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COMMISSION DIRECTIVE 2005/30/EC

of 22 April 2005

amending, for the purposes of their adaptation to technical progress, Directives 97/24/EC and 2002/24/EC of the European Parliament and of the Council, relating to the type-approval of two or three-wheel motor vehicles

(Text with EEA relevance)

(OJ L 106, 27.4.2005, p. 17)

Amended by:

► **M1**

Commission Directive 2006/120/EC of 27 November 2006

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**COMMISSION DIRECTIVE 2006/120/EC****of 27 November 2006****correcting and amending Directive 2005/30/EC amending, for the purposes of their adaptation to technical progress, Directives 97/24/EC and 2002/24/EC of the European Parliament and of the Council, relating to the type-approval of two or three-wheel motor vehicles****(Text with EEA relevance)**

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Directive 97/24/EC of the European Parliament and of the Council of 17 June 1997 on certain components and characteristics of two or three-wheel motor vehicles ⁽¹⁾, and in particular Article 7 thereof,Having regard to Directive 2002/24/EC of the European Parliament and of the Council of 18 March 2002 relating to the type-approval of two and three-wheel motor vehicles and repealing Council Directive 92/61/EEC ⁽²⁾, and in particular Article 17 thereof,

Whereas:

- (1) Directive 97/24/EC is one of the separate Directives for the purposes of the EC type approval procedure laid down by Directive 2002/24/EC.
- (2) Technical measures for the type-approval, as separate technical units, of replacement catalytic converters should be introduced in order to ensure an appropriate emissions performance. Measures should be introduced in order to aid enforcement in Member States through the marking of replacement catalytic converters and their packaging.
- (3) The Member State type-approval code for Malta and Cyprus, in Annex V to Directive 2002/24/EC, should be updated.
- (4) Directives 97/24/EC and 2002/24/EC should be amended accordingly.
- (5) The measures provided for this Directive are in accordance with the opinion of the Committee for Adaptation to Technical Progress,

HAS ADOPTED THIS DIRECTIVE:

Article 1

The text annexed to Directive 97/24/EC is amended in accordance with Annex I to this Directive.

Article 2

Annexes II and V to Directive 2002/24/EC are amended in accordance with Annex II to this Directive.

⁽¹⁾ OJ L 226, 18.8.1997, p. 1. Directive as last amended by Directive 2003/77/EC (OJ L 211, 21.8.2003, p. 24).

⁽²⁾ OJ L 124, 9.5.2002, p. 1. Directive as last amended by the 2003 Act of Accession.

▼B*Article 3***▼M1**

1. With effect from 18 May 2006 Member States shall not, in respect of new replacement catalytic converters complying with the requirements of Directive 97/24/EC as amended by this Directive and which are intended to be fitted on vehicles that have been type-approved in accordance with Directive 97/24/EC:

- (a) refuse to grant EC type-approval pursuant to Article 4(1) of Directive 2002/24/EC;
- (b) prohibit the sale or installation on a vehicle.

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2. With effect from 18 May 2006, Member States shall, on grounds relating to the measures to be taken against air pollution, permissible sound level or anti-tampering measures, no longer grant EC type-approval pursuant to Article 4(1) of Directive 2002/24/EC in respect of a new replacement catalytic converter which fails to comply with Directive 97/24/EC, as amended by this Directive.

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3. With effect from 1 January 2009, Member States shall refuse the sale or installation on a vehicle of replacement catalytic converters which are not of a type in respect of which a type-approval has been granted in compliance with Directive 97/24/EC, as amended by this Directive.

▼B*Article 4*

1. Member States shall adopt and publish, by 17 May 2006 at the latest, the laws, regulations and administrative provisions necessary to comply with this Directive. They shall forthwith communicate to the Commission the text of those provisions and a correlation table between those provisions and this Directive.

They shall apply those provisions from 18 May 2006.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 5

This Directive shall enter into force on the twentieth day following its publication in the *Official Journal of the European Union*.

Article 6

This Directive is addressed to the Member States.



