

Symptom-based workshop manual

Service

68/21 ENU 2651

2

Symptom Exterior – Rattling/Noises from the Rear Area of the Exhaust System: Observe Specified Procedure (SY 68/21)

Change overview

Release	Date	Change	
0	07/07/2021	First publication	
1	09/05/2023	 Hexagon nut, M5 omitted under "Required parts" Order types added Procedure updated Part numbers updated Labor operations added 	

Vehicle Type: Panamera (971) / Panamera 4 (971) / Panamera 4 E-Hybrid (971) / Panamera 4S (971) /

Panamera 4S E-Hybrid (971)

Model Year: As of 2017 up to 2023

Equipment: 2.9-L V6 biturbo engine

Concerns: Actuator for exhaust flap

Symptom: The customer complains about a rattling or noise from the rear area of the exhaust system. The following

entries can be stored in the fault memory of the DME control unit:

'P047600 – 'Exhaust flap – signal implausible'

• 'P04A000 - 'Exhaust flap, bank 2 - signal implausible'

Cause: This may be due to a defective exhaust flap actuator.

Remedial Action:

Check exhaust flap and repair if necessary.

Vehicle Type: Panamera GTS (971) / Panamera Turbo (971) / Panamera Turbo S (971) / Panamera Turbo S

E-Hybrid (971)

Equipment: 4.0-L V8 biturbo engine

Concerns: Actuator for exhaust flap

Symptom: The customer complains about a rattling or noise from the rear area of the exhaust system. The following

entries can be stored in the fault memory of the DME control unit:

2651 ENU **68/21**

Symptom-based workshop manual

- 'P047600 'Exhaust flap signal implausible'
- 'P04A000 'Exhaust flap, bank 2 signal implausible'

Cause: The reason for this may be a defective actuator for an exhaust flap.

Remedial Action:

Check exhaust flap, see \Rightarrow *Technical Information 'Checking exhaust flap'* and repair if necessary.

Preliminary work

Work Procedure: 1 Remove rear underbody cover. ⇒ Workshop Manual '519419 Removing and installing rear underbody cover'

Checking exhaust flap (2.9-L V6 biturbo engine)

Work Procedure: 1 Does the customer complaint involve a noise?

- Yes, continue with Step 2.
- No, continue with Step 5.
- 2 Check exhaust flap actuator.
 - 2.1 Remove actuator for exhaust flap. \Rightarrow Workshop Manual '265119 Removing and installing actuator for exhaust flap'
 - 2.2 Check exhaust flap actuator for damage.
- Exhaust flap actuator is not damaged: Continue with Step 3.
- Exhaust flap actuator is damaged: Replace exhaust flap and rear silencer if necessary.



Information

To ensure compatibility between the rear silencer exhaust flap and actuator, a new rear silencer in the equipment-dependent version is also required **once**. If the corresponding new type of rear silencer with the respective part number listed below is already installed in the vehicle and the exhaust flap mechanism is OK, it need not be replaced.

Valid for vehicles of model years 2017 to 2020:

- ⇒ Workshop Manual '265119 Removing and installing actuator for exhaust flap'
- ⇒ Workshop Manual '263355 Replacing rear silencer'

Valid for vehicles of model years 2021 to 2023:

- ⇒ Workshop Manual '265119 Removing and installing actuator for exhaust flap'
- ⇒ Workshop Manual '263319 Removing and installing rear silencer'

Service

68/21 ENU 2651

2

Required parts for replacement on one side:

Part No.	Designation	Number
99904903240	\Rightarrow Hexagonal plastic nut	5 pieces
9A7133246	\Rightarrow Exhaust flap servo motor	1 piece
	Clamping sleeve *	1 piece

^{*} Select the vehicle-specific parts from the Porsche Replacement Parts Catalogue (PET).

Additionally required parts if the rear silencer must also be replaced:

971253607 ⇒ Left rear silencer 1 piece - Sports tailpipe covers (M-No. OP3, OP6) or sports exhaust system (M-No. OP8, OP9) or 971253608 ⇒ Right rear silencer 1 piece - Sports tailpipe covers (M-No. OP3, OP6) or sports exhaust system (M-No. OP8, OP9) or 971253607A ⇒ Left rear silencer 1 piece - Standard tailpipe (M-No. OPO) or 971253608A ⇒ Right rear silencer 1 piece - Standard tailpipe (M-No. OPO)

3 Check the exhaust flap mechanism in the exhaust pipe for damage, clearance or blockage.



Information

The exhaust flap actuator you removed earlier **must** remain off during the test. The test is performed manually.

- Exhaust flap mechanism is OK: Continue with Step 4.
- Exhaust flap mechanism is not OK: Replace rear silencer and, if necessary, exhaust flap actuator.



Information

To ensure compatibility between the rear silencer exhaust flap and actuator, a new rear silencer in the equipment-dependent version is also required **once**. If the corresponding new type of rear silencer with the respective part number listed below is already installed in the vehicle and the exhaust flap mechanism is OK, it need not be replaced.

