

AE03 - Checking Lower Trailing Arms For Rear Axle And Replacing Them If Necessary (Recall Campaign)

Revision: **Revision 1: August 1, 2014**
 This revision amends AE03 to include information under Claims Submission regarding how to handle the transport/reunite of 918 vehicles to/from the dealership and/or the customer's residence.

Revision 2: August 19, 2014
 Revision 2 contains numerous changes throughout the entire text of AE03. Consequently, Revision 2 supersedes all other versions of AE03 and we ask that you destroy all other copies of this campaign that may be in your records.

Model Year: **2015**

Model Line: **918 Spyder**

Concerns: **Lower trailing arms (longitudinal and transverse control arms) for rear axle**

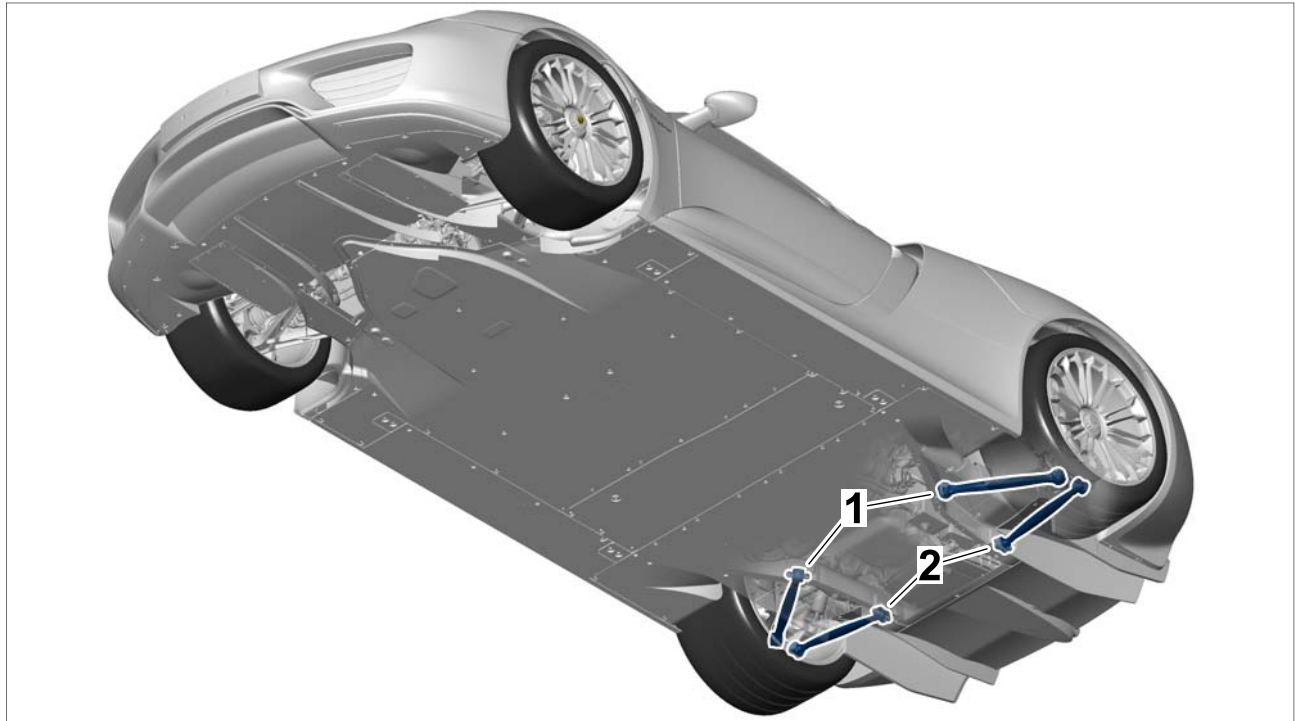
Information: This is to inform you of a Recall Campaign on the above-mentioned vehicles. **Internal quality checks have shown that a chassis component from a batch that does not meet the required specifications was installed on the rear axle on some vehicles.**
 This can result in a change in the material properties and thus reduced endurance strength.

Action Required: Check the batch numbers of the lower trailing arms for the rear axle and replace the trailing arms if necessary.

Affected Vehicles: The VIN(s) can be checked by using PIWIS Vehicle Information link to verify if the campaign affects the vehicle. This campaign is scope specific to the VIN! Failure to verify in PIWIS may result in an improper repair. This recall campaign affects 6 vehicles in North America.

