

**WLA8 - Checking Connecting Shaft for Front-Wheel Drive and Replacing it if Necessary (Workshop Campaign)**

Vehicle Type: **Panamera 4 (971)/Panamera 4 Executive (971)/Panamera 4 Sport Turismo (971)  
Panamera 4S (971)/Panamera 4S Executive (971)/Panamera 4S Sport Turismo (971)  
Panamera 4 E-Hybrid (971)/Panamera 4 E-Hybrid Executive (971)/Panamera 4 E-Hybrid Sport Turismo**

Model Year: **As of 2017 up to 2018**

Equipment: All-wheel drive

Subject: **Connecting shaft for front-axle final drive**

Information: **There is a possibility that the splines of the connecting shaft for the front-axle final drive were not greased according to specifications on the affected vehicles.**

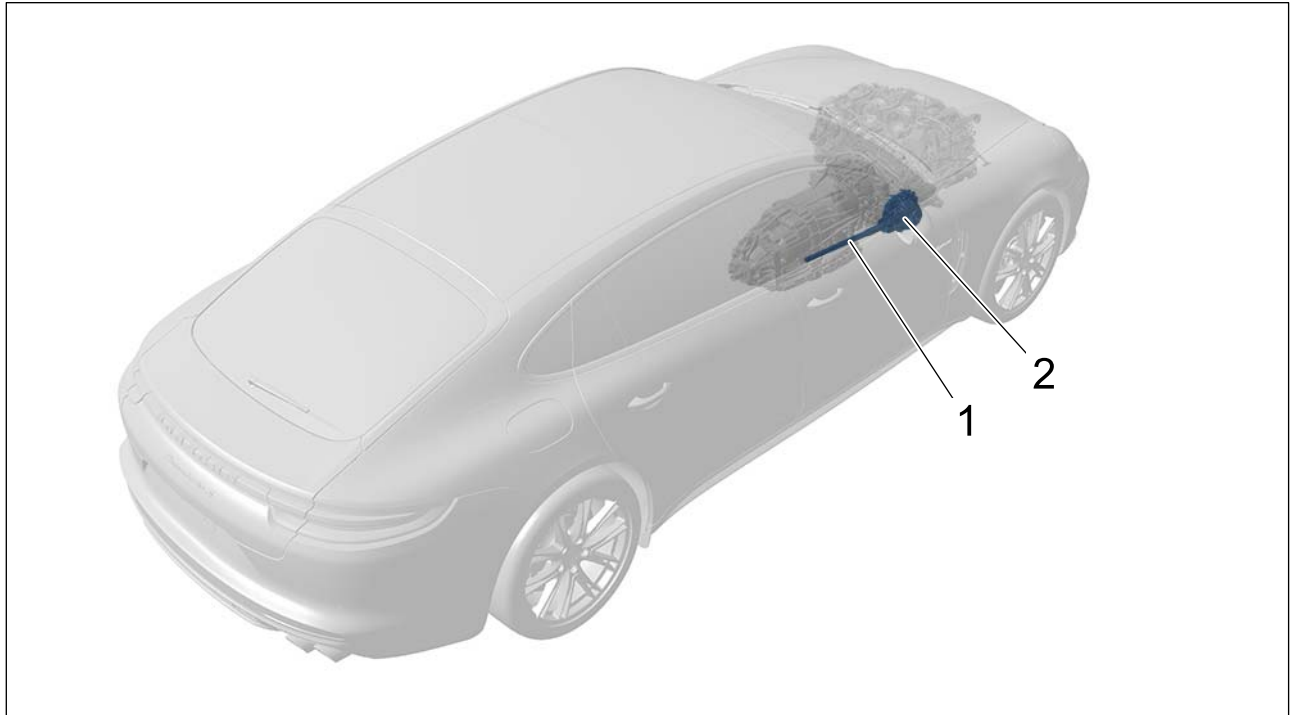
If this is the case, the area on and around the splines can become corroded over the service life of the vehicle and as a result, the splines will wear. The customer may hear noises.

