



THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

COMMUNICATION CONCERNING THE APPROVAL GRANTED ⁽¹⁾ 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*0896*00

Report No: 14-00006-CM-MIL-00, by technical service: TÜV SÜD Auto Service GmbH, date: 25 March 2014

Reason(s) for extension: Not applicable

1. Make of exhaust: Termignoni
2. Type of exhaust: Y102
3. Name and address of manufacturer:
Termignoni S.p.A.
Via della Rampina, 1
I-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 manufacturer's documentation
6. Date system submitted for testing: 17 and 27 February 2014
7. Component type-approval GRANTED⁽¹⁾

8. Place: BRISTOL

9. Date: 15 APRIL 2014

10. Signature: 

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

(1) Delete as appropriate





THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

APPROVAL NUMBER: e11*97/24/9/III/2009/108*0896*00

INFORMATION PACKAGE CONTENTS

INDEX REVISION NUMBER: Not applicable

Total number of sheets: 10 (Ten)

Reasons for Revision: Not applicable

Revision date
&
Office stamp

EAQ298108

An executive agency of the Department for Transport
April 2013 Revision 3





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:* Y102
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 application:* *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).



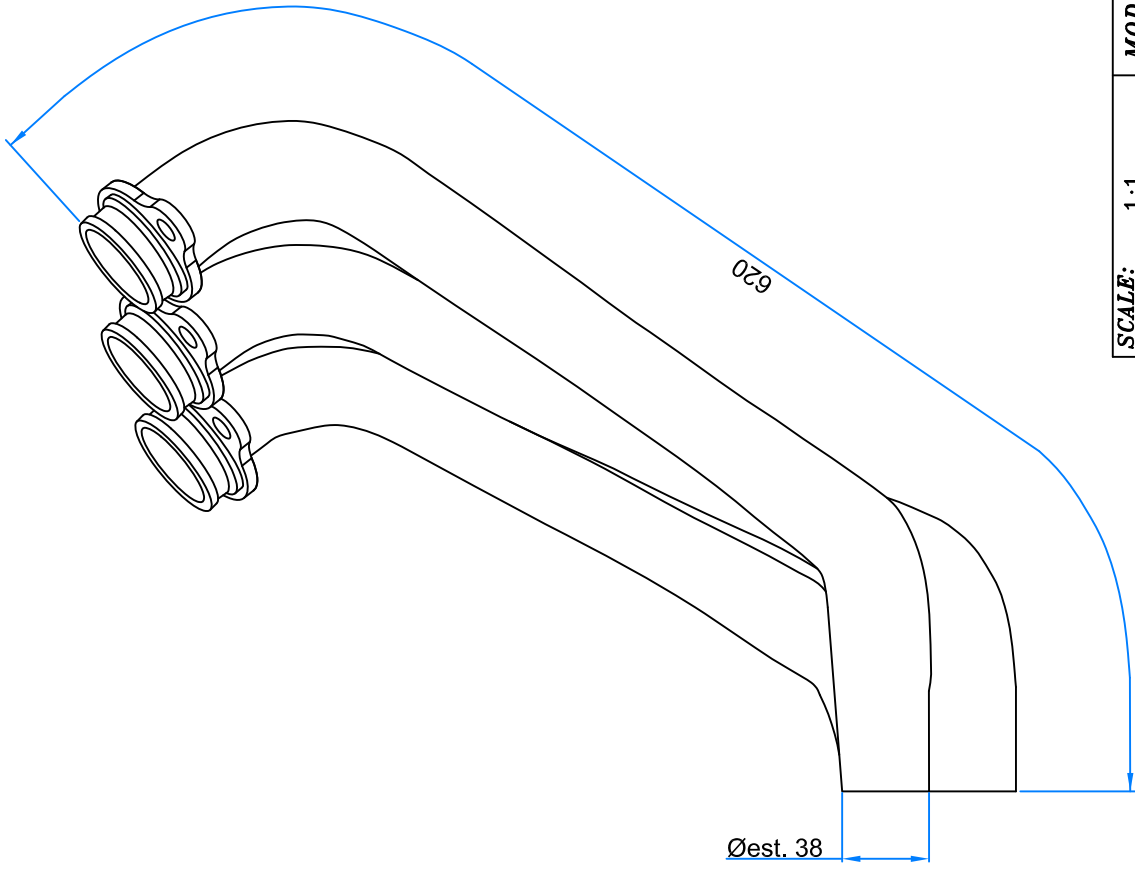
Information Document relating to EC type approval as separate technical unit of exhaust systems for motorcycles (Directive 97/24/EC amended 2009/108/EC)

