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## COUNCIL DIRECTIVE

## of 6 February 1970

on the approximation of the laws of the Member States relating to the permissible sound level and the exhaust system of motor vehicles

(70/157/EEC)

(OJ L 42, 23.2.1970, p. 16)

## Amended by:

<u>▶</u>B

		Official Journal		
		No	page	date
<u>M1</u>	Commission Directive 73/350/EEC 73/350/EEC of 7 November 1973	L 321	33	22.11.1973
► <u>M2</u>	Council Directive 77/212/EEC 77/212/EEC of 8 March 1977	L 66	33	12.3.1977
► <u>M3</u>	Commission Directive 81/334/EEC 81/334/EEC of 13 April 1981	L 131	6	18.5.1981
► <u>M4</u>	Commission Directive 84/372/EEC 84/372/EEC of 3 July 1984	L 196	47	26.7.1984
► <u>M5</u>	Council directive 84/424/EEC 84/424/EEC of 3 September 1984	L 238	31	6.9.1984
► <u>M6</u>	Council Directive 87/354/EEC 87/354/EEC of 25 June 1987	L 192	43	11.7.1987
► <u>M7</u>	Commission Directive 89/491/EEC 89/491/EEC of 17 July 1989	L 238	43	15.8.1989
<u>M8</u>	Council Directive 92/97/EEC of 10 November 1992	L 371	1	19.12.1992
► <u>M9</u>	Commission Directive 96/20/EC of 27 March 1996	L 92	23	13.4.1996
► <u>M10</u>	Commission Directive 1999/101/EC of 15 December 1999	L 334	41	28.12.1999
► <u>M11</u>	Council Directive 2006/96/EC of 20 November 2006	L 363	81	20.12.2006
► <u>M12</u>	Commission Directive 2007/34/EC of 14 June 2007	L 155	49	15.6.2007
Amended	1 by:			
► <u>A1</u>	Act of Accession of Denmark, Ireland and the United Kingdom of Great Britain and Northern Ireland	L 73	14	27.3.1972
► <u>A2</u>	Act of Accession of Spain and Portugal	L 302	23	15.11.1985
► <u>A3</u>	Act of Accession of Austria, Sweden and Finland	C 241	21	29.8.1994
	(adapted by Council Decision 95/1/EC, Euratom, ECSC)	L 1	1	1.1.1995
► <u>A4</u>	Act concerning the conditions of accession of the Czech Republic, the Republic of Estonia, the Republic of Cyprus, the Republic of Latvia, the Republic of Lithuania, the Republic of Hungary, the Republic of Malta, the Republic of Poland, the Republic of Slovenia and the Slovak Republic and the adjustments to the Treaties on which the European Union is founded	L 236	33	23.9.2003

#### **COUNCIL DIRECTIVE**

#### of 6 February 1970

on the approximation of the laws of the Member States relating to the permissible sound level and the exhaust system of motor vehicles

(70/157/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100 thereof;

Having regard to the proposal from the Commission;

Having regard to the Opinion of the European Parliament (1);

Having regard to the Opinion of the Economic and Social Committee (2);

Whereas the technical requirements which motor vehicles must satisfy pursuant to national laws relate, *inter alia*, to the permissible sound level and the exhaust system;

Whereas those requirements differ from one Member State to another; whereas it is therefore necessary that all Member States adopt the same requirements either in addition to or in place of their existing rules, in order, in particular, to allow the EEC type approval procedure which was the subject of the Council Directive (3) 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 to be applied in respect of each type of vehicle;

HAS ADOPTED THIS DIRECTIVE:

#### Article 1

For the purposes of this Directive, 'vehicle' means any motor vehicle intended for use on the road, with or without bodywork, having at least four wheels and a maximum design speed exceeding 25 kilometres per hour, with the exception of vehicles which run on  $\blacktriangleright \underline{M9}$  rails and of agricultural and forestry tractors and all mobile machinery.  $\blacktriangleleft$ 

#### **▼** M3

#### Article 2

No Member State may, on grounds relating to the permissible sound level and the exhaust system, refuse to grant EEC or national type-approval in respect of a type of motor vehicle or type of exhaust system or component of such a system regarded as a separate technical unit,

 if the vehicle satisfies the requirements of Annex I as regards the sound level and exhaust system,

<sup>(1)</sup> OJ No C 160, 18.12.1969, p. 7.

<sup>(2)</sup> OJ No C 48, 16.4.1969, p. 16.

