

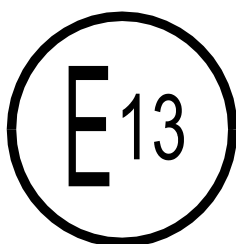


Référence: E13*59R02/01*0060A*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Bertrange, le 08 juillet 2021

Communication concernant:⁽²⁾
Communication concerning:



- **la délivrance d'une homologation**
approval granted
- ~~**l'extension d'homologation**~~
approval extended
- ~~**le refus d'homologation**~~
approval refused
- ~~**le retrait d'homologation**~~
approval withdrawn
- ~~**l'arrêt définitif de la production**~~
production definitely discontinued

**d'un type de dispositif silencieux d'échappement de remplacement ou d'élément d'un tel dispositif en
application du Règlement N° 59.**

of a type of replacement silencing system or components of the said system pursuant to Regulation No. 59.

Numéro d'homologation par type:
Approval number:

E13*59R02/01*0060A*00

Raison(s) de l'extension:
Reason(s) of extension:

Not applicable

1. **Marque de fabrique ou de commerce du
dispositif silencieux d'échappement:**
Trade name or mark of the exhaust silencing system:

Stoll GmbH

2. **Type du dispositif silencieux
d'échappement:**
Type of the exhaust silencing system:

APR 253 609 A

3. **Nom et adresse du fabricant:**
Manufacturer's name and address:

Stoll GmbH
Porschestraße 1
D-79761 Waldshut-Tiengen

4. **Le cas échéant, nom et adresse de son
mandataire:**
If applicable, name and address of manufacturer's
representative:

Not applicable

5. **Description sommaire du dispositif
silencieux (avec/sans ⁽²⁾ / matériaux fibreux,
etc.):**
Brief description of the exhaust silencing system
(with/without ⁽²⁾ / fibrous material, etc.):

Front and rear-silencers with fibrous material;
absorption /reflection principle.

6.	Marque de fabrique ou de commerce du type de véhicule auquel le dispositif silencieux est destiné: Trade name or mark of the vehicle type for which the exhaust silencing system is intended:	Volkswagen Golf, T-Roc, Tiguan Audi S3, SQ2, TT, TTS Seat Cupra Formentor, Ateca
7.	Type de ce véhicule, à commencer par le numéro de série: Vehicle type, starting from serial number:	AU, CD, A1, 5N 8V, GY, GA, 8J KM, 5FP serial number: not applicable
8.	Principe de fonctionnement du moteur (à allumage commandé, à allumage par compression etc.): Kind of engine:	Positive-ignition
9.	Cycle ⁽²⁾: Cycles ⁽²⁾ :	Two-stroke / Four stroke
10.	Cylindrée: Cylinder capacity:	See appendix 2/00
11.	Puissance maximale du moteur (kW): Rated maximum net power (kW):	See appendix 2/00
12.	Nombre de rapports de la boîte de vitesses: Number of gears:	See appendix 3/00
13.	Rapport(s) de la boîte de vitesses utilise(s): Gears used:	See appendix 3/00
14.	Rapport(s) du pont: Final drive ratio(s):	See appendix 3/00
15.	Régime de puissance maximale: Rated maximum net power:	See appendix 2/00
16.	Conditions de charge du véhicule pendant l'essai: Load conditions of vehicles during test:	1515 kg 1551 kg 1540 kg
17.	Valeurs du niveau sonore: Sound levels:	
17.1	- Véhicule en marche [db(A)]: Vehicle in motion [dbA]:	See appendix 3/00
17.2	- Véhicule à l'arrêt [db(A)] à [tr/min]: Vehicle stationary [dbA] with engine running at [rpm]:	See appendix 3/00
18.	Valeur de la contre-pression: Value of the back pressure:	See appendix 3/00
19.	Dispositif silencieux présenté Exhaust silencing system submitted	
	- à l'homologation le: for approval on:	2021-03-02, 2021-03-03 (Test series A) 2021-03-24, 2021-03-25 (Test series B) 2021-04-13, 2021-04-14 (Test series C)
	- à l'extension de l'homologation le: for extension of approval on:	Not applicable

