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**COUNCIL DIRECTIVE 96/96/EC**

**of 20 December 1996**

**on the approximation of the laws of the Member States relating to roadworthiness tests for motor vehicles and their trailers**

(OJ L 46, 17.2.1997, p. 1)

Amended by:

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► <b><u>M1</u></b> Commission Directive 1999/52/EC of 26 May 1999	L 142	26	5.6.1999
► <b><u>M2</u></b> Commission Directive 2001/9/EC of 12 February 2001	L 48	18	17.2.2001
► <b><u>M3</u></b> Commission Directive 2001/11/EC of 14 February 2001	L 48	20	17.2.2001
► <b><u>M4</u></b> Commission Directive 2003/27/EC of 3 April 2003	L 90	41	8.4.2003

Corrected by:

► **C1** Corrigendum, OJ L 49, 25.2.1999, p. 46 (96/96/EC)



**COUNCIL DIRECTIVE 96/96/EC**  
**of 20 December 1996**

**on the approximation of the laws of the Member States relating to  
roadworthiness tests for motor vehicles and their trailers**

THE COUNCIL OF THE EUROPEAN UNION,

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

Having regard to the proposal from the Commission <sup>(1)</sup>,

Having regard to the opinion of the Economic and Social Committee <sup>(2)</sup>,

Acting in accordance with the procedure laid down in Article 189c of the Treaty <sup>(3)</sup>,

- (1) Whereas Council Directive 77/143/EEC of 29 December 1976 on the approximation of the laws of the Member States relating to roadworthiness tests for motor vehicles and their trailers <sup>(4)</sup> has been substantially amended on a number of occasions; whereas, now that it is to be further amended, the Directive should, for reasons of clarity, be consolidated into a single text;
- (2) Whereas, within the framework of the common transport policy, certain road traffic within the Community should operate under the most favourable circumstances as regards both safety and competitive conditions applying to carriers in the Member States;
- (3) Whereas the growth of road traffic and the resultant increase in danger and nuisances present all Member States with safety problems of a similar nature and seriousness;
- (4) Whereas the present standards and methods of testing vary from one Member State to another and this situation affects the equivalence of safety and environmental performance levels of tested vehicles operating in the Member States; whereas, moreover, this state of affairs is likely to disturb the conditions governing competition between transport undertakings of the various Member States;
- (5) Whereas it is therefore necessary to harmonize as far as is practicable the frequency of tests and the compulsory items to be tested;
- (6) Whereas testing during the life cycle of a vehicle should be relatively simple, quick and inexpensive;
- (7) Whereas the minimum Community standards and methods to be used for testing the items listed in Annex II should therefore be defined in separate Directives;
- (8) Whereas, as a transitional measure, national standards remain applicable in respect of items not covered by separate Directives;
- (9) Whereas it is necessary to adapt rapidly to technical progress the standards and methods laid down in the separate Directives and, in order to facilitate implementation of the measures required for this purpose, to establish a procedure for close cooperation between the Member States and the Commission within a committee on the adaptation to technical progress of roadworthiness tests;

<sup>(1)</sup> OJ No C 193, 4. 7. 1996, p. 5 and 31.

<sup>(2)</sup> OJ No C 39, 12. 2. 1996, p. 24.

<sup>(3)</sup> European Parliament opinion of 29 February 1996 (OJ No C 78, 18. 3. 1996, p. 27), Council common position of 18 June 1996 (OJ No C 248, 26. 8. 1996, p. 49) and European Parliament Decision of 24 October 1996 (OJ No C 347, 18. 11. 1996).

<sup>(4)</sup> OJ No L 47, 18. 2. 1977, p. 47. Directive as last amended by Commission Directive 94/23/EC (OJ No L 147, 14. 6. 1994, p. 6).

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- (10) Whereas with regard to braking systems it would be premature to set values for air pressure settings and build-up times, etc., given the variance in the equipment and methods within the Community;
- (11) Whereas it is the intention to amend this Directive further so as to include a harmonious and improved test methodology;
- (12) Whereas, until such time as there are harmonized test procedures and practices, Member States may use their judgment as to the test procedure they use to establish whether the vehicles in question meet the braking requirements;
- (13) Whereas each Member State must ensure, within its own area of jurisdiction, that roadworthiness tests are conducted methodically and to a high standard;
- (14) Whereas the Commission should verify the practical application of this Directive and report to the European Parliament and the Council at regular intervals on its findings;
- (15) Whereas it is recognized by all concerned with vehicle testing that the method of testing and, in particular, whether the vehicle is tested in a laden, part-laden or unladen condition, can influence the degree of confidence testers have as to the roadworthiness of the braking system;
- (16) Whereas the prescription of brake force reference values for various laden conditions for each vehicle model would help restore that confidence; whereas this Directive enables testing under this regime as an alternative to testing against minimum performance values for each vehicle category;
- (17) Whereas with regard to braking systems the scope of this Directive relates in the main to vehicles which have been granted component type-approval in accordance with Directive 71/320/EEC <sup>(1)</sup> although it is recognized that certain types of vehicle have been granted such approval in accordance with national standards which may differ from the requirements of this Directive;
- (18) Whereas Member States may extend the scope of the braking test to include vehicles or test items outside the scope of this Directive;
- (19) Whereas Member States may make the braking test more stringent or increase the frequency of testing;
- (20) 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;
- (21) 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;
- (22) Whereas in the case of compression-ignition (diesel) engines measurement of the opacity of the exhaust fumes is deemed to be an adequate indicator of the condition of the vehicle's state of maintenance, with regard to emissions;
- (23) Whereas for positive-ignition (petrol) engines measurement of carbon monoxide emissions from the exhaust pipe when the engine is idling is deemed to be an adequate indicator of the vehicle's state of maintenance, with regard to emissions;

<sup>(1)</sup> Council Directive 71/320/EEC of 26 July 1971 on the approximation of the laws of the Member States relating to the braking devices of certain categories of motor vehicles and their trailers (OJ No L 202, 6. 9. 1971, p. 37). Directive as last amended by Directive 91/422/EEC (OJ No L 233, 22. 8. 1991, p. 21).