<sup>(3)</sup> OJ No L 42, 23.2.1970, p. 1.

#### **▼**<u>M3</u>

— if the exhaust system or any component thereof, considered as a separate technical unit within the meaning of ► M9 Article 2 ◀ of Directive 70/156/EEC satisfies the requirements of Annex II.

#### Article 2a

- 1. No Member State may, on grounds relating to the permissible sound level and the exhaust system, refuse or prohibit the sale, registration, entry into service or use of any vehicle in which the sound level and the exhaust system satisfy the requirements of Annex I.
- 2. No Member State may, on grounds relating to the permissible sound level and the exhaust system, prohibit the placing on the market of an exhaust system or any component thereof considered as a separate technical unit within the meaning of  $\triangleright \underline{M9}$  Article 2  $\triangleleft$  of Directive 70/156/EEC if, within the meaning of Article 2, it is of a type in respect of which a type-approval has been granted.

**▼**B

#### Article 3

The amendments necessary for adjusting the requirements of  $\blacktriangleright \underline{M9}$  the Annexes  $\blacktriangleleft$  so as to take account of technical progress, with the exception of the requirements set out under  $\blacktriangleright \underline{M3}$  items 5.2.2.1 and 5.2.2.5 of Annex I  $\blacktriangleleft$ , shall be adopted in accordance with the procedure laid down in Article 13 of the Council Directive on the type approval of motor vehicles and their trailers.

#### Article 4

- 1. Member States shall put into force the provisions containing the requirements needed in order to comply with this Directive within eighteen months of its notification and shall forthwith inform the Commission thereof.
- 2. Member States shall ensure that the texts of the main provisions of national law which they adopt in the field covered by this Directive are communicated to the Commission.

#### Article 5

This Directive is addressed to the Member States.

## **▼**<u>M9</u>

#### List of Annexes

ANNEX I: Provisions for ec type-approval in respect of the sound level of

a type of motor vehicle

Appendix 1: Information document

Appendix 2: Model

Addendum to EC

type-approval certificate: concerning the type-approval of a

vehicle with regard to Directive 70/157/EEC as last amended by

Directive .../.../EC

ANNEX II:

Administrative provisions for ec type-approval of exhaust systems as separate technical units (replacement exhaust

systems)

Appendix 1: Information document

Appendix 2: Model

Addendum to EC

type-approval certificate: concerning the separate technical

unit type-approval of exhaust systems for motor vehicles with regard to Directive 70/157/EEC as last amended by Directive .../.../EC

Appendix 3: Model for the EC type-approval

mark

ANNEX III:

#### ANNEX I

## PROVISIONS FOR EC TYPE-APPROVAL IN RESPECT OF THE SOUND LEVEL OF A TYPE OF MOTOR VEHICLE

- 1. APPLICATION FOR EC TYPE-APPROVAL OF A VEHICLE TYPE
- 1.1. The application for EC type-approval pursuant to Article 3(4) of Directive 70/156/EEC of a vehicle type with regard to its sound level shall be submitted by the vehicle manufacturer.
- 1.2. A model for the information document is given in Appendix 1.
- 1.3. A vehicle representative of the type in respect of which type-approval is sought must be submitted to the technical service responsible for the tests by the vehicle manufacturer.
- 1.4. At the request of the technical service, a specimen of the exhaust system and an engine of at least the same cylinder capacity and rated maximum power as that fitted to the vehicle in respect of which type-approval is sought must also be submitted.
- 2. SOUND LEVEL OF MOVING VEHICLES

#### 2.1. Limiting values

The sound level measured in accordance with the provisions of Annex III shall not exceed the following limits:

	Vehicle categories	Values expressed in dB(A) (decibels(A))
2.1.1.	Vehicles intended for the carriage of passengers, and comprising not more than nine seats including the driver's seat	74
2.1.2.	Vehicles intended for the carriage of passengers and equipped with more than nine seats, including the driver's seat; and having a maximum permissible mass of more than 3,5 tonnes and:	
2.1.2.1.	with an engine power of less than 150 kW	78
2.1.2.2.	with an engine power of not less than 150 kW	80
2.1.3.	Vehicles intended for the carriage of passengers and equipped with more than nine seats, including the driver's seat; vehicles intended for the carriage of goods:	
2.1.3.1.	with a maximum permissible mass not exceeding 2 tonnes	76
2.1.3.2.	with a maximum permissible mass exceeding 2 tonnes but not exceeding 3,5 tonnes	77
2.1.4.	Vehicles intended for the carriage of goods and having a maximum permissible mass exceeding 3,5 tonnes:	
2.1.4.1.	with an engine power of less than 75 kW	77
2.1.4.2.	with an engine power of not less than 75 kW but less than 150 kW $$	78
2.1.4.3.	with an engine power of not less than 150 $kW$	80

