THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

COMMUNICATION CONCERNING THE APPROVAL GRANTED TO A COMPONENT TYPE-APPROVAL CERTIFICATE IN RESPECT OF A NON-ORIGINAL EXHAUST SYSTEM FOR A TYPE OF MOTORCYCLE PURSUANT TO COUNCIL DIRECTIVE 97/24/EC – CHAPTER 9 AS LAST AMENDED BY 2009/108/EC.

EC Component type-approval No: e11*97/24/9/III/2009/108*0860*00

Report No 13-00013-CM-MIL-00, by technical service TÜV SÜD Automotive, date 22 February 2013

Reason(s) for extension:

1. Make of exhaust: Termignoni

2. Type of exhaust: D134

3. Name and address of manufacturer:

   Termignoni S.p.A.
   Via della Rampina, 1
   15077 Predosa (AL)
   ITALY

4. If applicable, name and address of the manufacturer's authorized representative: Not applicable

5. Make(s) and type(s) and any variant(s) or version(s) of the vehicle(s) for which the exhaust system is designed: see list enclosed

6. Date system submitted for testing: see enclosure

7. Component type-approval GRANTED:

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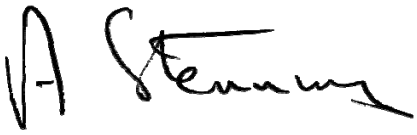
8. Place: BRISTOL

9. Date: 28 FEBRUARY 2013

10. Signature: 

A.W.STENNING
Head of Technical and Quality Support Group

(1) Delete as appropriate

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APPROVAL NUMBER: e11*97/24/9/III/2009/108*0860*00

INFORMATION PACKAGE CONTENTS

INDEX

REVISION NUMBER: Not applicable

Total number of sheets:	9 (Nine)
Number of separate drawings:	0 (Nil)
Number of separate photographs:	0 (Nil)

Reasons for Revision: Not applicable

Revision date
&
Office stamp

An executive agency of the Department for Transport
September 2012 Revision 1

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TERMIGNONI	**INFORMATION DOCUMENT** **N° D134/97/24 rev. 00**	**Date: 10/01/2013** **Page 1/2**

Information Document relating to EC type approval as separate technical unit of exhaust systems for motorcycles (Directive 97/24/EC amended 2009/108/EC)

1.	*Make (trade name of manufacturer)*:	TERMIGNONI
2.	*Type and general commercial description:*	D134
3.	*Name and address of manufacturer:*	Termignoni S.p.A. via della Rampina, 1 I-15077 Predosa (AL)
4.	*Name and address of manufacturer's authorized representative:*	*Not applicable*
5.	*Parts list:*	*Notice enclosure 1 of the test report*
6.	*Make and motorcycle type of the field of appication:*	*See list enclosed*
7.	*Restriction and instructions for installing:*	*Notice assembly manual and field of application*

Further details according to directive 97/24/EC, chapter 9, annex III, enclosure 2 A including amendment 2009/108/EC are mentioned in the motorcycle homologation (notice enclosure 2 of the test report).

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Information Document relating to EC type approval as separate technical unit of exhaust systems for motorcycles (Directive 97/24/EC amended 2009/108/EC)

Enclosures	*Drawing no.*	*Date*
Drawing of rear silencers	D134: SILENCER	10/01/2013
Drawing of composition	D134: ASSEMBLY	10/01/2013
Drawing of inlet section	D134: INLET SECTION	10/01/2013
Drawing of reduction	D134: TAPPO	10/01/2013
Drawing of catalyst	D134: CATALYTIC CONVERTER	09/01/2013
List of vehicles		
Fitting instructions		

