

WMM2 – Replacing Upper Trailing Arm on Front Axle (Workshop Campaign)

Model Line: **Cayenne (9YA / 9YB)**

Model Year: **2021**

Concerns: **Front-axle trailing arm, top right**

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

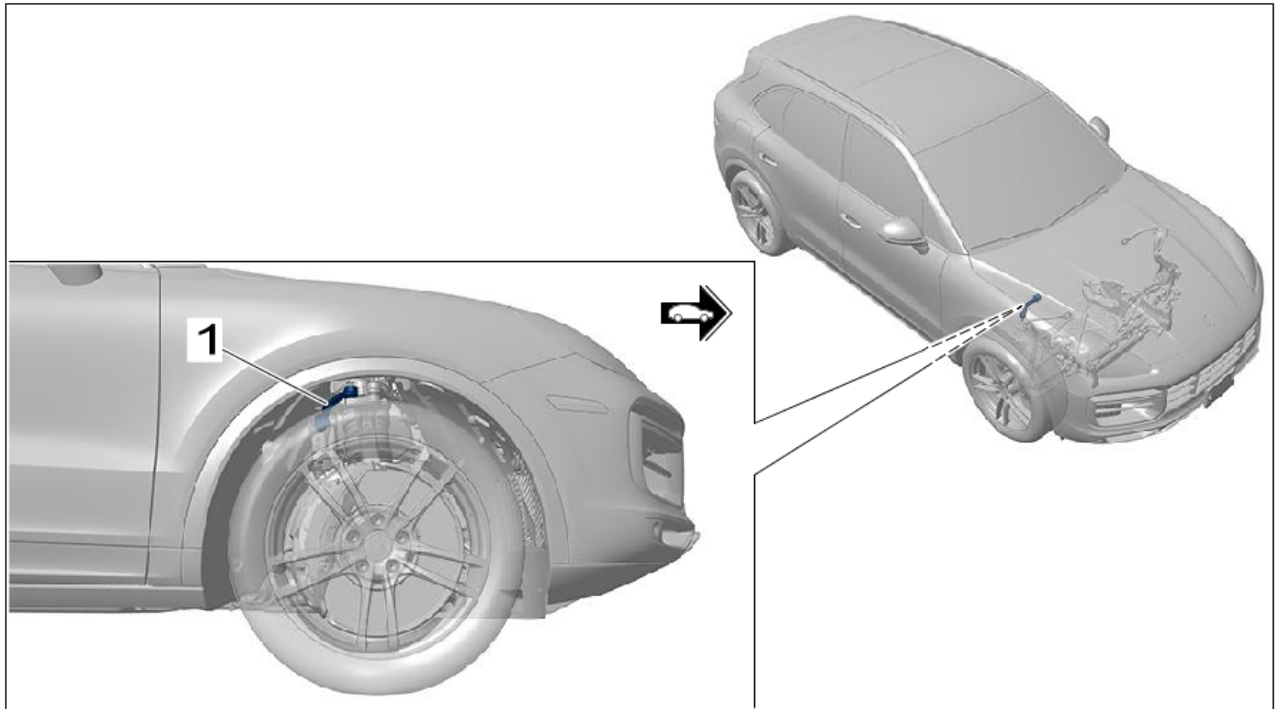
If this is the case, contact with the air-spring strut can occur on vehicles with an air suspension system. As a result, the air-spring strut could be damaged and lose pressure.

Action required: Replace upper right trailing arm on front axle.

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

Installation

Position:



Installation position of upper right trailing arm on front axle

1 – Upper right trailing arm on front axle (**replace**)

Required parts and materials



Information

The required parts and materials must be determined based on the scope of the campaign scope assigned to the respective vehicle. For an overview of the campaign scopes, see ⇒ *Technical Information 'Warranty processing'*

Required tools

Tools:

- **9229/1 - Puller hook**
- **T40183 - Insert tool**
- **VAS 6826 - Steering wheel balance**
- **VAS 6918 - Quick-clamping unit**
- Tie-wrap pliers, e.g. **VAS 6927 - Tie-wrap pliers**
- Suitable engine and gearbox jack, e.g. **VAS 6931 - Engine and gearbox jack**
- Torque wrench, 2-10 Nm (1.5-7.5 ftlb.), e.g. **V.A.G 1783 - Torque wrench, 2-10 Nm (1.5-7.5 ftlb.)**