#### However

<sup>—</sup> for vehicles of categories 2.1.1 and 2.1.3, the limit values are increased by 1 dB(A) if they are equipped with a direct injection diesel engine,

#### **▼**M12

- for vehicles with a maximum permissible mass of over two tonnes designed for off-road use, the limit values are increased by 1 dB(A) if their engine power is less than 150 kW and 2 dB(A) if their engine power is 150 kW or more,
- for vehicles in category 2.1.1, equipped with a manually operated gear box having more than four forward gears and with an engine developing a maximum power exceeding 140 kW/t and whose maximum power/maximum mass ratio exceeds 75 kW/t, the limit values are increased by 1 dB(A) if the speed at which the rear of the vehicle passes the line BB' in third gear is greater than 61 km/h.

#### 2.2. Interpretation of results

- 2.2.1. To take account of inaccuracies in the measuring instruments, the result obtained from each measurement is determined by deducting 1 dB(A) from the meter reading.
- 2.2.2. The measurements are considered valid if the difference between two consecutive measurements on the same side of the vehicle does not exceed 2 dB(A).
- 2.2.3. The highest sound level measured shall constitute the test result. Should the result exceed the maximum permissible sound level for the category of vehicle tested by 1 dB(A), two further measurements shall be made at the corresponding microphone position. Three of the four measurements thus obtained at that microphone position must fall within the prescribed limits.

#### MARKINGS

- 3.1. The exhaust and intake system components, excluding fixing hardware and pipes, must bear:
- 3.1.1. the trade mark or name of the manufacturer of the systems and their components;
- 3.1.2. the manufacturer's trade description.
- 3.2. These markings must be clearly legible and indelible, even when the system is fitted to the vehicle.
- 4. GRANTING OF EC TYPE-APPROVAL OF A VEHICLE TYPE
- 4.1. If the relevant requirements are satisfied, EC type-approval pursuant to Article 4(3) and, if applicable, 4(4) of Directive 70/156/EEC shall be granted.
- 4.2. A model for the EC type-approval certificate is given in Appendix 2.
- 4.3. An approval number in accordance with Annex VII to Directive 70/156/ EEC shall be assigned to each vehicle type approved. The same Member State shall not assign the same number to another vehicle type.
- 5. MODIFICATIONS OF THE TYPE AND AMENDMENTS TO APPROVALS
- 5.1. In the case of modifications of the type approved pursuant to this Directive, the provisions of Article 5 of Directive 70/156/EEC shall apply.

#### 6. CONFORMITY OF PRODUCTION

- 6.1. Measures to ensure the conformity of production shall be taken in accordance with the requirements laid down in Article 10 of Directive 70/156/EEC.
- 6.2. Special provisions:
- 6.2.1. The tests referred to in item 2.3.5 of Annex X to Directive 70/156/EEC are those laid down in Annex 7 of UN/ECE Regulation No 51 as referred to in Annex III of this Directive.
- 6.2.2. The frequency of inspections referred to in item 3 of Annex X to Directive 70/156/EEC is normally one every two years.

#### Appendix 1

Information document No ... pursuant to Annex I of Council Directive 70/156/EEC (\*) relating to EC type-approval of a vehicle with respect to the permissible sound level and the exhaust system (Directive 70/157/EEC, as last amended by Directive .../.../EC)

The following information, if applicable, must be supplied in triplicate and include a list of contents. Any drawings must be supplied in appropriate scale and in sufficient detail on size A4 or on a folder of A4 format. Photographs, if any, must show sufficient detail.

