PORSCHE®

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

Vehicle Types:	**911 Carrera S (992)/911 Carrera 4S (992)/911 Carrera S Cabriolet (992)/911 Carrera 4S Cabriolet (992)**
Model Year:	**2020**
Concern:	**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 it if necessary.

Required spare parts and tools

Parts Info:	Part No.	Designation — Use	Qty.
	992422573	⇒ Dust boot for steering system	1 ea.
	WHT004955A	⇒ Internal hexagon round cheese head bolt — Universal joint on power-steering gear	1 ea.

Tools:
- Rubber spatula
- **9900 - PIWIS Tester 3**
- **Battery charger** with a current rating of **at least 90 A**. We recommend **VAS 5908 - battery charger 90A or equivalent**, for example
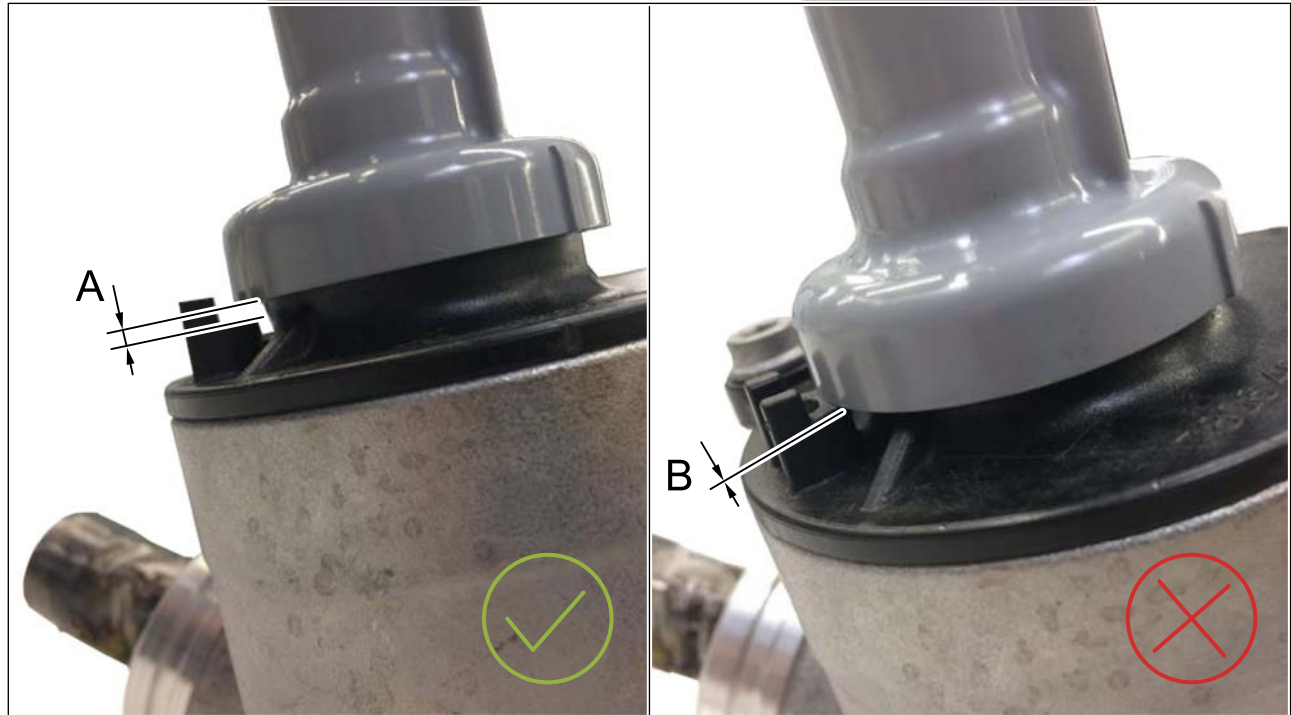
Preparatory work

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 and replacing dust boot on 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 ($\Rightarrow$ *Checking dust boot* -dimension A-):**
The dust boot is not the cause of the squeaking noise — Install front-axle support, see $\Rightarrow$ *Workshop Manual '400819 Removing and installing front-axle support'*.