<i>Enclosures</i>	<i>Drawing no.</i>	<i>Date</i>
<i>Drawing of collectors</i>	Y102: Collectors	12/02/2014
<i>Drawing of final body</i>	Y102: Final body	12/02/2014
<i>Drawing of silencer</i>	Y102: SILENCER	06/02/2014
<i>Drawing of catalytic converter</i>	Y102: CATALYTIC CONVERTER	14/02/2014
<i>Drawing of reduction</i>	Y102: TAPPO	14/02/2014
<i>Drawing of composition</i>	Y102: ASSEMBLY	12/02/2014
<i>List of vehicles</i>		
<i>Fitting instructions</i>		

INFORMATION DOCUMENT N° Y102/97/24 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)	YAMAHA MOTOR CO., LTD	YAMAHA	MT-09	RN e13*2002/24*0643*	N701E	4-stroke	847	84,6 / 10000	with cat	1) 2) 3) 4)





SCALE: 1:1

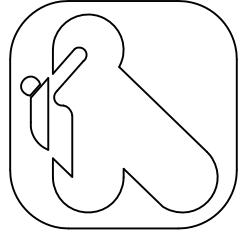
MODEL: YAMAHA MT-09 2014
Collectors code Y102

DATE: 12/02/2014

DES: E. Vrapi
Y102 e11 0896 ⑤⑨

TYPE: Y102: Collectors

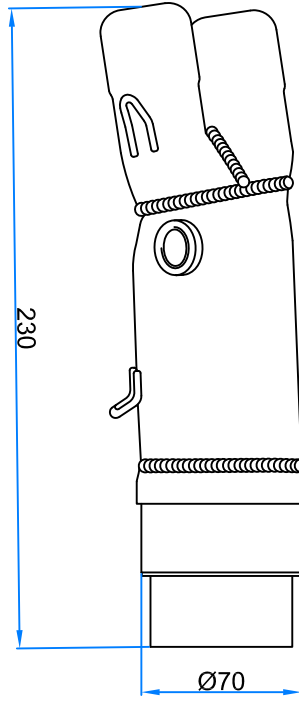
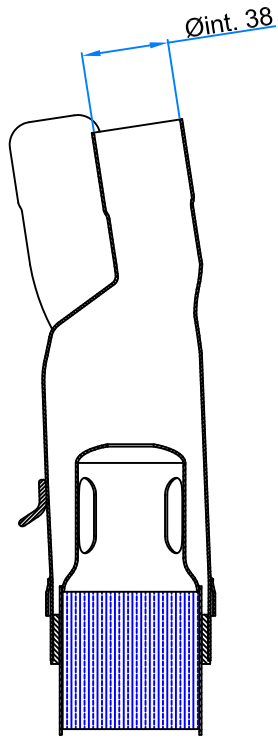
Termignoni S.p.A.



info@termignoni.it

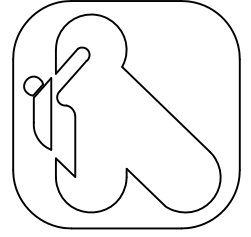


see drawing
"Y102: Catalytic converter"



