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COMMISSION DIRECTIVE

of 18 April 1979

adapting to technical progress Council Directive 70/221/EEC on the approximation of the laws of the Member States relating to the liquid fuel tanks and rear underrun protection of motor vehicles and their trailers

(79/490/EEC)

(OJ L 128, 26.5.1979, p. 22)

Corrected by:

►**C1** Corrigendum, OJ L 188, 26.7.1979, p. 54 (79/490)

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COMMISSION DIRECTIVE

of 18 April 1979

adapting to technical progress Council Directive 70/221/EEC on the approximation of the laws of the Member States relating to the liquid fuel tanks and rear underrun protection of motor vehicles and their trailers

(79/490/EEC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community,

Having regard to Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers ([1]), as last amended by Directive 78/547/EEC ([2]), and in particular Articles 11, 12 and 13 thereof,

Having regard to Council Directive 70/221/EEC of 20 March 1970 on the approximation of the laws of the Member States relating to the liquid fuel tanks and rear underrun protection of motor vehicles and their trailers ([3]),

Whereas, in view of experience gained and of the state of the art, it is now possible to make requirements more stringent and to match them more closely to actual test conditions;

Whereas devices for rear underrun protection are already marketed both separately and after being fitted to a vehicle; whereas if it is possible to check them before they are fitted to a vehicle, their free movement may be facilitated by the introduction of EEC type-approval for such devices considered as separate technical units within the meaning of Article 9a of Directive 70/156/EEC;

Whereas the provisions of this Directive are in accordance with the opinion of the Committee on the Adaptation to Technical Progress of the Directives Aimed at the Removal of Technical Barriers to Trade in the Motor Vehicle Sector,

HAS ADOPTED THIS DIRECTIVE:

Article 1

Directive 70/221/EEC is amended as follows:

1. Articles 2 and 2a are replaced by the following:

'Article 2

1. No Member State may, on grounds relating to its liquid fuel tanks, refuse to grant EEC type-approval or national type-approval for a vehicle if such vehicle satisfies the requirements set out in the Annex concerning liquid fuel tanks.

2. No Member State may, on grounds relating to rear underrun protection, refuse to grant EEC type-approval or national type-approval for a vehicle if such vehicle satisfies the requirements set out in the Annex concerning rear underrun protection or if such vehicle is fitted with a rear underrun protective device which has been granted type-approval as a technical unit within the meaning of Article 9a of Directive 70/156/EEC and installed in accordance with the requirements of item II.5 of the Annex.

([1]) OJ No L 42, 23. 2. 1970, p. 1.
([2]) OJ No L 168, 26. 6. 1978, p. 39.
([3]) OJ No L 76, 6. 4. 1970, p. 23and OJ No L 65, 15. 3. 1979, p. 42.

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3. No Member State may refuse to grant EEC type-approval or national type-approval for a rear underrun protective device if such device, considered as a technical unit within the meaning of Article 9a of Directive 70/156/EEC, satisfies the relevant requirements set out in the Annex.

Article 2a

1. No Member State may, on grounds relating to its liquid fuel tanks, refuse or prohibit the sale, registration, entry into service or use of a vehicle if such a vehicle satisfies the requirements set out in the Annex concerning liquid fuel tanks.

2. No Member State may, on grounds relating to its rear underrun protection, refuse or prohibit the sale, registration, entry into service or use of a vehicle if such a vehicle satisfies the requirements set out in the Annex concerning rear underrun protection or if the vehicle is fitted with a rear underrun protective device which has been granted type-approval as a technical unit within the meaning of Article 9a of Directive 70/156/EEC and installed in accordance with the requirements set out in item II.5 of the Annex.

3. No Member State may prohibit the placing on the market of any rear underrun protective device considered as a technical unit within the meaning of Article 9a of Directive 70/156/EEC if it conforms to a type which has been granted type-approval within the meaning of Article 2 (3).'

