

AMB2 – Replacing Lower Trailing Arm on Front Axle (Stop Delivery/Recall Campaign)

Model Line: **Panamera (971)**

Model Year: **As of 2018 up to 2021**

Concerns: **Trailing arm on front axle, lower right**

Information: **There is a possibility that trailing arms that do not meet the required specifications were installed on the lower right of the front axle on the affected vehicles.**

If this is the case, there is a possibility that the lower trailing arm can break. As a result, we cannot rule out the possibility of impaired vehicle handling and possible loss of control of the vehicle.

Action required: Replace trailing arm on front axle, lower right.

Affected Vehicles: Only vehicles assigned to the campaign (see also PCSS Vehicle Information). This campaign affects 325 vehicles.

Required parts and materials

Parts Info:	Part No.	Designation – Use	Qty.
	V040150060	⇒ Front axle trailing arm, lower right	1 ea.
	N 10628301	⇒ Hexagon flange bolt – Spring strut to lower trailing arm	1 ea.
	PAF104029	⇒ Hexagon collar nut – Spring strut to lower trailing arm	1 ea.

Additional parts required if the **camber on the front axle must be corrected** during suspension alignment:



Information

The **camber on the front axle** cannot be adjusted, but must be **centered** evenly within the tolerance range by **moving the front-axle carrier**.

Part No.	Designation – Use	Qty.
N 91244301	⇒ Hexagon flange bolt M12 x 1.5 x 90 – Front-axle carrier to body	8 ea.

Also required for vehicles with V6 engine:

N 91260401	⇒ Hexagon flange bolt, M10 x 45 – Front-axle carrier to body	2 ea.
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Materials: **Required materials** (usually already available at the Porsche dealer):

Part No.	Designation	Qty.
00004330508	⇒ Mounting paste – Wheel centring surface to wheel hub	100 g/ 3.5 oz tube (approx. 2 grams/ 0.07 oz required per vehicle)

Required tools

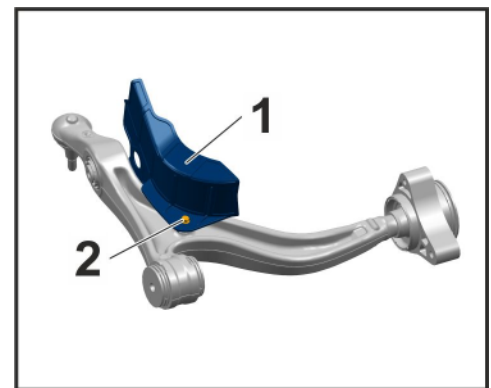
- Tools:
- Suitable transmission and engine jack, e.g. **VAS 6931 Engine and gearbox jack**
 - **T10187 - Press-out tool**
 - **T10188 - Insert tool**
 - **VW552 - Spring compressor**
 - **VAS 6826 Steering wheel alignment gauge**
 - **VAS 6918 Quick-clamping unit**
 - **9229/1 - Puller hook**
 - Torque/torque angle wrench, 20 – 400 Nm (15 – 296 ftlb.), e.g. **VAS 6942 Digital torque wrench, 20 – 400 Nm (15 – 296 ftlb.) or equivalent**
 - Torque screwdriver, 1.5 – 3 Nm (1 – 2 ftlb.), e.g. **VAS 6494 Torque screwdriver, 1.5 – 3.0 Nm (1-2 ftlb.) or equivalent**
 - Torque wrench, 2 – 10 Nm (1.5 – 7.5 ftlb.), e.g. **VAG 1783 Torque wrench, 2 - 10 Nm (1.5 - 7.5 ftlb.)**
 - Torque wrench, 40 – 200 Nm (30 – 148 ftlb.), e.g. **VAG 1332 Torque wrench, 40 – 200 Nm (30 – 148 ftlb.)**
 - **9900 - PIWIS Tester 3**
 - Battery charger with a current rating of **at least 90 A**, e.g. **VAS 5908 Battery charger 90A**

Additional tools required for calibrating the driver assistance systems:

- **VAS 6430/1A Adjustment device with reflector**
- **VAS 6430/3 ACC reflector mirror**
- **VAS 6430/4 Lane Departure Warning Calibration Plate**
- **VAS 6430/6 Night View Assist calibration unit**
- **VAS 6350A - Calibration unit**