Remedial Action:

- Checking connecting shaft for front-axle final drive
- Replacing the connecting shaft and front-axle final drive if necessary, depending on the result of the check

Affected Vehicles: Only vehicles assigned to the campaign (see also PCSS Vehicle Information). There are 2,153 vehicles affected by this campaign.

Installation  
Position:



*Overview of installation position*

- 1 – Connecting shaft (**check and replace if necessary**)
- 2 – Front-axle final drive (**replace if necessary**)

### Parts required

PartS Info: **No parts are required** for **checking** the connecting shaft for the front-axle final drive.

Parts required for **replacing** the connecting shaft for the front-axle final drive, **depending on the result of the check**:

Part No.	Designation – Use	Qty.
9A730720300	⇒ Connecting shaft – Front-wheel drive	1 ea.
9A7409505 X	⇒ Front-axle final drive – Front-wheel drive	1 ea.
N 0123741	⇒ Circlip – Front-axle final drive	1 ea.

WHT005157	⇒ O-ring – Front-axle final drive	1 ea.
9A740763500	⇒ Circlip – Left and right drive shaft	2 ea.
298407475	⇒ Protective ring – Left and right drive shaft	2 ea.
971407297	⇒ Circlip – Left drive shaft	1 ea.
N 91244301	⇒ Hexagon flange bolt, M12 x 1.5 x 90 – Front-axle carrier to body front – strut to body	8 ea.
N 91260401	⇒ Hexagon flange bolt, M10 x 45 – Front-axle carrier to body	2 ea.
N 10714101	⇒ Hexagon flange bolt, M10 x 25 – Strut to body	2 ea.
WHT004955A	⇒ Internal hexagon round cheese head bolt, M8 x 30 – Steering column (center) to power-steering gear	1 ea.
N 10687201	⇒ Cheese head bolt, M10 x 45 – Engine carrier to engine – Engine mount to engine carrier	12 ea.
PAF911489	⇒ Hexagon flange bolt, M12 x 1.5 x 60 – Engine mount to front-axle carrier	2 ea.
N 10664503	⇒ Hexagon flange bolt, M8 x 45 – Side A-strut to body	2 ea.
N 10628301	⇒ Hexagon flange bolt, M12 x 1.5 x 90 – Spring strut to trailing arm	2 ea.
PAF104029	⇒ Hexagon collar nut, M12 x 1.5 – Spring strut to trailing arm	2 ea.
N 10261311	⇒ Hexagon nut, M10 – Spring strut to body – Dome strut to body	8 ea.
N 10272302	⇒ Hexagon nut, M10 – Connecting link to wheel bearing housing	2 ea.
WHT005819	⇒ Hexagon collar nut, M12 x 1.5 – Upper trailing arm to wheel bearing housing	2 ea.
WHT005633	⇒ Double-hex collar nut, M14 x 1.5 – Lower trailing arm to wheel bearing housing	2 ea.

9A700499500	⇒ Hexagon nut, M12 x 1.5 – Tie-rod ball to wheel bearing housing	2 ea.
N 90666003	⇒ O-ring, 11.5 x 3 – ATF line	2 ea.
WHT008539	⇒ Hexagon flange bolt, M10 x 80 – Torque support – Dome strut to body	3 ea.
N 10625901	⇒ Cheese head bolt, M10 x 70 – Torque support	1 ea.
N 90440003	⇒ Hexagon-head bolt, M8 x 35 – A-strut to body	2 ea.
N 10082913	⇒ Hexagon-head bolt, M6 x 16 – Cover plate to wheel bearing housing	10 ea.
N 10456004	⇒ Internal hexagon round countersunk screw, M6 x 12 – Brake disc to wheel hub	4 ea.