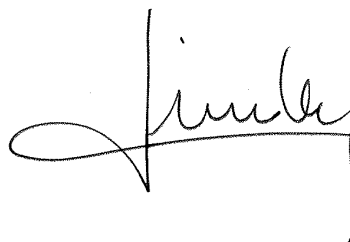
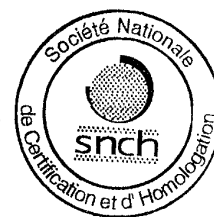
20. **Service technique chargé des essais d'homologation:**
Technical service responsible for conducting approval tests: TÜV Rheinland Luxembourg S.à r.l.
2-4, rue Edmond Reuter
L-5326 Contern
21. **Date du procès-verbal émis par ce service:**
Date of report issued by that service: 15.06.2021
22. **Numéro du procès-verbal émis par ce service:**
Number of report issued by that service: TS-R59-004/21
23. **L'homologation est ⁽²⁾:**
Approval: Granted / ~~extended~~ / ~~refused~~ / ~~withdrawn~~
24. **Emplacement sur le dispositif silencieux de la marque d'homologation:**
Position of approval mark on the vehicle: The UN approval mark is engraved onto the exhaust silencers outer shell.
25. **Lieu:**
Place: Bertrange
26. **Date:**
Date: 08 juillet 2021
27. **Signature:**
Signature:

Pour le Ministre de la Mobilité
et des Travaux publics



Alain DISIVISCOUR
Conseiller

Pour la SNCH

Laurent LINDEN
Directeur opérationnel



28. **Sont annexes à la présente communication les pièces suivantes qui portent le numéro d'homologation indiqué ci-dessus:**

The following documents, bearing the approval number shown above, are annexed to this communication:

- **dessins, schémas et plans du dispositif silencieux d'échappement**
- drawings, diagrams and plans of the silencing system
- **photographies du dispositif silencieux d'échappement**
- photographs of the exhaust silencing system
- **bordereau des éléments, dûment identifiés, formant le dispositif silencieux**
- list of components, duly identified constituting the exhaust silencing system

² **Biffer la mention qui ne convient pas**
Strike out what does not apply



Référence: E13*59R02/01*0060A*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Bertrange, le 08 juillet 2021

Index du dossier d'homologation

Index to type-approval report

Numéro d'homologation: E13*59R02/01*0060A*00
Approval number:

Révision: 00
Revision:

Marque de fabrique ou de commerce: Stoll GmbH
Trade name or mark:

Type: APR 253 609 A
Type:

1. **Procès-verbal d'essai:** N° TS-R59-004/21
Test report:
 - Test report: Page 1 to 6
 - List of modification: Appendix 0 - Page 7
 - Composition of the separate technical unit: Appendix 1/00 - Page 8 & 9
 - Range of application: Appendix 2/00 - Page 10 to 12
 - Test results: Appendix 3/00 - Page 13
2. **Dossier du constructeur:** N° APR 253 609 A/00
Report of the manufacturer:
 - Manufacturer's information document: Page 1 to 4
 - Attachments: Refer to Appendices Page 3 & 4.
3. **Autres documents annexés:** Not applicable
Other documents annexed:
4. **Date de délivrance de l'homologation initiale:** 08.07.2021
Date of issue of initial type approval:
5. **Date de la dernière délivrance de pages révisées:** Not applicable
Date of last issue of revised pages:
6. **Date de la dernière délivrance d'une homologation révisée:** Not applicable
Date of last extension:

Test Report No. TS-R59-004/21

Vehicle type / Type : APR 253 609 A

Manufacturer : Stoll GmbH

TEST REPORT

according to: UN-Regulation No. 59

Uniform provisions concerning the approval of replacement silencing system

as last amended by

02 series of amendments of the Regulation, Supplement 01

Approval Status

EU type – approval : -

UN approval : E13*59R02/01*0060A*00 (was reserved in advance by SNCH)

Structure of the Test Report

Item No.

- | | |
|----|-------------------------------|
| 0. | General information |
| 1. | Tested vehicle(s) / object(s) |
| 2. | Test record |
| 3. | Appendices |
| 4. | Statement of conformity |
-

The Test Report shall be reproduced and published only in its entirety by the client. It may however be reproduced and published partially, but only with the written permission of the Technical Service.