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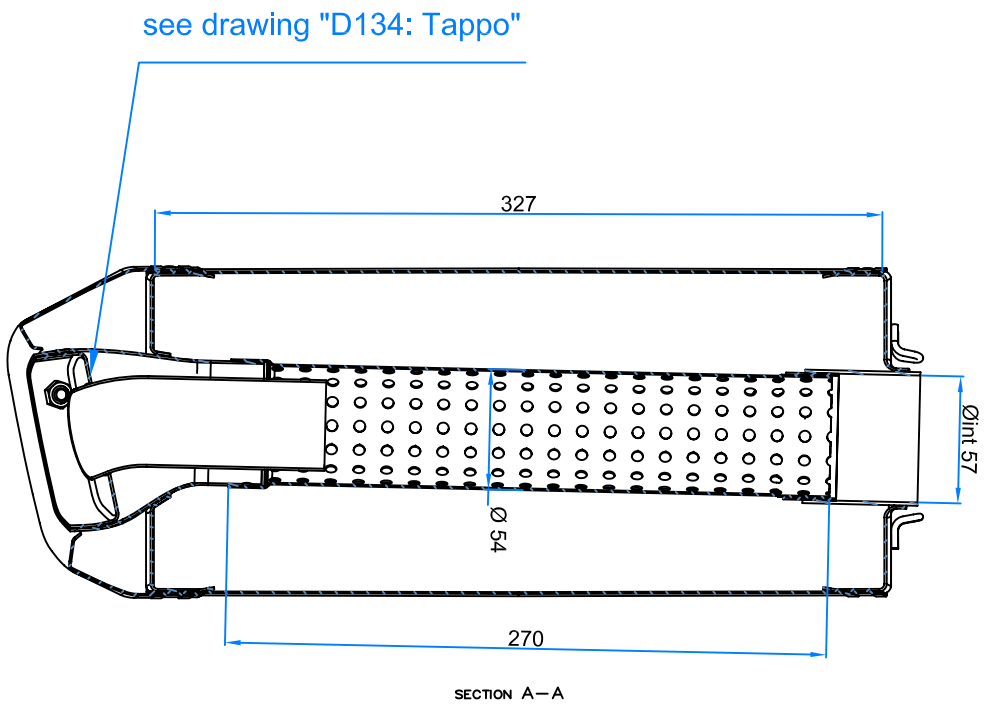

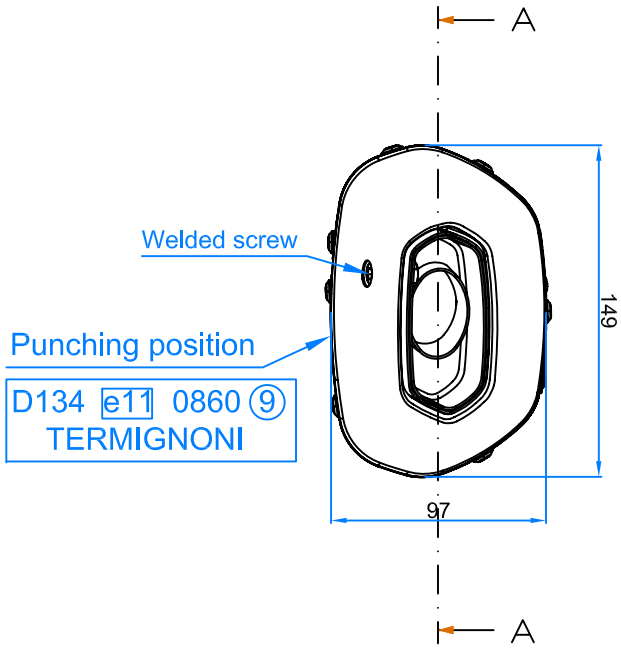

SCALE:	***MODEL:*** DUCATI HYM 0902 silencer code D134 D134 e11 0860 ⑤ ⑨
DATE: 10/01/2013	
DES: C. Zappia	
TYPE: D134: Silencer	

Termignoni S.p.A.

