June 1992.

For the Council

The President

Joaquim FERREIRA DO AMARAL

ANNEX

VEHICLES IN CATEGORIES 1, 2, 3, 4, 5 and 6

8.2. Exhaust emissions

8.2.1. Motor vehicles equipped with positive-ignition (petrol) engines

- (a) where the exhaust emissions are not controlled by an advanced emission control system such as a three-way catalytic converter which is lambda-probe controlled.

1. Visual inspection of the exhaust system in order to check that there are no leakages.
2. If appropriate, visual inspection of the emission control system in order to check that the required equipment has been fitted.

After a reasonable period of engine conditioning (taking account of the vehicle manufacturer's recommendations) the carbon monoxide (CO) content of the exhaust gases is measured when the engine is idling (no load).

The maximum permissible CO content in the exhaust gases is that stated by the vehicle manufacturer. Where this information is not available or where Member States' competent authorities decide not to use it as a reference value, the CO content must not exceed the following:

- for vehicles registered or put into service for the first time between the date from which Member States required the vehicles to comply with Directive 70/220/EEC⁽¹⁾ and 1 October 1986:

CO — 4,5 vol %,

- for vehicles registered or put into service for the first time after 1 October 1986:

CO — 3,5 vol %.

- (b) where the exhaust emissions are controlled by an advanced emission control system such as a three-way catalytic converter which is lambda-probe controlled.

1. Visual inspection of the exhaust system in order to check that there are no leakages and that all parts are complete.
2. Visual inspection of the emission control system in order to check that the required equipment has been fitted.
3. Determination of the efficiency of the vehicle's emission control system by measuring the lambda value and the CO content of the exhaust gases in accordance with Section 4 or with the procedures proposed by the manufacturers and approved at the time of type-approval. For each of the tests the engine is conditioned in accordance with the vehicle manufacturer's recommendations.
4. Exhaust pipe emissions — limit values

- Measurement at engine idling speed:

The maximum permissible CO content in the exhaust gases is that stated by the vehicle manufacturer. Where this information is not available, the maximum CO content must not exceed 0,5 vol %.

- Measurement at high idle speed, engine speed to be at least 2 000 rpm:

CO content: maximum 0,3 vol %

Lambda: 1 +/- 0,03 or in accordance with the manufacturer's specifications.

8.2.2. Motor vehicles equipped with compression ignition (diesel) engines

Measurement of exhaust gas opacity with free acceleration (no load from idling up to cut-off speed). The level of concentration must not exceed the level recorded on the plate pursuant to Directive 72/306/EEC⁽²⁾. Where this information is not available or where Member States' competent

⁽¹⁾ Council Directive 70/220/EEC of 20 March 1970 on the approximation of the laws of the Member States relating to measures to be taken against air pollution by gases from positive-ignition engines of motor vehicles (OJ No L 76, 9. 3. 1970, p. 1). Last amended by Directive 91/441/EEC, (OJ No L 242, 30. 8. 1991, p. 1.).

⁽²⁾ Council Directive 72/306/EEC of 2 August 1972 on the approximation of the laws of the Member States relating to the measures to be taken against the emission of pollutants from diesel engines for use in vehicles (OJ No L 190, 20. 8. 1972, p. 1). Last amended by Commission Directive 89/491/EEC (OJ No L 238, 15. 8. 1989, p. 43).

authorities decide not to use it as a reference, the limit values of the co-efficient of absorption are as follows:

Maximum co-efficient of absorption for:

- Naturally aspirated diesel engines = $2,5 \text{ m}^{-1}$,
- Turbo-charged diesel engines = $3,0 \text{ m}^{-1}$,

or equivalent values where use is made of equipment of a type different from that used for EEC type-approval.

Vehicles registered or put into service for the first time before 1 January 1980 are exempted from these requirements.

8.2.3. *Test equipment*

Vehicle emissions are tested using equipment designed to establish accurately whether the limit values prescribed or indicated by the manufacturer have been complied with.

- 8.2.4. Where, during EEC type-approval, a type of vehicle is found not to have satisfied the limit values laid down by this Directive, the Member States may lay down higher limit values for that type of vehicle on the basis of proof supplied by the manufacturer. They must inform the Commission thereof forthwith and it in turn will inform the other Member States.
-