SCALE:	1:1
DATE:	12/02/2014
DES:	E. Vrapì
TYPE:	Y102: Final body

MODEL:
YAMAHA MT-09 2014
Final body code Y102
Y102 e11 0896 ⑤⑨



info@termignoni.it

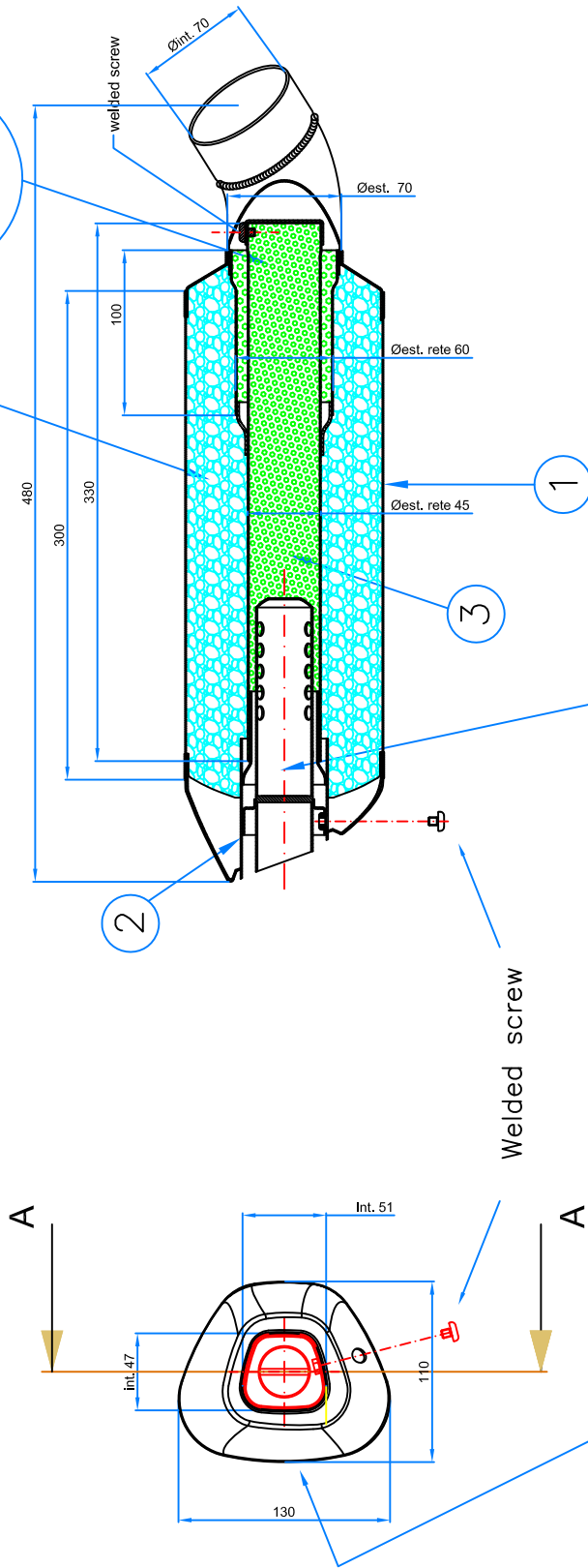


Termignoni S.p.A.

General tolerance: ± 1mm

DETAIL (NOT IN SCALE)

Section A-A



see drawing
"Y102: TAPPO"

PART LIST

Nr	Part name	Material	Dimensions	QT
1	Shell	Stainless Steel	See Drawing	1x
		Titanium	See Drawing	1x
		Carbon fiber	See Drawing	1x
		Aluminium	See Drawing	1x
2	Outlet Pipe	Stainless Steel	See Drawing	1x
		Titanium	See Drawing	1x
3	Punched-holes pipe	Stainless Steel	Ø 45x0,8	1x
		Titanium	Ø 45x0,8	1x
4	Sound deadener	Fiberglass	635 gr.	1x

SCALE: MODEL:

YAMAHA MT 09
SILENCER code Y102
Y102 e11 0896 ©

DATE: 06/02/2014

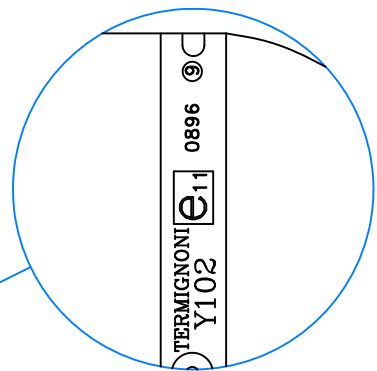
NAME: E. Vrepi

TYPE: Y102: SILENCER



Termignoni s.p.a.