Installation

Position:



Overview of lower trailing arms for rear axle

- 1 – Lower longitudinal control arms for rear axle
- 2 – Lower transverse control arms for rear axle

Checking batch numbers of lower trailing arms for rear axle

- Tools:
- **9002 - Lifting platform holders**
 - **9453 - Access ramps**
 - 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 1331 - Torque wrench, 6-50 Nm (4.5-37 ftlb.)**
 - Suitable inspection mirror
 - Shop light

Work See Attachment "A".

Procedure:

Claim See Attachment "B".

Submission:

Attachment "A": **Work Procedure**

- 1 Raise the vehicle on a lifting platform ⇒ *Workshop Manual '4X00IN Lifting the vehicle'*.
 - 1.1 Position the vehicle between the arms of the lifting platform and push it onto the **9453 - access ramps**.
 - 1.2 Remove covers on the underbody and fit mounting plates **9002 - Lifting platform holders**, ⇒ *Workshop Manual '518119 Removing and installing jacking points'*.
 - 1.3 Jack and raise the vehicle at the mounting plates.

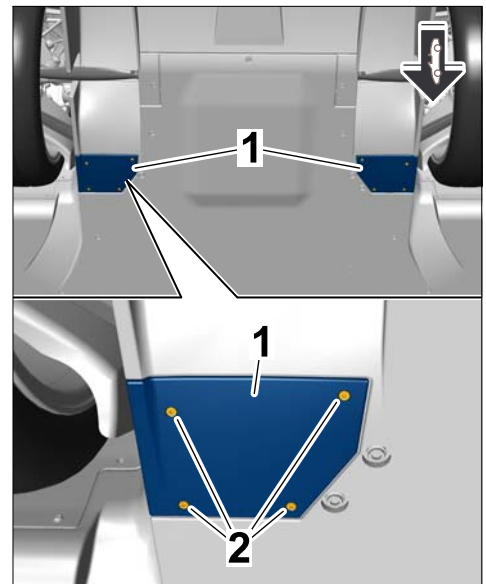


Information

The batch numbers must be checked on both the **left and right longitudinal control arms** and on the **left and right transverse control arms**.

The procedure for checking the left-hand side of the vehicle is described below as an example.

- 2 Remove the cover ⇒ *Covers for assembly openings in underbody-1* of the assembly opening in the underbody at the left and right.
 To do this, unscrew and remove the fastening screws ⇒ *Covers for assembly openings in underbody-2* and remove the cover.



Covers for assembly openings in underbody

- 3 Remove the lower rear side spoiler ⇒ *Lower rear spoiler (at the sides)* -1- at the left and right side.
 - 3.1 Unscrew and remove fastening screw ⇒ *Lower rear spoiler (at the sides)* -2-.
 - 3.2 Unscrew and remove fastening screws ⇒ *Lower rear spoiler (at the sides)* -3-.
 - 3.3 Pull the spoiler ⇒ *Lower rear spoiler (at the sides)* -1- to the rear and off the underbody and remove it.

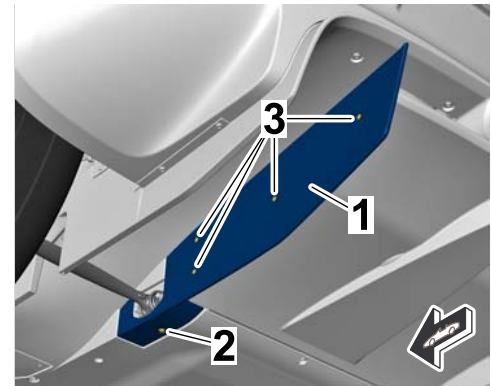


Information

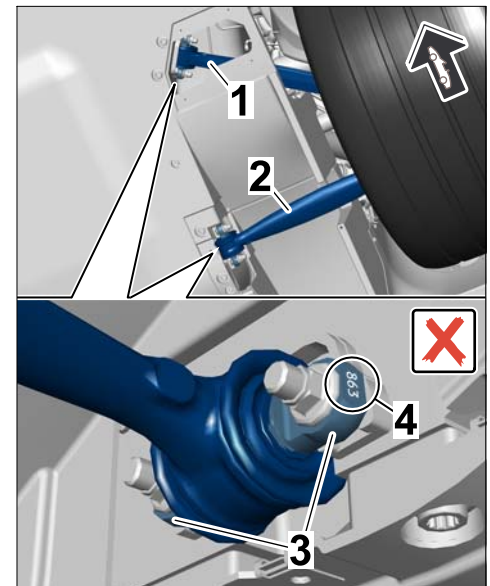
The batch number is stamped close to the fastening points on the inner joint of each trailing arm. Depending on the installation position of the trailing arms, the batch number can be either at the front or at the rear fastening point of the respective trailing arm.