- Torque wrench, 6-50 Nm (4.5-37 ftlb.), e.g. **V.A.G 1331A - Torque wrench, 6-50 Nm (4.5-37 ftlb.)**
- Torque wrench, 40-200 Nm (29.5- 147.5 ftlb.), e.g. **VAG 1332 Torque wrench, 40-200 Nm (29.5- 147.5 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 when replacing the air-spring strut:

- **T10149 - Support**
- **3424 - Spreader**
- **VAS 6935 - Pole terminal puller**

Additional tools required for calibrating driver assistance systems:

- **VAS 6430/1A - Adjustment device with reflector**
- **VAS 6430/3 - ACC reflector mirror**
- **VAS 6350/2A - Spacing laser**
- **VAS 6350A - Calibration unit**
- **VAS 6430/4 - Lane Departure Warning calibration board**
- **VAS 6430/6 - Enhanced night vision calibration unit**

Replacing upper right trailing arm on front axle

Work Procedure: 1 Remove right front wheel. ⇒ *Workshop Manual '440519 Removing and installing wheel'*

- 2 **Only for vehicles with air suspension system:**
Check air-spring strut for damage. If there are signs of abrasion on the air suspension bellows near the rear trailing arm ⇒ *Damage to front right air-spring strut*, replace air-spring strut. ⇒ *Workshop Manual '433019 Removing and installing front air-spring strut'*
- 3 Replace upper trailing arm. ⇒ *Workshop Manual '401519 Removing and installing upper trailing arm'*
- 4 Install right front wheel. ⇒ *Workshop Manual '440519 Removing and installing wheel'*



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**.



Damage to front right air-spring strut

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.

- 5 Perform suspension alignment. ⇒ *Workshop Manual '449503 Performing front and rear suspension alignment'*
- 6 Enter the campaign in the Warranty and Maintenance booklet.

Warranty processing



Information

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

Scope 1 - 20: Not relevant.

The campaign **cannot** be **invoiced** using this scope.

Scope 21: **Replacing upper right trailing arm** on front axle

Relevant for

- **Cayenne (9YA/9YB)** with steel chassis (**M-no. 1BA, 1BH**)

Labor time:

Replacing upper right trailing arm on front axle

Labor time: **273 TU**

Includes:

- Raising and lowering the vehicle
- Removing and installing front right wheel
- Checking upper right trailing arm
- Removing and installing cover for front underbody cover
- Removing and installing front-axle support
- Perform front suspension alignment
- Adjusting vehicle at the front
- Calibrating steering-angle sensor for PSM
- Teaching power steering gear

Parts required:

958407510C	⇒ Upper wishbone, rear right – Front axle	1 ea.
PAF91221601	⇒ Hexagon-head bolt, M10 x 85 – Wishbone to body	1 ea.

PAF00072900	⇒ Hexagon socket head bolt, M8 x 20 – Front underbody cover	3 ea.
PAF005372	⇒ Cheese head bolt with multiple-tooth head – Front-axle support to front-axle carrier:	2 ea.
PAF911511	⇒ Hexagon-head bolt (combination) – Front-axle support to front-axle carrier:	4 ea.
WHT002305	⇒ Square nut – Front-axle support to front-axle carrier:	4 ea.
PAF91184301	⇒ Hexagon-head bolt, M12 x 1.5 x 90 – Front axle carrier on body, front	4 ea.
PAF91237901	⇒ Hexagon-head bolt, M14 x 1.5 x 100 – Front axle carrier on body rear	4 ea.
N 91208802	⇒ Cheese head bolt with multiple-tooth head – Front-axle support to front-axle carrier:	3 ea.
Required materials (usually already available at the Porsche dealer):		
00004330508	⇒ Mounting paste (100 g/ 3.53 oz tube) – Wheel centring surface to wheel hub	0.01 ea.
⇒ Damage code WMM2 066 000 2		

Scope 22: **Replacing upper trailing arm** on front axle

Relevant for

- **Cayenne (9YA/9YB)** with air suspension (**M-no. 1BK**)

Labor time:		
Replacing upper right trailing arm on front axle		Labor time: 324 TU
Includes:	Raising and lowering the vehicle Removing and installing front right wheel Checking upper right trailing arm Removing and installing cover for front underbody cover Removing and installing front-axle support Perform front suspension alignment Adjusting vehicle at the front Calibrating steering-angle sensor for PSM Teaching power steering gear	
Parts required:		