If the systems, components or separate technical units have electronic controls, information concerning their performance must be supplied.

information concerning their performance must be supplied.		
0.	General	
0.1.	Make (trade name of manufacturer):	
0.2.	Type and general commercial description(s):	
0.3.	Means of identification of type, if marked on the vehicle (b):	
0.3.1.	Location of that marking.	
0.4.	Category of vehicle (c):	
0.5.	Name and address of manufacturer:	
0.8.	Address(es) of assembly plant(s):	
1.	General construction characteristics of the vehicle	
1.1.	Photographs and/or drawings of a representative vehicle:	
1.3.3.	Powered axles (number, position, interconnection):	
1.6.	Position and arrangement of the engine:	
2.	Masses and dimensions (e) (in kg and mm) (Refer to drawing where applicable)	
2.4.	Range of vehicle dimensions (overall)	
2.4.1.	For chassis without bodywork	
2.4.1.1.	Length (j):	
2.4.1.2.	Width (k):	
2.4.2.	For chassis with bodywork	
2.4.2.1.	Length (j):	
2.4.2.2.	Width (k):	
2.6.	Mass of the vehicle with bodywork in running order, or mass of the chassis with cab if the manufacturer does not fit the bodywork (with standard equipment, including coolant, oils, fuel, tools, spare wheel and driver) (o) (maximum and minimum):	

<sup>3.</sup> Power plant (q)

- 3.1. Manufacturer:
- 3.1.1. Manufacturer's engine code: (As marked on the engine, or other means of identification)
- 3.2. Internal combustion engine

<sup>(\*)</sup> The item numbers and footnotes used in this information document correspond to those set out in Annex I to Directive 70/156/EEC. Items not relevant for the purpose of this Directive are omitted.

3.2.1.1.	Working principle: positive ignition/compression ignition, four stroke/two stroke $(\sp{1})$
3.2.1.2.	Number and arrangement of cylinders:
3.2.1.2.3.	Firing order:
3.2.1.3.	Engine capacity (s): cm <sup>3</sup>
3.2.1.8.	Maximum net power (t): $kW$ at $\mbox{min}^{-1}$ (manufacturer's declared value)
3.2.4.	Fuel feed
3.2.4.1.	By carburettor(s): yes/no (1)
3.2.4.1.2.	Type(s):
3.2.4.1.3.	Number fitted:
3.2.4.2.	By fuel injection (compression ignition only): yes/no $({}^{\rm l})$
3.2.4.2.2.	Working principle: Direct injection/pre-chamber/swirl chamber $({}^{l})$
3.2.4.2.4.	Governor
3.2.4.2.4.1.	Type:
3.2.4.2.4.2.1.	Cut-off point under load: min <sup>-1</sup>
3.2.4.3.	By fuel injection (positive ignition only): yes/no (1)
3.2.4.3.1.	Working principle: Intake manifold (single-/multi-point $(^1))/direct$ injection/other (specify) $(^1)$
3.2.8.	Intake system
3.2.8.4.2.	Air filter, drawings; or
3.2.8.4.2.1.	Make(s):
3.2.8.4.2.2.	Type(s):
3.2.8.4.3.	Intake silencer, drawings; or
3.2.8.4.3.1.	Make(s):
3.2.8.4.3.2.	Type(s):
3.2.9.	Exhaust system
3.2.9.2.	Description and/or drawing of the exhaust system:
3.2.9.4.	Exhaust silencer(s):
	ntre, rear silencer: construction, type, marking, where relevant for e: reducing measures in the engine compartment and on the engine:
3.2.9.5.	Location of the exhaust outlet:
3.2.9.6.	Exhaust silencer containing fibrous materials:
3.2.12.2.1.	Catalytic convertor: yes/no (1)
3.2.12.2.1.1.	Number of catalytic convertors and elements:
3.3.	Electric motor
3.3.1.	Type (winding, excitation):
3.3.1.1.	Maximum hourly output: kW
3.3.1.2.	Operating voltage: V
3.4.	Other engines or motors or combinations thereof (particulars regarding the parts of such engines or motors):
	3.2.1.2. 3.2.1.2.3. 3.2.1.3. 3.2.1.8. 3.2.4. 3.2.4.1. 3.2.4.1.2. 3.2.4.1.3. 3.2.4.2. 3.2.4.2.4. 3.2.4.2.4.1. 3.2.4.2.4.1. 3.2.4.2.4.1. 3.2.4.3.1. 3.2.8. 3.2.8.4.2.1. 3.2.8.4.2.2. 3.2.8.4.3.1. 3.2.8.4.3.1. 3.2.8.4.3.1. 3.2.8.4.3.1. 3.2.9. 3.2.9.2. 3.2.9.4. For front, ce exterior noise 3.2.9.5. 3.2.9.6. 3.2.12.2.1. 3.3. 3.3.1. 3.3.1.1. 3.3.1.2.