2. The following Article is inserted:

'Article 2b

A Member State which carries out type-approval shall take the measures necessary to ensure that it is informed of any modification to a part or characteristic referred to in items II.2.1 and II.2.2 of the Annex. The competent authorities of that Member State shall determine whether fresh tests should be carried out on the modified type and a fresh report drawn up. Where such tests reveal that the requirements of this Directive have not been complied with, the modification shall not be authorized.'

3. The Annex to Council Directive 70/221/EEC shall be amended in accordance with the Annex to this Directive.

Article 2

1. As from 1 January 1980, no Member State may, on grounds relating to the rear underrun protection of vehicles:

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

— prohibit the entry into service of vehicles,

if the parts providing rear underrun protection for such type of vehicle or such vehicles comply with the provisions of Directive 70/221/EEC, as last amended by this Directive.

2. With effect from 1 October 1980, a Member State:

— shall no longer issue the copy of the certificate provided for in the last indent of Article 10 (1) of Directive 70/156/EEC of 6 February 1970 in respect of a type of vehicle of which the parts providing rear underrun protection do not comply with the provisions of Directive 70/221/EEC, as last amended by this Directive,

— ►C1 may ◄ refuse to grant national type-approval of a type of vehicle of which the parts providing rear underrun protection do not comply with the provisions of Directive 70/221/EEC, as last amended by this Directive.

3. As from 1 October 1981, Member States may prohibit the entry into service of vehicles of which the parts providing rear underrun protection do not comply with the provisions of Directive 70/221/EEC, as last amended by this Directive.

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Article 3

Before 1 January 1980, Member States shall bring into force the provisions necessary to comply with this Directive, and shall forthwith inform the Commission thereof.

Article 4

This Directive is addressed to the Member States.

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ANNEX

The wording of item II is replaced by the following:

‘II. REAR UNDERRUN PROTECTION

II.1. **General**

Vehicles covered by this Directive must be designed so as to provide effective protection against underrunning from the rear by vehicles of categories M_1 and N_1 ([1]).

II.2. **Definitions**

II.2.1. *Vehicle type for the purposes of rear underrun protection*

The term “vehicle type for the purposes of rear underrun protection” means vehicles which do not differ with respect to the following main characteristics:

II.2.1.1. Width of the rear axle, structure, dimensions, shape and materials of the rear part of the vehicle in so far as they have a bearing on the requirements of items II.5.1 to II.5.4.5.5;

II.2.1.2. Suspension characteristics in so far as they have a bearing on the requirements of items II.5.1 to II.5.4.5.5.

II.2.2. *Type of rear underrun protective device*

The term “type of rear underrun protective device” means devices which do not differ with respect to the following main characteristics:

II.2.2.1. shape,

II.2.2.2. dimensions,

II.2.2.3. attachment,

II.2.2.4. materials.

II.3. **Application for EEC type-approval**

II.3.1. Application for EEC type-approval of a vehicle type with respect to rear underrun protection.

II.3.1.1. The application for EEC type-approval of a vehicle type with respect to the rear underrun protection must be submitted by the vehicle manufacturer or his authorized representative.

II.3.1.2. It must be accompanied by the undermentioned documents in triplicate and the following information:

II.3.1.2.1. A description of the vehicle from the standpoint of the criteria referred to in item 11.2.1, together with dimensional drawings and either a photograph or an exploded view of the rear of the vehicle. The numbers and/or symbols identifying the vehicle type must be quoted;

II.3.1.2.2. A technical description of the parts providing rear underrun protection together with sufficiently detailed information.

II.3.1.2.3. A vehicle representative of the type to be approved must be submitted to the technical service responsible for the type-approval tests.

II.3.2. Application for EEC type-approval in respect of a rear underrun protective device considered to be a technical unit.

II.3.2.1. The application for EEC type-approval in respect of a rear underrun protective device considered to be a technical unit within the meaning of Article 9a of Directive 70/156/EEC must be submitted by the vehicle manufacturer or the manufacturer of the rear

([1]) Categories under the international classification set out in Note (b) of Annex I to Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers.

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underrun protective device or by their respective authorized representatives.