ANNEX I

AMENDMENTS TO DIRECTIVE 97/24/EC

1. Chapter 5 annexed to Directive 97/24/EC is amended as follows:

(a) in the 'LIST OF ANNEXES' the following new references are added:

'ANNEX VII	type-approval of replacement catalytic converter as separate technical unit for two or three-wheel motor vehicles
Appendix 1	Information document in respect of a replacement catalytic converter, as separate technical unit(s), for a type of two or three-wheel motor vehicle
Appendix 2	Type-approval certificate in respect of a replacement catalytic converter, as separate technical unit, for a type of two or three-wheel motor vehicle
Appendix 3	Examples of type-approval mark';

(b) Annex I is amended as follows:

(i) The following sections 1.4, 1.5 and 1.6 are added:

- 1.4. "original equipment catalytic converter" means a catalytic converter or an assembly of catalytic converters covered by the type-approval delivered for the vehicle;
- 1.5. "replacement catalytic converter" means a catalytic converter or an assembly of catalytic converters intended to replace an original equipment catalytic converter on a vehicle type-approved in accordance with this Chapter, which can be type approved as a separate technical unit as defined in Article 2(5) of Directive 2002/24/EC;
- 1.6. "original replacement catalytic converter" means a catalytic converter or an assembly of catalytic converters whose types are indicated in ►**MI** section 4a of Annex VI ◀ but are offered on the market as separate technical units by the holder of the vehicle type-approval.';

(ii) the following section 2.3 is added:

- 2.3. **Diagram and markings**
- 2.3.1. A diagram and a cross-sectional drawing indicating the dimensions of the original equipment catalytic converter(s) (if any) must be annexed to the document referred to in Annex V.
- 2.3.2. All original equipment catalytic converter(s) must bear the "e" mark followed by the identification of the country which granted the type-approval. This reference must be legible and indelible and also visible (where possible) in the position at which it is to be fitted.';

(iii) the following section 5 is added:

5. **REPLACEMENT CATALYTIC CONVERTERS AND ORIGINAL REPLACEMENT CATALYTIC CONVERTERS**
- 5.1. Replacement catalytic converters intended to be fitted to vehicles type-approved in compliance with this Chapter must be tested in accordance with Annex VII.
- 5.2. Original replacement catalytic converters, which are of a type covered by ►**MI** section 4a of Annex VI ◀ and are intended for fitment to a vehicle to which the relevant type approval document refers, do not need to comply with Annex VII provided they fulfil the requirements of sections 5.2.1 and 5.2.2 of this Annex.
- 5.2.1. *Marking*
- Original replacement catalytic converters shall bear at least the following identifications:
- 5.2.1.1. the vehicle manufacturer's name or trade mark;
- 5.2.1.2. the make and identifying part number.
- 5.2.2. *Documentation*
- Original replacement catalytic converters shall be accompanied by the following information:

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- 5.2.2.1. the vehicle manufacturer's name or trade mark;
- 5.2.2.2. make and identifying part number;
- 5.2.2.3. the vehicles for which the original replacement catalytic converter is of a type covered by ►**M1** section 4a of Annex VI; ◀
- 5.2.2.4. installation instructions, where necessary;
- 5.2.2.5. this information shall be provided either on a leaflet accompanying the original replacement catalytic converter, or, on the packaging in which the original replacement catalytic converter is sold, or, by any other applicable means.'

(c) Annex II is amended as follows:

(i) the following sections 1.7, 1.8 and 1.9 are added:

- '1.7. "original equipment catalytic converter" means a catalytic converter or an assembly of catalytic converters covered by the type-approval delivered for the vehicle;
- 1.8. "replacement catalytic converter" means a catalytic converter or an assembly of catalytic converters intended to replace an original equipment catalytic converter on a vehicle type-approved in accordance with this Chapter, which can be type-approved as a separate technical unit as defined in Article 2(5) of Directive 2002/24/EC;
- 1.9. "original replacement catalytic converter" means a catalytic converter or an assembly of catalytic converters whose types are indicated in ►**M1** section 4a of Annex VI ◀ but are offered on the market as separate technical units by the holder of the vehicle type approval';

(ii) the following section 2.4 is added:

'2.4. **Diagram and markings**

- 2.4.1. A diagram and a cross-sectional drawing indicating the dimensions of the original equipment catalytic converter(s) (if any) must be annexed to the document referred to in Annex V.
- 2.4.2. All original equipment catalytic converter(s) must bear the "e" mark followed by the identification of the country which granted the type-approval. This reference must be legible and indelible and also visible (where possible) in the position at which it is to be fitted.';

(iii) the following section 5 is added:

'5. REPLACEMENT CATALYTIC CONVERTERS AND ORIGINAL REPLACEMENT CATALYTIC CONVERTERS

- 5.1. Replacement catalytic converters intended to be fitted to vehicles type-approved in compliance with this Chapter must be tested in accordance with Annex VII.
- 5.2. Original replacement catalytic converters, which are of a type covered by ►**M1** section 4a of Annex VI ◀ and are intended for fitment to a vehicle to which the relevant type approval document refers, do not need to comply with Annex VII provided they fulfil the requirements of sections 5.2.1 and 5.2.2 of this Annex.