info@termignoni.it

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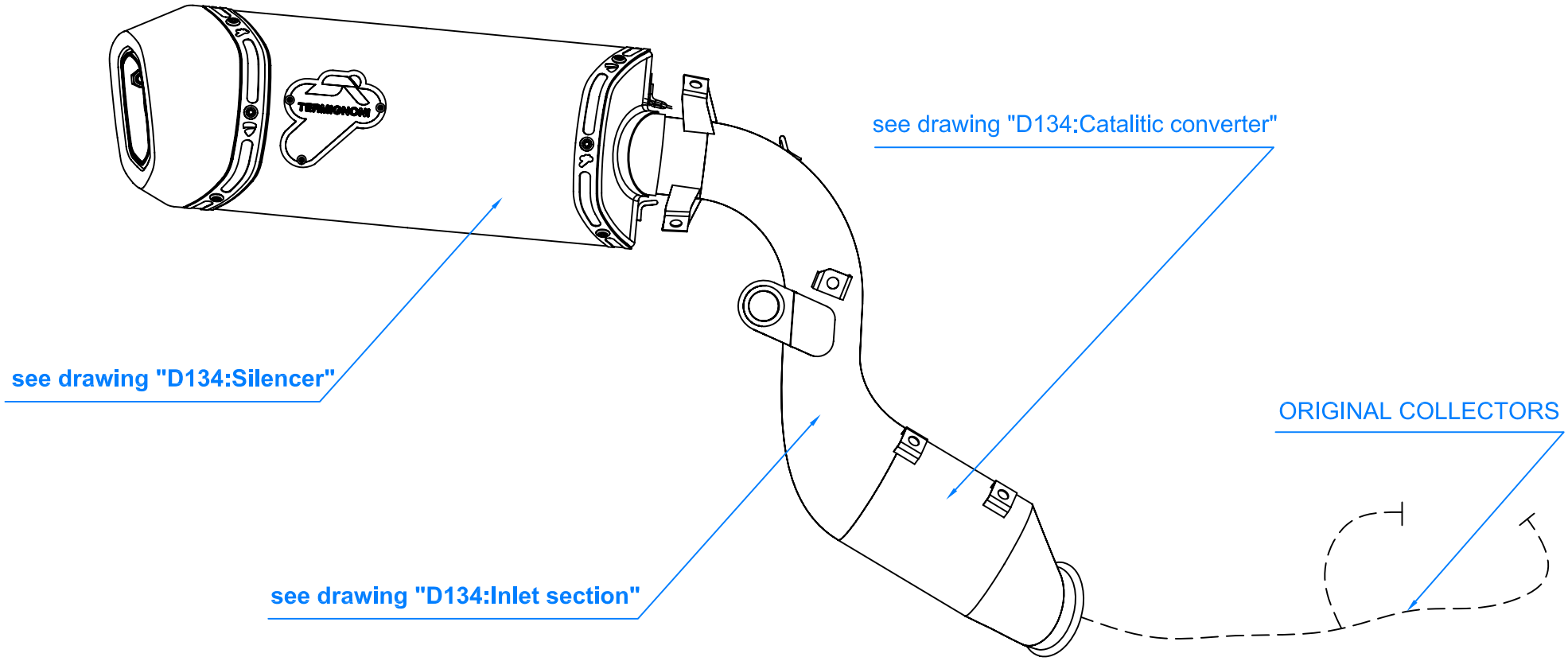

SCALE:	*MODEL:* DUCATI HYM 0902 silencer code D136 D134 e11 0860 ⑤⑨
DATE: 10/01/2013	
DES: C. Zappia	
TYPE: D134: Assembly	