**Additional parts required for vehicles with 18" disc brakes (I-no. 1LN, 1ZT, 1LD, 1LU):**

WHT004571	⇒ Collared cheese head bolt, M14 x 1.5 x 115 – 18" brake calliper	4 ea.
9A769826900	⇒ Retainer spring for brake pad – Brake calliper	2 ea.

or

**Additional parts required for vehicles with 19" or 20" disc brakes (I-no. 1LM, 1LP, 1LK, 1LL, 1LC, 1LI, 1LJ, 1LW):**

WHT004572	⇒ Collared cheese head bolt, M14 x 1.5 x 135 – 19", 20" brake calliper	4 ea.
9A769826900	⇒ Retainer spring for brake pad – Brake calliper	2 ea.

or

**Additional parts required for vehicles with PCCB disc brakes (I-no. 1LV, 1ZQ):**

WHT004572	⇒ Collared cheese head bolt, M14 x 1.5 x 135 – PCCB brake calliper	4 ea.
971698231A	⇒ Retainer spring for brake pad – PCCB brake calliper	2 ea.

**Additional parts required** for vehicles **without** PDCC:

N 10793603	⇒ Hexagon flange bolt, M12 x 1.5 x 60 – Anti-roll bar to connecting link (conventional)	2 ea.
N 0150818	⇒ Hexagon collar nut, M12 x 1.5 – Anti-roll bar to connecting link (conventional)	2 ea.

or

**Additional parts required** for vehicles with **PDCC (I-no. 1P7)**:

N 10702302	⇒ Hexagon flange bolt, M12 x 1.5 x 50 – Anti-roll bar to connecting link (PDCC)	2 ea.
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Materials: **No materials are required** for **checking** the connecting shaft for the front-axle final drive.

**Materials required** for **replacing** the connecting shaft for the front-axle final drive, **depending on the result of the check** (usually already available at the Porsche dealer):

Part No.	Designation – Use	Qty.
00004330586	⇒ Anti Seize AS040P mounting paste, 10 g/ 3.5 oz applicator gun – Connecting shaft splines	1 ea.
00004330534	⇒ Transmission oil, 1-liter/ 33.8 fl. oz. container – Front-axle final drive	As much as required (approx. 0.5 liter/ 16.9 fl. oz. required per vehicle)
00004321044	⇒ Pentosin FFL-8, 1-liter/ 33.8 fl. oz. container – ATF for transmission	As much as required (approx. 0.2 liter/ 6.7 fl. oz. required per vehicle)
00004330516	⇒ Coolant additive, 20-liter/ 676.3 fl. oz. container – Cooling system	As much as required (approx. 2 liter/ 67.6 fl. oz required per vehicle)
00004330508	⇒ Mounting paste, 100 g/ 3.5 oz. tube – Inner drive shaft splines	As much as required (approx. 10 grams/ 0.35 oz. required per vehicle)

**Required tools**

Tools: Tools required for **checking the connecting shaft**:

- Torque screwdriver, 1.5-3 Nm (1-2 ftlb.), e.g. **VAS 6494 Torque screwdriver, 1.5-3.0 Nm (1-2 ftlb.)**