5.2.1. *Marking*

Original replacement catalytic converters shall bear at least the following identifications:

- 5.2.1.1. the vehicle manufacturer's name or trade mark;
- 5.2.1.2. the make and identifying part number.

5.2.2. *Documentation*

Original replacement catalytic converters shall be accompanied by the following information:

- 5.2.2.1. the vehicle manufacturer's name or trade mark;
- 5.2.2.2. make and identifying part number;
- 5.2.2.3. the vehicles for which the original replacement catalytic converter is of a type covered by ►**M1** section 4a of Annex VI; ◀

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- 5.2.2.4. installation instructions, where necessary;
- 5.2.2.5. this information shall be provided either on a leaflet accompanying the original replacement catalytic converter, or, on the packaging in which the original replacement catalytic converter is sold, or, by any other applicable means.’;

(d) In Annex VI the following section 4a is inserted:

‘4a. **Catalytic converters**

- 4a.1. Make and type of original equipment catalytic converter as listed in item 3.2.12.2.1 of Annex V (the information document).
- 4a.2. Make(s) and type(s) of original replacement catalytic converter as listed in item 3.2.12.2.1 of Annex V (the information document)’;

(e) the following Annex VII is added:

‘ANNEX VII

TYPE-APPROVAL OF REPLACEMENT CATALYTIC CONVERTER AS SEPARATE TECHNICAL UNIT FOR TWO OR THREE-WHEEL MOTOR VEHICLES

This Annex applies to the type-approval, as separate technical units within the meaning of Article 2(5) of Directive 2002/24/EC, of catalytic converters to be fitted, on one or more types of two or three-wheel motor vehicles, as replacement parts.

1. DEFINITIONS

For the purposes of this Annex, the following definitions shall apply:

- 1.1. “original equipment catalytic converter” means a catalytic converter or an assembly of catalytic converters covered by the type approval delivered for the vehicle;
- 1.2. “replacement catalytic converter” means a catalytic converter or an assembly of catalytic converters intended to replace an original equipment catalytic converter on a vehicle type-approved in accordance with this Chapter which can be type-approved as a separate technical unit as defined in Article 2(5) of Directive 2002/24/EC;
- 1.3. “original replacement catalytic converter” means a catalytic converter or an assembly of catalytic converters whose types are indicated in ►M1 section 4a of Annex VI ◀ but are offered on the market as separate technical units by the holder of the vehicle type-approval;
- 1.4. “type of catalytic converter” means catalytic converters which do not differ in such essential respects as the following:
 - 1.4.1. number of coated substrates, structure and material;
 - 1.4.2. type of catalytic activity (oxidising, three-way, etc.);
 - 1.4.3. volume, ratio of frontal area and substrate length;
 - 1.4.4. catalyst material content;
 - 1.4.5. catalyst material ratio;
 - 1.4.6. cell density;
 - 1.4.7. dimensions and shape;
 - 1.4.8. thermal protection;
- 1.5. “vehicle type with regard to the emission of gaseous pollutants from the engine” means two or three-wheel motor vehicles which do not differ in such essential respects as the following:
 - 1.5.1. the equivalent inertia determined in relation to the reference mass, as laid down in section 5.2 of Appendix 1 of Annex I or Annex II (depending upon the type of vehicle);
 - 1.5.2. the characteristics of the engine and the two or three-wheel motor vehicle as defined in Annex V;
- 1.6. “gaseous pollutants” means carbon monoxide, hydrocarbons and oxides of nitrogen expressed in terms of nitrogen dioxide (NO₂) equivalence.