958407510C	⇒ Upper wishbone, rear right – Front axle	1 ea.
PAF91221601	⇒ Hexagon-head bolt, M10 x 85 – Wishbone to body	1 ea.
PAF00072900	⇒ Hexagon socket head bolt, M8 x 20 – Front underbody cover	3 ea.
PAF005372	⇒ Cheese head bolt with multiple-tooth head – Front-axle support to front-axle carrier:	2 ea.
PAF911511	⇒ Hexagon-head bolt (combination) – Front-axle support to front-axle carrier:	4 ea.
WHT002305	⇒ Square nut – Front-axle support to front-axle carrier:	4 ea.
PAF91184301	⇒ Hexagon-head bolt, M12 x 1.5 x 90 – Front axle carrier on body front	4 ea.
PAF91237901	⇒ Hexagon-head bolt, M14 x 1.5 x 100 – Front axle carrier on body rear	4 ea.
N 91208802	⇒ Cheese head bolt with multiple-tooth head – Front-axle support to front-axle carrier:	3 ea.
Required materials (usually already available at the Porsche dealer):		
00004330508	⇒ Mounting paste (100 g/ 3.53 oz tube) – Wheel centring surface to wheel hub	0.01 ea.
⇒ Damage code WMM2 066 000 2		

Scope 23: **Replacing air suspension strut and upper right trailing arm on front axle.**

Relevant for

- **Cayenne (9YA/9YB) with air suspension (M-no. 1BK)**

Labor time:

Replacing air suspension strut and upper right trailing arm on front axle.

Labor time: **510 TU**

Includes:

- Raising and lowering the vehicle
- Removing and installing front right wheel
- Checking upper right trailing arm
- Removing and installing cover for front underbody cover
- Removing and installing front-axle support
- Perform front suspension alignment
- Adjusting vehicle at the front
- Calibrating steering-angle sensor for PSM
- Teaching power steering gear

Parts required:

958407510C	⇒ Upper wishbone, rear right – Front axle	1 ea.
PAF91221601	⇒ Hexagon-head bolt, M10 x 85 – Wishbone to body	1 ea.
PAF00072900	⇒ Hexagon socket head bolt, M8 x 20 – Front underbody cover	3 ea.
PAF005372	⇒ Cheese head bolt with multiple-tooth head – Front-axle support to front-axle carrier:	2 ea.
PAF911511	⇒ Hexagon-head bolt (combination) – Front-axle support to front-axle carrier:	4 ea.
WHT002305	⇒ Square nut – Front-axle support to front-axle carrier:	4 ea.
PAF91184301	⇒ Hexagon-head bolt, M12 x 1.5 x 90 – Front axle carrier on body front	4 ea.
PAF91237901	⇒ Hexagon-head bolt, M14 x 1.5 x 100 – Front axle carrier on body rear	4 ea.
9Y0616040C	⇒ Air spring – front right	1 ea.
PAF912603	⇒ Hexagon-head bolt with washer M8 x 34 – Air spring to body	3 ea.
N 10106402	⇒ Hexagon collar nut, self-locking, M12 x 1.5 – Spring strut to spring strut fork	1 ea.
N 10272202	⇒ Hexagon-head bolt, M12 x 1.5 x 85 – Spring strut to lower trailing arm	1 ea.
N 10784702	⇒ Hexagon-head bolt (combination), M12 x 1.5 x 95 – Spring strut to spring strut fork	1 ea.
PAF001987	⇒ Hexagon nut, self-locking with washer, M12 x 1.5 – Spring strut to lower trailing arm	1 ea.
9A700837900	⇒ Tie-wrap, A8.0 x 337 – Air guide	2 ea.
WHT007061	⇒ 12 point socket, M10 x 85 – Coupling rod to spring strut (conventional)	1 ea.
PAF102861	⇒ Hexagon nut – Coupling rod to spring strut (conventional)	1 ea.

N 91208802	⇒ Cheese head bolt with multiple-tooth head – Front-axle support to front-axle carrier:	3 ea.
Required materials (usually already available at the Porsche dealer):		
00004330508	⇒ Mounting paste (100 g/ 3.53 oz tube) – Wheel centring surface to wheel hub	0.01 ea.
⇒ Damage code WMM2 066 000 2		

Scope 24: **Replacing upper trailing arm** on front axle

Relevant for

- **Cayenne (9YA/9YB)** with air suspension (**M-no. 1BK**) and PDCC (**M-no. 1P7**)

Labor time:

Replacing upper right trailing arm on front axle Labor time: **393 TU**

Includes:

- Raising and lowering the vehicle
- Removing and installing front right wheel
- Checking upper right trailing arm
- Removing and installing cover for front underbody cover
- Removing and installing front-axle support
- Perform front suspension alignment
- Adjusting vehicle at the front
- Calibrating steering-angle sensor for PSM
- Teaching power steering gear
- Calibrating control unit for distance measuring sensor
- Calibrating front camera
- Calibrating Night View Assist