Vehicle type / Type : **APR 253 609 A****Manufacturer** : **Stoll GmbH****0. General information**

- 0.1. Make (trade name of the manufacturer) : Stoll GmbH
- 0.2. Type : APR 253 609 A
- 0.3. Category of vehicle : M1
- 0.4. Name and address of the manufacturer : Stoll GmbH
Porschestraße 1
79761 Waldshut-Tiengen
Germany
- 0.5. No. of the information document : APR 253 609 A/00
 - Date of issue : 2021-06-14
 - Date of last change : -

1. Tested vehicle(s) / objects

- 1.1. Description : The tests were performed in two series A-C
- 1.1.1. Test vehicle (A) : Test series A
- Make : Volkswagen AG
- Type(s) / variant s) / version (s) : AU / GAC4DNUEX1 /
AD7AD7GC001R4B0R2ML1CVR2NA
- General commercial description : GOLF VII, R
- Identification number : WVVZZZAUZLW087401
- Category of vehicle : M1
- Vehicle type approval number : e1*2007/46*0623*42
- Power plant
- Manufacturer of engine : Volkswagen AG
- Manufacturer's engine code : DNUE
- Rated maximum net power : 221 kW at 5300 min⁻¹
- Mass in running order (m_{ro}) : 1515 kg
- Power-to-mass ratio (PMR) : 145,87 (W/kg)
- Transmission : 7 speed – AT (DSG)
- 1.1.1.1. Condition of vehicle : ~~new~~, used, ~~pretested~~
- Mileage : 16664 km

Test Report No. **TS-R59-004/21**

Vehicle type / Type : **APR 253 609 A**
Manufacturer : **Stoll GmbH**

1.1.2. Test vehicle (B) : Test series B

Make : Volkswagen AG

Type(s) / variant s) / version (s) : CD / ACDNFGX1 /
AD7AD7GC001V4BITOR2ML1CVR2AI0

General commercial description : GOLF VIII, R

Identification number : WVVZZZCDZMW090410

Category of vehicle : M1

Vehicle type approval number : e1*2007/46*2014*12

Power plant

Manufacturer of engine : Volkswagen AG

Manufacturer's engine code : DNFG

Rated maximum net power : 235 kW at 5350 min⁻¹

Mass in running order (m_{ro}) : 1551 kg

Power-to-mass ratio (PMR) : 151,52 (W/kg)

Transmission : 7 speed – AT (DSG)

1.1.2.1. Condition of vehicle : new, ~~used~~, ~~pre-tested~~

Mileage : 16 km

1.1.3. Test vehicle (C) : Test series C

Make : AUDI AG

Type(s) / variant s) / version (s) : 8V / SDJHAQ1 /
AD7AD7GC001V4BITOR2ML1CVR2AI0

General commercial description : S3 Sportback

Identification number : WAUZZZ8VHA137000

Category of vehicle : M1

Vehicle type approval number : e1*2007/46*0607*25

Power plant

Manufacturer of engine : AUDI AG

Manufacturer's engine code : DJHA

Rated maximum net power : 228 kW at 5500 min⁻¹

Test Report No. **TS-R59-004/21**

Vehicle type / Type : **APR 253 609 A**
Manufacturer : **Stoll GmbH**

- Mass in running order (m_{ro}) : 1540 kg
- Power-to-mass ratio (PMR) : 148,05 (W/kg)
- Transmission : 7 speed – AT (DSG)
- 1.1.2.1. Condition of vehicle : ~~new, used, pretested~~
- Mileage : 48687 km
- 1.2. Worst case configuration : For each test series, the highest powered vehicle was selected according to the range of application (appendix 2/00) and the relevant revision of UN Regulation No.51.
- 1.2.1. The test vehicles were equipped with a new replacement silencer
- Type : APR 253 609 A
- Assembly silencers according appendix: 1/00
- | Test-series | Assembling | Tailpipe(s) Variant |
|-------------|------------|---------------------|
| A | 01)02)1)4) | TIP0012 |
| B | 01)02)1)4) | |
| C | 01)02)1)3) | |
- 1.2.2. Remarks : All variants of the vehicle type as stated in appendix: 2/00, are covered by the tested vehicle version(s) and tested objects(s) respectively. Back to back comparison tests were carried out with vehicles with original silencers with variable geometries. The control of the NORESS was done via the original flap control of the series silencers.