- Flashlight

**Additional** tools required for **replacing** the connecting shaft:

- 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, 6-50 Nm (4.5-37 ftlb.), e.g. **VAG 1331A Torque wrench, 6-50 Nm (4.5-37 ftlb.)**
- Torque wrench, 20-100 Nm (15-74 ftlb.), e.g. **VAS 5820 Torque wrench, 20-100 Nm (15-74 ftlb.)**
- Torque/torque angle wrench, 20-400 Nm (15-296 ftlb.), e.g. **VAS 6942 Digital torque wrench, 20-400 Nm (15-296 ftlb.)**
- Torque wrench, 40-200 Nm (30-148 ftlb.), e.g. **VAG 1332 Torque wrench, 40-200 Nm (30-148 ftlb.)**
- **VAS 6832 Master Gear unit elevating platform**
- **VAS 6832/7 Assembly fixture - Panamera G2**
- **T40093/50 - Base**
- **T40093/3P - Support**
- **T40091/50-51 - Support**
- **T40091/1 - Pipe**
- **T40091/3 - Joiner**
- **10-222A/2 - Additional hook**
- **3033 - Lifting tackle**
- **T10439 - Assembly pin**
- **9472 - Brake piston resetting fixture**
- **9229/1 - Puller hook**
- **VAS 6926 Puller set**
- **T10187 - Press-out tool**
- **VW552 - Spring compressor**
- **VAS 6931 Transmission and Engine Jack**
- **9799 - Impact puller**
- **T40178B - Oil gauge tester**
- **VAS 6262A Adapter for Oil Filling**
- **VAS6262/2 Adapter for Filling ATF Oil**
- **VAS 741 039 Manoeuvring aid set**
- **9825/3 - Adapter**
- **9825/1 - Connecting line**
- **VAS 6629A Nitrogen Filler Set for Air-Spring Struts**
- **9900 - PIWIS Tester 3**
- **VAS 5908 Battery Charger, 90 A**
- **VAS 6826 Steering wheel balance**
- **VAS 6918 Quick-Clamping Unit**
- **9229/1 - Puller hook**
- **T10188 - Open-end spanner insert**
- **VAS 6883 Insulated Tool Set**
- **VAS 6563 Manual metering pumps, Porsche set**
- **VAS 6096/2 Vacuum pump**
- **9696 - Filling device**

- VAG 1274B Tester for Cooling System
- VAS 6562 Porsche Adapter Set for Cooling System Tester
- VAS 6890 Spring Band Clamp Pliers

**Additional** tools required for vehicles with hybrid drive if the **high-voltage system cannot be isolated automatically using the PIWIS Tester**:

- VAS 6558/9-6 High-voltage test adapter HVA 280
- T40262 - Locking cap
- 9703 - Flexible screwdriver

### Checking connecting shaft for front-axle final drive

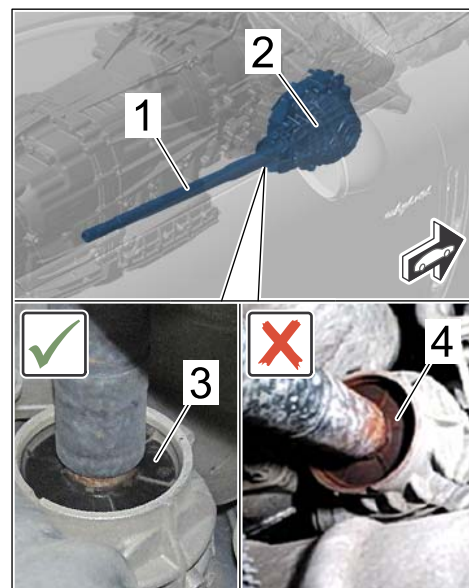
- Work Procedure:
- 1 Raise the vehicle using a lifting platform ⇒ *Workshop Manual '4X00IN Lifting the vehicle'*.
  - 2 Remove front underbody cover ⇒ *Workshop Manual '519219 Removing and installing cover for front underbody'*.
  - 3 Remove center underbody cover ⇒ *Workshop Manual '519319 Removing and installing cover for centre underbody'*.
  - 4 **Visually inspect the connecting shaft** on and around the splines for the front-axle final drive to see whether **there is any corrosion residue**.



#### Information

**Limescale deposits or dirt** that gets into the connecting shaft area as a result of driving the vehicle **are not a defect**. The connecting shaft and front-axle final drive must only be replaced if there are **obvious signs** of corrosion (red rust).

- There is **no corrosion dust** on the dust boot on the front-axle final drive to the connecting shaft: The connecting shaft for the front-axle final drive is greased according to specifications and **does not have to be replaced**. Continue with **Step 5**.
- If **there is corrosion dust** on the **dust boot** on the front-axle final drive, the connecting shaft was not greased according to specifications. The **connecting shaft** and the **front-axle final drive** must be **replaced**. To do this, continue with ⇒ *Technical Information '519319 Replacing connecting shaft and front-axle final drive'*.