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2. APPLICATION FOR TYPE-APPROVAL

- 2.1. An application for type-approval of a type of replacement catalytic converter as a separate technical unit shall be submitted by the manufacturer of the system or by his authorised representative.
- 2.2. A model for the information document is given in Appendix 1.
- 2.3. For each type of catalytic converter for which approval is requested, the type-approval application must be accompanied by the following documents in triplicate, and by the following particulars:
- 2.3.1. description of the type(s) of vehicle for which the device is intended, in respect of the characteristics referred to in section 1.1 of Annex I or Annex II (depending upon the type of vehicle);
- 2.3.2. the numbers and/or symbols specific to the type of engine and vehicle;
- 2.3.3. description of the replacement catalytic converter stating the relative position of each of its components, together with the fitting instructions;
- 2.3.4. drawings of each component to facilitate location and identification, and statement of materials used. These drawings must also indicate the intended location of the mandatory type-approval number.
- 2.4. The following must be submitted to the technical service responsible for the type approval test:
- 2.4.1. Vehicle(s) of a type approved in accordance with this Chapter equipped with a new original equipment catalytic converter. This (these) vehicle(s) shall be selected by the applicant with the agreement of the technical service. It (they) shall comply with the requirements of Section 3 of Appendix 1 to Annex I, II or III (depending upon the type of vehicle).

The test vehicle(s) shall have no emission control system defects; any excessively worn out or malfunctioning emission-related original part shall be repaired or replaced. The test vehicle(s) shall be tuned properly and set to the manufacturer's specification prior to emission testing.

- 2.4.2. One sample of the type of the replacement catalytic converter. This sample shall be clearly and indelibly marked with the applicant's trade name or mark and its commercial designation.

3. GRANTING OF TYPE-APPROVAL

- 3.1. Upon completion of the tests laid down in this Annex, the competent authority shall issue a certificate based on the model set out in Appendix 2.
- 3.2. An approval number in accordance with Annex V to Directive 2002/24/EC shall be assigned to each type of replacement catalytic converter approved. The same Member State shall not assign the same number to another replacement catalytic converter type. The same type-approval number may cover the use of that replacement catalytic converter type on a number of different vehicle types.

4. MARKING REQUIREMENT

- 4.1. Every replacement catalytic converter conforming to the type approved under this Directive as a separate technical unit, but not the mounting parts and pipes, shall bear a type-approval mark composed in accordance with the requirements of Article 8 of Directive 2002/24/EC, supplemented by further information as referred to in section 4.2 of this Annex. The type-approval mark must be affixed in such a way as to be legible and indelible and also visible (where possible) in the position at which it is to be fitted.

The dimensions of "a" must be ≥ 3 mm.

4.2. **Further information contained in the type-approval mark**

- 4.2.1. Every replacement catalytic converter, but not the mounting parts and pipes, must bear, in the type-approval mark, the number of the Chapter(s) under which the type approval has been granted.
- 4.2.1.1. Replacement catalytic converter which consists of a sole part integrating both the catalytic converter and the exhaust system (silencer)

The type-approval mark referred to in section 4.1 must be followed by two circles surrounding a number 5 and a number 9, respectively.

▼B**4.2.1.2. Replacement catalytic converter separated from the exhaust system (silencer)**

The mark of the type-approval referred to in section 4.1 affixed to the replacement catalytic converter must be followed by a circle surrounding a number 5.

Examples of type-approval marks are given in Appendix 3.

5. REQUIREMENTS**5.1. General requirements**

The design, construction and mounting of the replacement catalytic converter must be such that:

- 5.1.1. the vehicle complies with the requirements of the Annex under normal conditions of use, and in particular regardless of any vibrations to which it may be subjected;
- 5.1.2. the replacement catalytic converter displays reasonable resistance to the corrosion phenomena to which it is exposed, with due regard to the normal conditions of use of the vehicle;
- 5.1.3. the ground clearance available under the original equipment catalytic converter, and the angle at which the vehicle can lean over, are not reduced;
- 5.1.4. the surface does not reach unduly high temperatures;
- 5.1.5. the outline has no projections or sharp edges;
- 5.1.6. shock absorbers and suspension have adequate clearance;
- 5.1.7. adequate safety clearance is provided for pipes;
- 5.1.8. it is impact-resistant in a way that is compatible with clearly-defined maintenance and installation requirements;
- 5.1.9. if the original equipment catalytic converter includes thermal protection, the replacement catalytic converter shall include equivalent protection;
- 5.1.10. if (an) oxygen probe(s) and other sensors are originally installed on the exhaust line, the installation of the replacement catalytic converter shall be at the exact position of the original equipment catalytic converter, and the position on the exhaust line of the oxygen probe(s) and other sensors, shall not be modified.