2. Test record

- 2.1. Equipment for measuring and testing : The test facilities / measurement equipment used, were in compliance with the test requirements.
- Acoustic measurements : Precision sound level meter meets the requirements described in IEC 61672 – 1:2002 class 1.
- Manufacturer : Brüel & Kjaer
- Type : 2250L
- Serial No. : 30110320, 3028096
- Sound Calibrator
- Manufacturer : Brüel & Kjaer
- Type : 4231
- Serial no. : 2517924

Test Report No. TS-R59-004/21

Vehicle type / Type : **APR 253 609 A**
Manufacturer : **Stoll GmbH**

- | | | |
|--------------------------------------|--|--|
| Speed measurements | : | GPS/GLONASS Data logger 100 Hz |
| Manufacturer | : | Racelogic |
| Type | : | Vbox 3i-V5 |
| Serial No. | : | 072768 |
| | | |
| Backpressure measurements | : | Each with nominal speed |
| Manufacturer | : | Xylem Analytics |
| Type | : | VAM 320 |
| Serial No. | : | 15172710 |
| | | |
| Meteorological Instrumentation | | |
| Temperature measuring device | : | Testo 0572 1767, 0572 6172, 0628 7507 |
| Barometric pressure measuring device | | |
| Relative humidity measuring device | | |
| Serial No. | : | 41002222, 20682129, --- |
| Wind speed-measuring device | : | Kaindl electronic, Windmaster 2 |
| Serial No. | : | 0704-92046-4 |
| | | |
| 2.1.1. | Specification for the test site | : Bastuck test track ISO 10844:2014
In der Hold
66822 Lebach
GPS: 49°25'35.9"N 6°54'54.27.6"E |
| | | |
| 2.2. | Test results | |
| | () numbering according to Annex 1 of the UNECE R59 02 series of amendments | |
| | [] numbering according to Annex 1 – appendix of the UNECE R59 02 series of amendments | |
| | { } numbering according to Annex 6 – Information for users and technical inspection | |
| | | |
| 2.2.1. | Test results referring to measurements | : See Appendix 3/00 |
| | | |
| 2.2.2. | Test results of not measurable attributes | |
| | Additional specifications regarding sound absorbing fibrous material, used in exhaust silencing systems. | |
| | The design of replacement exhaust system uses fibrous materials. The exhaust gases are not in directly contact with the fibrous material, because the perforated pipes inside, are wrapped by stain-less steel wool to prevent washing out the fibrous material. | |
| | | |
| 2.3. | Additional information | : The results of the test refer exclusively to the object mentioned under section 1.1. of this report. |
| | | |
| | Test site | : Lebach, Bastuck & Co. GmbH
Sulzbach, TÜV Saarland automobil GmbH |
| | | |
| | Test date | |
| | | |
| | Test series were conducted | : 2021-03-02, 2021-03-03 (Test series A)
2021-03-24, 2021-03-25 (Test series B)
2021-04-13, 2021-04-14 (Test series C) |

Meteorological Conditions	Test series					
	A		B		C	
Test Site (surface characteristics)	Asphalt dry					
Temperatures of ambient air [°C]	4	5	10,9	16	11	7
Temperatures of test track surface [°C]	5	5	12,5	12,5	16	5,2
Barometric pressure [hPa]	1020	1032	992	987	997	996
Humidity [%]	80	82,1	60,5	61	46,3	53,5
Wind Speed [m/s]	2	0,1	0,8	4,7	2,3	3,8
Wind direction	SO	S	SW	W	W	NO
Background noise [dB(A)]	42	45	38	36	38	40

3. Appendices

Appendix 0	: List of modification
Appendix 1/00	: Composition of the separate technical unit
Appendix 2/00	: Range of application
Appendix 3/00	: Test results

Information document

4. Statement of conformity

The in section 0.5. mentioned information document and the type described in that comply with the requirements mentioned on page 1. The mentioned test results refer to the vehicle(s)/object(s) described under point 1.1 of this report. With regard to the required level of performance to be achieved, the tested samples were representative for the type to be approved (see section 1.2).