*Dust boot and connecting shaft for front-axle final drive*

- 5 Install center underbody cover ⇒ *Workshop Manual '519319 Removing and installing cover for centre underbody'*.
- 6 Install front underbody cover ⇒ *Workshop Manual '519219 Removing and installing cover for front underbody'*.
- 7 Lower the vehicle and remove it from the lifting platform.
- 8 Enter the campaign in the Warranty and Maintenance booklet.

**– End of action required –**

For warranty processing, see **Scope 1** under ⇒ *Technical Information '519219 Warranty processing'*.

### Replacing connecting shaft and front-axle final drive

Work Procedure:



#### Information

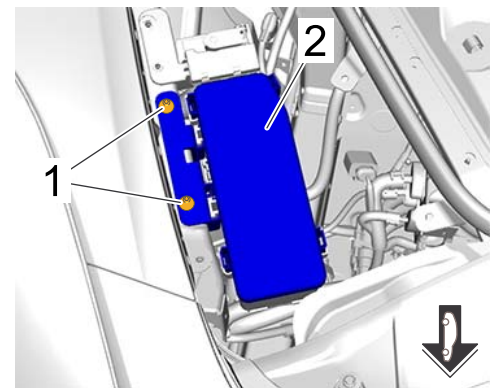
Digital photos of the relevant connecting shafts and the relevant front-axle final drive are required for analysing the damage and for vehicle differentiation. Please add these photos to the relevant PQIS job line/ warranty claim. Lack of clear documentation may lead to warranty claim chargeback or reduction.

- 1 Document the damage on the connecting shaft and front-axle final drive **while they are installed** on the respective vehicle.  
To do this, take digital photos that clearly show the signs of corrosion.  
Also take digital photos of the connecting shaft and front-axle final drive after removing them (see Step 13).
- 2 **Vehicles with hybrid drive:** Observe general warning notes for working on the high-voltage vehicle electrical system ⇒ *Workshop Manual '2X00IN General warning notes for working on the high-voltage electrical system'*.
- 3 **Vehicles with hybrid drive:** Isolate the high-voltage system from the power supply and complete the relevant documentation ⇒ *Workshop Manual '2X00IN Isolating high-voltage system from power supply/Starting high-voltage system'*.
- 4 **Only for vehicles with PDCC:** Disconnect 48 V system ⇒ *Workshop Manual '270703 Disconnecting and starting 48 V system'*.
- 5 Disconnect ground strap on the battery.  
For instructions, see ⇒ *Workshop Manual '270619 Removing and installing battery'*.
- 6 Drain coolant ⇒ *Workshop Manual '193817 Draining and filling coolant (includes bleeding)'*.
- 7 Remove front wheels ⇒ *Workshop Manual '440519 Removing and installing wheel'*.

- 8 Remove front wheel housing liners on both sides of the vehicle ⇒ *Workshop Manual '505619 Removing and installing front wheel housing liner'*.
- 9 Remove front-axle support ⇒ *Workshop Manual '400819 Removing and installing front-axle support'*.
- 10 Remove spring struts with front drive shafts ⇒ *Workshop Manual '404119 Removing and installing front drive shaft'*.
- 11 Support the engine on the body.
  - 11.1 Remove engine cover ⇒ *Workshop Manual '108319 Removing and installing engine cover (design cover)'*.
  - 11.2 Remove front trim panel at the left and right ⇒ *Workshop Manual '700219 Removing and installing front trim panel (engine compartment)'*.
  - 11.3 If installed: Remove torque support ⇒ *Workshop Manual '103719 Removing and installing torque support'*.

11.4 Loosen fuse box in the engine compartment. To do this, unscrew the screws ⇒ *Fuse box in engine compartment -1-* and move the fuse box ⇒ *Fuse box in engine compartment -2-* aside.

11.5 Loosen moulded hoses at the bottom of the charge-air coolers on both sides of the vehicle. For instructions, see ⇒ *Workshop Manual '214319 Removing and installing charge-air cooler'*.



Fuse box in engine compartment



**Information**

Further work may be required, depending on the engine type of the respective vehicle.