Transmission (v)

Gear ratios

Type (mechanical, hydraulic, electric, etc.):

4.

4.2.4.6.

<sup>(1)</sup> Delete as applicable.

to Directive 70/156/EEC)

		Internal gearbox ratios	Final drive ratio (s)	
	Gear	(ratios of engine to gearbox output shaft revo- lutions)	(ratio of gearbox output shaft to driven wheel revo- lutions)	Total gear ratios
	Maximum for CVT (*)			
	1			
	2			
	3			
	Minimum for CVT (*)			
	Reverse			
	(*) Continuously varia	ble transmission		
4.7.	Maximum vehicle sp km/h) (w):	peed (and gear	in which this i	s achieved) (in
6.	Suspension			
6.6.	Tyres and wheels			
6.6.2.	Upper and lower lim	its of rolling ra	adii	
6.6.2.1.	Axle 1:			
6.6.2.2.	Axle 2:			
6.6.2.3.	Axle 3:			
6.6.2.4.	Axle 4:			
	etc.			
9.	Bodywork (not app	licable for veh	icles of categor	ry M <sub>1</sub> )
9.1.	Type of bodywork:			
9.2.	Materials used and n	nethod of const	truction	
12.	Miscellaneous			
12.5.	Details of any non-er covered by other iter		esigned to redu	ce noise (if not
Additional in	nformation in the case	of off-road ve	hicles:	
1.3.	Number of axles and	l wheels:		
2.4.1.	For chassis without 1	oodywork		
2.4.1.4.1.	Approach angle (na)	:	degrees	
2.4.1.5.1.	Departure angle (nb)	:	degrees	
2.4.1.6.	Ground clearance (as to Directive 70/156/F		nt 4.5 of section	A of Annex II
2.4.1.6.1.	Between the axles:			
2.4.1.6.2.	Under the front axle	(s):		
2.4.1.6.3.	Under the rear axle(s	s):		
2.4.1.7.	Ramp angle (nc):	degr	rees	
2.4.2.	For chassis with bod	ywork		
2.4.2.4.1.	Approach angle (na)	:	degrees	
2.4.2.5.1.	Departure angle (nb)	:	degrees	
2.4.2.6.	Ground clearance (as to Directive 70/156/F		nt 4.5 of section	A of Annex II

Date, File

<sup>(1)</sup> Delete as applicable.

#### Appendix 2

#### MODEL

#### EC TYPE-APPROVAL CERTIFICATE

(Maximum Format: A4 (210 × 297 mm))

Stamp of administration

Communication concerning the

- type-approval (¹)
- extension of type-approval (¹)
- refusal of type-approval (¹)
- withdrawal of type-approval (¹)

of a type of a vehicle/component/separate technical unit (¹) with regard to Directive .../.../EEC, as last amended by Directive .../.../EC.

Type-approval number:

Reason for extension:

#### SECTION I

- 0.1. Make (trade name of manufacturer):
- 0.2. Type and general commercial description(s):
- 0.3. Means of identification of type if marked on the vehicle/component/separate technical unit (1) (2)
- 0.3.1. Location of that marking.
- 0.4. Category of vehicle (3):
- 0.5. Name and address of manufacturer:
- 0.7. In the case of components and separate technical units, location and method of affixing of the EC approval mark:
- 0.8. Address(es) of assembly plant(s)

#### SECTION II

- 1. Additional information (where applicable): See Addendum
- 2. Technical service responsible for carrying out the tests:
- 3. Date of test report:
- 4. Number of test report:
- 5. Remarks (if any): See Addendum
- 6. Place:
- 7. Date:
- 8. Signature:
- The index to the information package lodged with the approval authority, which may be obtained on request, is attached.

<sup>(1)</sup> Delete as applicable

<sup>(2)</sup> If the means of identification of type contains characters not relevant to describe the vehicle, component or separate technical unit types covered by the type-approval certificate such characters shall be represented in the documentation by the symbol: "?" (e.g. ABC??123??).

<sup>(3)</sup> As defined in Annex IIA to Directive 70/156/EEC.

Addendum to EC type-approval certificate No ...