5.2. Requirements regarding emissions

- 5.2.1. The vehicle referred to in section 2.4.1, equipped with a replacement catalytic converter of the type for which type-approval is requested, shall undergo the tests laid down in Appendices 1 and 2 to Annexes I, II or III (according to the type-approval of the vehicle) (*).

5.2.1.1. Evaluation of the emission of pollutants of vehicles equipped with replacement catalytic converter

Requirements regarding emissions are deemed to be complied with if the test vehicle equipped with the replacement catalytic converter complies with the limit values according to Annex I, II or III (according to the type-approval of the vehicle) (**).

Where type-approval is applied for different types of vehicles from the same manufacturer, and provided that these different types of vehicle are fitted with the same type of original equipment catalytic converter, the type I test may be limited to at least two vehicles selected after agreement with the technical service responsible for approval.

5.2.2. Requirements regarding permissible sound level

The vehicle referred to in section 2.4.1, equipped with a replacement catalytic converter of the type for which type-approval is requested, shall satisfy the requirements of section 3 to Annex II, III or IV to Chapter 9 (according to the type approval of the vehicle). The test result for the vehicle in motion and for the stationary test shall be mentioned in the test report.

5.3. Testing of vehicle performance

- 5.3.1. The replacement catalytic converter must be such as to ensure that the vehicle's performance is comparable to that achieved with the original equipment catalytic converter.

(*) As provided for in this Directive in the version applicable to the type-approval of that vehicle.

(**) As provided for in this Directive in the version applicable to the type-approval of that vehicle.

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- 5.3.2. The replacement catalytic converter must be compared with an original equipment catalytic converter, also in new condition, fitted in turn to the vehicle referred to in section 2.4.1.
- 5.3.3. This test is carried out by measuring the engine power curve. The net maximum power and the top speed measured with the replacement catalytic converter must not deviate from the net maximum power and top speed measured under the same conditions with the original equipment catalytic converter by more than $\pm 5\%$.

6. CONFORMITY OF PRODUCTION

The provisions of Annex VI to Directive 2002/24/EC apply to the checking of conformity of production.

In order to test conformity as required above, a sample replacement catalytic converter must be taken from the production line of the type-approved, pursuant to this Annex.

Production will be regarded as being in conformity with the provisions of this Annex if the requirements of section 5.2 (Requirements regarding emissions) and section 5.3 (Testing of vehicle performance) are satisfied.

7. DOCUMENTATION

- 7.1. Each new replacement catalytic converter shall be accompanied by the following information:
 - 7.1.1. the catalyst manufacturer's name or trade mark;
 - 7.1.2. the vehicles (including year of manufacture) for which the replacement catalytic converter is approved;
 - 7.1.3. installation instructions, where necessary.
- 7.2. This information shall be provided either on a leaflet accompanying the replacement catalytic converter, or on the packaging in which the replacement catalytic converter is sold, or by any other applicable means.



Appendix 1

Information document in respect of a replacement catalytic converter, as separate technical unit, for a type of two or three-wheel vehicle

Order No (assigned by applicant)

The type-approval application for replacement catalytic converter for a type of two or three-wheel vehicle must include the following details:

1. Make of the device:
2. Type of the device:
3. Name and address of the manufacturer of the device:
.....
4. If applicable, name and address of the authorised representative of the manufacturer of the device:
.....
5. Make(s) and type(s) of vehicle for which the device is designed (***):
6. Drawings of the replacement catalytic converter, identifying in particular all the characteristics referred to in section 1.4 of Annex VII to Chapter 5 annexed to Directive 97/24/EC:
.....
7. Description and drawings showing the position of the replacement catalytic converter relative to the engine exhaust manifold(s) and the oxygen sensor (if any):
8. Any restrictions on use and fitting instructions:
9. The details listed in Annex II to Directive 2002/24/CE, part 1 (A), sections:
 - 0.1,
 - 0.2,
 - 0.5,
 - 0.6,
 - 2.1,
 - 3,
 - 3.0,
 - 3.1,
 - 3.1.1,
 - 3.2.1.7,
 - 3.2.12,
 - 4 to 4.4.2,
 - 4.5,
 - 4.6,
 - 5.2.

