

# Symptom-based workshop manual

Service

146/21 ENU 4652

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## Symptom - PSCB Disc Brakes - Scrubbing Noises from the Front Axle Area (SY 146/21)

### Change overview:

Release	Date	Change
1	10/28/2021	First publication
2	08/06/2024	<ul> <li>Required parts adapted (part numbers for brake discs, brake pads and retaining springs)</li> <li>Work procedure adjusted</li> </ul>

Model Line: Taycan (Y1A / Y1B / Y1C)

Model Year: As of 2020 up to 2024

Equipment: Porsche Surface Coated Brake (PSCB, M-no. 1LZ/1ZP)

Concerns: Front PSCB disc brake

Symptom: The customer complains about a scrubbing noise coming from the front axle area at night, particularly at

low speed and when the brake is not pressed.

Cause: A slight tolerance deviation in the contact pattern and/or a slight lateral runout of the PSCB disc brakes

results in sound transmission via the steering column into the passenger compartment.

Remedial

Action:

Retrofit a balance weight on the universal joint of the steering column in order to dampen sound transmission. Also check brake discs on the front axle for tolerance deviations, lateral runout and hotspots and replace them if necessary.

#### Required parts and materials

Parts Info:	Part No.	Designation - Location	Number
	9J1419647B	<ul><li>⇒ Balance weight (half shell)</li><li>– Intermediate steering shaft</li></ul>	1 piece
	9J1419647C	<ul><li>⇒ Balance weight (half shell)</li><li>– Intermediate steering shaft</li></ul>	1 piece
	PAF104882	⇒ Internal hexagon round/oval-head screw (M5 x 20) – Balance weight	2 pieces

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Part No.	Designation	Quantity
Required materials	(usually already available in the Porsche Center):	
9J1698151M	<ul><li>⇒ 1 set of brake pads for disc brakes</li><li>– Brake calliper on front axle</li></ul>	1 piece
9A769826900	<ul><li>⇒ Retainer spring repair kit</li><li>– Brake calliper on front axle</li></ul>	2 pieces
PAD615302	⇒ Brake disc – Front axle, right	1 piece
PAD615301	⇒ Brake disc – Front axle, left	1 piece
	Model year as of 2021:	
9Y0698151AQ	<ul><li>⇒ 1 set of brake pads for the disc brakes</li><li>– Brake calliper on front axle</li></ul>	1 piece
PAE698231	<ul><li>⇒ 1 set of springs repair kit</li><li>– Brake calliper on front axle</li></ul>	2 pieces
9Y0615302AF	<ul><li>⇒ Brake disc</li><li>– Front axle, right</li></ul>	1 piece
9Y0615301AF	⇒ Brake disc – Front axle, left	1 piece
	up to model year 2021:	
PAF004572	<ul><li>⇒ Collared cheese head bolt with hexagon socket head (M14 x 1.5 x 135)</li><li>– Brake calliper on front axle</li></ul>	4 pieces
971907637	<ul><li>⇒ Sender wire (brake pad wear indicator)</li><li>– Brake calliper on front axle</li></ul>	2 pieces
	additional parts only required in certain cases	
WHT004955A	<ul><li>⇒ Internal hexagon round cheese head bolt (M8 x 30)</li><li>– Steering column</li></ul>	2 pieces
N90799102	<ul><li>⇒ Countersunk screw with internal serration, self-locking (M18 x 1.5 x 18)</li><li>– Steering wheel</li></ul>	1 piece

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Materials:

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⇒ Mounting paste (100 gram/ 3.52 oz tube)

4 grams/ 0.14 oz

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### Retrofitting balance weight



#### Information

When installing the balance weights, the wheels must always be in straight-ahead position.

Work Procedure: 1

Separate universal joint from the steering column.

⇒ Workshop Manual '481519 Removing and installing steering column'

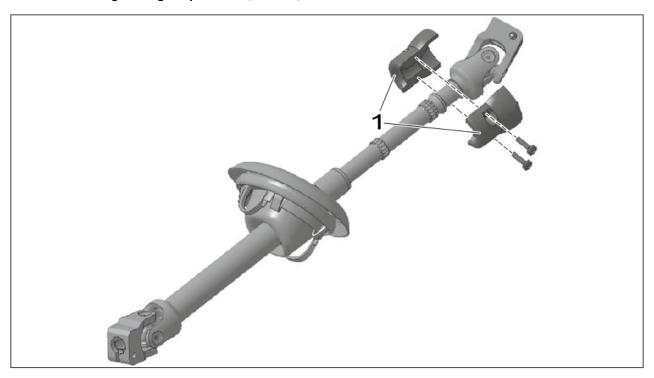


#### Information

When screwing-in the balance weights, first install both screws and then tighten them to prevent the half bodyshells from tilting.

2 Install balance weights (half shells) on the steering wheel side *⇒ Assembling balance weight -1-* at the universal joint and screw in and tighten screws.

Tightening torque 6 Nm (4.4 ftlb.)



Assembling balance weight

- 3 Install steering column.
  - ⇒ Workshop Manual '481519 Removing and installing steering column'
- 4 Test drive the car and check whether the customer complaint has been rectified.

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	Assessment	Action
<b>(√)</b>	Customer complaint <b>no longer</b> exists.	End of action.
(X)	Customer complaint still exists.	Continue with:  ⇒ Technical Information '481519 Check brake discs and replace brake discs and pads if necessary'.

### Check brake discs and replace brake discs and pads if necessary

Work Procedure: 1

Remove both front wheels.

- ⇒ Workshop Manual '440519 Removing and fitting wheel'
- 2 Check contact pattern and lateral runout of PSCB brake discs.

  ⇒ Workshop Manual '465202 Checking front PSCB brake discs'
- If the brake discs show defects in accordance with the inspection as described in the Workshop
  Manual, the brake discs and brake pads must be replaced and the balance weight must also be retrofitted.

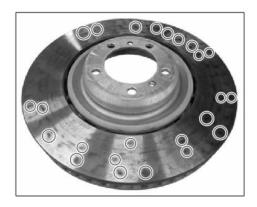


#### Information

If hotspots are visible, replacing the brake discs and brake pads cannot be billed using the new vehicle warranty. ⇒ Brake disc hotspots

Install both front wheels.

⇒ Workshop Manual '440519 Removing and fitting wheel'



Brake disc hotspots

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## Labor position and PCSS encryption:



#### Information

- If the PSCB disc brakes have hotspots, the brake disc and brake pad replacement cannot be billed
  using the new vehicle warranty.
- If the PSCB disc brakes have **deviations from tolerance limits and/or lateral wear**, the brake disc and brake pad replacement can be billed using the new vehicle warranty.
- Retrofitting the balance weight can be billed using the new vehicle warranty.

### Labor position:

APOS	Labour operation	I No.
46525000	Reworking two front PSCB brake discs (installing balance weight)	
46525002	Reworking two front PSCB brake discs (installing balance weight, replacing brake discs and pads)	

### PCSS encryption:

Location (FES5)	46520	Front PSCB brake disc
Damage type (SA4)	1316	rubs

References:

- ⇒ Workshop Manual '440519 Removing and installing wheel'
- ⇒ Workshop Manual '465202 Checking front PSCB brake discs'
- ⇒ Workshop Manual '463456 Replacing front PCCB brake pads'
- ⇒ Workshop Manual '465119 Removing and installing front PCCB brake disc'
- ⇒ Workshop Manual '481519 Removing and installing steering column'

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