### concerning the type-approval of a vehicle with regard to Directive 70/157/ EEC as last amended by Directive .../.../EC

1.	Additional information:
1.1.	If necessary, list of vehicles covered by item 3.1.2.3.2.3. of Annex III of UN/ECE Regulation No $51\colon$
1.2.	Engine
1.2.1.	Manufacturer:
1.2.2.	Type:
1.2.3.	Model:
1.2.4.	Rated maximum power $kW$ at $min^{-1}$
1.3.	Transmission: non-automatic gearbox/automatic gearbox (1)
1.3.1	Number of gears:
1.4.	Equipment
1.4.1.	Exhaust silencer
1.4.1.1.	Manufacturer:
1.4.1.2.	Model:
1.4.1.3.	Type: in accordance with drawing No:
1.4.2.	Intake silencer
1.4.2.1.	Manufacturer:
1.4.2.2.	Model:
1.4.2.3.	Type: in accordance with drawing No:
1.5.	Tyre size:
1.5.1.	Description of tyre type used for type-approval testing:
1.6.	Measurements
1.6.1.	Sound level of moving vehicle:

	Measurement	results	
	Left-hand side dB(A) (¹)	Right-hand side dB(A) (1)	Position of gear lever
first measurement			
second measurement			
third measurement			
fourth measurement			

Test result: ..... dB(A)/E (2)

The measurement values are given with the 1 dB(A) deduction in accordance with provisions of item 2.2.1 of Annex I.  $^{\circ}$ E' indicates that the measurements in question were conducted in accordance with this Directive.

<sup>(1)</sup> Delete as applicable.

#### 1.6.2. Sound level of stationary vehicle:

	Mea	surement results	
		dB(A)	Engine
first measurement			
second measurement			
third measurement			
Test regults	AD(A	\/E (1)	•

Test result: ..... dB(A)/E(1)

#### 1.6.3. Sound level of compressed air noise:

Mea	surement results	
	Left-hand side dB(A) (¹)	Right-hand side dB(A) (1)
first measurement		
second measurement		
third measurement		
fourth measurement		

Test result: ..... dB(A)

#### 5. Remarks:

 <sup>&#</sup>x27;E' indicates that the measurements in question were conducted in accordance with this Directive.

<sup>(</sup>i) The measurement values are given with the 1 dB(A) deduction in accordance with provision of item 2.2.1 of Annex I.

#### ANNEX II

## ADMINISTRATIVE PROVISIONS FOR EC TYPE-APPROVAL OF EXHAUST SYSTEMS AS SEPARATE TECHNICAL UNITS (REPLACEMENT EXHAUST SYSTEMS)

- 1. APPLICATION FOR EC TYPE-APPROVAL
- 1.1. The application of EC type-approval pursuant to Article 3(4) of Directive 70/156/EEC in respect of a replacement exhaust system or component thereof as a separate technical unit shall be submitted by the vehicle manufacturer or the manufacturer of the separate technical unit in question.
- 1.2. A model for the information document is given in Appendix 1.
- 1.3. At the request of the technical service concerned, the applicant must submit:
- 1.3.1. two examples of the system in respect of which application for EC type-approval has been made,
- 1.3.2. an exhaust system of the type originally fitted to the vehicle when EC type-approval was granted,
- 1.3.3. a vehicle representative of the type to which the system is to be fitted, which meets the requirements of item 4.1 of Annex 7 of UN/ECE Regulation No 51 as referred to in Annex III of this Directive.
- 1.3.4. a separate engine corresponding to the type of vehicle described above.
- MARKINGS
- 2.4.1. The replacement exhaust system or its components, excluding fixing hardware and pipes must bear:
- 2.4.1.1. the trademark or trade name of the manufacturer of the replacement system and its components,
- 2.4.1.2. the manufacturer's trade description,
- 2.4.2. These marks must be clearly legible and indelible, even when the system is fitted to the vehicle.
- 3. GRANTING OF EC TYPE-APPROVAL
- 3.1. If the relevant requirements are satisfied, EC type-approval pursuant to Article 4(3) and, if applicable, Article 4(4) of Directive 70/156/EEC shall be granted.
- 3.2. A model for the EC type-approval certificate is given in Appendix 2.
- 3.3. A type-approval number in accordance with Annex VII to Directive 70/156/EEC shall be assigned to each type of replacement exhaust system or component thereof approved as a separate technical unit; section 3 of the type-approval number shall indicate the number of the amending Directive which was applicable at the time of the vehicle type-approval. The same Member State shall not assign the same number to another type of replacement exhaust system or component thereof.
- 4. EC TYPE-APPROVAL MARK
- 4.1. Every replacement exhaust system or component thereof, excluding fixing hardware and pipes, conforming to a type approved under this Directive shall bear an EC type-approval mark.
- 4.2. The EC type-approval mark shall consist of a rectangle surrounding the lower case letter 'e' followed by the distinguishing letter(s) or number of the Member State which has granted the approval:
  - '1' for Germany
  - '2" for France
  - '3' for Italy
  - '4' for the Netherlands
  - '5' for Sweden

