

Noise Symptom - Squeaking While Steering: Checking Installation Position of Dust Boot on Steering System (SY 103/19)

Revision:	This bulletin replaces bulletin Group 4 103/19, dated February 25, 2020.
Model Year:	As of 2020 up to 2021
Model Line:	911 Carrera (992)
Subject:	Power-steering gear
Symptom:	A squeaking noise can be heard from the power-steering gear area or from the steering column while steering.
Cause:	The dust boot on the power-steering gear may have been pressed in too far during production and as a result, it may rub against the power-steering gear housing while steering.
Remedial Action:	In the event of a customer complaint, check the installation position of the dust boot and replace steering gear if necessary.

Required tools, parts and materials



Information

The new 911 (992) comes with either a **lithium starter battery** (I-no. J2A) or an **AGM starter battery** (I-no. J0V, J4K) as standard.

This depends on the following:

- Country version
- Model type
- Vehicle equipment

Lithium starter batteries must only be charged using a **suitable battery charger** that has a current and voltage-controlled charge map.

For further information about the battery chargers to be used, see ⇒ *Workshop Manual '270689 Charging battery/vehicle electrical system'*.

Tools:	<ul style="list-style-type: none"> • Battery charger with a current rating of at least 90 A and - if required - also with a current and voltage-controlled charge map for lithium starter batteries, e.g. VAS 5908 Battery charger, 90 A • 9900 - PIWIS Tester 3
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Parts Info: **Parts required (if necessary):**

Part No.	Designation - Use	Qty.
992423051R	⇒ Steering gear (I no. ON1, LOL)	1 ea.
	or	
992423051S	⇒ Steering gear (I no. ON5, LOL)	1 ea.
	or	
992423051T	⇒ Steering gear (I no. ON1, LOR)	1 ea.
	or	
992423051AA	⇒ Steering gear (I no. ON5, LOR)	1 ea.
	Additional parts required	
PAF107738	⇒ Hex flange bolt with multiple-tooth head - Power-steering gear	2 ea.
PAF908088	⇒ Hexagon collar nut - Tie-rod ball	2 ea.
WHT004955A	⇒ Internal hexagon round cheese head bolt - Universal Joint	1 ea.
N 91253401	⇒ Hex flange bolt with hexagon socket head - front-axle cross member	6 ea.
N 10714101	⇒ Hexagon flange bolt - front-axle cross member	2 ea.
PAF008741 ¹⁾	⇒ Stud (I no. 1X1) - front-axle cross member	2 ea.
PAF008757	⇒ Hexagon-head bolt - Front-axle cross member	2 ea.
PAF008737	⇒ Stud - front-axle cross member	2 ea.
N 90916701	⇒ Hexagon collar nut - Front-axle cross member	2 ea.
PAF008756	⇒ Hexagon flange bolt - front-axle cross member	2 ea.
WHT007957	⇒ Hexagon self-clinching nut - Anti-roll bar	2 ea.
	or	
9A700781900	⇒ Hexagon nut - anti-roll bar (PDCC)	2 ea.
PAF008282	⇒ O-ring - coolant hose	2 ea.
9A700828100	⇒ O-ring - coolant hose	2 ea.
PAF013814	⇒ Sealing ring - drain plug	2 ea.

¹⁾ Only for all-wheel drive (4WD) vehicles

Materials: **Required materials** (usually already available at the Porsche dealer):

Part No.	Designation	Qty.
	- Use	
00004320593	⇒ Lubricating grease	100g/ 3.5 oz tube ¹⁾
	- O-rings	
00004330515	⇒ Coolant additive	20-liter/ 5.28 gal container ³⁾

¹⁾ approx. 10 grams/ 0.35 oz required per vehicle.

²⁾ approx. 0.5 liter/ 16.9 fl oz required per vehicle.

Preparatory work

Work Procedure: 1 Turn steering wheel to center position.

