

Service

51/17 ENU WH15

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# WH15 - Checking and Tightening Bleeder Screw for Front Axle Lift System (Workshop Campaign)

Important: CRITICAL WARNING - This campaign includes steps where control unit(s) in the vehicle will be

programmed with the PIWIS Tester. The vehicle voltage must be maintained between 13.5 volts and 14.5 volts during this programming. Failure to maintain this voltage could result in damaged control unit(s). Damage caused by inadequate voltage during programming is not a warrantable defect. The technician must verify the actual vehicle voltage in the PIWIS Tester before starting the campaign and also document

the actual voltage on the repair order.

Model Year: As of 2016 up to 2017

Model Line: 911 R (991), 911 Carrera (991 Gen. II)

Equipment: Front axle lift system (I-no. 474)

Subject: Bleeder screw for front axle lift system

Situation: There is a possibility that the bleeder screw for the front axle lift system was not tightened to

the prescribed tightening torque on the affected vehicles.

This can impair the function of the lift system. The error message "Error lift system" can then be displayed in the instrument cluster when the lift function is activated.

Remedial Action:

- Check the area around the bleeder screw for the front axle lift system for visible traces of hydraulic fluid and tighten bleeder screw.
- Depending on the result of the check, fill the front axle lift system with hydraulic fluid or replace the compressor for the front axle lift system.

Affected Vehicles:

Only the vehicles assigned to the campaign (see also PIWIS Vehicle information). This campaign affects 839 vehicles in North America.

### Required parts and materials

Materials: No parts or materials are required for checking the bleeder screw for the front axle lift system (Scope 1).

Materials required if the **front axle lift system must be filled(Scope 2-3)**:

Part No.	Designation – Use	Qty.
00004330550	<ul><li>⇒ Oil</li><li>– Compressor for front axle lift system</li></ul>	As much as required (max. 160 ml required per vehicle)

NOTE: PARTS WILL NOT BE AUTOMATICALLY ALLOCATED TO YOUR DEALERSHIP. ALL PARTS MUST BE ORDERED VIA A PTEC/PAV.

Parts Info:

Additional parts required if the compressor for the front axle lift system must be replaced(Scope 4-5):

Part No.	Designation - Use	Qty.
9P1412257C	⇒ Level adjustment pump	1 ea.
99907286901	<ul><li>⇒ Hexagon-head bolt</li><li>– Strut</li></ul>	2 ea.
99951004601	<ul><li>⇒ Cheese head bolt</li><li>– Strut</li></ul>	2 ea.
99907344301	<ul><li>⇒ Combination screw</li><li>– Strut</li></ul>	2 ea.
99907509501	<ul><li>⇒ Combination screw</li><li>– Strut</li></ul>	2 ea.

### Required tools

Tools: Tools required for **tightening the bleeder screw**:

- Torque wrench, 6 50 Nm (4.5 37 ftlb.), e.g. V.A.G 1331 Torque wrench, 6-50 Nm (4.5-37 ftlb.)
- Shop light

Additional tools required if the **front axle lift system must be filled or if the compressor must be replaced**:

- Torque wrench, 1.5 3 Nm (1 2 ftlb.), e.g. **VAS 6494 Torque screwdriver**
- Torque wrench, 6 50 Nm (4.5 37 ftlb.), e.g. V.A.G 1331 Torque wrench, 6-50 Nm (4.5-37 ftlb.)
- 9900 PIWIS Tester 3
- Filling adapter for front axle lift system Please order part # 9P1411813 if needed for filling adapter. This can then be re-used.\*

<sup>\*</sup> If part/tool is unavailable, please submit PTEC/STR to request tool rental. For any questions on tool rental, please contact Tool Technical Support Specialist - jeff.haller@porsche.us

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## Checking area around the bleeder screw for front axle lift system for leaks and tightening bleeder screw



#### Information

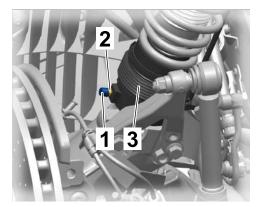
The procedure for checking and tightening the bleeder screw for the front axle lift system, described here on the left-hand side of the vehicle as an example, must always be carried out on the **left and right-hand** side of the vehicle.

Work Procedure: 1 Raise the vehicle on a lifting platform ⇒ Workshop Manual '4X00IN Lifting the vehicle'.

2 Perform a visual inspection to see whether hydraulic fluid has leaked out at the bleeder screws ⇒ Visual inspection of bleeder screw on actuator -2- on both actuators ⇒ Visual inspection of bleeder screw on actuator -3- on the front spring strut.

#### Result of check:

- There are traces of hydraulic fluid visible at the bleeder screws or underneath the actuator: Hydraulic fluid has leaked out. The front axle lift system must be filled. To do this, continue with ⇒ Step 3.
- If no hydraulic fluid has leaked out at the bleeder screws, the front axle lift system does not need to be filled. Continue with ⇒ Step 4.



Visual inspection of bleeder screw on actuator

- 3 Drain and fill hydraulic fluid on the front axle lift system.
  - 3.1 Deactivate front axle lift system using the switch in the vehicle (lower the vehicle).
  - 3.2 Remove wheel *⇒ Workshop Manual '440519 Removing and installing wheel'*.