#### **▼**M12

- '6' for Belgium
- '7' for Hungary
- '8' for the Czech Republic
- '9' for Spain
- '11' for the United Kingdom
- '12' for Austria
- '13' for Luxembourg
- '17' for Finland
- '18' for Denmark
- '19' for Romania
- '20' for Poland
- '21' for Portugal
- '23' for Greece
- '24' for Ireland
- '26' for Slovenia
- '27' for Slovakia
- '29' for Estonia
- '32' for Latvia
- '34' for Bulgaria
- '36' for Lithuania
- '49' for Cyprus
- '50' for Malta

It must also include in the vicinity of the rectangle the 'base approval number' contained in section 4 of the type-approval number referred to in Annex VII to Directive 70/156/EEC, preceded by the two figures indicating the sequence number assigned to the most recent major technical amendment to Council Directive 70/157/EEC which was applicable at the time of the vehicle type-approval. For Directive 70/157/EEC, the sequence number is 00; for Directive 77/212/EEC the sequence number is 01; for Directive 84/424/EEC the sequence number is 02; for Directive 92/97/EEC and this Directive the sequence number is 03. Sequence number 03 reflects as well the technical requirements of the 00 series of amendments of UN/ECE Regulation No 59.

- 4.3. The mark must be clearly legible and indelible even when the replacement exhaust system or component thereof is fitted to the vehicle.
- 4.4. An example of the EC type-approval mark is shown in Appendix 3.
- 5. MODIFICATION OF THE TYPE AND AMENDMENTS TO APPROVALS
- 5.1. In the case of modifications of the type approved pursuant to this Directive, the provisions of Article 5 of Directive 70/156/EEC shall apply.
- 6. CONFORMITY OF PRODUCTION
- 6.1. Measures to ensure the conformity of production shall be taken in accordance with the requirements laid down in Article 10 to Directive 70/156/EEC.
- 6.2. Special provisions:
- 6.2.1. The tests referred to item 2.3.5 of Annex X to Directive 70/156/EEC are those prescribed in Annex 5 of UN/ECE Regulation No 59 as referred to in Annex III of this Directive.
- 6.2.2. The frequency of inspections referred to in item 3 of Annex X to Directive 70/156/EEC is normally one every two years.

#### **▼**M12

#### Appendix 1

Information Document No ... relating to EC type-approval as separate technical unit of exhaust systems for motor vehicles (Directive 70/157/ EEC, as last amended by Directive .../.../EC)

The following information, if applicable, must be supplied in triplicate and include a list of contents. Any drawings must be supplied in appropriate scale and in sufficient detail on size A4 or on a folder of A4 format. Photographs, if any, must show sufficient detail.

If the systems, components or separate technical units have electronic controls, information concerning their performance must be supplied.

- 0 General
- 0.1. Make (trade name of manufacturer):
- 0.2. Type and general commercial description(s):
- 0.5. Name and address of manufacturer:
- 0.7. In the case of components and separate technical units, location and method of affixing of the EC approval mark:
- 0.8. Address(es) of assembly plant(s):
- Description of the vehicle for which the device is intended (if the device is intended to be fitted to more than one vehicle type the information requested under this point shall be supplied for each type concerned)
- 1.1. Make (trade name of manufacturer):
- 1.2. Type and general commercial description(s):
- 1.3. Means of identification of type, if marked on the vehicle:
- 1.4. Category of vehicle:
- 1.5. EC type-approval number with regard to sound level:
- 1.6. All the information mentioned in items 1.1 to 1.5 of the type-approval certificate concerning the vehicle (Annex I, Appendix 2 to this Directive):
- 2. Description of the device
- 2.1. A description of the replacement exhaust system indicating the relative position of each system component, together with mounting instructions:
- 2.2. Detailed drawings of each component, so that they can be easily located and identified, and reference to the materials used. These drawings must indicate the place provided for the compulsory affixing of the EC typeapproval mark:

Date, File

#### Appendix 2

#### MODEL

#### EC TYPE-APPROVAL CERTIFICATE

(Maximum Format: A4 (210 × 297 mm))

Stamp of administration

Communication concerning the

- type-approval (¹)
- extension of type-approval (¹)
- refusal of type-approval (¹)
- withdrawal of type-approval (¹)

of a type of a vehicle/component/separate technical unit (¹) with regard to Directive .../.../EEC, as last amended by Directive .../.../EC.