D-66820 Sulzbach, 2021-06-15



Dipl.-Ing. (FH) M.Schmitt
Expert Technical Service

Vehicle type / Type : APR 253 609 A

Manufacturer : Stoll GmbH

List of modifications**Appendix 0**

Correction of : -

Modification of : -

Addition of : -

Deletion of : -

Composition of the separate technical unit

No.	Component parts, dimensions in mm	Dimensions of parts in mm or original part / replacement part	Part-no or. / approval no.	See on drawing
01)	Front pipe	OE-part	-	-
02)	Catalyst / particulate trap	OE-part	-	-
1)	MQB AWD Mid Muffler 1 Inlet pipe Ø 76 mm 1 Outlet pipe Ø 76 mm	Oval 240,1 x 110 x 236	MAUA0027	MUH0027, Rev.A
2)	S3 Sedan Axleback Muffler Assy 2x Rear Silencer 4 Inlet pipe Ø 63,5, per silencer 4 Outlet pipes Ø 63,5, per silencer	Oval 219,5 x 169 x 240	MUA0017	MUA0017
3)	S3 Sportsback Axleback Muffler Assy 2x Rear Silencer 4 Inlet pipe Ø 63,5, per silencer 4 Outlet pipes Ø 63,5, per silencer	Oval 219,5 x 169 x 240	MUA0018	MUA0018
4)	MK7.5 Golf R Axleback Muffler Assy 2x Rear Silencer 4 Inlet pipe Ø 63,5, per silencer 4 Outlet pipes Ø 63,5, per silencer	Oval 219,5 x 169 x 240	MUA0030	MUA0030

Composition of the separate technical unit

No.	Component parts, dimensions in mm	Dimensions of parts in mm or original part / replacement part	Part-no or. / approval no.	See on drawing
5)	Tailpipes 3,5"	3.5" opt. 4"	TIP0018 EXH0233 EXH0236 EXH0237 EXH0254 TIP0007 TIP0008 TIP0011 TIP0012	TIP0018 EXH0233 EXH0236 EXH0237 EXH0254 TIP0007 TIP0008 TIP0011 TIP0012

Remarks: -

Range of application

Data of the vehicles for which the exhaust replacement silencing system is intend; according UNECE R59, Annex 6, paragraph 1, {g}

No.	Manufacturer	Make	Tradename	Vehicle type and Approval no	Category of vehicle	Motor type/ working principle [PI / CI] ⁽¹⁾	Engine capacity [cm ³]	Rated maximum net power [kW/min ⁻¹]	Kind of trans- mission	Restriction ²⁾ concerning vehicles where the system can be mounted
	() Numbering according to Annex 1, / [] Numbering according to Annex 1 - Appendix / { } Numbering according to Annex 6 of UNECE R59									
	[1.6.1]	[1.1]/ {i}	(6)/[1.2]	(7)/[1.2], [1.5]/ {ii, iii}	[1.4]	(8)/[1.6.2]/ {iv}	(10)	(11)/[1.6.3]/ {v}	[1.7.1] (12)/ {vi}	[1.11]/ {vii}
1.	Volkswagen AG	VW	Golf (Golf VII)	AU e1*2007/46*0623*..	M1	CJXB / PI	1984	206 / 5100	MT / AT	CKB0017 01)02)1)4)
2.						CKXD / PI	1984	213 / 5400		
3.						DJHB / PI	1984	213 / 5400		
4.						CJXC/ PI	1984	221 / 5500		
5.						DNUE / PI	1984	221 / 5300		
6.						CJXG / PI	1984	228 / 5800		
7.						DJHA / PI	1984	228 / 5500		
8.			Golf (Golf VIII)	CD e1*2007/46*2014*..		DNFG / PI	1984	235 / 5350		
9.			T-Roc	A1 e13*2007/46*1845*..		DNUE / PI	1984	221 / 5300		CBK003 01)02)1)2)
10.			Tiguan	5N e1*2001/116*0450*..		DNFC / PI	1984	221 / 5300		
11.						DNFG / PI	1984	235 / 5350		

Range of application

Data of the vehicles for which the exhaust replacement silencing system is intend; according UNECE R59, Annex 6, paragraph 1, {g}