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- (24) Whereas the failure rate in exhaust-emission tests for vehicles which have not been regularly maintained may well be high;
- (25) Whereas in the case of petrol-engined vehicles for which the type-approval standards specify that they must be equipped with advanced emission control systems such as three-way catalytic converters which are lambda-probe controlled, the regular emission test standards must be more stringent than for conventional vehicles;
- (26) Whereas Member States may, if appropriate, exclude from the scope of this Directive certain vehicles that are considered to be of historic interest; whereas they may also establish their own testing standards for such vehicles; whereas, however, such a right must not lead to the application of stricter standards than those which the vehicles concerned were originally designed to meet;
- (27) Whereas it must be possible to adapt this Directive 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;
- (28) Whereas Council Directive 92/6/EEC <sup>(1)</sup> requires the installation and use of speed limitation devices in certain categories of road vehicles;
- (29) Whereas pending developments in the technology of speed-limitation devices which would make it easier to monitor them, certain parts of such devices may nevertheless already undergo a series of checks at the roadworthiness test where this is possible;
- (30) Whereas the correct functioning of speed limitation devices is currently left to Member States to determine using whatever means they consider to be appropriate; whereas it is the intention to harmonize the test methods and standards in due course;
- (31) Whereas the Commission should assess in-service checks on the correct functioning of speed-limitation devices and submit a report to the Council; whereas the conclusions of that report will form the basis of any further proposals for changes in the rules applicable to speed-limitation devices;
- (32) Whereas technical requirements relating to taxis and ambulances are similar to those for private cars; whereas the items to be checked may therefore be similar, although the frequency of tests is different;
- (33) Whereas in view of the expected impact of this Directive on the sector in question and in the light of the principle of subsidiarity, the Community measures provided for in this Directive are necessary to achieve harmonization of the rules on roadworthiness tests, to prevent distortion of competition between road hauliers and to guarantee that vehicles are properly checked and maintained; whereas these aims could not be achieved in full by the Member States acting individually;
- (34) Whereas this Directive makes no difference to the obligations of the Member States concerning the deadlines for transposition into national law and for implementation of the Directives which have been repealed,

<sup>(1)</sup> Council Directive 92/6/EEC of 10 February 1992 on the installation and use of speed limitation devices for certain categories of motor vehicles in the Community (OJ No L 57, 2. 3. 1992, p. 27).



HAS ADOPTED THIS DIRECTIVE:

#### CHAPTER I

### General provisions

#### *Article 1*

1. In each Member State, motor vehicles registered in that State and their trailers and semi-trailers shall undergo periodic roadworthiness tests in accordance with this Directive and in particular its Annexes I and II.
2. The categories of vehicles to be tested, the frequency of the roadworthiness tests and the items which must be tested are listed in Annexes I and II.

#### *Article 2*

The roadworthiness tests provided for in this Directive shall be carried out by the State, or by a public body entrusted with the task by the State or by bodies or establishments designated and directly supervised by the State, including duly authorized private bodies. In particular, when establishments designated as vehicle testing centres also perform motor vehicle repairs, Member States shall make every effort to ensure the objectivity and high quality of the vehicle testing.

#### *Article 3*

1. Member States shall take such measures as they deem necessary to make it possible to prove that a vehicle has passed a roadworthiness test complying with at least the provisions of this Directive.

These measures shall be notified to the other Member States and to the Commission.

2. Each Member State shall, on the same basis as if it had itself issued the proof, recognize the proof issued in another Member State showing that a motor vehicle registered on the territory of that other State, together with its trailer or semi-trailer, have passed a roadworthiness test complying with at least the provisions of this Directive.
3. Member States shall apply suitable procedures to establish, as far as practicable, that the brake performance of the vehicles registered in their territory meets the requirements specified in this Directive.

#### CHAPTER II

### Exceptions and derogations

#### *Article 4*

1. Member States shall have the right to exclude from the scope of this Directive vehicles belonging to the armed forces, the forces of law and order and the fire service.
2. Member States may, after consulting the Commission, exclude from the scope of this Directive or subject to special provisions, certain vehicles operated or used in exceptional conditions and vehicles which are never, or hardly ever, used on public highways, including vehicles of historic interest manufactured before 1 January 1960 or which are temporarily withdrawn from circulation.
3. Member States may, after consulting the Commission, set their own testing standards for vehicles considered to be of historic interest.

#### *Article 5*

Notwithstanding the provisions of Annexes I and II, Member States may:

- bring forward the date for the first compulsory roadworthiness test and, where appropriate, submit the vehicle for testing prior to registration,

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- shorten the interval between two successive compulsory tests,
- make the testing of optional equipment compulsory,
- increase the number of items to be tested,
- extend the periodic test requirement to other categories of vehicles,
- prescribe special additional tests,
- require for vehicles registered on their territory higher minimum standards for braking efficiency than those specified in Annex II and may include a test on vehicles with heavier loads provided such requirements do not exceed those of the vehicle's original type-approval.

*Article 6*

1. By way of derogation from the provisions of Annexes I and II, and until 1 January 1993, Member States may:

- postpone the date of the first compulsory roadworthiness test,
- extend the interval between two successive compulsory roadworthiness tests,
- reduce the number of items to be tested,
- amend the categories of vehicles subject to compulsory roadworthiness tests,

provided that all the light commercial vehicles referred to in section 5 of Annex I are required to undergo roadworthiness tests in accordance with this Directive before that date.