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info@termignoni.it

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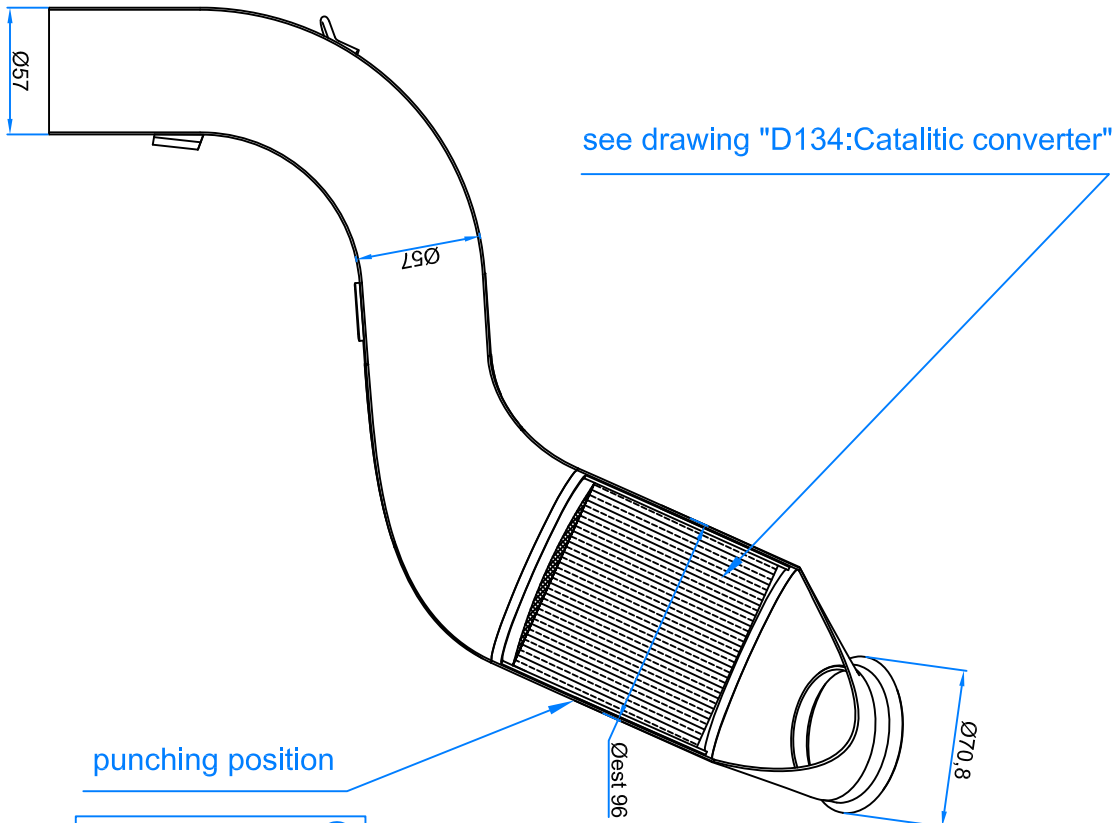
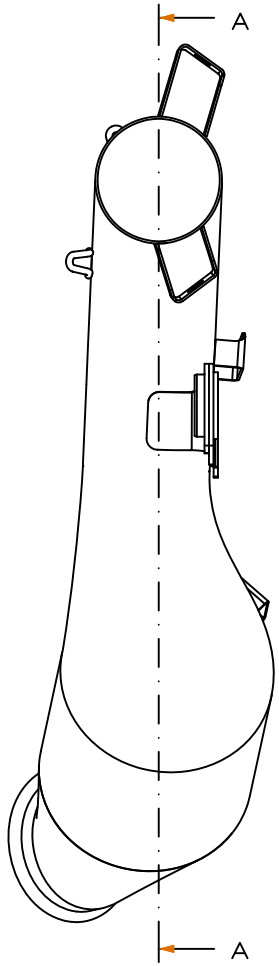


SECTION A–A



SCALE:	***MODEL:*** DUCATI HYM 0902 silencer code D134 D134 e11 0860 5 9
DATE: 10/01/2013	
DES: C. Zappia	
TYPE: D134: Inlet section	

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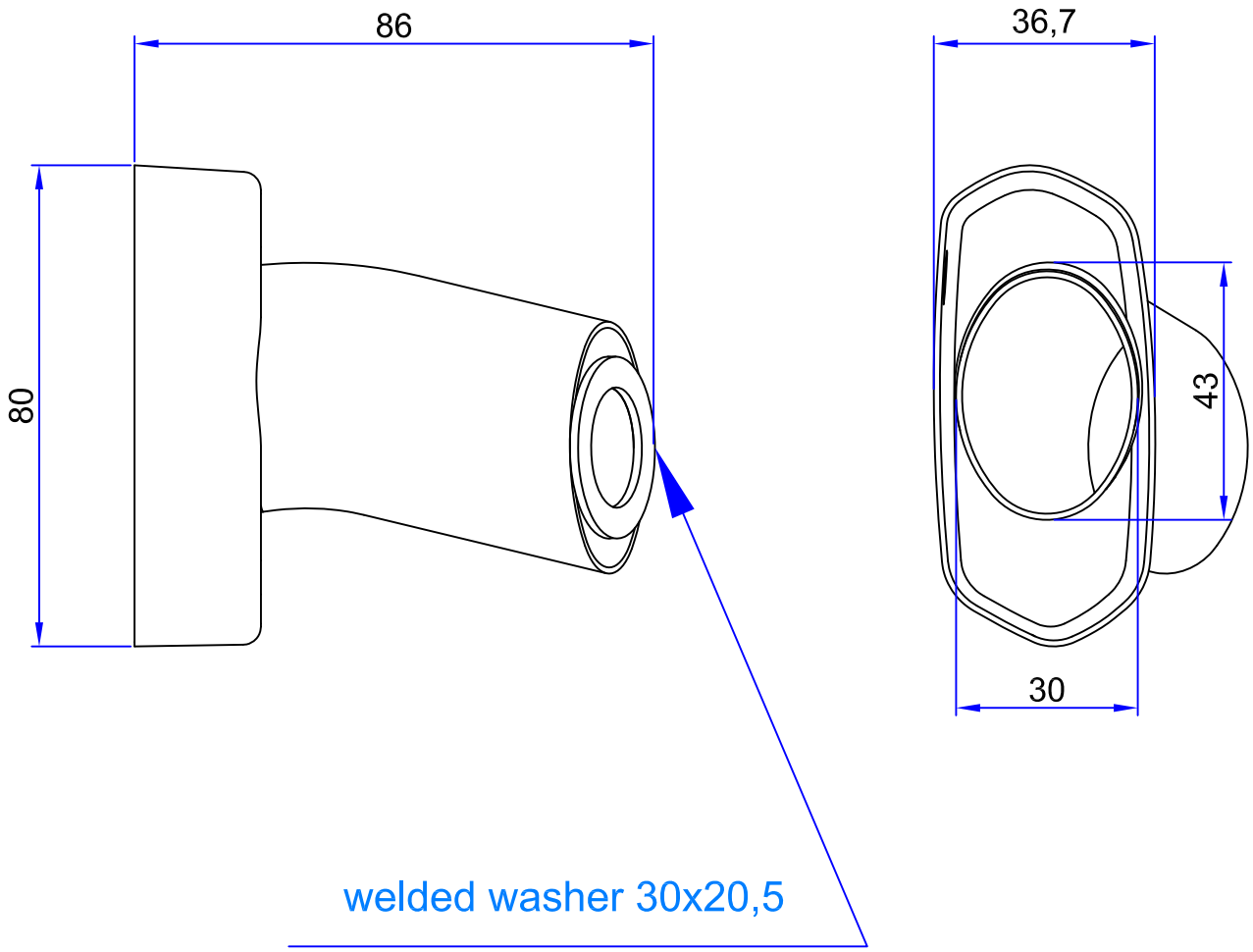