II.3.2.2. For each type of rear underrun protective device, the application must be accompanied by:

II.3.2.2.1. Documentation in triplicate giving a description of the technical characteristics of the device;

II.3.2.2.2. A sample of the type of device. If the competent authority deems it to be necessary, it may request a further sample. The samples must be clearly and indelibly marked with the applicant's trade name or mark and the type designation.

II.4. **EEC type-approval**

II.4.1. The EEC type-approval certificate for a vehicle type must be provided with an Annex drawn up in conformity with one of the following models:

II.4.1.1. In the case of the application referred to in item II.3.1, the model shown in Appendix 1;

II.4.1.2. In the case of the application referred to in item II.3.2, the model shown in Appendix 2.

II.5. **Specifications**

II.5.1. All vehicles must be so constructed and/or equipped as to offer effective protection over their whole width against underrunning from the rear by vehicles of categories M_1 and N_1 [1].

II.5.2. Any vehicle in one of the categories M_1, M_2, M_3, N_1, O_1 or O_2 [1] will be deemed to satisfy the condition set out in item II.5.1 if the ground clearance of the entire rear width of the chassis or the main parts of the body does not exceed 55 cm.

This requirement must be satisfied over a distance of 45 cm measured from the rear extremity of the vehicle.

II.5.3. Any vehicle in one of the categories N_2, N_3, O_3 or O_4 [1] will be deemed to satisfy the condition set out in item II.5.1 provided that:

— the vehicle is equipped with a special rear underrun protective device in accordance with the requirements of item II.5.4, or

— the vehicle is so designed and/or equipped at the rear that, by virtue of their shape and characteristics, its component parts can be regarded as replacing the rear underrun protective device. Components whose combined function satisfies the requirements set out in item II.5.4 are considered to form a rear underrun protective device.

II.5.4. A device for protection against underrunning from the rear, hereinafter referred to as "device", generally consists of a cross-member and linking components connected to the chassis side-members or to whatever replaces them.

It must have the following characteristics:

II.5.4.1. The device must be fitted as close to the rear of the vehicle as possible. When the vehicle is unladen [2], the lower edge of the device must at no point be more than 55 cm above the ground;

II.5.4.2. The width of the device must at no point exceed the width of the rear axle measured at the outermost points of the wheels, excluding the bulging of the tyres close to the ground, nor must it be more than 10 cm shorter on either side. Where there is more than one rear axle, the width to be considered is that of the widest rear axle;

II.5.4.3. The section height of the cross-member must be not less than 10 cm. The lateral extremities of the cross-member must not bend to the rear or have a sharp outer edge; this condition is fulfilled when the lateral extremities of the cross-member are rounded on the outside and have a radius of curvature of not less than 2·5 mm

[1] Categories under the international classification set out in Note (b) of Annex I to Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers.

[2] As defined in item 2.6 of Annex I to Directive 70/156/EEC.

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II.5.4.4. The device may be so designed that its position at the rear of the vehicle can be varied. In this event, there must be a guaranteed method of securing it in the service position so that any unintentional change of position is precluded. It must be possible for the operator to vary the position of the device by applying a force not exceeding 40 daN;

II.5.4.5. The device must offer adequate resistance to forces applied parallel to the longitudinal axis of the vehicle, and be connected, when in the service position, with the chassis side-members or whatever replaces them.

This requirement will be satisfied if it is shown that both during and after the application the horizontal distance between the rear of the device and the rear extremity of the vehicle does not exceed 40 cm at any of the points P1, P2 and P3. In measuring this distance, any part of the vehicle which is more than 3 m above the ground when the vehicle is unladen must be excluded;

II.5.4.5.1. Points P1 are located 30 cm from the longitudinal planes tangential to the outer edges of the wheels on the rear axle; points P2, which are located on the line joining points P1, are symmetrical to the median longitudinal plane of the vehicle at a distance from each other of 70 to 100 cm inclusive, the exact position being specified by the manufacturer. The height above the ground of points P1 and P2 must be defined by the vehicle manufacturer within the lines that bound the device horizontally. The height must not, however, exceed 60 cm when the vehicle is unladen. P3 is the centre-point of the straight line joining points P2;