However, in Member States where there was no system of regular roadworthiness testing comparable to that intended by this Directive for this category of vehicles as at 28 July 1988, paragraph 1 shall apply until 1 January 1995.

2. With regard to the private cars referred to in section 6 of Annex I, paragraph 1 shall apply until 1 January 1994.

However, in Member States where there was no system of regular roadworthiness testing comparable to that intended by this Directive for this category of vehicles as at 31 December 1991, paragraph 1 shall apply until 1 January 1998.

## CHAPTER III

**Final provisions***Article 7*

1. The Council, acting by a qualified majority on a proposal from the Commission, shall adopt the separate Directives necessary to define the minimum standards and methods for testing the items listed in Annex II.

2. Any amendments which are necessary to adapt the standards and methods defined in the separate Directives to technical progress shall be adopted in accordance with the procedure laid down in Article 8.

*Article 8*

1. The Commission shall be assisted by a committee on the adaptation to technical progress of the Directive on roadworthiness tests for motor vehicles and their trailers, hereinafter referred to as the 'Committee', which shall consist of representatives of the Member States with a representative of the Commission in the chair.

2. The Committee shall adopt its own rules of procedure.

3. The representative of the Commission shall submit to the Committee a draft of the measures to be taken. The Committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority laid down in Article 148 (2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission. The votes of the representatives of

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the Member States within the Committee shall be weighted in the manner set out in the abovementioned Article. The chairman shall not vote.

4. (a) The Commission shall adopt the measures envisaged if they are in accordance with the opinion of the Committee.
- (b) If the measures envisaged are not in accordance with the opinion of the Committee, or if no opinion is delivered, the Commission shall, without delay, submit to the Council a proposal relating to the measures to be taken. The Council shall act by a qualified majority.

If, within three months of the submission of the proposal to the Council, the Council has not acted, the proposed measures shall be adopted by the Commission.

*Article 9*

1. The Commission shall, no later than 31 December 1998, submit a report to the Council on the implementation of roadworthiness testing of private cars, accompanied by any proposal deemed necessary, with particular reference to the frequency and content of tests.
2. No later than three years after the introduction of regular testing of speed limitation devices, the Commission shall examine whether, on the basis of the experience gained, the tests laid down are sufficient to detect defective or manipulated speed limitation devices or whether the rules need to be amended.

*Article 10*

The Directives listed in Annex III, Part A are hereby repealed as from the date indicated in Article 11, without prejudice to the obligations of the Member States concerning the deadlines for transposition and implementation set out in Annex III, Part B.

References to the repealed Directives shall be construed as reference to this Directive and should be read in accordance with the correlation tables set out in Annex IV.

*Article 11*

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive no later than 9 March 1998. They shall forthwith inform the Commission thereof.

When Member States adopt these provisions, they shall contain a reference to this Directive or be accompanied by such reference at the time of their official publication. The methods of making such reference shall be laid down by Member States.

2. Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field governed by this Directive.
3. Member States shall adopt the measures necessary to implement the system of tests laid down in this Directive. The measures adopted must be effective, proportionate and dissuasive.

*Article 12*

This Directive shall enter into force on the 20th day following that of its publication in the *Official Journal of the European Communities*.

*Article 13*

This Directive is addressed to the Member States.

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## ANNEX I

**CATEGORIES OF VEHICLES SUBJECT TO ROADWORTHINESS  
TESTS AND FREQUENCY OF THE TESTS**

Categories of vehicle	Frequency of tests
1. Motor vehicles used for the carriage of passengers and with more than eight seats, excluding the driver's seat	One year after the date on which the vehicle was first used, and thereafter annually
2. Motor vehicles used for the carriage of goods and having a maximum permissible mass exceeding 3 500 kg	One year after the date on which the vehicle was first used, and thereafter annually
3. Trailers and semi-trailers with a maximum permissible mass exceeding 3 500 kg	One year after the date on which the vehicle was first used, and thereafter annually
4. Taxis, ambulances	One year after the date on which the vehicle was first used, and thereafter annually
5. Motor vehicles having at least four wheels, normally used for the road carriage of goods and with a maximum permissible mass not exceeding 3 500 kg, excluding agricultural tractors and machinery	Four years after the date on which the vehicle was first used, and thereafter every two years
6. Motor vehicles having at least four wheels, used for the carriage of passengers and with not more than eight seats excluding the driver's seat	► <u>C1</u> Four years after the date on which the vehicle was first used, and thereafter every two years ◀





## ANNEX II

## ITEMS TO BE COMPULSORILY TESTED

The test must cover at least the items listed below, provided that these are related to the obligatory equipment of the vehicle being tested in the Member State concerned.

The tests covered by this Annex may be carried out visually without disassembly of vehicle parts.

Where the vehicle is found to be defective with regard to the test items below, the competent authorities in the Member States must adopt a procedure for setting the conditions under which the vehicle may be used before passing another roadworthiness test.

## VEHICLES IN CATEGORIES 1, 2, 3, 4, 5 AND 6

## 1. Braking systems

The following items are to be included in the roadworthiness test of vehicle braking systems. The test results achieved during the checks on the braking systems must be equivalent as far as is practicable to the technical requirements of Directive 71/320/EEC (1).