SCALE:	**MODEL:** DUCATI HYM 0902 silencer code D134 D134 e11 0860 ⑤ ⑨
DATE: 10/01/13	
DES: C. Zappia	
TYPE: D134: Tappo	

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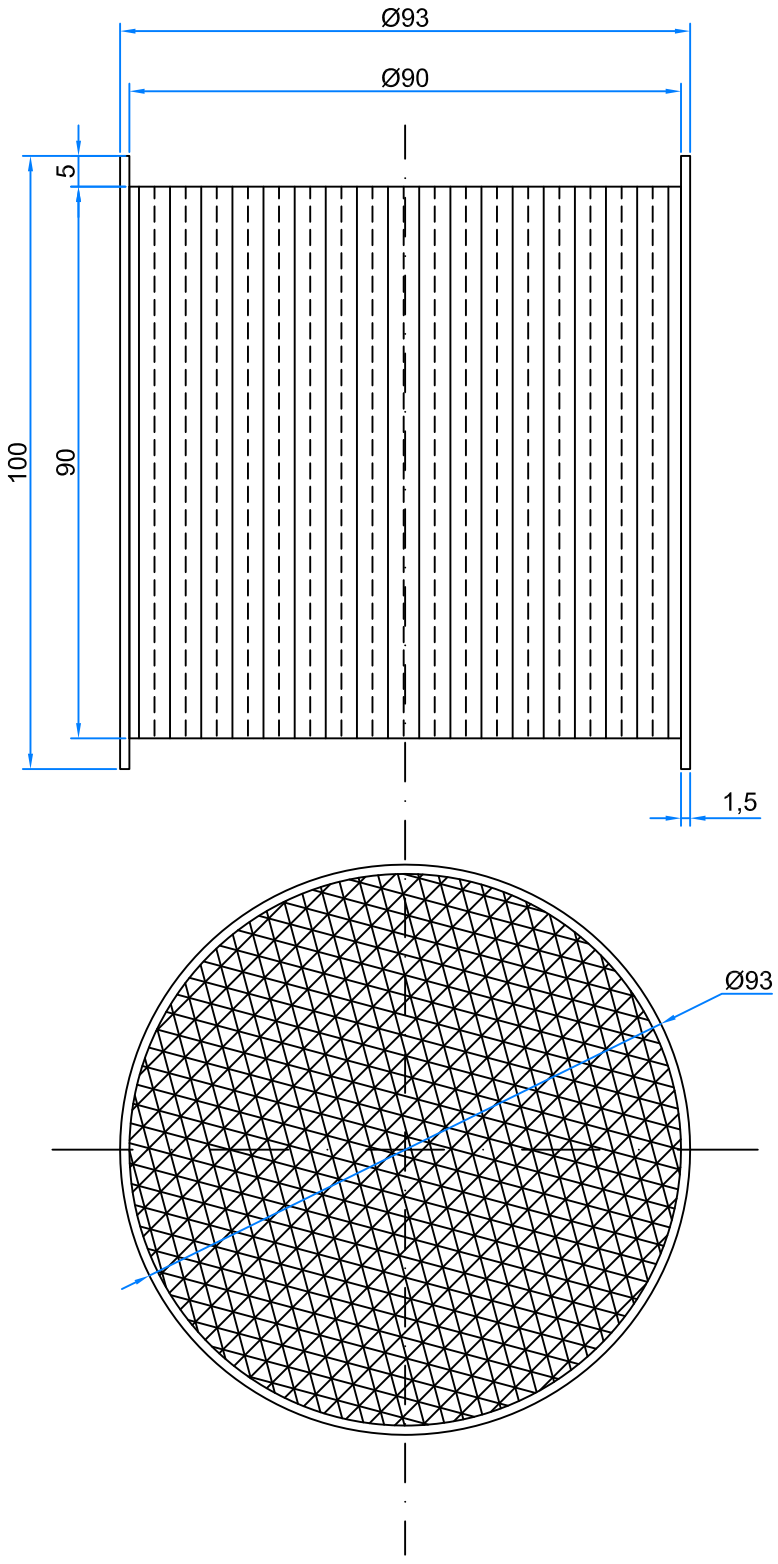
28-Feb-13