2 Remove front-axle support, see ⇒ *Workshop Manual '400819 Removing and installing front-axle support'*.

Checking dust boot for steering system

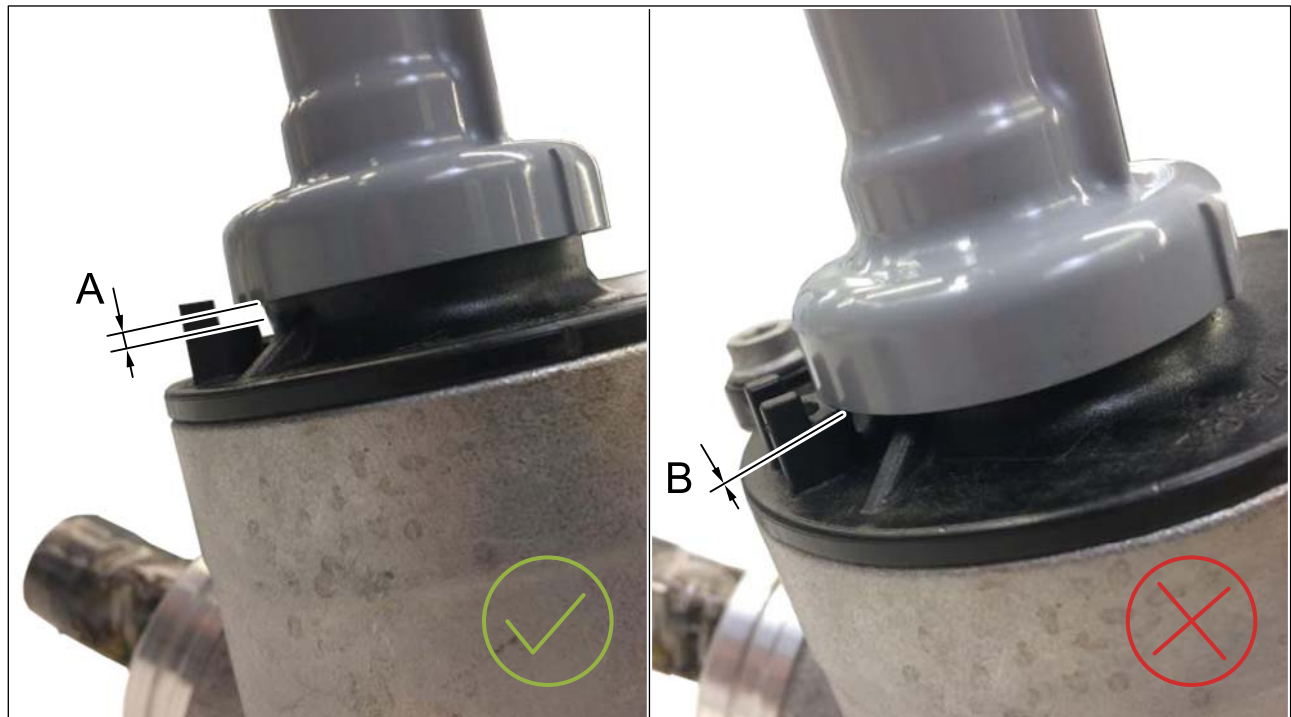
Work Procedure: 1 Check whether there is a sufficient gap between the dust boot and housing cover bar.

1.1 **If the gap is OK (⇒ *Checking dust boot -Dimension A-*):**

The dust boot is not the cause of the squeaking noise — Install front-axle support, see ⇒ *Workshop Manual '400819 Removing and installing front-axle support'*. Continue with fault finding.

1.2 **If the gap is not OK (⇒ *Checking dust boot -Dimension B-*):**

The dust boot is the cause of the squeaking noise — replace power-steering gear, see ⇒ *Workshop Manual '489019 Removing and installing power-steering gear'*.



Checking dust boot

Dimension A – ~ 2 mm

Dimension B – ~ 0 mm

Concluding work

- Work Procedure: 1 Install front-axle support, see ⇒ *Workshop Manual '400819 Removing and installing front-axle support'*.
- 2 Read out and erase the fault memories of all control units.
⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Subsequent work"*

Invoicing

Invoicing: For documentation and warranty invoicing, enter the labor operations, PQIS coding and part numbers specified below in the warranty claim:

APOS	Labour operation	I No.
48900100	Check power-steering gear	
48905500	Replacing power-steering gear (2WD)	
48905505	Replacing power-steering gear (4WD)	

PQIS coding:

Location (FES5)	48900	Power-steering gear
Damage type (SA4)	1015	Gap/air gap too large/too small

Parts Info: **Parts required (if necessary):**

Part No.	Designation	Qty.
	- Use	
992423051R	Steering gear (I no. 0N1, LOL)	1 ea.
	or	
992423051S	Steering gear (I no. 0N5, LOL)	1 ea.
	or	
992423051T	Steering gear (I no. 0N1, LOR)	1 ea.
	or	
992423051AA	Steering gear (I no. 0N5, LOR)	1 ea.
	Additional parts required	
PAF107738	Hex flange bolt with multiple-tooth head - Power-steering gear	2 ea.
PAF908088	Hexagon collar nut - Tie-rod ball	2 ea.
WHT004955A	Internal hexagon round cheese head bolt - Universal Joint	1 ea.
N 91253401	Hex flange bolt with hexagon socket head - front-axle cross member	6 ea.
N 10714101	Hexagon flange bolt - front-axle cross member	2 ea.
PAF008741 ¹⁾	Stud (I no. 1X1) - front-axle cross member	2 ea.
PAF008757	Hexagon-head bolt - Front-axle cross member	2 ea.
PAF008737	Stud - front-axle cross member	2 ea.
N 90916701	Hexagon collar nut - Front-axle cross member	2 ea.
PAF008756	Hexagon flange bolt - front-axle cross member	2 ea.
WHT007957	Hexagon self-clinching nut - Anti-roll bar	2 ea.
	or	
9A700781900	Hexagon nut - anti-roll bar (PDCC)	2 ea.

PAF008282	O-ring – coolant hose	2 ea.
9A700828100	O-ring – coolant hose	2 ea.
PAF013814	Sealing ring – drain plug	2 ea.
00004320593	Lubricating grease – O-rings	approx. 10 grams/ 0.35 oz
00004330515	Coolant additive	approx. 0.5 liter/ 16.9 fl oz

¹⁾ Only for all-wheel drive (4WD) vehicles

References: ⇒ *Workshop Manual '400819 Removing and installing front-axle support'*
 ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*

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