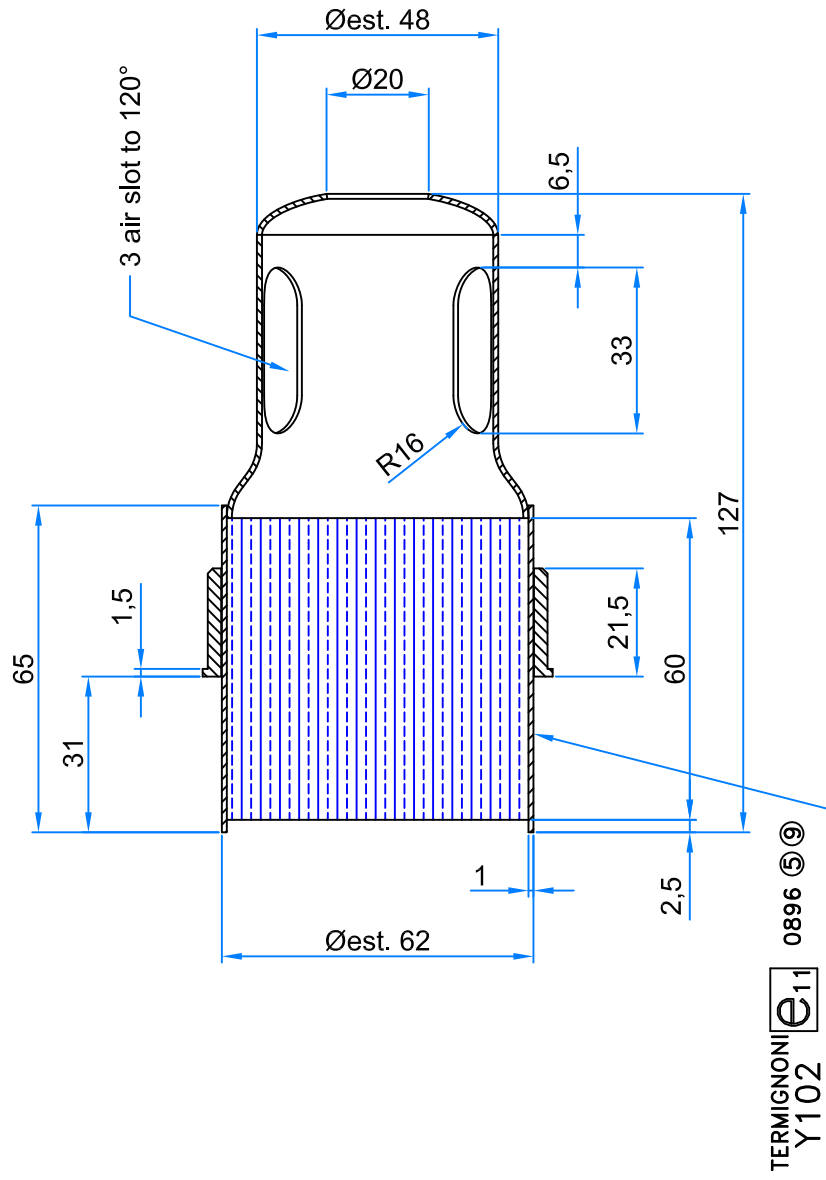
DETAIL (NOT IN SCALE)



General tolerance: ± 1 mm

MATERIAL: S-Steel or Titanium

Section A - A



CHARACTERISTICS

DIMENSIONS : \varnothing i 60x60 mm.

CPSI : 400

FORMULATION : Pt/Pd/Rh

RATIO : 1/13/1

LOADING : 140 gr/fts



Cod. TERMIGNONI TY170

SCALA: 1:1

DATUM: 14/02/2014

NAME: E. Vrapi

MODEL:

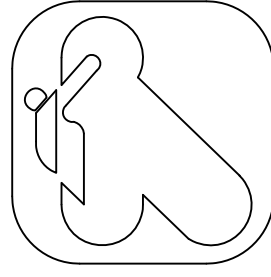
YAMAHA MT-09 2014

Catalytic converter

Y102 e11 0896 5 9

Type: Y102: Catalytic converter

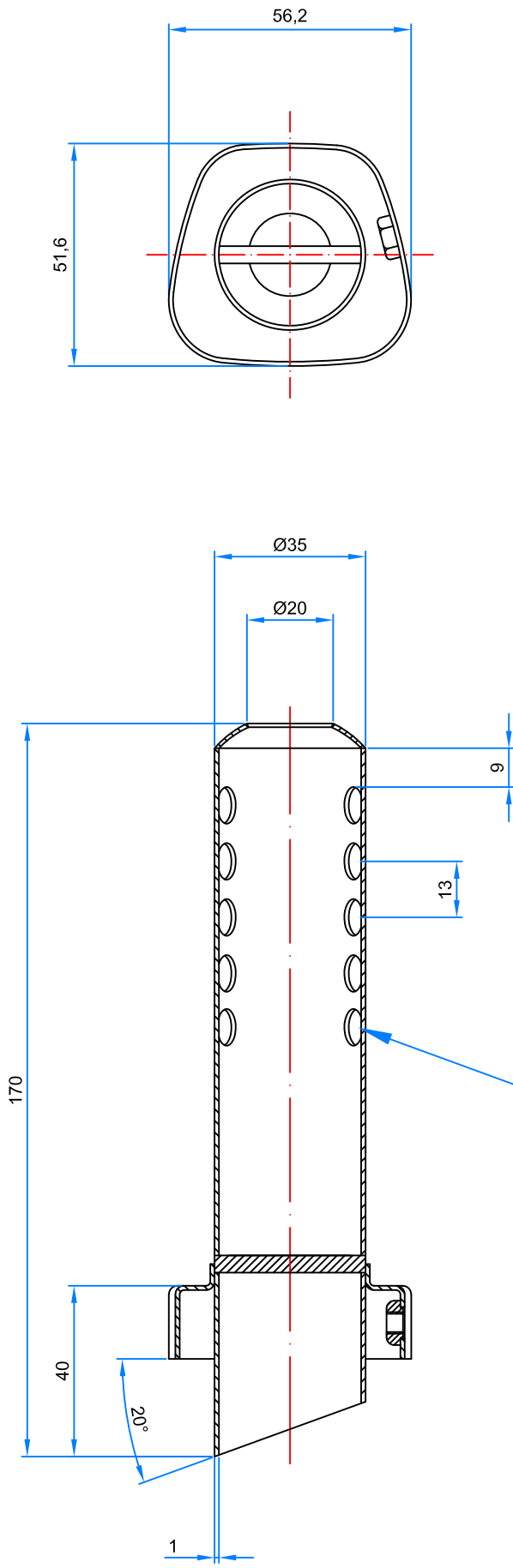
Termignoni s.p.a.



info@termignoni.it

General tolerance: $\pm 1\text{mm}$

MATERIAL: S-Steel or Titanium



3 rows of $\varnothing 9$ holes at 120°



Cod. TERMIGNONI TER506

SCALA:

1:1

DATUM:

14/02/2014

NAME:

E. Vrapì

MODEL:

YAMAHA MT-09 2014

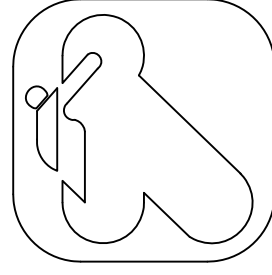
Tappo code Y102

Y102 e11 0896 (5) (9)

Type: Y102: Tappo

Termignoni

s.p.a.



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Material: Stainless steel or titanium