Replacing trailing arm on front axle, lower right

- Work Procedure: 1 Remove right plenum panel cover. ⇒ *Workshop Manual '852219 Removing and installing plenum panel cover'*
- 2 Move the vehicle onto a lifting platform and raise it. ⇒ *Workshop Manual '4X00IN Lifting the vehicle'*
- 3 Remove right front wheel. ⇒ *Workshop Manual '440519 Removing and installing wheel'*
- 4 Remove front underbody cover. ⇒ *Workshop Manual '519219 Removing and installing front underbody cover'*
- 5 Remove front section of front wheel housing liner on the right.
For instructions see: ⇒ *Workshop Manual '505619 Removing and installing front wheel housing liner'*
- 6 Remove front air guide at the right side (behind charge-air cooler). ⇒ *Workshop Manual '211019 Removing and installing front air guide at the side (behind charge-air cooler)'*
- 7 Replace lower trailing arm on front axle.
- 7.1 Remove trailing arm on front axle, lower right. ⇒ *Workshop Manual '401719 Removing and installing lower trailing arm'*
- 7.2 Remove control arm spoiler ⇒ *Control arm spoiler mounting -1-* on the previously removed trailing arm.
To do this, unscrew fastening screw ⇒ *Control arm spoiler mounting -2-* and remove the control arm spoiler from the old trailing arm.
- 7.3 Position control arm spoiler ⇒ *Control arm spoiler mounting -1-* on the **new trailing arm** and secure it with fastening screw ⇒ *Control arm spoiler mounting -2-*.
Tightening torque 8 Nm (6 ftlb.)
- 7.4 Install new trailing arm on the front axle, lower right. ⇒ *Workshop Manual '401719 Removing and installing lower trailing arm'*
- 8 Install front air guide at the right side (behind charge-air cooler). ⇒ *Workshop Manual '211019 Removing and installing front air guide at the side (behind charge-air cooler)'*



Control arm spoiler mounting

- 9 Install front section of front wheel housing liner on the right.
For instructions see: ⇒ *Workshop Manual '505619 Removing and installing front wheel housing liner'*
- 10 Install front underbody cover. ⇒ *Workshop Manual '519219 Removing and installing front underbody cover'*
- 11 Install right front wheel. ⇒ *Workshop Manual '440519 Removing and installing wheel'*
- 12 Lower the vehicle and remove it from the lifting platform.
- 13 Install right plenum panel cover. ⇒ *Workshop Manual '852219 Removing and installing plenum panel cover'*
- 14 Perform suspension alignment and adjust the vehicle.

**Information**

The **camber on the front axle** cannot be adjusted, but must be **centered** evenly within the tolerance range by **moving the front-axle carrier**.

If the camber on the front axle must be adjusted, first adjust the front-axle carrier and screw it to the body **using the old fastening screws** and then **replace all relevant fastening screws one after the other** with new screws.

For instructions, see:

⇒ *Workshop Manual '449503 Performing front and rear suspension alignment'*

⇒ *Workshop Manual '4495TW Adjustment values for suspension alignment'*

- 15 After correcting the wheel alignment values, carry out the following required subsequent work.
 - 15.1 Calibrate steering-angle sensor. ⇒ *Workshop Manual '456005 Initialising and calibrating steering-angle sensor'*
 - 15.2 Teach steering lock settings for the power-steering gear. ⇒ *Workshop Manual '489025 Teaching power-steering gear'*

**Information**

The front camera and driver assistance systems must only be calibrated if the axle geometry needs to be adjusted during suspension alignment.

- 15.3 Calibrate front camera.
For instructions see: ⇒ *Workshop Manual '963855 Replacing front camera'*
- 15.4 **If installed:** Calibrate control unit for distance measuring sensor (ACC). ⇒ *Workshop Manual '278515 Adjusting control unit for distance measuring sensor'*

- 15.5 **If installed:** Calibrate infrared camera.
For instructions see: ⇒ *Workshop Manual '908055 Replacing infrared camera'*

16 Enter the campaign in the Warranty and Maintenance booklet.

- References:
- ⇒ *Workshop Manual '211019 Removing and installing front air guide at the side (behind charge-air cooler)'*
 - ⇒ *Workshop Manual '278515 Adjusting control unit for distance measuring sensor'*
 - ⇒ *Workshop Manual '4X00IN Lifting the vehicle'*
 - ⇒ *Workshop Manual '401719 Removing and installing lower trailing arm'*
 - ⇒ *Workshop Manual '440519 Removing and installing wheel'*
 - ⇒ *Workshop Manual '449503 Performing front and rear suspension alignment'*
 - ⇒ *Workshop Manual '4495TW Adjustment values for suspension alignment'*
 - ⇒ *Workshop Manual '456005 Initialising and calibrating steering-angle sensor'*
 - ⇒ *Workshop Manual '489025 Teaching power-steering gear'*
 - ⇒ *Workshop Manual '505619 Removing and installing front wheel housing liner'*
 - ⇒ *Workshop Manual '519219 Removing and installing front underbody cover'*
 - ⇒ *Workshop Manual '852219 Removing and installing plenum panel cover'*
 - ⇒ *Workshop Manual '908055 Replacing infrared camera'*
 - ⇒ *Workshop Manual '963855 Replacing front camera'*

Warranty processing

Information:



Information

The working times specified below were determined specifically for carrying out this campaign and may differ from the working times published in the Labor Operation List in PWIS.