1.2   **If the gap is not OK ($\Rightarrow$ *Checking dust boot* -dimension B-):**
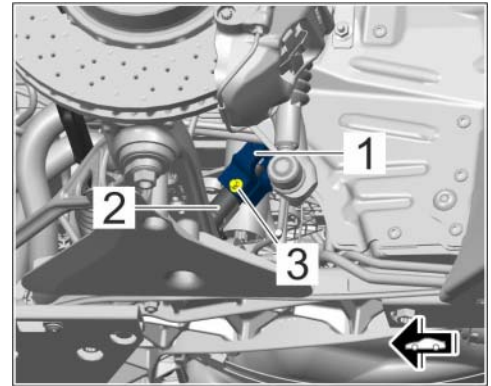The dust boot is causing the squeaking noise. Continue with Step 2.

Checking dust boot
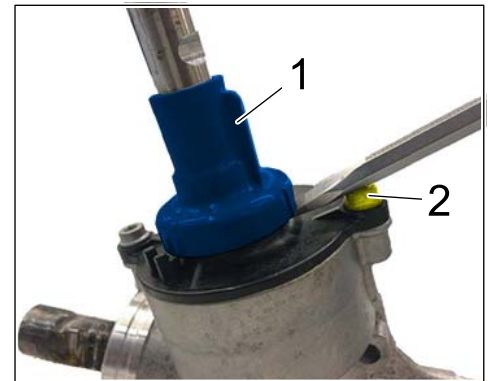
Dimension A – ~ 2 mm
Dimension B – ~ 0 mm

2   Loosen universal joint $\Rightarrow$ *Universal joint on power-steering gear* **-1-** from power-steering gear $\Rightarrow$ *Universal joint on power-steering gear* **-2-**.

2.1   Clean the area around the dust boot, universal joint and steering spindle.

2.2   Unscrew screw ⇒ *Universal joint on power-steering gear* **-3-**.

2.3   Pull universal joint off the power-steering gear.

3   Remove dust boot ⇒ *Removing dust boot* **-1-**.

Universal joint on power-steering gear

3.1   Loosen the dust boot using a screwdriver and support the screwdriver at the screw ⇒ *Removing dust boot* **-2-** on the housing cover.

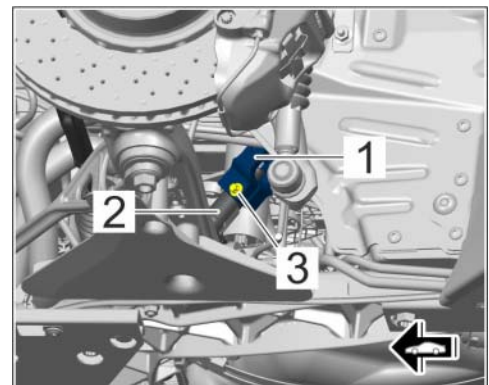3.2   Pull off dust boot by hand.

Removing dust boot

4   Check that the shaft sealing ring ⇒ *Shaft sealing ring on power-steering gear* **-1-** on the power-steering gear is completely covered with grease. If there is no grease, use a rubber spatula to transfer clean grease from the removed dust boot ⇒ *Shaft sealing ring on power-steering gear* **-2-** onto the steering spindle.

5   Install new dust boot.

    5.1   Position dust boot and push it as far as it will go onto the power-steering gear by hand.

    5.2   Check the gap between the dust boot and housing cover bar again.

6   Secure universal joint ⇒ *Universal joint on power-steering gear* **-1-** to the power-steering gear ⇒ *Universal joint on power-steering gear* **-2-**.

    6.1   Move universal joint on the power-steering gear into installation position.

    6.2   Replace screw ⇒ *Universal joint on power-steering gear* **-3-**.

    6.3   Fit and tighten **new** screw.

        Initial tightening 20 Nm (15 ftlb.)

        Final tightening +90°

Shaft sealing ring on power-steering gear

Universal joint on power-steering gear

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	Checking power-steering gear (17 TU)	
48904900	Reworking power-steering gear (34 TU)	

PQIS coding:

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

Part No.	Designation — Use	Qty.
992422573	⇒ Dust boot for steering system	1
WHT004955A	⇒ Internal hexagon round cheese head bolt — Universal joint on power-steering gear	1

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'*