<i>Items to be checked/tested</i>	<i>Reasons for failure</i>
1.1. Mechanical condition and operation	
1.1.1. Footbrake pedal pivot	<ul style="list-style-type: none"> <li>— too tight</li> <li>— bearing worn</li> <li>— excessive wear/play</li> </ul>
1.1.2. Pedal condition and travel of the brake operating device	<ul style="list-style-type: none"> <li>— excessive or insufficient reserve travel</li> <li>— brake control not releasing correctly</li> <li>— anti-slip provision on brake pedal missing, loose or worn smooth</li> </ul>
1.1.3. Vacuum pump or compressor and reservoirs	<ul style="list-style-type: none"> <li>— time taken to build up air pressure/vacuum for the effective operation of the brakes is excessive</li> <li>— insufficient air pressure/vacuum to give assistance for at least two applications of the brake after the warning device has operated (or gauge shows unsafe reading)</li> <li>— air leak causing a noticeable drop in pressure or audible air leaks</li> </ul>
1.1.4. Low pressure warning indicator or gauge	<ul style="list-style-type: none"> <li>— malfunctioning or defective low pressure indicator/air pressure gauge</li> </ul>
1.1.5. Hand-operated brake control valve	<ul style="list-style-type: none"> <li>— cracked or damaged control, excessive wear</li> <li>— malfunction of control valve</li> <li>— control insecure on valve spindle or valve unit insecure</li> <li>— connections loose or leak in system</li> <li>— unsatisfactory operation</li> </ul>

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<i>Items to be checked/tested</i>	<i>Reasons for failure</i>
1.1.6. Parking brake, lever control, parking brake ratchet	<ul style="list-style-type: none"> <li>— parking brake ratchet not holding correctly</li> <li>— excessive wear at lever pivot or ratchet mechanism</li> <li>— excessive movement of lever indicating incorrect adjustment</li> </ul>
1.1.7. Braking valves (footvalves, unloaders, governors, etc.)	<ul style="list-style-type: none"> <li>— damaged, excessive air leakage</li> <li>— excessive discharge of oil from compressor</li> <li>— insecure/inadequate mounting</li> <li>— discharge of hydraulic brake fluid</li> </ul>
1.1.8. Couplings for trailer brakes	<ul style="list-style-type: none"> <li>— defective isolation taps or self-sealing valve</li> <li>— insecure/inadequate mounting</li> <li>— excessive leaks</li> </ul>
1.1.9. Energy storage reservoir pressure tank	<ul style="list-style-type: none"> <li>— damaged, corroded, leaking</li> <li>— drain device inoperative</li> <li>— insecure/inadequate mounting</li> </ul>
1.1.10. Brake servo units, master cylinder (hydraulic systems)	<ul style="list-style-type: none"> <li>— servo unit is defective or ineffective</li> <li>— master cylinder defective or leaking</li> <li>— master cylinder insecure</li> <li>— insufficient quantity of brake fluid</li> <li>— master cylinder reservoir cap missing</li> <li>— brake fluid warning lamp illuminated or defective</li> <li>— incorrect functioning of brake fluid level warning device</li> </ul>
1.1.11. Rigid brake pipes	<ul style="list-style-type: none"> <li>— risk of failure or fracture</li> <li>— leaks from pipes or connections to coupling</li> <li>— damaged or excessively corroded</li> <li>— misplaced</li> </ul>
1.1.12. Flexible brake hoses	<ul style="list-style-type: none"> <li>— risk of failure or fracture</li> <li>— damaged, chafing, brake hoses too short, twisted</li> <li>— leaks from hoses or couplings</li> <li>— hose bulging under pressure</li> <li>— porosity</li> </ul>
1.1.13. Brake coverings (lining pads)	<ul style="list-style-type: none"> <li>— excessive wear</li> <li>— contaminated (oil, grease, etc.)</li> </ul>
1.1.14. Brake drums, brake discs	<ul style="list-style-type: none"> <li>— excessive wear, excessive scoring, cracks, insecure or fractured</li> <li>— contaminated (oil, grease, etc.)</li> <li>— back plate insecure</li> </ul>
1.1.15. Brake cables, rods, levers linkage	<ul style="list-style-type: none"> <li>— cables damaged, knotted</li> <li>— excessively worn or corroded</li> <li>— cable or rod joint insecure</li> <li>— cable guide defective</li> <li>— any restriction to free movement of the braking system</li> <li>— any abnormal movement of levers/rods/linkage indicating maladjustment or excessive wear</li> </ul>

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<i>Items to be checked/tested</i>	<i>Reasons for failure</i>
1.1.16. Brake actuators (including spring brakes or hydraulic wheel cylinders)	<ul style="list-style-type: none"> <li>— cracked or damaged</li> <li>— leaking</li> <li>— insecure/inadequate mounting</li> <li>— excessively corroded</li> <li>— excessive travel of operating piston or diaphragm mechanism</li> <li>— dust protection cover missing or excessively damaged</li> </ul>
1.1.17. Load sensing valve	<ul style="list-style-type: none"> <li>— defective linkage</li> <li>— incorrect adjustment</li> <li>— seized, not working</li> <li>— missing</li> </ul>
1.1.18. Automatic slack adjusters indicating	<ul style="list-style-type: none"> <li>— seized or abnormal movement, excessive wear or wrong adjustment</li> <li>— defective</li> </ul>
1.1.19. Retarder system (where fitted or required)	<ul style="list-style-type: none"> <li>— insecure connectors or mountings</li> <li>— defective</li> </ul>
1.2. Service brake performance and efficiency	
1.2.1. Performance (progressively increased to maximum effort)	<ul style="list-style-type: none"> <li>— inadequate braking effort on one or more wheels</li> <li>— braking effort from any wheel is less than 70 % of the highest recorded effort from another wheel on the same axle. In the case of brake testing on the road, the vehicle's deviation from a straight line is excessive</li> <li>— no gradual variation of brake effort (grabbing)</li> <li>— abnormal time lag in brake operation at any wheel</li> <li>— excessive fluctuation of brake effort due to distorted discs or oval drums</li> </ul>
1.2.2. Efficiency	<ul style="list-style-type: none"> <li>— a braking ratio which relates to the maximum authorized mass or, in the case of semi-trailers, to the sum of the authorized axle loads where practicable, less than the following:  minimum braking efficiency  category 1: 50 % <sup>(2)</sup>  category 2: 43 % <sup>(3)</sup>  category 3: 40 % <sup>(4)</sup>  category 4: 50 %  category 5: 45 % <sup>(5)</sup>  category 6: 50 %</li> <li>— or  a braking effort less than the reference values if specified by the vehicle manufacturer for the vehicle axle <sup>(6)</sup></li> </ul>
1.3. Secondary (emergency) brake performance and efficiency (if met by separate system)	