Scope 1:

Replacing trailing arm on front axle, lower right

This scope must be invoiced if adjustment of the axle geometry was not required during suspension alignment and consequently the front camera and further driver assistance systems did not have to be calibrated.

Working time:

Replacing trailing arm on front axle, lower right

Labor time: **359 TU**

- Includes:
- Removing and installing plenum panel cover
 - Raising and lowering the vehicle
 - Removing and installing right front wheel
 - Removing and installing front underbody cover
 - Removing and installing front section of front wheel housing liner on the right
 - Removing and installing front air guide on the right side (behind charge-air cooler)
 - Converting control arm spoiler

Performing suspension alignment
 Calibrating steering-angle sensor
 Teaching steering lock settings
 Without: Calibrating control unit for distance measuring sensor
 Calibrating front camera
 Calibrating Night View Assist

Parts required:

V040150060	Front axle trailing arm, lower right	1 ea.
N 10628301	Hex flange bolt	1 ea.
PAF104029	Hexagon collar nut	1 ea.

Materials required:

00004330508	Mounting paste	0.02 ea.
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⇒ **Damage Code AMB2 099 000 2**

Scope 2:

Replacing trailing arm on front axle, lower right

– also calibrating front camera without further driver assistance systems

- **without** adaptive cruise control (ACC) (M-no. 3V1 or 8T3)
- **without** Night View Assist (M-no. 9R1)

Working time:

Replacing trailing arm on front axle, lower right Labor time: **381 TU**

Includes: Removing and installing plenum panel cover
 Raising and lowering the vehicle
 Removing and installing right front wheel
 Removing and installing front underbody cover
 Removing and installing front section of front wheel housing
 liner on the right
 Removing and installing front air guide on the right side
 (behind charge-air cooler)
 Converting control arm spoiler
 Performing suspension alignment and adjusting the vehicle
 Calibrating steering-angle sensor
 Teaching steering lock settings
 Calibrating front camera
 Without: Calibrating control unit for distance measuring sensor
 Calibrating Night View Assist

Parts required:		
V040150060	Front axle trailing arm, lower right	1 ea.
N 10628301	Hex flange bolt	1 ea.
PAF104029	Hexagon collar nut	1 ea.
Additional parts required if the camber on the front axle was corrected:		
N 91244301	Hexagon flange bolt, M12 x 1.5 x 90	8 ea.
Also required for vehicles with V6 engine:		
N 91260401	Hexagon flange bolt, M10 x 45	2 ea.
Materials required:		
00004330508	Mounting paste	0.02 ea.
⇒ Damage Code AMB2 099 000 2		

Scope 3:

Replacing trailing arm on front axle, lower right

– also calibrating front camera and driver assistance systems

- **with** adaptive cruise control (ACC) (M-no. 3V1 or 8T3)

and/or

- **with** Night View Assist (M-no. 9R1)

Working time:	
Replacing trailing arm on front axle, lower right	Labor time: 422 TU
Includes:	<ul style="list-style-type: none"> Removing and installing plenum panel cover Raising and lowering the vehicle Removing and installing right front wheel Removing and installing front underbody cover Removing and installing front section of front wheel housing liner on the right Removing and installing front air guide on the right side (behind charge-air cooler) Converting control arm spoiler Performing suspension alignment and adjusting the vehicle Calibrating steering-angle sensor Teaching steering lock settings Calibrating front camera Calibrating control unit for distance measuring sensor

Calibrating Night View Assist

Parts required:

V040150060	Front axle trailing arm, lower right	1 ea.
N 10628301	Hex flange bolt	1 ea.
PAF104029	Hexagon collar nut	1 ea.

Additional parts required if the camber on the front axle was corrected:

N 91244301	Hexagon flange bolt, M12 x 1.5 x 90	8 ea.
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Also required for vehicles with V6 engine:

N 91260401	Hexagon flange bolt, M10 x 45	2 ea.
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Materials required:

00004330508	Mounting paste	0.02 ea.
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⇒ Damage Code AMB2 099 000 2

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