- 4 Read off and check the batch numbers of the lower trailing arms (longitudinal and transverse control arms) ⇒ *Checking batch number of the trailing arms* -1, 2- on the rear axle. To do this, insert an inspection mirror through the openings in the underbody, close to the fastening points ⇒ *Checking batch number of the trailing arms* -3- for the longitudinal and transverse control arms and read off the batch number ⇒ *Checking batch number of the trailing arms* -4-.

- If the **batch number of all four trailing arms** is **not 863** ⇒ continue with **Step 5**.
- **If the batch number of a trailing arm is 863**, the trailing arm in question must be replaced ⇒ *Technical Information 'AE0300 Replacing lower trailing arm (longitudinal and transverse control arm) for rear axle'*



Lower rear spoiler (at the sides)



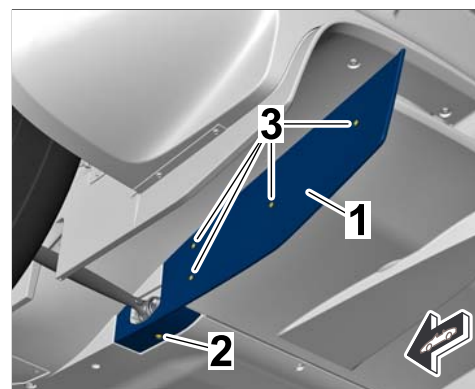
Checking batch number of the trailing arms

- 5 Install the lower rear side spoiler ⇒ *Lower rear spoiler (at the sides)*-1- at the left and right side.
 - 5.1 Position the spoiler ⇒ *Lower rear spoiler (at the sides)*-1- in installation position on the underbody and only fit the fastening screws ⇒ *Lower rear spoiler (at the sides)*-2, 3- initially.
 - 5.2 Tighten fastening screws ⇒ *Lower rear spoiler (at the sides)*-3-.
Tightening torque 5.5 Nm (4 ftlb.)
 - 5.3 Tighten fastening screw ⇒ *Lower rear spoiler (at the sides)*-2-.
Tightening torque 10 Nm (7.5 ftlb.)

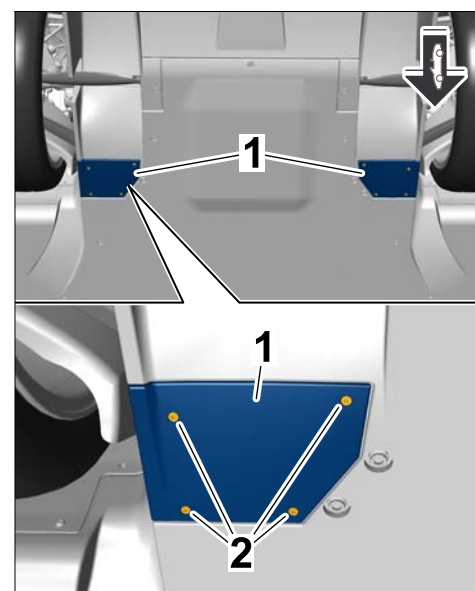
- 6 Fit the cover ⇒ *Covers for assembly openings in underbody*-1- for the assembly opening in the underbody at the left and right.
To do this, screw in and tighten the fastening screws ⇒ *Covers for assembly openings in underbody*-2-.
Tightening torque 5.5 Nm (4 ftlb.)

- 7 Lower the vehicle and remove it from the lifting platform ⇒ *Workshop Manual '4X00IN Lifting the vehicle'*.
 - 7.1 Lower the vehicle onto the **9453 - access ramps** with the lifting platform.
 - 7.2 Remove mounting plates **9002 - Lifting platform holders** and install the covers on the underbody ⇒ *Workshop Manual '518119 Removing and installing jacking points'*.