II.5.4.5.2. A horizontal force equal to 12·5 % of the maximum technically permissible weight of the vehicle but not exceeding $2{\cdot}5 \times 10^4$ N must be applied successively to both points P1 and to point P3;

II.5.4.5.3. A horizontal force equal to 50 % of the maximum technically permissible weight of the vehicle but not exceeding 10×10^4N must be applied successively to both points P2;

II.5.4.5.4. The forces specified in items II.5.4.5.2 and II.5.4.5.3 above must be applied separately. The order in which the forces are applied may be specified by the manufacturer;

II.5.4.5.5. Whenever a practical test is performed to verify compliance with the abovementioned requirements, the following conditions must be fulfilled:

II.5.4.5.5.1. The device must be connected to the chassis side-members of the vehicle or to whatever replaces them;

II.5.4.5.5.2. The specified forces must be applied by rams which are suitably articulated (e.g. by means of universal joints) and must be parallel to the median longitudinal plane of the vehicle via a surface not more than 25 cm in height (the exact height must be indicated by the manufacturer) and 20 cm wide, with a radius of curvature of 5 ± 1 mm at the vertical edges; the centre of the surface is placed successively at points P1, P2 and P3.

II.5.5. By way of derogation from the abovementioned requirements, vehicles of the following categories need not comply with the requirements of this Annex as regards rear underrun protection:

— tractors for semi-trailers;

— “slung” trailers and other similar trailers for the transport of logs or other very long items;

— vehicles for which rear underrun protection is incompatible with their use.’

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APPENDIX 1

MODEL

(Maximum format: A4 (210 × 297 mm)

Name of administration

ANNEX TO THE EEC TYPE-APPROVAL CERTIFICATE FOR A MOTOR VEHICLE: REAR UNDERRUN PROTECTION (DIRECTIVE 79/490/EEC AMENDING DIRECTIVE 70/221/EEC)

(Articles 4 (2) and 10 of Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers)

EEC type-approval number .....

1. Trade mark or name of vehicle .....
2. Type of vehicle .....
3. Name and address of manufacturer .....
   .....
4. Name and address of manufacturer's authorized representative (if any) .....
   .....
5. Characteristics of the parts providing rear underrun protection .....
   .....
6. Vehicle submitted for type-approval on .....
7. Technical service responsible for type-approval tests .....
   .....
8. Date of test report issued by the technical service .....
9. Number of test report issued by the technical service .....
10. Type approval has been granted/refused (1) in respect of the rear underrun protection
11. Place .....
12. Date .....
13. Signature .....
14. The following documents, bearing the type-approval number referred to above, are appended to this Annex:

    ..... dimensional drawings

    ..... exploded view or photograph of the rear part of the vehicle
15. Remarks (if any) .....
    .....
    .....

(1) Delete as appropriate.

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APPENDIX 2

MODEL

(Maximum format: A4 (210 × 297 mm)

Name of administration

EEC TYPE-APPROVAL CERTIFICATE FOR A TECHNICAL UNIT (DIRECTIVE 79/490/EEC AMENDING DIRECTIVE 70/221/EEC)

(Article 9a of Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers)

Technical unit: type of rear underrun protective device

EEC type-approval number for the technical unit

1. Trade mark or name of device .....
2. Type of device .....
3. Name and address of manufacturer .....
   .....
4. Name and address of manufacturer's authorized representative (if any) .....
   .....
5. Characteristics of the device .....
   .....
6. Restrictions on use and mounting specifications (if any) .....
   .....
7. Date on which the device was submitted for EEC type-approval as a technical unit .....
8. Technical service responsible for carrying out the EEC type-approval tests on technical units .....
   .....
9. Date of test report issued by the technical service .....
10. Number of test report issued by the technical service .....
11. EEC type-approval has been granted/refused (1) in respect of the rear underrun protective device considered as a technical unit
12. Place .....
13. Date .....
14. Signature .....
15. The following documents bearing the EEC type-approval number referred to above are appended to this note .....
    ..... (to be completed, where necessary)
16. Remarks (if any) .....
    .....
    .....

(1) Delete as appropriate.