Type-approval number:

Reason for extension:

#### SECTION I

- 0.1. Make (trade name of manufacturer):
- 0.2. Type and general commercial description(s):
- 0.3. Means of identification of type if marked on the vehicle/component/separate technical unit (1) (2):
- 0.3.1. Location of that marking:
- 0.4. Category of vehicle (3):
- 0.5. Name and address of manufacturer:
- 0.7. In the case of components and separate technical units, location and method of affixing of the EC approval mark:
- 0.8. Address(es) of assembly plant(s):

#### SECTION II

- 1. Additional information (where applicable): See Addendum
- 2. Technical service responsible for carrying out the tests:
- 3. Date of test report:
- 4. Number of test report:
- 5. Remarks (if any): See Addendum
- 6. Place:
- 7. Date:
- 8. Signature:
- The index to the information package lodged with the approval authority, which may be obtained on request, is attached.

<sup>(1)</sup> Delete as applicable

<sup>(2)</sup> If the means of identification of type contains characters not relevant to describe the vehicle, component or separate technical unit types covered by the type-approval certificate such characters shall be represented in the documentation by the symbol: '?' (e.g. ABC??123??).

<sup>(3)</sup> As defined in Annex IIA to Directive 70/156/EEC.

Addendum to EC type-approval certificate No ...

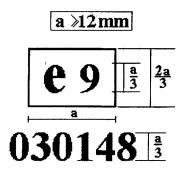
# concerning the separate technical unit type-approval of exhaust systems for motor vehicles with regard to Directive 70/157/EEC as last amended by Directive .../.../EC

1.	Additional information
1.1.	Composition of the separate technical unit:
1.2.	Trademark or trade name of the type(s) of motor vehicle to which the silencer is to be fitted $(^1)$
1.3.	Type(s) of vehicle and its/their type-approval number(s):
1.4.	Engine
1.4.1.	Type (positive ignition, diesel):
1.4.2.	Cycles: two-stroke, four-stroke:
1.4.3.	Total cylinder capacity:
1.4.4.	Rated maximum engine power $kW$ at $min^{-1}$
1.5.	Number of gear ratios:
1.6.	Gear ratios employed:
1.7.	Drive-axle ratios(s):
1.8.	Sound-level values:
	moving vehicle: $dB(A)$ , speed stabilised before acceleration at $km/h$ ;
	stationary vehicle dB(A), at min-1
1.9.	Value of the back pressure:
1.10.	Any restrictions in respect of use and mounting requirements:
2.	Remarks:

<sup>(1)</sup> If several types are indicated, items 1.3 to 1.10 inclusive must be completed in respect of each type.

#### Appendix 3

## Model for the EC type-approval mark



The exhaust system or component thereof bearing the above EC type-approval mark is a device which has been approved in Spain (e 9) pursuant to Directive 92/97/EEC (03) under the base approval number 0148.

The figures used are only indicative.

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#### ANNEX III

- 1. The technical requirements are those set out in:
  - (a) points 2, 6.1, 6.2.1 and 6.3 of UN/ECE Regulation No 51 (\*) and Annexes 3 to 10 thereto;
  - (b) points 2 and 6 of UN/ECE Regulation No 59 (\*\*) and Annexes 3 to 5 thereto
- 2. For the purposes of the application of the provisions referred to in point 1, the following shall apply:
  - (a) 'Unladen vehicle' means a vehicle the mass of which is described in point 2.6 of Appendix 1 of Annex I to this Directive, without driver;
  - (b) 'Communication form' shall be understood as type-approval-certificate set out in Appendix 2 of Annexes I and II;
  - (c) 'Contracting Parties to the respective regulations' shall be understood as Member States;
  - (d) references to Regulation No 51 and Regulation No 59 shall be construed as references to Directive 70/157/EEC;
  - (e) footnote 1 in point 2.2.6 shall be understood as follows: 'For definitions of the categories, see Annex II A to Directive 70/156/EEC'.

(\*) OJ L 137, 30.5.2007, p. 68.

<sup>(\*\*)</sup> OJ L 326, 24.11.2006, p. 43.