info@termignoni.it

Cod. TERMIGNONI TD453N



CHARACTERISTICS

DIMENSIONS : Øi 90x90 mm.

CPSI : 200

FORMULATION : Pt/Pd/Rh

RATIO : 4/25/1

LOADING : 30 gr/ft 3

SCALE:	***MODEL:*** DUCATI HYM 0902 silencer code D134 D134 e11 0860 ⑤ ⑨
DATE: 09/01/13	
DES: C. Zappia	
TYPE: D134: Catalytic converter	

Termignoni s.p.a.

28-Feb-13
info@termignoni.it
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INFORMATION DOCUMENT N° D134/97/24 rev. 00 - List of the vehicles

No. of vehicle	Manufacturer	Make	Commercial name	Vehicle type (and no. of homologation)	Engine type	Stroke	Engine capacity in cm^3	Rated maximum engine power in kW/min^{-1}	Additional remarks:	Composition as shown in enclosure no. 1
1)	DUCATI Motor Holding S.p.A.	DUCATI	HYPERMOTARD HYPERMOTARD SP HYPERSTRADA	B2 (e9*2002/24*0601)	821W4	4	821	77,0/9250	with cat	1) 2) 3) 4) 5)
2)				B3 (e9*2002/24*0600)	821W4B			70,0/9250 35,0/7750 24,0/8500		

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Termignoni s.p.a.
Via della Rampina, 1
15077 PREDOSA (AL) Italy
Telef. +39 0131.71666
Fax +39 0131.71696
www.termignoni.it
Part. IVA - C.F. 00862780061
Iscriz. C.C.I.A.A. AL 130295
Iscriz. Tribunale Reg. Soc. 7721
N. Export AL 009063
C.C. IT 00862780061
Cap. Soc. € 1.000.000,00 int. vers.

FITTING INSTRUCTIONS

For Termignoni exhaust systems

A. Dismantling the original exhaust system

1. Remove any casing impeding clear access
2. Detach the silencer support(s) and the original silencer from the branch pipe and/or exhaust manifold

B. Fitting Termignoni silencer(s)

1. Fit the Termignoni silencer(s) to the original branch pipe, or use the Termignoni branch pipe to fit the exhaust manifold
2. Attach the silencer(s) with the mounting(s) supplied with the vehicle, leaving the screws and bolts loose
3. Adjust the exhaust system so that when fully inserted it is at least 5 mm from any other component of the vehicle
4. Tighten all screws and bolts
5. Test the vehicle and check all connections, tightening the screws and bolts if necessary
6. After about 100 km check all the connections again and tighten the screws and bolts if necessary

WARNING:

Take care when working on the exhaust system after testing the vehicle since the surfaces could be very hot

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TÜV SÜD Automotive GmbH
Westendstraße 199
D-80686 München