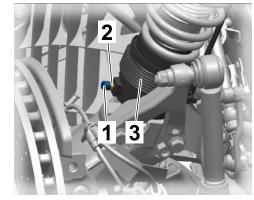


### Information

Before filling the lift system, make sure that the bleeder screws on both actuators are tightened to the prescribed tightening torque of **7 Nm (5 ftlb.)**.

- 3.3 Drain and fill hydraulic fluid for lift system ⇒ Workshop Manual '430117 Draining and filling hydraulic fluid for front axle lift system'.
- 3.4 Carry out a function test on the lift system using the switch in the vehicle.
  - If the front axle **cannot be lifted or lowered**, the **compressor must be replaced**. For instructions, see ⇒ *Workshop Manual '431519 Removing and installing compressor for front axle lift system'*.
  - If the front axle can be lifted and lowered, the function test is OK. Then continue with ⇒ Step 3.5.

- 3.5 Fit wheel ⇒ Workshop Manual '440519 Removing and installing wheel'. Then continue with  $\Rightarrow$  Step 5.
- Tighten bleeder screws for front axle lift system in the front wheel housing.
  - 4.1 Turn the steering fully to the left/right.
  - 4.2 Pull off protection cap ⇒ *Tightening bleeder* screw on actuator -1- on the bleeder screw ⇒ Tightening bleeder screw on actuator -2-.
  - 4.3 Tighten bleeder screw on the actuator ⇒ Tightening bleeder screw on actuator -3using a torque wrench and socket insert a/f 12. Tightening torque 7 Nm (5 ftlb.)



Tightening bleeder screw on actuator

Labor time: 19 TU

- 4.4 Fit protection cap *⇒ Tightening bleeder* screw on actuator -1- on the bleeder screw  $\Rightarrow$  Tightening bleeder screw on actuator -2again.
- Remove the vehicle from the lifting platform.
- Enter the campaign in the Warranty and Maintenance booklet.

### Warranty processing

Scope 1: Checking bleeder screw for front axle lift system for leaks and tightening bleeder screw.

### Working time:

Checking bleeder screw for front axle lift system for leaks and tightening bleeder screw.

Includes: Raising and lowering the vehicle

⇒ Damage Code WH15 066 000 1

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Scope 2: Checking bleeder screw for front axle lift system for leaks and tightening bleeder screw. Also filling hydraulic fluid.

Vehicles without central wheel lock

### Working time:

Checking bleeder screw for front axle lift system for leaks and tightening

bleeder screw, also filling hydraulic fluid.

Includes: Raising and lowering the vehicle

Removing and installing wheel Bleeding the front axle lift system

Required materials:

00004330550 Oil 0.8 ea.

(= approx. 160 ml)

Labor time: 71 TU

⇒ Damage Code WH15 066 000 1

Scope 3: Checking bleeder screw for front axle lift system for leaks and tightening bleeder screw.

Also filling hydraulic fluid.

Vehicles with central wheel lock

### Working time:

Checking bleeder screw for front axle lift system for leaks and tightening

bleeder screw, also filling hydraulic fluid.

Includes: Raising and lowering the vehicle

Removing and installing wheel with central lock

Bleeding the front axle lift system

Required materials:

00004330550 Oil 0.8 ea.

(= approx. 160 ml)

Labor time: 89 TU

⇒ Damage Code WH15 066 000 1

Labor time: 266 TU

Scope 4: Checking bleeder screw for front axle lift system for leaks and tightening bleeder screw. Also replacing compressor for front axle lift system.

Vehicles without central wheel lock

### Working time:

Checking bleeder screw for front axle lift system for leaks and tightening bleeder screw, also replacing compressor for front axle lift system.

Includes: Raising and lowering the vehicle

Removing and installing wheel

Removing and installing cover for front underbody Removing and installing cover for center underbody Removing and installing cover for rear underbody

Removing and installing strut

Removing and installing front-axle support

Draining and filling hydraulic fluid for front axle lift system

Bleeding the front axle lift system

### Parts required:

9P1412257C	Level adjustment pump	1 ea.
99907286901	Hexagon-head bolt	2 ea.
99951004601	Cheese head bolt	2 ea.
99907344301	Combination screw	2 ea.
99907509501	Combination screw	2 ea.

### Required materials:

00004330550 Oil 0.8 ea.

(= approx. 160 ml)

⇒ Damage Code WH15 066 000 2

Labor time: 285 TU

Scope 5: Checking bleeder screw for front axle lift system for leaks and tightening bleeder screw. Also replacing compressor for front axle lift system.

Vehicles with central wheel lock

### Working time:

Checking bleeder screw for front axle lift system for leaks and tightening bleeder screw, also replacing compressor for front axle lift system.

Includes: Raising and lowering the vehicle

Removing and installing wheel with central lock Removing and installing cover for front underbody Removing and installing cover for center underbody Removing and installing cover for rear underbody

Removing and installing strut

Removing and installing front-axle support

Draining and filling hydraulic fluid for front axle lift system

Bleeding the front axle lift system

### Parts required:

9P1412257C	Level adjustment pump	1 ea.
99907286901	Hexagon-head bolt	2 ea.
99951004601	Cheese head bolt	2 ea.
99907344301	Combination screw	2 ea.
99907509501	Combination screw	2 ea.

#### Required materials:

00004330550 Oil 0.8 ea.

(= approx. 160 ml)

⇒ Damage Code WH15 066 000 2

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