- 8 Enter the recall campaign in the Warranty and Maintenance booklet ⇒ **End of action required.**



Lower rear spoiler (at the sides)



Covers for assembly openings in underbody

Replacing lower trailing arms (longitudinal and transverse control arms) for rear axle

Parts Info:

NOTE: DO NOT ORDER PARTS. PARTS WILL BE ORDERED FOR YOU DEPENDING ON THE SPECIFIC NEEDS OF THE 918 SPYDER IN QUESTION AND THEN SHIPPED DIRECTLY TO YOUR DEALERSHIP.

Part No.	Designation – Location	Qty.
918.331.043.00	⇒ Lower longitudinal control arm for rear axle at the left/right	1 ea.*
and/or		
918.331.041.00	⇒ Lower transverse control arm for rear axle at the left/right	1 ea.*

* The trailing arms (longitudinal and transverse control arms) for the rear axle are identical on the left and right side. Depending on the number of trailing arms affected, either one or two longitudinal or transverse control arms must be ordered.

The following parts will also be required for each trailing arm to be replaced:

999.084.655.01	⇒ Hexagon nut, M12 x 1.5 – Trailing arm to wheel carrier	1 ea.
999.084.656.01	⇒ Hexagon nut, M10 – Trailing arm to body	2 ea.

The following parts are also required for each vehicle side affected:

999.084.656.01	⇒ Hexagon nut, M10 – Brake calliper to wheel carrier	2 ea.
999.073.572.01	⇒ Lens-head screw, M6 x 8 – Brake disc to wheel hub	2 ea.

Depending on the vehicle equipment, the following parts are also required for each trailing arm to be replaced:

Vehicles **without** Racetrack package (I-no. 808):

999.311.504.01	⇒ Fit bolt, M12 x 1.5 x 77 – Trailing arm to wheel carrier	1 ea.
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or

Vehicles **with** Racetrack package (I-no. 808):

999.311.504.02 ⇒ Fit bolt, M12 x 1.5 x 77 1 ea.
 – Trailing arm to wheel carrier

Tools:

- **9003 - Socket wrench** for central wheel lock
- **9004 - Socket wrench** for central wheel lock cover
- 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 1331 - Torque wrench, 6-50 Nm (4.5-37 ftlb.)**
- Torque wrench, 40 – 200 Nm (30 – 148 ftlb.), e.g. **V.A.G 1332 - Torque wrench, 40-200 Nm (30-148 ftlb.)**
- Torque wrench, 150 – 800 Nm (111 – 592 ftlb.), e.g. **V.A.G. 1601 - Torque wrench 150-800 Nm (111-592 ftlb.)**

Procedure:

- 1 Remove wheel on the relevant side of the vehicle ⇒ *Workshop Manual '440519 Removing and installing wheel'*.



Information

- **Do not open the brake hydraulic system (brake line remains connected).**
- 2 Loosen rear brake caliper from the wheel carrier and suspend it to the side in the wheel housing using a tie-wrap, for example ⇒ *Workshop Manual '474119 Removing and installing rear brake calliper'*.
 - 3 Remove rear brake disc ⇒ *Workshop Manual '465419 Removing and installing rear PCCB brake disc'*.



Information

Camber adjustment of the rear wheels involves fitting adjusting shims ⇒ *Adjusting shims on rear trailing arm -2-* at the fastening point for the longitudinal control arm ⇒ *Adjusting shims on rear trailing arm -1-* and fitting adjusting shims ⇒ *Adjusting shims on rear trailing arm -4-* at the fastening point for the transverse control arm ⇒ *Adjusting shims on rear trailing arm -3-* on the body.

When removing and installing the relevant trailing arm (longitudinal and transverse control arm), the adjusting shims must be assigned uniquely to the relevant fastening point and must not be interchanged in order to ensure correct camber adjustment.

- 4 Remove all affected **trailing arms** (longitudinal and transverse control arms) with the **batch number 863** and install new trailing arms ⇒ *Workshop Manual '421119 Removing and installing lower trailing arm'*.



Information

The fact that the trailing arms are mounted without play using Unibal joints and have very low manufacturing tolerances means that there is no need to perform suspension alignment after replacing the trailing arms.