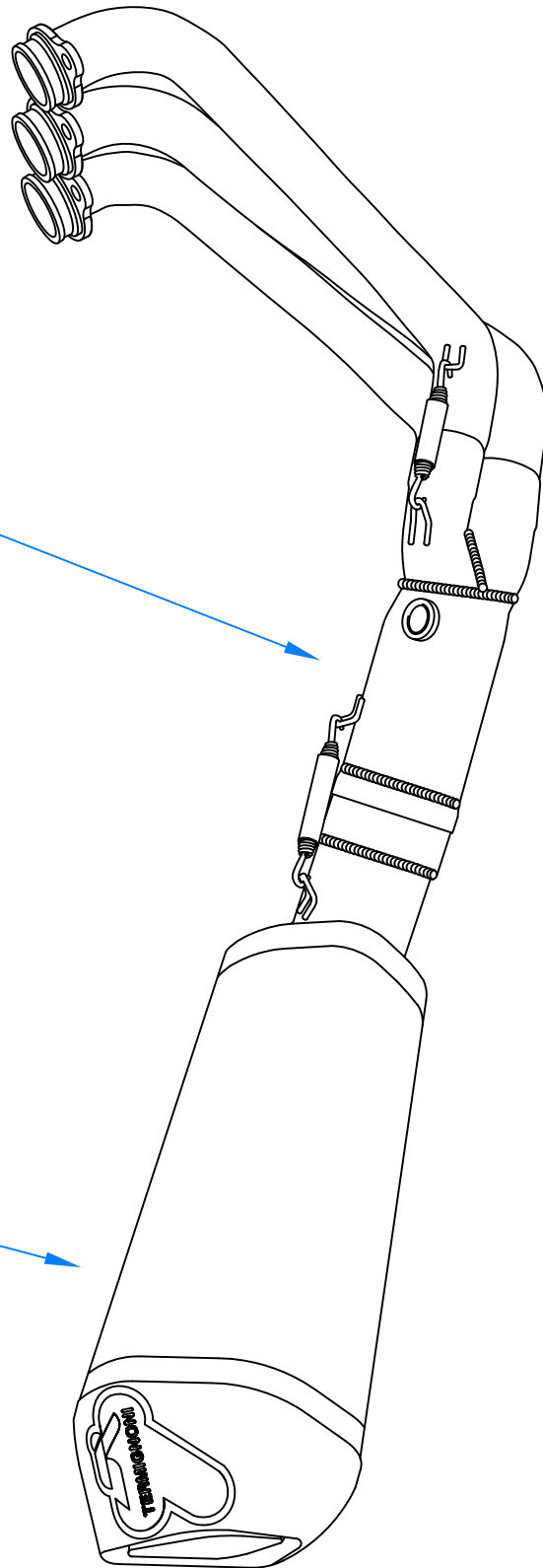
SILENCER

see drawing "Y102: Silencer"

CATALYTIC CONVERTER

see drawing "Y102:CONVERTER"

COLLECTORS
see drawing "Y102: COLLECTORS"



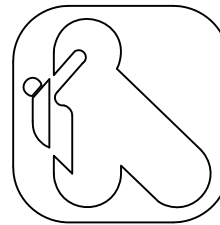
SCALE:

DATE: 12/02/2014

NAME: E. Vrapi

TYPE: Y102: ASSEMBLY

MODEL:
YAMAHA MT-09 2014
SILENCER code Y102
Y102 e11 0896 ©



www.termignoni.it

Termignoni s.p.a.





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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



Techn. Report No.: 14-00006-CM-MIL-00
Manufacturer: Termignoni S.p.A
15077 Predosa (AL)
Type: Y102

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TEST REPORT

No. 14-00006-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

Approval status	
<input checked="" type="checkbox"/>	Granting of a type approval
<input type="checkbox"/>	Extension/correction to type approval no. --

Techn. Report No.: 14-00006-CM-MIL-00
Manufacturer: Termignoni S.p.A
15077 Predosa (AL)
Type: Y102

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Reason for extension:

It will be changed: Not applicable

It will be updated: Not applicable

0. General information

- 0.1. Make: TERMIGNONI
- 0.2. Type: Y102
- 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: Y102/97/24 rev. 00
Date: 25.03.2014
- 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

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, \varnothing 130x110 mm and, total length 480 mm, absorption-reflection principle with outlet pipe \varnothing 35 mm with covering pipe 51x47 mm according to drawing no. Y102: Silencer, Y102: Tappo. Equipped with catalytic converter inside of the inlet section of system according to drawings no. Y102:Final body and Y102: Catalytic converter.

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Manufacturer: Termignoni S.p.A
15077 Predosa (AL)
Type: Y102

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- 2.2. Place of marking: On the silencer, see drawing:
Y102: Silencer
- 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

3. Test report

The tests were carried out in 2 series A at 17/02/2014 and B at 27/02/2014

3.1. **Vehicle**

- (0.1) Make: YAMAHA
- 3.1.1. Type / Variant / Version: RN
- 3.1.1.1 Model: MT-09
- 3.1.2. Manufacturer YAMAHA MOTOR CO., LTD
- 3.1.3. Homologation no.: e13*2002/24*0643*
3.1.3.1 Extension: 00
- 3.1.4. Vehicle identification no.: *JYARN291000000799*
- 3.1.5. Year of manufacture: 2013
- 3.1.6. Kilometers: 1726
- 3.1.7. Total weight: 191 kg

3.2. **Engine**

- 3.2.1. Manufacturer: Notice 3.1.2
Trade name: YAMAHA
- 3.2.2. Type: N701E
- 3.2.3. Engine capacity: 847 cm³

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Manufacturer: Termignoni S.p.A
15077 Predosa (AL)
Type: Y102

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3.2.4. Rated maximum engine power: 84,6 kW at 10000 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 See point 3.1.3

Top speed: See point 3.1.3

Tires:
front 120/70ZR17M/C (58W)
rear 180/55ZR17M/C (73W)

3.4. **Assembly of the exhaust system**
(no. of parts, enclosure 1): 1) 2) 3) 4)

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 80kg driver

3.5.5. Deviation at calibration: < 0.2 dB(A)

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)

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Manufacturer: Termignoni S.p.A
15077 Predosa (AL)
Type: Y102

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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. Emission 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.