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<i>Items to be checked/tested</i>	<i>Reasons for failure</i>
1.3.1. Performance	<ul style="list-style-type: none"> <li>— brake inoperative on one side</li> <li>— braking effort from any wheel is less than 70 % of the highest recorded effort from another wheel on the same axle</li> <li>— no gradual variation of efficiency (grabbing)</li> <li>— automatic brake system not working in the case of trailers</li> </ul>
1.3.2. Efficiency	— for all vehicle categories, a braking ratio less than 50 % <sup>(1)</sup> of the service brake performance defined in 1.2.2 in relation to the maximum authorized mass or, in the case of semi-trailers, to the sum of the authorized axle loads
1.4. Parking brake performance and efficiency	
1.4.1. Performance	— brake inoperative on one side
1.4.2. Efficiency	— for all vehicle categories, a braking ratio less than 16 % in relation to the maximum authorized mass, or, for motor vehicles, less than 12 % in relation to the maximum authorized combination mass of the vehicle, whichever is greater
1.5. Retarder or exhaust brake system performance	<ul style="list-style-type: none"> <li>— no gradual variation of efficiency (retarder)</li> <li>— defective</li> </ul>
1.6. Anti-lock braking	<ul style="list-style-type: none"> <li>— malfunction of the anti-lock warning device</li> <li>— defective</li> </ul>

(1) Council Directive 71/320/EEC of 26 July 1971 on the approximation of the laws of the Member States relating to the braking devices of certain categories of motor vehicles and their trailers (OJ No L 202, 6. 9. 1971, p. 37). Directive as last amended by Directive 91/422/EEC (OJ No L 233, 22. 8. 1991, p. 21).

(2) 48 % for category 1 vehicles not fitted with ABS, or type-approved before 1 October 1991 (date of prohibition of first putting into circulation without EC component type-approval) (Directive 71/320/EEC, as amended by Commission Directive 88/194/EEC, (OJ No L 92, 9. 4. 1988, p. 47).

(3) 45 % for vehicles registered after 1988 or from the date of application of Directive 71/320/EEC, as amended by Commission Directive 85/647/EEC (OJ No L 380, 31. 12. 1985, p. 1), under Member States' national legislation, whichever is the later.

(4) 43 % for semi-trailers and draw-bar trailers registered after 1988 or from the date of application of Directive 71/320/EEC, as amended by Commission Directive 85/647/EEC, under Member States' national legislation, whichever is the later..

(5) 50 % for category 5 vehicles registered after 1988 or from the date of application of Directive 71/320/EEC, as amended by Commission Directive 85/647/EEC, under Member States' national legislation, whichever is the later.

(6) The reference value for the vehicle axle is the braking effort (expressed in newtons) necessary to achieve this minimum prescribed braking force at the particular weight that the vehicle is presented.

(7) For categories 2 and 5 vehicles the minimum secondary brake performance must be 2,2 m/s<sup>2</sup> (as the secondary brake performance was not covered by Directive 71/320/EEC, as amended by Commission Directive 85/647/EEC).

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VEHICLES IN CATEGORIES 1, 2 AND 3	VEHICLES IN CATEGORIES 4, 5 AND 6
<b>2. Steering and steering wheel</b>	<b>2. Steering</b>
2.1. Mechanical condition 2.2. Steering wheel 2.3. Steering play 2.4. Wheel bearings	2.1. Mechanical condition 2.2. Steering play 2.3. Steering system attachment
<b>3. Visibility</b>	<b>3. Visibility</b>
3.1. Field of vision 3.2. Condition of glass 3.3. Rear-view mirrors 3.4. Windscreen wipers 3.5. Screenwashers	3.1. Field of vision 3.2. Condition of glass 3.3. Rear-view mirrors 3.4. Windscreen wipers 3.5. Screenwashers
<b>4. Lamps, reflectors and electrical equipment</b>	<b>4. Lighting equipment</b>
4.1. Main and dipped-beam head-lamps 4.1.1. Condition and operation 4.1.2. Alignment 4.1.3. Switches 4.1.4. Visual efficiency	4.1. Main and dipped-beam head-lamps 4.1.1. Condition and operation 4.1.2. Alignment 4.1.3. Switches
4.2. Side lamps and end-outline marker lamps 4.2.1. Condition and operation 4.2.2. Colour and visual efficiency	4.2. Condition and operation, condition of lenses, colour and visual efficiency of: 4.2.1. Side and rear lamps 4.2.2. Stop lamps 4.2.3. Direction-indicator lamps 4.2.4. Reserving lamps 4.2.5. Fog lamps 4.2.6. Rear registration plate lamps 4.2.7. Retro reflectors 4.2.8. Hazard warning lamps
4.3. Stop lamps 4.3.1. Condition and operation 4.3.2. Colour and visual efficiency	
4.4. Direction-indicator lamps 4.4.1. Condition and operation 4.4.2. Colour and visual efficiency 4.4.3. Switches 4.4.4. Flashing frequency	
4.5. Front and rear fog lamps 4.5.1. Position 4.5.2. Condition and operation 4.5.3. Colour and visual efficiency	
4.6. Reversing lamps 4.6.1. Condition and operation	