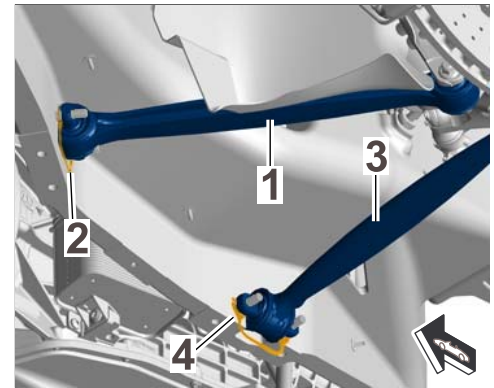
The main prerequisite for this is that the original adjusting shims for camber adjustment are installed correctly at the fastening points for the trailing arms, i.e. the correct number of adjusting shims of the correct size must be fitted at the correct position.

- 5 Install rear brake disc ⇒ *Workshop Manual '465419 Removing and installing rear PCCB brake disc'*.
- 6 Install rear brake caliper ⇒ *Workshop Manual '474119 Removing and installing rear brake calliper'*.
- 7 Install the lower rear side spoiler ⇒ *Lower rear spoiler (at the sides)*-**1**- at the left and right side.

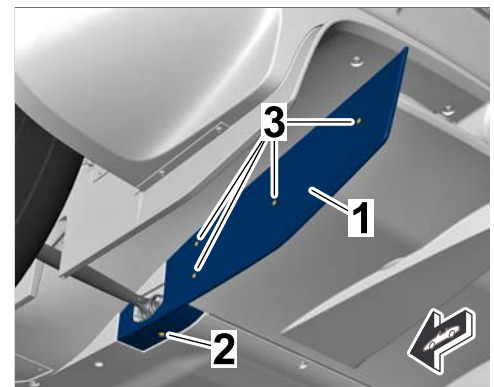
- 7.1 Position the spoiler ⇒ *Lower rear spoiler (at the sides)*-**1**- in installation position on the underbody and only fit the fastening screws ⇒ *Lower rear spoiler (at the sides)*-**2**, **3**- initially.

- 7.2 Tighten fastening screws ⇒ *Lower rear spoiler (at the sides)*-**3**-.
Tightening torque 5.5 Nm (4 ftlb.)

- 7.3 Tighten fastening screw ⇒ *Lower rear spoiler (at the sides)*-**2**-.
Tightening torque 10 Nm (7.5 ftlb.)



Adjusting shims on rear trailing arm



Lower rear spoiler (at the sides)

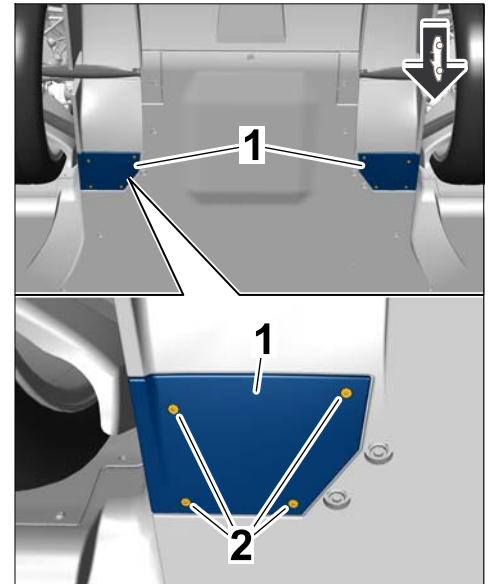
- 8 Fit the cover ⇒ *Covers for assembly openings in underbody-1* - for the assembly opening in the underbody at the left and right.
To do this, screw in and tighten the fastening screws ⇒ *Covers for assembly openings in underbody-2*.
Tightening torque 5.5 Nm (4 ftlb.)

- 9 Fit wheel on the relevant side of the vehicle ⇒ *Workshop Manual '440519 Removing and installing wheel'*.

- 10 Lower the vehicle and remove it from the lifting platform ⇒ *Workshop Manual '4X00IN Lifting the vehicle'*.

- 10.1 Lower the vehicle onto the **9453 - access ramps** with the lifting platform.

- 10.2 Remove mounting plates **9002 - Lifting platform holders** and install the covers on the underbody ⇒ *Workshop Manual '518119 Removing and installing jacking points'*.



Covers for assembly openings in underbody

- 11 Enter the recall campaign in the Warranty and Maintenance booklet.