TEST REPORT
No. 13-00013-CM-MIL-00

about a test of a non-original exhaust system or a component
as a separate technical unit for motorcycles according to the directive of the Council of the European Community for adaptation to the laws of the Member States relating to the permissible sound level, pollution and exhaust systems for two or three-wheel motor vehicles

No. 97/24/EC including the amendment 2009/108/EG
Concerning chapter 9, annex III

0. General information

0.1.	Make:	TERMIGNONI
0.2.	Type:	D134
0.2.1.	Variants	n.a.
0.3.	Name and address of manufacturer:	Termignoni S.p.A. Via della Rampina, 1 I-15077 Predosa (AL) Italy
0.4.	Name and address of authorized agent:	n.a.
0.5.	No. of information document: Date:	D134/97/24 rev.00 10.01.2013
1.0.	Class of the vehicles the unit is used for:	L3e
1.1.	Description of the vehicles the unit is used for:	Notice enclosure 2

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2. Composition of the separate technical unit

2.1.	Kind of technical unit:	Non-original exhaust system, consisting out of one silencer on the right, inlet ∅ 57 mm and final endcap 149 x 97 mm, silencer length 327 mm (without endcap), absorption-reflection principle with outlet pipe 43 x 30 mm according to drawing no. D134: Silencer and D134: Tappo. Equipped with catalytic converter inside of the inlet section of system according to drawings no. D134: Inlet section and D134: Catalytic converter. Stainless steel alternatively titanium alternatively carbon fiber-cover.
2.2	Place of marking:	On the silencer and on the inlet section, see drawings D134: Silencer and D134: Inlet section
2.3.	Assembly of the exhaust system for testing (No. of parts, enclosure 1):	Notice 3.4
2.4.	Position and direction of the tail pipe:	On the rear right side of the vehicle
2.5.	Test samples submitted for testing at:	05/12/2012 and 11/01/2013

3. Test report

The tests were carried out in 1 series A on 05/12/2012 and 11/01/2013

3.1. Vehicle

(0.1)	Make:	DUCATI
3.1.1.	Type / Variant / Version:	B2/00/AA
3.1.1.1	Model:	HYPERMOTARD
3.1.2.	Manufacturer	DUCATI Motor Holding S.p.A.
3.1.3.	Homologation no.:	e9*2002/24*0601*
3.1.4.	Vehicle identification no.:	*ZDMB200AACB000004*
3.1.5.	Year of manufacture:	2013
3.1.6.	Kilometers:	3027
3.1.7.	Total weight:	204 kg

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3.2.	**Engine**	
3.2.1.	Manufacturer:	DUCATI
	Trade name:	--
3.2.2.	Type:	821W4
3.2.3.	Engine capacity:	821 cm^3
3.2.4.	Rated maximum engine power:	77,0 kW at 9250 min^{-1}
3.3.	**Transmission**	
3.3.1.	Kind of transmission:	Mechanical
3.3.4	Gearbox:	6 speed
3.3.5.	Transmission ratios: primary / final	1:848 / 1:3
	Top speed:	220 km/h
	Tires: front rear	 120/70 ZR17 M/C 58W 180/55 ZR17 M/C 73W
3.4.	**Assembly of the exhaust system** (no. of parts, enclosure 1):	1) 2) 3) 4) 5)
3.5.	**Acoustic measurements**	
3.5.1.	Manufacturer of the sound level meter:	Brüel & Kjaer
3.5.2.	Type of the sound level meter:	2236
3.5.3.	Drive by noise, stationary noise:	
	according to the Council Directive No. 97/24/EC with the amendment 2009/108/EC chapter 9 III.	
3.5.4	Load condition during drive by test:	Unloaded weight plus driver
3.5.5.	Deviation at calibration:	< 0.2 dB(A)

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3.6. Power measurement

3.6.1. Testing of max. power with non-original exhaust system:

The tested max. power und the engine speed are in the 5% tolerance in comparison with the original exhaust system. (see enclosure)

3.6.2. Testing of top speed with non-original exhaust system:

Not applicable, because vehicle class: Motorcycle L3e

3.7. Conditioning

by pulsation

3.8. Pollution Test

Testing of pollution with aftermarket catalytic converter in combination with non-original exhaust system against the limits mentioned in 97/24/Chap. 5 Annex II, regarding the type approval of the test bikes.

3.9. Test results

The results of
3.9.1. Noise testing
3.9.2. Power measurement
3.9.3. Top speed
3.9.4 Pollution test
are attached in the enclosure.