2651 ENU **68/21**

Symptom-based workshop manual

Valid for vehicles of model years 2017 to 2020:

⇒ Workshop Manual '263355 Replacing rear silencer'

Valid for vehicles of model years 2021 to 2023:

⇒ Workshop Manual '263319 Removing and installing rear silencer'



Information

To ensure compatibility between the rear silencer exhaust flap and actuator, a new exhaust flap servo motor is also required **once**. If the corresponding new servo motor with the part number listed below is already installed in the vehicle, and the servo motor is OK, it need not be replaced.

Required parts for replacement on one side:

Part No.	Designation	Number
99904903240	⇒ Hexagonal plastic nut	5 pieces
	Clamping sleeve *	1 piece
* Select the vehicle-sp	pecific parts from the Porsche Replacement Parts Catalogu	e (PET).
971253607	 ⇒ Left rear silencer – Sports tailpipe covers (M-No. OP3, OP6) or sports exhaust system (M-No. OP8, OP9) 	1 piece
or		
971253608	 ⇒ Right rear silencer – Sports tailpipe covers (M-No. OP3, OP6) or sports exhaust system (M-No. OP8, OP9) 	1 piece
or		
971253607A	⇒ Left rear silencer – Standard tailpipe (M-No. 0P0)	1 piece
or		
971253608A	⇒ Right rear silencer– Standard tailpipe (M-No. OPO)	1 piece

Additionally required if the exhaust flap servo motor does not correspond to the following current status:

9A7133246 \Rightarrow Exhaust flap servo motor 1 piece

Install exhaust flap actuator. ⇒ Workshop Manual '265119 Removing and installing actuator for exhaust flap'

Service

68/21 ENU 2651

2

5 Connect **9900 - PIWIS Tester 4** to the vehicle and read out the fault memory of the DME control unit.

	Result of check	Action
(<)	 One of the following entries is stored in the fault memory of the DME control unit: 'P047600 - 'Exhaust flap - signal implausible' 'P04A000 - 'Exhaust flap, bank 2 - signal implausible' 	Check plug connection for exhaust flap actuator.
		Check the exhaust flap actuator plug for the following points and repair if necessary:
		 Damage to plug, pins and electric lines. Correct seating of plug and pins. Corrosion on pins and electric lines. Risk of short circuit
	If all the components listed above are normal, replace the exhaust flap actuator and, if necessary, rear silencer according to the specifications in Step 2.2.	
(x)	None of these entries are stored in the fault memory of the DME control unit.	Repeat the test. If there is no noise from the exhaust system and no fault memory entry, the customer's complaint must be checked and readjusted if necessary. If the noise is still not present, the test must be carried out starting with Step 1.

Checking exhaust flap (4.0-L V8 biturbo engine)

Work Procedure: 1 Does the customer complaint involve a noise?

- Yes, continue with Step 2.
- No, continue with Step 5.
- 2 Check exhaust flap actuator.
 - 2.1 Remove actuator for exhaust flap. \Rightarrow Workshop Manual '265119 Removing and installing actuator for exhaust flap'
 - 2.2 Check exhaust flap actuator for damage.
- Exhaust flap actuator is not damaged: Continue with Step 3.
- Exhaust flap actuator is damaged: Replace exhaust system actuator and rear silencer if necessary.

 ⇒ Workshop Manual '265119 Removing and installing actuator for exhaust flap'

Service

2651 ENU 68/21

Symptom-based workshop manual



Information

To ensure compatibility between the rear silencer exhaust flap and actuator, a new rear silencer in the equipment-dependent version is also required **once**. If the corresponding new type of rear silencer with the respective part number listed below is already installed in the vehicle and the exhaust flap mechanism is OK, it need not be replaced.

Valid for vehicles of model years 2017 to 2020:

- ⇒ Workshop Manual '265119 Removing and installing actuator for exhaust flap'
- ⇒ Workshop Manual '263355 Replacing rear silencer'

Valid for vehicles of model years 2021 to 2023:

- ⇒ Workshop Manual '265119 Removing and installing actuator for exhaust flap'
- ⇒ Workshop Manual '263319 Removing and installing rear silencer'

Required parts for replacement on one side:

Part No.	Designation	Number
99904903240	\Rightarrow Hexagonal plastic nut	5 pieces
9A7133246	\Rightarrow Exhaust flap servo motor	1 piece
	Clamping sleeve *	1 piece

^{*} Select the vehicle-specific parts from the Porsche Replacement Parts Catalogue (PET).

Additional required parts as needed:

971253607B	⇒ Left rear silencer - Exhaust concept 7GH / 7MM / 7MU (without OPF - all variants) - Exhaust concept 4BI / 7CR / 7CW (with OPF) and standard exhaust system (M-No. OPO, OP3, OP6)	1 piece
or		
971253607C	⇒ Left rear silencer - Exhaust concept 4BI / 7CR / 7CW (with OPF) and sports exhaust system (M-No. 0P8, 0P9)	1 piece
or		
971253608B	⇒ Right rear silencer - All variants	1 piece

3 Check the exhaust flap mechanism in the exhaust pipe for damage, clearance or blockage.

Symptom-based workshop manual

Service

68/21 ENU 2651





Information

The exhaust flap actuator you removed earlier **must** remain off during the test. The test is performed manually.