Attachment "B"



Information

NOTE: If transportation/reunite is required, please contact Tim Reeder at PCNA at 770-290-4644 who will make all appropriate arrangements for transport.



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 PIWIS.

Claim Submission - Recall Campaign AE03

Warranty claims should be submitted via WWS/PQIS.

Open campaigns may be checked by using either the PIWIS Vehicle Information system or through PQIS Job Creation.

, parts, and sublet will be automatically inserted when Technician is selected in WWS/PQIS. If necessary, the required part numbers will need to be manually entered into warranty system by the dealer administrator.

Scope 1: Checking batch numbers of lower trailing arms for rear axle – **The trailing arms do not need to be replaced.**

Working time:

Checking batch numbers of lower trailing arms (longitudinal and transverse control arms) for rear axle at the left and right

Labor time: **147 TU**

Includes: Raising and lowering the vehicle
Removing and installing covers in the underbody
Removing and installing lower rear spoiler at the left and right

⇒ **Damage code AE03 099 000 1**

Scope 2: Checking batch numbers and replacing **one** trailing arm.

Working time:

Checking batch numbers and replacing one trailing arm (longitudinal or transverse control arm)

Labor time: **307 TU**

Includes: Raising and lowering the vehicle
Removing and installing covers in the underbody
Removing and installing lower rear side spoiler at the left and right
Removing and installing wheel
Loosening and securing rear brake caliper
Removing and installing rear brake disc
Removing and installing trailing arm

Parts required:

918.331.043.00	Lower longitudinal control arm for rear axle at the left/right	1 ea.
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or

918.331.041.00	Lower transverse control arm for rear axle at the left/right	1 ea.
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Additional parts required for vehicles **without** Racetrack package (I-no. 808):

999.311.504.01	Fit bolt, M12 x 1.5 x 77	1 ea.
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Additional parts required for vehicles **with** Racetrack package (I-no. 808):

999.311.504.02	Fit bolt, M12 x 1.5 x 77	1 ea.
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Additional parts required:

999.084.655.01	Hexagon nut, M12 x 1.5	1 ea.
999.084.656.01	Hexagon nut, M10	4 ea.
999.073.572.01	Lens-head screw, M6 x 8	2 ea.

⇒ **Damage code AE03 099 000 2**

Scope 3: Checking batch numbers and replacing **two** trailing arms on **one side of the vehicle**.

Working time:

Checking batch numbers and replacing two trailing arms (longitudinal or transverse control arms) Labor time: **320 TU**

- Includes:
- Raising and lowering the vehicle
 - Removing and installing covers in the underbody
 - Removing and installing lower rear side spoiler at the left and right
 - Removing and installing wheel
 - Loosening and securing rear brake calliper
 - Removing and installing rear brake disc
 - Removing and installing trailing arm (2x)

Parts required:

918.331.043.00	Lower longitudinal control arm for rear axle at the left/right	1 ea.
918.331.041.00	Lower transverse control arm for rear axle at the left/right	1 ea.

Additional parts required for vehicles **without** Racetrack package (I-no. 808):

999.311.504.01	Fit bolt, M12 x 1.5 x 77	2 ea.
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Additional parts required for vehicles **with** Racetrack package (I-no. 808):

999.311.504.02	Fit bolt, M12 x 1.5 x 77	2 ea.
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Additional parts required:

999.084.655.01	Hexagon nut, M12 x 1.5	2 ea.
999.084.656.01	Hexagon nut, M10	6 ea.

999.073.572.01	Lens-head screw, M6 x 8	2 ea.
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⇒ **Damage code AE03 099 000 2**

Scope 4: Checking batch numbers and replacing **one** trailing arm on **each side of the vehicle**.

Working time:

Checking batch numbers and replacing two trailing arms (longitudinal or transverse control arms) Labor time: **358 TU**

Includes:

- Raising and lowering the vehicle
- Removing and installing covers in the underbody
- Removing and installing lower rear side spoiler at the left and right
- Removing and installing wheel (2x)
- Loosening and securing rear brake caliper (2x)
- Removing and installing rear brake disc (2x)
- Removing and installing trailing arm (2x)

Parts required:

918.331.043.00	Lower longitudinal control arm for rear axle at the left/right	1 ea.
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918.331.041.00	Lower transverse control arm for rear axle at the left/right	1 ea.
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or