No.	Manufacturer	Make	Tradename	Vehicle type and Approval no	Category of vehicle	Motor type/ working principle [PI / CI] ¹⁾	Engine capacity [cm ³]	Rated maximum net power [kW/min ⁻¹]	Kind of trans- mission	Restriction ²⁾ concerning vehicles where the system can be mounted
() Numbering according to Annex 1, / [] Numbering according to Annex 1 - Appendix / { } Numbering according to Annex 6 of UNECE R59										
	[1.6.1]	[1.1]/i	(6)/[1.2]	(7)/[1.2], [1.5]/{ii, iii}	[1.4]	(8)/[1.6.2]/iv	(10)	(11)/[1.6.3]/ {v}	[1.7.1] (12)/vi	[1.11]/vii
12.	Audi AG	Audi	S3	8V e1*2007/46*0607*..	M1	CJKB / PI	1984	206 / 5100	MT / AT	CBK004 (Sportback) 01)02)1)3) opt. CBK0003 (Limousine) 01)02)1)2)
13.						DJXF / PI	1984	210 / 5300		
14.						CJXD / PI	1984	213 / 5400		
15.						DJHB / PI	1984	213 / 5400		
16.						CJXC / PI	1984	221 / 5500		
17.						DNUE / PI	1984	221 / 5300		
18.						CJXG / PI	1984	228 / 5800		
19.						DJHA / PI	1984	228 / 5500		
20.			S3	GY e1*2007/46*2060*..		DNFB / PI	1984	228 / 5500		
21.			SQ2	GA e1*2007/46*1552*..		DNUE / PI	1984	221 / 5300		CBK0004 01)02)1)3)
22.	Audi Hungaria Zrt.	Audi	TT, TTS	8J e1*2001/116*0369*..	M1	DNUF / PI	1984	228 / 5450	MT / AT	CBM0003 01)02)1)2)
23.						DNFD / PI	1984	235 / 5600		

Range of application

Data of the vehicles for which the exhaust replacement silencing system is intend; according UNECE R59, Annex 6, paragraph 1, {g}

No.	Manufacturer	Make	Tradename	Vehicle type and Approval no	Category of vehicle	Motor type/ working principle [PI / CI] ¹⁾	Engine capacity [cm ³]	Rated maximum net power [kW/min ⁻¹]	Kind of transmission	Restriction ²⁾ concerning vehicles where the system can be mounted
() Numbering according to Annex 1, / [] Numbering according to Annex 1 - Appendix / { } Numbering according to Annex 6 of UNECE R59										
	[1.6.1]	[1.1]/{i}	(6)/[1.2]	(7)/[1.2], [1.5]/{ii, iii}	[1.4]	(8)/[1.6.2]/{iv}	(10)	(11)/[1.6.3]/{v}	[1.7.1] (12)/{vi}	[1.11]/{vii}
24.	Seat S.A.	Cupra	Formentor	KM e9*2007/46*4008*..	M1	DNFB / PI	1984	228 / 5450	MT / AT	CBK0004 01)02)1)3)
25.			Ateca	5FP e9*2007/46*6394*..		DNUE / PI	1984	221 / 5300		CBK0003 01)02)1)2)
26.						DNFC / PI	1984	221 / 5300		

Remarks:

- 1) PI = Positive Ignition (Petrol Car) / CI = Compression Ignition (Diesel Car)
 2) Composition of the separate technical unit. See Appendix: 1/00 of test report.

Test results**ECE R1, Revision 3**

No. vehicle/ test series	Trans- mission	Gears used	Final drive ratio	EC-approval no. con- cerning the sound level	<u>Sound level values</u> in dB(A) measured										Back pressure	
					moving vehicle					stationary vehicle						
					Replace- ment	Original	Vehicle type approval	Speed in km/h	Limit value	Replacement	Original	Vehicle type approval	min ⁻¹	Orig.	Repl.	
														in hPa measured		
														() Numbering according to Annex 1, / [] Numbering according to Annex 1 - Appendix of UNECE R59		
[1.7]/(12)	(13)	(14)	[1.9]/(17)										[1.10]/(18)			
5 / A	7 AT	5	4,48	E1*51R03/04*13215*02	71	71	70	50	73	85	98	96	3750	17	10	
8 / B	7 AT	4+5	4,48	E1*51R03/05*13500*01	70	69	69	50	71	85	86	84	3750	65	61	
19 / C	7 AT	4	4,48	E1 51R-02 11811 Ext.05	75	75	74	50	74	89	89	87	3750	20	4	

Remarks: -