- Exhaust flap mechanism is OK: Continue with Step 4.
- Exhaust flap mechanism is not OK: Replace rear silencer and, if necessary, exhaust flap actuator.



Information

To ensure compatibility between the rear silencer exhaust flap and actuator, a new exhaust flap servo motor is also required **once**. If the corresponding new servo motor with the part number listed below is already installed in the vehicle, and the servo motor is OK, it need not be replaced.

Valid for vehicles of model years 2017 to 2020:

⇒ Workshop Manual '263355 Replacing rear silencer'

Valid for vehicles of model years 2021 to 2023:

⇒ Workshop Manual '263319 Removing and installing rear silencer'

Required parts for replacement on one side:

Part No.	Designation	Number
99904903240	⇒ Hexagonal plastic nut	5 pieces
	Clamping sleeve *	1 piece
* Select the vehicle-sp	pecific parts from the Porsche Replacement Parts Catalogue	e (PET).
971253607B	⇒ Left rear silencer - Exhaust concept 7GH / 7MM / 7MU (without OPF - all variants) - Exhaust concept 4BI / 7CR / 7CW (with OPF) and standard exhaust system (M-No. OPO, OP3, OP6)	1 piece
or		
971253607C	⇒ Left rear silencer - Exhaust concept 4BI / 7CR / 7CW (with OPF) and sports exhaust system (M-No. 0P8, 0P9)	1 piece
or		
971253608B	⇒ Right rear silencer– All variants	1 piece

2651 ENU 68/21

Symptom-based workshop manual

Additionally required if the exhaust flap servo motor does not correspond to the following current status:

9A7133246 ⇒ Exhaust flap servo motor

1 piece

- 4 Install exhaust flap actuator. ⇒Workshop Manual '265119 Removing and installing actuator for exhaust flap'
- 5 Connect **9900 PIWIS Tester 4** to the vehicle and read out the fault memory of the DME control unit.

	Result of check	Action
(v)	One of the following entries is stored in the fault memory of the DME control unit: • 'P047600 - 'Exhaust flap - signal implausible' • 'P04A000 - 'Exhaust flap, bank 2 - signal implausible'	Check plug connection for exhaust flap actuator. Check the exhaust flap actuator plug for the following points and repair if necessary: Damage to plug, pins and electric lines. Correct seating of plug and pins. Corrosion on pins and electric lines. Risk of short circuit If all the components listed above are normal, replace the exhaust flap actuator and, if necessary, rear silencer according to the specifications in Step 2.2.
(X)	None of these entries are stored in the fault memory of the DME control unit.	Repeat the test. If there is no noise from the exhaust system and no fault memory entry, the customer's complaint must be checked and readjusted if necessary. If the noise is still not present, the test must be carried out starting with Step 1.

Concluding work

Work Procedure: 1 Installing rear underbody cover. ⇒ Workshop Manual '519419 Removing and installing rear

underbody cover'

Invoicing

Invoicing: For documentation and invoicing for warranty purposes, enter the labor operations specified below in the

warranty claim:

Symptom-based workshop manual

Service

68/21 ENU 2651

2

APOS	Labor operation	I No.
26510241	Checking exhaust flap actuators (without removal)	
26510140	Checking exhaust flap actuator (with left or right removal)	
26510240	Checking exhaust flap actuators (with left and right removal)	
26515540	Replacing exhaust flap actuator (left or right)	
26515640	Replacing exhaust flap actuators (left and right)	
26335540	Replacing rear silencer (left or right)	
26335640	Replacing rear silencer (left and right)	

PQIS coding:

Location (FES5)	26510	Exhaust flap actuator
Damage type (SA4)	2014	rattles

References:

⇒ Workshop Manual '519419 Removing and installing rear underbody cover'

⇒ Workshop Manual '265119 Removing and installing actuator for exhaust flap'

⇒ Workshop Manual '263355 Replacing rear silencer'

⇒ Workshop Manual '263319 Removing and installing rear silencer'

Important Notice: Technical Bulletins issued by Porsche Cars North America, Inc. are intended only for use by professional automotive technicians who have attended Porsche service training courses. They are written to inform those technicians of conditions that may occur on some Porsche vehicles, or to provide information that could assist in the proper servicing of a vehicle. Porsche special tools may be necessary in order to perform certain operations identified in these bulletins. Use of tools and procedures other than those Porsche recommends in these bulletins may be detrimental to the safe operation of your vehicle, and may endanger the people working on it. Properly trained Porsche technicians have the equipment, tools, safety instructions, and know-how to do the job properly and safely. Part numbers listed in these bulletins are for reference only. The work procedures updated electronically in the Porsche PIWIS diagnostic and testing device take precedence and, in the event of a discrepancy, the work procedures in the PIWIS Tester are the ones that must be followed.