11.6 Support the engine on the body ⇒ *Workshop Manual '1001IN Supporting engine on the body (engine safety device)'*.

**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.

The bores in the front-axle carrier for the fastening screws are designed as slots for this purpose.

To minimize the work involved in subsequently performing suspension alignment and adjusting the vehicle, mark the **position of the fastening screws** ⇒ *Marking fastening screws on front-axle carrier -2-* in relation to the front-axle carrier ⇒ *Marking fastening screws on front-axle carrier -1-* before loosening them using a suitable pen or marker.

- 12 Remove front-axle carrier ⇒ *Workshop Manual '400619 Removing and installing front-axle carrier'*.

**Information**

Digital photos of the relevant connecting shafts and the relevant front-axle final drive are required for analysing the damage and for vehicle differentiation. Please add these photos to the relevant PQIS job line/warranty claim. Lack of clear documentation may lead to warranty claim chargeback or reduction.

- 13 Document the damage on the connecting shaft and front-axle final drive **after removing them**. To do this, take digital photos that clearly show the signs of corrosion on the respective components.
- 14 Remove front-axle final drive and connecting shaft ⇒ *Workshop Manual '398819 Removing and installing all-wheel final drive'*.

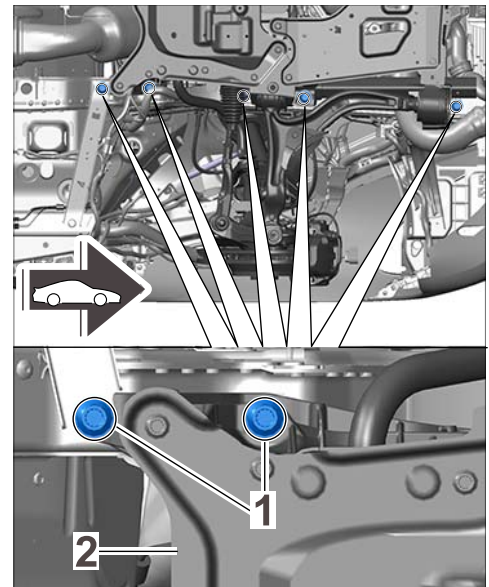
- 15 Install new front-axle final drive and connecting shaft.  
**Make sure to grease the splines of the connecting shaft for the front-axle final drive with Weicon Anti Seize AS040P mounting paste (Part No. 00004330586).**

For instructions, see ⇒ *Workshop Manual '398819 Removing and installing all-wheel final drive'*.

**Information**

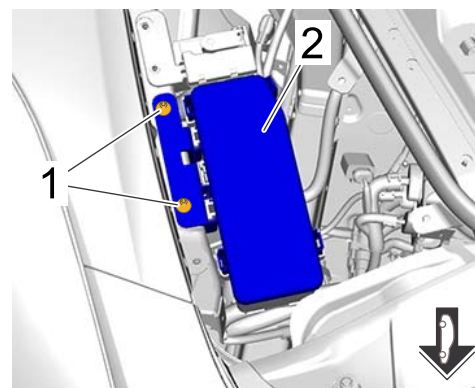
First secure the front-axle carrier **to the body using the old fastening screws** and after you have performed suspension alignment and adjusted the vehicle, **replace all the relevant fastening screws one after the other with new screws**.

- 16 Install front-axle carrier ⇒ *Workshop Manual '400619 Removing and installing front-axle carrier'*.



*Marking fastening screws  
on front-axle carrier*

- 17 Remove engine support.
  - 17.1 Remove support ⇒ *Workshop Manual '1001IN Supporting engine on the body (engine safety device)'*.
  - 17.2 Secure moulded hoses at the bottom of the charge-air coolers on both sides of the vehicle. For instructions, see ⇒ *Workshop Manual '214319 Removing and installing charge-air cooler'*.
  - 17.3 Secure fuse box in the engine compartment. To do this, move the fuse box ⇒ *Fuse box in engine compartment -2-* back to its original position and tighten the screws ⇒ *Fuse box in engine compartment -1-*.
  - 17.4 If installed: Install torque support ⇒ *Workshop Manual '103719 Removing and installing torque support'*.
  - 17.5 Install front trim panel at the left and right ⇒ *Workshop Manual '700219 Removing and installing front trim panel (engine compartment)'*.
  - 17.6 Install engine cover ⇒ *Workshop Manual '108319 Removing and installing engine cover (design cover)'*.