Parts required:

958407510C	⇒ Upper wishbone, rear right – Front axle	1 ea.
PAF91221601	⇒ Hexagon-head bolt, M10 x 85 – Wishbone to body	1 ea.
PAF00072900	⇒ Hexagon socket head bolt, M8 x 20 – Front underbody cover	3 ea.
PAF005372	⇒ Cheese head bolt with multiple-tooth head – Front-axle support to front-axle carrier:	2 ea.
PAF911511	⇒ Hexagon-head bolt (combination) – Front-axle support to front-axle carrier:	4 ea.

WHT002305	⇒ Square nut – Front-axle support to front-axle carrier:	4 ea.
PAF91184301	⇒ Hexagon-head bolt, M12 x 1.5 x 90 – Front axle carrier on body front	4 ea.
PAF91237901	⇒ Hexagon-head bolt, M14 x 1.5 x 100 – Front axle carrier on body rear	4 ea.
N 10662201	⇒ Tie-wrap – Mounting for electric wire harness (PDCC)	1 ea.
Required materials (usually already available at the Porsche dealer):		
00004330508	⇒ Mounting paste (100 g/ 3.53 oz tube) – Wheel centring surface to wheel hub	0.01 ea.
⇒ Damage code WMM2 066 000 2		

Scope 25: **Replacing air suspension strut and upper right trailing arm on front axle.**

Relevant for

- **Cayenne (9YA/9YB)** with air suspension (**M-no. 1BK**) and PDCC (**M-no. 1P7**)

Labor time:		
Replacing air suspension strut and upper right trailing arm on front axle.		Labor time: 573 TU
Includes:	Raising and lowering the vehicle Removing and installing front right wheel Checking upper right trailing arm Removing and installing cover for front underbody cover Removing and installing front-axle support Perform front suspension alignment Adjusting vehicle at the front Calibrating steering-angle sensor for PSM Teaching power steering gear Calibrating control unit for distance measuring sensor Calibrating front camera Calibrating Night View Assist	
Parts required:		
958407510C	⇒ Upper wishbone rear right – Front axle	1 ea.
PAF91221601	⇒ Hexagon-head bolt, M10 x 85 – Wishbone to body	1 ea.

PAF00072900	⇒ Hexagon socket head bolt, M8 x 20 – Front underbody cover	3 ea.
PAF005372	⇒ Cheese head bolt with multiple-tooth head – Front-axle support to front-axle carrier:	2 ea.
PAF911511	⇒ Hexagon-head bolt (combination) – Front-axle support to front-axle carrier:	4 ea.
WHT002305	⇒ Square nut – Front-axle support to front-axle carrier:	4 ea.
PAF91184301	⇒ Hexagon-head bolt, M12 x 1.5 x 90 – Front axle carrier on body front	4 ea.
PAF91237901	⇒ Hexagon-head bolt, M14 x 1.5 x 100 – Front axle carrier on body rear	4 ea.
9Y0616040C	⇒ Air springs – front right	1 ea.
PAF912603	⇒ Hexagon-head bolt with washer M8 x 34 – Air spring to body	3 ea.
N 10106402	⇒ Hexagon collar nut, self-locking, M12 x 1.5 – Spring strut to spring strut fork	1 ea.
N 10272202	⇒ Hexagon-head bolt, M12 x 1.5 x 85 – Spring strut to lower trailing arm	1 ea.
N 10784702	⇒ Hexagon-head bolt (combination), M12 x 1.5 x 95 – Spring strut to spring strut fork	1 ea.
PAF001987	⇒ Hexagon nut, self-locking with washer, M12 x 1.5 – Spring strut to lower trailing arm	1 ea.
9A700837900	⇒ Tie-wrap, A8.0 x 337 – Air guide	2 ea.
WHT007422	⇒ 12-point socket, M12 x 85 – Coupling rod to spring strut (PDCC)	1 ea.
PAF015081	⇒ Hexagon nut – Coupling rod to spring strut (PDCC)	1 ea.
N 10662201	⇒ Tie-wrap – Mounting for electric wire harness (PDCC)	1 ea.
Required materials (usually already available at the Porsche dealer):		
00004330508	⇒ Mounting paste (100 g/ 3.53 oz tube) – Wheel centring surface to wheel hub	0.01 ea.
⇒ Damage code WMM2 066 000 2		

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