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VEHICLES IN CATEGORIES 1, 2 AND 3	VEHICLES IN CATEGORIES 4, 5 AND 6
4.6.2. Colour and visual efficiency	
4.7. Rear registration plate lamp	
4.8. Retro reflectors — condition and colour	
4.9. Telltales	
4.10. Electrical connections between drawing vehicle and trailer or semi- trailer	
4.11. Electrical wiring	
<b>5. Axles, wheels, tyres, suspension</b>	<b>5. Axles, wheels, tyres, suspension</b>
5.1. Axles	5.1. Axles
5.2. Wheels and tyres	5.2. Wheels and tyres
5.3. Suspension	5.3. Suspension
<b>6. Chassis and chassis attachments</b>	<b>6. Chassis and chassis attachments</b>
6.1. Chassis or frame and attachments	6.1. Chassis or frame and attachments
6.1.1. General condition	6.1.1. General condition
6.1.2. Exhaust pipes and silencers	6.1.2. Exhaust pipes and silencers
6.1.3. Fuel tank or pipes	6.1.3. Fuel tank or pipes
6.1.4. Geometric properties and condition of rear protective device, heavy lorries	6.1.4. Spare-wheel carrier
6.1.5. Spare-wheel carrier	6.1.5. Security of coupling mechanism (if fitted)
6.1.6. Coupling mechanism on drawing vehicles, trailers and semi- trailers	
6.2. Cab and bodywork	6.2. Bodywork
6.2.1. General condition	6.2.1. Structural condition
6.2.2. Mounting	6.2.2. Doors and locks
6.2.3. Doors and locks	
6.2.4. Floor	
6.2.5. Driver's seat	
6.2.6. Running boards	
<b>7. Other equipment</b>	<b>7. Other equipment</b>
7.1. Safety belts	7.1. Mounting of driver's seat
7.2. Fire extinguisher	7.2. Mounting of battery
7.3. Locks and anti-theft device	7.3. Audible warning device
7.4. Warning triangle	7.4. Warning triangle
7.5. First-aid kit	7.5. Safety belts
7.5.1. Security of mountings	7.5.2. Condition of belts
7.5.3. Operation	

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VEHICLES IN CATEGORIES 1, 2 AND 3	VEHICLES IN CATEGORIES 4, 5 AND 6
7.6. Wheel chock(s)	
7.7. Audible warning device	
7.8. Speedometer	
7.9. Tachograph (presence of, and integrity of seals) — check validity of tachograph plate if required by Regulation (EEC) No 3821/85 <sup>(1)</sup> — check, if in doubt, whether the nominal circumference or size of tyre matches the data given on the tachograph plate — where practical, check that the seals of the tachograph and, where appropriate, any other means of protecting the connections against fraudulent manipulation are intact	
7.10. Speed limitation device — where possible, check whether speed limiter is fitted as required by Directive 92/6/EEC <sup>(2)</sup> — check validity of speed limiter plate — where practical, check that the seals of the speed limiter and, where appropriate, any other means of protecting the connections against fraudulent manipulation are intact ► <b>M4</b> — check wherever practical that the speed limitation device prevents vehicles mentioned in Article 2 and Article 3 of Directive 92/6/EEC from exceeding the prescribed values ◀	
<b>8. Nuisance</b>	<b>8. Nuisance</b>
8.1. Noise	8.1. Noise
<p>(1) Council Regulation (EEC) No 3821/85 of 20 December 1985 on recording equipment in road transport (OJ No L 370, 31. 12. 1985, p. 8). As last amended by Commission Regulation (EC) No 2479/95 (OJ No L 256, 26. 10. 1995, p. 8).</p> <p>(2) Council Directive 92/6/EEC of 10 February 1992 on the installation and use of speed limitation devices for certain categories of motor vehicles in the Community (OJ No L 57, 2. 3. 1992, p. 27).</p>	

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

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- 8.2. Exhaust emissions
- 8.2.1. Motor vehicles equipped with positive-ignition engines and fuelled by petrol
- (a) Where the exhaust emissions are not controlled by an advanced emission control system such as a three-way catalytic converter that is lambda-probe controlled:
1. Visual inspection of the exhaust system in order to check that it is complete and in a satisfactory condition and that there are no leaks.

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2. Visual inspection of any emission control equipment fitted by the manufacturer in order to check that it is complete and in a satisfactory condition and that there are no leaks.

After a reasonable period of engine conditioning (taking account of 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 the Member States' competent authorities decide not to use it as a reference value, the CO content must not exceed the following:

- (i) 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<sup>(1)</sup> and 1 October 1986: CO — 4,5 % vol.
  - (ii) For vehicles registered or put into service for the first time after 1 October 1986 — 3,5 % vol.
- (b) Where the exhaust emissions are controlled by an advanced emission control system such as a three-way catalytic converter that is lambda-probe controlled:

1. Visual inspection of the exhaust system in order to check that it is complete and in a satisfactory condition and that there are no leaks.
2. Visual inspection of any emission control equipment fitted by the manufacturer in order to check that it is complete and in a satisfactory condition and that there are no leaks.
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

The maximum permissible CO content in the exhaust gases is that stated by the vehicle manufacturer. Where this information is not available the CO content must not exceed the following:

- (i) Measurement at engine idling speed:

The maximum permissible CO content in the exhaust gases must not exceed 0,5 % vol. and for vehicles that have been type-approved according to the limit values shown in row A or row B of the table in section 5.3.1.4. of Annex I to Directive 70/220/EEC, as amended by Directive 98/69/EC<sup>(2)</sup> or later amendments the maximum CO content must not exceed 0,3 % vol. Where identification to Directive 70/220/EEC, as amended by Directive 98/69/EC is not possible then the above shall apply to vehicles registered or first put into service after 1 July 2002.

- (ii) Measurement at high idle speed (no load), engine speed to be at least 2 000 min<sup>-1</sup>:

CO content: maximum 0,3 % vol. and for vehicles that have been type-approved according to the limit values shown in row A or row B of the table in section 5.3.1.4. of Annex I to Directive 70/220/EEC, as amended by Directive 98/69/EC or later amendments the maximum CO content must not exceed 0,2 % vol. Where identification to Directive 70/220/EEC, as amended by Directive 98/69/EC is not possible then the above shall apply to vehicles registered or first put into service after 1 July 2002.