- 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.

4. Enclosures

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

Techn. Report No.: 14-00006-CM-MIL-00
 Manufacturer: Termignoni S.p.A
 15077 Predosa (AL)
 Type: Y102

5. Summary

The information folder as mentioned under No. 0.5 and the type described therein are in compliance with the test specification mentioned above. The worst-case was selected in accordance with document "Preparation of Test Reports".

The test report may be reproduced and published in full and by the client only. It can be reproduced partially with the written permission of the test laboratory only.

Designated as Technical Service by:

Approval authority	Country	Registration-number	Actual scope list
Kraftfahrt-Bundesamt (KBA)	Deutschland/ Germany	KBA-P 00100-10	www.kba.de
Vehicle Certification Agency (VCA)	Vereintes Königreich/ United Kingdom	VCA-TS-006	http://ec.europa.eu/enterpri se/sectors/automotive/appro val-authorities-technical- services/technical- services/index_en.htm
Approval Authority of the Netherlands (RDW)	Niederlande/ The Netherlands	RDW-99050009 01	
National Standards Authority of Ireland (NSAI)	Irland/ Ireland	Technical Service Number: 49	
Vehicle Safety Certification Center (VSCC)	Taiwan/ Taiwan	DE04-06-1	http://www.vsc.org.tw/Engli sh/Default.aspx

München, 25.03.2014



Pietro Vergani
 Authorized Signatory

ENCLOSURE 1

To test report no.

14-00006-CM-MIL-00

Type:

Y102

Manufacturer:

Termignoni S.p.A.

Composition of the original exhaust system + original parts

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No.	Components parts, dimensions in mm	Dimensions of the part in mm or original part / replacement part	Part no. or homologation no.
1)	Collectors	Notice drawing	Drawing Y102: Collectors and Drawing Y102: Final body
2)	Catalytic converter	∅ 62x127	Drawing Y102: CATALYTIC CONVERTER
3)	Reduction	Notice drawing	Drawing Y102: TAPPO
4)	Silencer (outlet pipe ∅ 51x47 mm)	one silencer on the right, ∅ 130x110 mm, total length 480 mm, absorption- reflection- principle with an outlet pipe 51x47 mm with covering pipe ∅ 35 mm	Drawing Y102: SILENCER

ENCLOSURE 2

To test report no.
Type:
Manufacturer:

14-00006-CM-MIL-00
Y102
Termignoni S.p.A.

Field of application

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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)	YAMAHA MOTOR CO., LTD	YAMAHA	MT-09	RN e13*2002/24*0643*	N701E	4-stroke	847	84,6 / 10000	with cat	1) 2) 3) 4) (*)

(*) The Catalytic converter with separate marking TERMIGNONI Y102 e110896 5 9 must be correctly placed in the assembly , in order to fulfil the requirements of the complete exhaust system.
the installation of the muffler, separated by the catalytic converter, is not allowed and doesn't fulfil the directive requirements

ENCLOSURE 3

To test report no.

14-00006-CM-MIL-00

Type:

Y102

Manufacturer:

Termignoni S.p.A.

Test results

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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	measure d in gear ratio	Limit Value **)	Original measured	Non original measured	at km/h	Vehicle type hom.	Original measured	Non original measured	at min ⁻¹
1) A*	84,6 / 10000	81,7 / 10000	-	-	2/3	80	80	79	50	94	94	94	5000

*) *Test series*

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

ENCLOSURE 4

To test report no.
Type
Manufacturer:

14-00006-CM-MIL-00
Y102
Termignoni S.p.A.

Test results according pollution

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Type I

Equivalent flywheel mass	260 kg
--------------------------	--------

	CO [g/km]	HC [g/km]	NO _x [g/km]
Test 1	0,296	0,069	0,030
Test 2	-	-	-
Test 3	-	-	-
<i>Average</i>	0,296	0,069	0,030
<i>Limits C, II</i> (Vh≥150cm ³)	2,62	0,33	0,22

Type II

Running condition	CO [Vol %]	Engine rpm [min ⁻¹]	Engine oil temperature [K]
Nominal idle speed	0,12	1100	365
Exceeded idle speed	0,11	2300	365