918.331.043.00	Lower longitudinal control arm for rear axle at the left/right	2 ea.
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or

918.331.041.00	Lower transverse control arm for rear axle at the left/right	2 ea.
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Additional parts required for vehicles **without** Racetrack package (I-no. 808):

999.311.504.01	Fit bolt, M12 x 1.5 x 77	2 ea.
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Additional parts required for vehicles **with** Racetrack package (I-no. 808):

999.311.504.02	Fit bolt, M12 x 1.5 x 77	2 ea.
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Additional parts required:

999.084.655.01	Hexagon nut, M12 x 1.5	2 ea.
999.084.656.01	Hexagon nut, M10	8 ea.
999.073.572.01	Lens-head screw, M6 x 8	4 ea.
: ⇒ Damage code AE03 099 000 2		

Scope 5: Checking batch numbers and replacing **three** trailing arms.

Working time:		
Checking batch numbers and replacing three trailing arms (longitudinal or transverse control arms)		Labor time: 371 TU
Includes:	<ul style="list-style-type: none"> Raising and lowering the vehicle Removing and installing covers in the underbody Removing and installing lower rear side spoiler at the left and right Removing and installing wheel (2x) Loosening and securing rear brake caliper (2x) Removing and installing rear brake disc (2x) Removing and installing trailing arm (2x) 	
Parts required:		
918.331.043.00	Lower longitudinal control arm for rear axle at the left/right	2 ea.
918.331.041.00	Lower transverse control arm for rear axle at the left/right	1 ea.
or		
918.331.043.00	Lower longitudinal control arm for rear axle at the left/right	1 ea.
918.331.041.00	Lower transverse control arm for rear axle at the left/right	2 ea.
Additional parts required for vehicles without Racetrack package (I-no. 808):		
999.311.504.01	Fit bolt, M12 x 1.5 x 77	3 ea.
Additional parts required for vehicles with Racetrack package (I-no. 808):		
999.311.504.02	Fit bolt, M12 x 1.5 x 77	3 ea.

Additional parts required:

999.084.655.01	Hexagon nut, M12 x 1.5	3 ea.
999.084.656.01	Hexagon nut, M10	10 ea.
999.073.572.01	Lens-head screw, M6 x 8	4 ea.

⇒ **Damage code AE03 099 000 2**

Scope 6: Checking batch numbers and replacing **all four** trailing arms.

Working time:

Checking batch numbers and replacing four trailing arms (longitudinal or transverse control arms) Labor time: **384 TU**

Includes:

- Raising and lowering the vehicle
- Removing and installing covers in the underbody
- Removing and installing lower rear side spoiler at the left and right
- Removing and installing wheel (2x)
- Loosening and securing rear brake caliper (2x)
- Removing and installing rear brake disc (2x)
- Removing and installing trailing arm (2x)

Parts required:

918.331.043.00	Lower longitudinal control arm for rear axle at the left/right	2 ea.
918.331.041.00	Lower transverse control arm for rear axle at the left/right	2 ea.

Additional parts required for vehicles **without** Racetrack package (I-no. 808):

999.311.504.01	Fit bolt, M12 x 1.5 x 77	4 ea.
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Additional parts required for vehicles **with** Racetrack package (I-no. 808):

999.311.504.02	Fit bolt, M12 x 1.5 x 77	4 ea.
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Additional parts required:

999.084.655.01	Hexagon nut, M12 x 1.5	4 ea.
999.084.656.01	Hexagon nut, M10	12 ea.
999.073.572.01	Lens-head screw, M6 x 8	4 ea.

⇒ Damage code AE03 099 000 2

- References:
- ⇒ Workshop Manual '4X00IN Lifting the vehicle'
 - ⇒ Workshop Manual '449503 Suspension alignment, complete'
 - ⇒ Workshop Manual '4X00IN Adjustment values for suspension alignment'
 - ⇒ Workshop Manual '421119 Removing and installing lower trailing arm'
 - ⇒ Workshop Manual '440519 Removing and installing wheel'
 - ⇒ Workshop Manual '465419 Removing and installing rear PCCB brake disc'
 - ⇒ Workshop Manual '474119 Removing and installing rear brake calliper'
 - ⇒ Workshop Manual '518119 Removing and installing jacking points'
 - ⇒ Workshop Manual '66591901 Removing and installing lower part of rear spoiler (at the sides)'

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