Lambda:  $1 \pm 0,03$  or in accordance with the manufacturer's specifications.

- (iii) For motor vehicles equipped with on-board diagnostic systems (OBD) in accordance with Directive 70/220/EEC (as amended by Directive 98/69/EC and subsequent amendments) Member States may as an alternative to the test specified in item (i) establish the correct functioning of the emission

<sup>(1)</sup> OJ L 76, 9.3.1970, p. 1.

<sup>(2)</sup> OJ L 350, 28.12.1998, p. 1.



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system through the appropriate reading of the OBD device and the simultaneous checking of the proper functioning of the OBD system.

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

- (a) Exhaust gas opacity to be measured during free acceleration (no load from idle up to cut-off speed) with gear lever in neutral and clutch engaged.
- (b) Vehicle preconditioning:
  - 1. Vehicles may be tested without preconditioning although for safety reasons checks should be made that the engine is warm and in a satisfactory mechanical condition.
  - 2. Except as specified in subparagraph (d)(5), no vehicle will be failed unless it has been preconditioned according to the following requirements:
    - (i) Engine shall be fully warm, for instance the engine oil temperature measured by a probe in the oil level dipstick tube to be at least 80 °C, or normal operating temperature if lower, or the engine block temperature measured by the level of infrared radiation to be at least an equivalent temperature. If, owing to vehicle configuration, this measurement is impractical, the establishment of the engine's normal operating temperature may be made by other means, for example by the operation of the engine cooling fan.
    - (ii) Exhaust system shall be purged by at least three free acceleration cycles or by an equivalent method.
- (c) Test procedure:
  - 1. Visual inspection of any emission control equipment fitted by the manufacturer in order to check that it is complete and in a satisfactory condition and that there are no leaks.
  - 2. Engine and any turbocharger fitted, to be at idle before the start of each free acceleration cycle. For heavy-duty diesels, this means waiting for at least 10 seconds after the release of the throttle.
  - 3. To initiate each free acceleration cycle, the throttle pedal must be fully depressed quickly and continuously (in less than one second) but not violently, so as to obtain maximum delivery from the injection pump.
  - 4. During each free acceleration cycle, the engine shall reach cut-off speed or, for vehicles with automatic transmissions, the speed specified by the manufacturer or if this data is not available then two thirds of the cut-off speed, before the throttle is released. This could be checked, for instance, by monitoring engine speed or by allowing a sufficient time to elapse between initial throttle depression and release, which in the case of vehicles of category 1 and 2 of Annex 1, should be at least two seconds.
- (d) Limit values:
  - 1. The level of concentration must not exceed the level recorded on the plate pursuant to Directive 72/306/EEC <sup>(1)</sup>.
  - 2. Where this information is not available or where Member States' competent authorities decide not to use it as a reference, the level of concentration must not exceed the level stated by the manufacturer or the limit values of the coefficient of absorption that are as follows:
 

Maximum coefficient of absorption for:

    - naturally aspirated diesel engines = 2,5 m<sup>-1</sup>
    - turbo-charged diesel engines = 3,0 m<sup>-1</sup>
    - a limit of 1,5 m<sup>-1</sup> shall apply to the following vehicles that have been type-approved according to the limit values shown in:
      - (a) row B of the table in section 5.3.1.4 of Annex I to Directive 70/220/EEC, as amended by Directive 98/69/EC — (Light Duty Vehicle Diesel — Euro4);

<sup>(1)</sup> OJ L 190, 20.8.1972, p. 1.

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- (b) row B1 of the tables in section 6.2.1 of Annex I to Directive 88/77/EEC, as amended by Directive 1999/96/EC <sup>(1)</sup> — (Heavy Duty Vehicle Diesel — Euro4);
- (c) row B2 of the tables in section 6.2.1 of Annex I to Directive 88/77/EEC, as amended by Directive 1999/96/EC — (Heavy Duty Vehicle Diesel — Euro5);
- (d) row C of the tables in section 6.2.1 of Annex I to Directive 88/77/EEC, as amended by Directive 1999/96/EC — (Heavy Duty Vehicle — EEV)

or limit values in later amendments of Directive 70/220/EEC as amended by Directive 98/69/EC, or limit values in later amendments of Directive 88/77/EEC as amended by Directive 1999/96/EC, or equivalent values where use is made of equipment of a type different from that used for EC type-approval.

Where identification to section 5.3.1.4 of Annex I to Directive 70/220/EEC, as amended by Directive 98/69/EC or to section 6.2.1 of Annex I to Directive 88/77/EEC, as amended by Directive 1999/96/EC is not possible then the above shall apply to vehicles registered or first put into service after 1 July 2008.

3. Vehicles registered or put into service for the first time before 1 January 1980 are exempted from these requirements.
4. Vehicles shall only be failed if the arithmetic means of at least the last three free acceleration cycles are in excess of the limit value. This may be calculated by ignoring any measurement that departs significantly from the measured mean, or the result of any other statistical calculation that takes account of the scattering of the measurements. Member States may limit the number of test cycles.
5. To avoid unnecessary testing, Member States may, by way of exception from the provisions of paragraph 8.2.2(d)(4), fail vehicles which have measured values significantly in excess of the limit values after less than three free acceleration cycles or after the purging cycles (or equivalent) specified in subparagraph 8.2.2(b)2(ii). Equally to avoid unnecessary testing, Member States may, by way of exception from the provisions of 8.2.2(d)(4) pass vehicles which have measured values significantly below the limits after less than three free acceleration cycles or after the purging cycles (or equivalent) specified in subparagraph 8.2.2(b)2(ii).

## 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 EC 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 forthwith inform the Commission thereof and it in turn must inform the other Member States.