All motorcycles with the same serial exhaust system and same or fewer performance mentioned in enclosure 2, can be taken into the field of application due to the measurement with the above named motorcycle/s.

Pollution test are referred to approval no. e9*97/24/5/II/B*2009/108*1016*00.

3.9.5. The described non-original exhaust system / technical unit is suitable for an application at the vehicles listed in enclosure 2.

3.9.6. The general specifications concerning 97/24/EC capt.9 annex III point 3.5.1 were checked and fulfilled regarding the technical possibilities by the non-original exhaust system / technical unit.

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4. Enclosures

Enclosure 1, Composition of the non original exhaust system + original parts
Enclosure 2, Field of application
Enclosure 3, Test results
Enclosure 4, Test results according pollution
Information Document

5. Summary

The named information document and the described type correspond to the Directive 97/24/EC including the amendment 2009/108/EG chapter 9, annex III.
There are no technical objections against granting an EC Type-approval.
The technical service is accredited for the named testing procedure by the Kraftfahrt-Bundesamt, Federal Republic of Germany, by the KBA-Accreditation.

München, 22.02.2013
The Expert

Pietro Vergani
Prüflabor DIN EN ISO/IEC 17025

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TÜV SÜD Automotive GmbH
Westendstraße 199
D-80686 München

E N C L O S U R E 1

To test report no. **13-00013-CM-MIL-00**
Type: **D134**
Manufacturer: **Termignoni S.p.A.**

Composition of the non original exhaust system + original parts

No.	Components parts, dimensions in mm	Dimensions of the part in mm or original part / replacement part	Part no. or homologation no.
1)	Collectors	Original parts	--
2)	Inlet section	Notice drawing	D134: Inlet section
3)	Catalytic converter	Notice drawing	D134: Catalytic converter
4)	Reduction	Notice drawing	D134: Tappo
5)	Silencer (outlet pipes 30 x 43 mm)	One silencer on the right, inlet ∅ 57 mm and final endcap 149 x 97 mm, silencer length 327 mm (without endcap), absorption-reflection principle with outlet pipe 43 x 30 mm	D134: Silencer

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E N C L O S U R E 2

To test report no. **13-00013-CM-MIL-00**
Type: **D134**
Manufacturer: **Termignoni S.p.A.**

Field of application

No. of vehicle	Manufacturer	Make	Commercial name	Vehicle type (and no. of homologation)	Engine type	Stroke	Engine capacity in cm^3	Rated maximum engine power in kW/min^{-1}	Additional remarks:	Composition as shown in enclosure no. 1
1)	DUCATI Motor Holding S.p.A.	DUCATI	HYPERMOTARD HYPERMOTARD SP HYPERSTRADA	B2 (e9*2002/24*0601)	821W4	4	821	77,0/9250	with cat	1) 2) 3) 4) 5)
2)				B3 (e9*2002/24*0600)	821W4B			70,0/9250 35,0/7750 24,0/8500		

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D-80686 München

E N C L O S U R E 3

To test report no. **13-00013-CM-MIL-00**
Type: **D134**
Manufacturer: **Termignoni S.p.A.**

Test results

No. of vehicle	*Engine power original kW/min^{-1}*	*Engine power non original* kW/min^{-1}	*Vmax original km/h*	*Vmax non original km /h*	*measured in gear ratio*	*Limit Value **)*	*Original mea-sured*	*Non original measured*	*at km/h*	*Vehicle type hom.*	*Original mea-sured*	*Non original measured*	*at min^{-1}*
1) A*	77,0/9250	77,6/9250	-	-	2/3	80	79	80	50	97	97	97	4625

*) *Test series*

**) *Limit value of directive which was valid by vehicle type homologation*

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D-80686 München

E N C L O S U R E 4 **To *test report no.*** **13-00013-CM-MIL-00**
Type: **D134**
Manufacturer: **Termignoni S.p.A.**

Test results according pollution

Type I

Equivalent flywheel mass	280 kg

	CO [g/km]	HC [g/km]	NO_X [g/km]
Test 1	0,624	0,108	0,063
Test 2	-	-	-
Test 3	-	-	-
Average	0,624	0,108	0,063
Limits C, II (Vh≥150cm³)	2,00	0,30	0,15

Type II

Running condition	CO [Vol %]	Engine rpm [min^{-1}]	Engine oil temperature [K]
Nominal idle speed	0,01	1350	373
Exceeded idle speed	0,01	2000	374

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