(***) Delete as appropriate.

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Appendix 2

Type-approval certificate in respect of a replacement catalytic converter for a type of two or three-wheel vehicle

Name of administration

Report No: ... by technical service: ... Date: ...

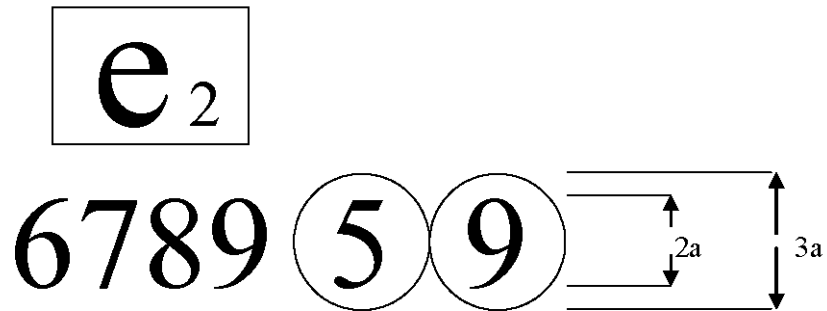
Type-approval No: ... No of extension: ...

1. Make of the device:
2. Type of the device:
3. Name and address of the manufacturer of the device:
.....
4. If applicable, name and address of the authorised representative of the manufacturer of the device:
.....
5. Make(s) and type(s) and any variant(s) or version(s) of the vehicle(s) for which the device is designed:
.....
6. Date device submitted for testing:
7. Type-approval granted/refused (****):
8. Place:
9. Date:
10. Signature:

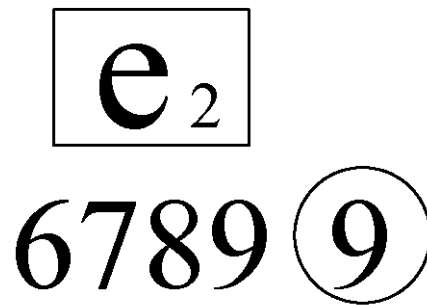
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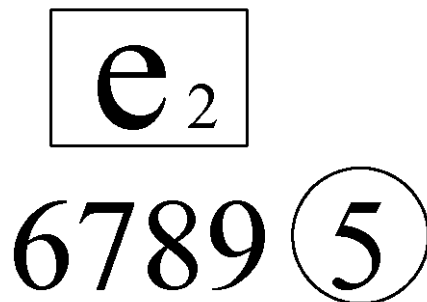
- (b) In Annex II, the following section 3.5.5 is added:
- ‘3.5.5. *Evaluation of the emission of pollutants of vehicles equipped with replacement silencer system*
- The vehicle referred to in section 3.2.3.3, equipped with a silencer of the type for which approval is requested, shall undergo a Type I and a Type II test under the conditions described in the corresponding Annex to Chapter 5 annexed to this Directive according to the type-approval of the vehicle.
- The requirements regarding emissions shall be deemed to be fulfilled if the results meet the limit values according to the type-approval of the vehicle.’
- (c) In Annex III, the following section 3.5.5 is added:
- ‘3.5.5. *Evaluation of the emission of pollutants of vehicles equipped with replacement silencer system*
- The vehicle referred to in section 3.2.3.3, equipped with a silencer of the type for which approval is requested, shall undergo a Type I and a Type II test under the conditions described in the corresponding Annex to Chapter 5 annexed to this Directive according to the type-approval of the vehicle.
- The requirements regarding emissions shall be deemed to be fulfilled if the results meet the limit values according to the type-approval of the vehicle.’
- (d) In Annex IV, the following section 3.5.5 is added:
- ‘3.5.5. *Evaluation of the emission of pollutants of vehicles equipped with replacement silencer system*
- The vehicle referred to in section 3.2.3.3, equipped with a silencer of the type for which approval is requested, shall undergo a Type I and a Type II test under the conditions described in the corresponding Annex to Chapter 5 annexed to this Directive according to the type-approval of the vehicle.
- The requirements regarding emissions shall be deemed to be fulfilled if the results meet the limit values according to the type-approval of the vehicle.’
- (e) Annex VI is amended as follows:
- (i) Section 1.3 is replaced by the following:
- ‘1.3. the type-approval mark composed and affixed in accordance with the requirements of Article 8 of Directive 2002/24/EC, supplemented by further information referred to in section 6 of this Annex. The dimensions of “a” must be ≥ 3 mm.’
- (ii) The following section 6 is added:
- ‘6. FURTHER INFORMATION CONTAINED IN THE TYPE-APPROVAL MARK
- 6.1. The non-original exhaust system or components thereof, but not the mounting parts and pipes, must bear in the type-approval mark the number of the Chapter(s) under which the type-approval has been granted, except as referred to in section 6.1.3.
- 6.1.1. *Non-original exhaust system which consists of a sole part integrating both the silencer and the catalytic converter*
- The type-approval mark referred to in section 1.3 must be followed by two circles surrounding a number 5 and a number 9, respectively.
- 6.1.2. *Non-original exhaust system separated from the catalytic converter*
- The type-approval mark referred to in section 1.3 affixed to the silencer must be followed by a circle surrounding a number 9.
- 6.1.3. *Non-original exhaust system consisting of a sole part (silencer) for vehicles which are not type-approved according to the Chapter 5*
- The type-approval mark referred to in 1.3 affixed to the silencer must not be followed by any further information.
- Examples of type-approval marks are shown in the Appendix.’
- (iii) The following Appendix is added:

▼B*Appendix***Examples of type-approval mark**

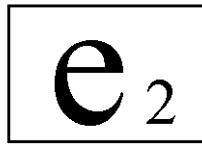
The above represented type-approval mark was issued by France [e₂] under number 6789 for a non-original exhaust system consisting of a sole part integrating both the silencer and the catalytic converter.



The above represented type-approval mark was issued by France [e₂] under number 6789 for a non-original silencer not integrating a catalytic converter (catalytic converter and silencer not integrated in a sole element or vehicle not equipped with a catalytic converter)



The above represented type-approval mark was issued by France [e₂] under number 6789 for the replacement catalytic converter not integrated in the exhaust system (catalytic converter and silencer not integrated in a sole element) (see Chapter 5).

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The above represented type-approval mark was issued by France [e₂] under number 6789 for a non-original exhaust system consisting of a sole part (silencer) intended to be fitted on vehicles which are not type-approved according to Chapter 5.'



ANNEX II

AMENDMENTS TO DIRECTIVE 2002/24/EC

Directive 2002/24/EC is amended as follows:

(a) in Annex II, section 3.2.12 is replaced by the following:

- ‘3.2.12. *Measures taken against air pollution*
- 3.2.12.1. Device for recycling crankcase gases, solely in the case of four-stroke engines (description and drawings):
- 3.2.12.2. Additional anti-pollution devices (if any, and if not covered by another heading):
- 3.2.12.2.1. Catalytic converter: yes/no (*)
- 3.2.12.2.1.1. Number of catalytic converters and elements:
- 3.2.12.2.1.2. Dimensions, shape and volume of the catalytic converter(s):
- 3.2.12.2.1.3. Type of catalytic action:
- 3.2.12.2.1.4. Total charge of precious metal:
- 3.2.12.2.1.5. Relative concentration:
- 3.2.12.2.1.6. Substrate (structure and material):
- 3.2.12.2.1.7. Cell density:
- 3.2.12.2.1.8. Type of casing for the catalytic converter(s):
- 3.2.12.2.1.9. Location of the catalytic converter(s) (place and reference distance in the exhaust line):
- 3.2.12.2.2. Oxygen sensor: yes/no (*)
- 3.2.12.2.2.1. Type:
- 3.2.12.2.2.2. Location:
- 3.2.12.2.2.3. Control range:
- 3.2.12.2.3. Air injection: yes/no (*)
- 3.2.12.2.3.1. Type (pulse air, air pump etc.):
- 3.2.12.2.4. Exhaust gas recirculation: yes/no (*)
- 3.2.12.2.4.1. Characteristics (flow rate etc.):
- 3.2.12.2.5. Other systems (description and operation):

(*) Delete as appropriate.’

(b) Annex V is amended as follows:

- (i) in the list in section 1 of point 1 under the heading A, the text ‘CY for Cyprus’ and ‘MT for Malta’ is replaced by: ‘49 for Cyprus’ and ‘50 for Malta’.
- (ii) in the list in point 1.1 under the heading B, the text ‘CY for Cyprus’ and ‘MT for Malta’ is replaced by ‘49 for Cyprus’ and ‘50 for Malta’.