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VEHICLES IN CATEGORIES 1, 2 AND 3	VEHICLES IN CATEGORIES 4, 5 AND 6
8.3. Suppression of radio interference	
<b>9. Supplementary tests for public transport vehicles</b>	
9.1. Emergency exit(s) (including hammers for breaking windows), signs indicating emergency exit(s)	
9.2. Heating system	
9.3. Ventilation system	

<sup>(1)</sup> OJ L 44, 16.2.2000, p. 1.

**▼B**

VEHICLES IN CATEGORIES 1, 2 AND 3	VEHICLES IN CATEGORIES 4, 5 AND 6
9.4. Seat layout	
9.5. Interior lighting	
<b>10. Vehicle identification</b>	<b>10. Vehicle identification</b>
10.1. Registration plate	10.1. Registration plate
10.2. Chassis number	10.2. Chassis number



## ANNEX III

**PART A****Repealed Directives****(referred to in Article 10)**

Council Directive 77/143/EEC of 29 December 1976 on the approximation of the laws of the Member states relating to roadworthiness tests for motor vehicles and their trailers and the Directives amending that Directive:

- Council Directive 88/449/EEC,
- Council Directive 91/225/EEC,
- Council Directive 91/328/EEC,
- Council Directive 92/54/EEC,
- Council Directive 92/55/EEC,
- Commission Directive 94/23/EC.

**PART B**

Directive	Deadlines	
	for transposition	for implementation
77/143/EEC (OJ No L 47, 18. 2. 1977, p. 47)	31 December 1977	31 December 1977
88/449/EEC (OJ No L 222, 12. 8. 1988, p. 10)	28 July 1990	28 July 1990
91/225/EEC (OJ No L 103, 23. 4. 1991, p. 3)	1 January 1992	1 January 1992
91/328/EEC (OJ No L 178, 6. 7. 1991, p. 29)	1 July 1993	1 July 1993
92/54/EEC (OJ No L 225, 10. 8. 1992, p. 63)	22 June 1993	22 June 1993
92/55/EEC (OJ No L 225, 10. 8. 1992, p. 68)	22 June 1993	
for the vehicles referred to in section 8.2.1 (a) of Annex II:		1 January 1994
for the vehicles referred to in section 8.2.2 of Annex II:		1 January 1996
for the vehicles referred to in section 8.2.1 (b) of Annex II:		1 January 1997
94/23/EC (OJ No L 147, 14. 6. 1994, p. 6)	1 January 1997	1 January 1997

## ANNEX IV

CORRELATION TABLE No 1  
(enacting terms)

This Directive	77/143/EEC	88/449/EEC	91/225/EEC	91/328/EEC	92/54/EEC	92/55/EEC	94/23/EC
Article 1 (1)	Article 1						
Article 1 (2)	Article 2 (1)						
Article 2	Article 4						
Article 3 (1) (1)	Article 5 (1)						
Article 3 (1) (2)	Article 5 (2)						
Article 3 (2)	Article 5 (3)						
Article 3 (3)							
Article 4 (1)	Article 2 (2)						Article 2
Article 4 (2)	Article 2 (3)						Article 4
Article 4 (3)							Article 3
Article 5 (indents 1 to 6)	Article 3						
Article 5 (indent 7)							
Article 6 (1)	Article 7 (1)	Article 1 (1)					
Article 6 (2)			Article 1	Article 1 (1)			
Article 7 (1) and (2)			Article 1				
Article 8 (1) to (4)				Article 3			
Article 9 (1)							
Article 9 (2)							
Article 10							
Article 11 (1)	Article 6	Article 2 (1)	Article 2 (1)	Article 2 (1)	Article 2 (1)	Article 2 (1 to 3)	Article 5 (1)
Article 11 (2)		Article 2 (2)	Article 2 (2)	Article 2 (2)	Article 2 (2)		Article 5 (2)
Article 11 (3)							
Article 12							
Article 13						Article 2 (4)	

**CORRELATION TABLE No 2**  
**(vehicle categories subject to roadworthiness tests)**

This Directive	77/143/EEC	88/449/EEC	91/225/EEC	91/328/EEC	92/54/EEC	92/55/EEC	94/23/EC
Annex I category 1 category 2 category 3 category 4 category 5 category 6	Annex I category 1 category 2 category 3 category 4	Article 1 (2)		Article 1 (2)			

**CORRELATION TABLE No 3**  
**(items to be checked/tested)**

This Directive	77/143/EEC	88/449/EEC	91/225/EEC	91/328/EEC	92/54/EEC	92/55/EEC	94/23/EC
Annex II (*) Introductory note 1 Introductory note 2 Introductory note 3 Point 1 Point 1.2 Point 1.2.1 Point 1.2.2 Point 1.3 Point 1.3.1 Point 1.3.2 Point 1.4 Point 1.4.1 Point 1.4.2	Annex II Introductory note 1				Article 1 (1) Article 1 (1) Article 1 (1)  Article 1 (1)  Article 1 (1)  Article 1 (1)  Article 1 (1)		Article 1           Article 1        Article 1    Article 1



This Directive	77/143/EEC	88/449/EEC	91/225/EEC	91/328/EEC	92/54/EEC	92/55/EEC	94/23/EC
Point 1.5							
Point 1.6							
Point 2		Article 1 (3)			Article 1 (1)		
Point 7.8							
Point 7.9 (title (indents 1 to 3)	Article 1 (3)						
Point 7.10 (indents 1 to 3)							
Point 8		Article 1 (3)					
Point 8.1							
Point 8.2							
Point 8.2.4						Article 1 (1)	
Point 8.3							
Point 10.2							

(\* ) N.B.: Category 4 (taxis and ambulances) is transferred from the left-hand column to the right-hand one (with categories 5 and 6) in Annex II.