Fuse box in engine compartment



**Information**

Further work may be required, depending on the engine type of the respective vehicle.

- 18 Install spring struts with front drive shafts ⇒ *Workshop Manual '404119 Removing and installing front drive shaft'*.
- 19 Check the oil level in the front-axle final drive and top it up ⇒ *Workshop Manual '399035 Checking and topping up oil for all-wheel final drive'*.
- 20 Install front-axle support ⇒ *Workshop Manual '400819 Removing and installing front-axle support'*.
- 21 Install front wheel housing liners on both sides of the vehicle ⇒ *Workshop Manual '505619 Removing and installing front wheel housing liner'*.
- 22 Install front wheels ⇒ *Workshop Manual '440519 Removing and installing wheel'*.
- 23 Fill and bleed the cooling system ⇒ *Workshop Manual '193817 Draining and filling coolant (includes bleeding)'*.

- 24 Connect battery ground strap.  
For instructions, see ⇒ *Workshop Manual '2X00IN Work instructions after disconnecting the battery'*.
- 25 **Only for vehicles with PDCC:** Start 48 V vehicle electrical system ⇒ *Workshop Manual '270703 Disconnecting and starting 48 V system'*.
- 26 **Vehicles with hybrid drive:** Start the high-voltage system and complete the relevant documentation ⇒ *Workshop Manual '2X00IN Isolating high-voltage system from power supply/Starting high-voltage system'*.
- 27 Check and top up ATF ⇒ *Workshop Manual '370235 Checking and topping up ATF'*.
- 28 Lower the vehicle and remove it from the lifting platform ⇒ *Workshop Manual '4X00IN Lifting the vehicle'*.
- 29 Perform suspension alignment and adjust the vehicle ⇒ *Workshop Manual '449503 Suspension alignment complete'*.
- 30 **Unscrew previously re-used fastening screws** on the front-axle carrier **individually** and **one after the other** and replace them with **new fastening screws**.  
For instructions, see ⇒ *Workshop Manual '400619 Removing and installing front-axle carrier'*.
- 31 Enter the campaign in the Warranty and Maintenance booklet.  
**– End of action required –**  
For warranty processing, see **Scopes 2 – 4** under ⇒ *Technical Information '400619 Warranty processing'*.

### Warranty processing

Scope 1: **Checking connecting shaft for front-axle final drive – No parts** have to be replaced.

**Relevant for all vehicles.**

#### Working time:

Checking connecting shaft for front-axle final drive

Labor time: **69 TU**

Includes:    Removing and installing cover for front underbody  
                 Removing and installing cover for center underbody

⇒ **Damage Code WLA8 066 000 1**

Scope 2: **Checking connecting shaft for front-axle final drive – Replacing connecting shaft and front-axle final drive**

**Only relevant** for vehicles with the following **version/equipment**:

- Vehicles **without** hybrid drive
- Vehicles **without** PDCC

**Working time:**

Checking connecting shaft for front-axle final drive – Replacing connecting shaft and front-axle final drive

Labor time: **1126 TU**

- Includes:
- Supporting engine on the body and securing engine
  - Disconnecting and connecting the battery
  - Removing and installing wheel
  - Removing and installing front wheel housing liners at the left and right
  - Removing and installing front-axle support
  - Removing and installing spring struts with front drive shafts
  - Draining and filling coolant (includes bleeding)
  - Removing and installing front-axle carrier
  - Removing and installing all-wheel final drive
  - Checking oil level in front-axle final drive and topping up oil
  - Checking and topping up ATF
  - Performing suspension alignment and adjusting the vehicle
  - Calibrating assistance systems

**Parts required:**

9A730720300	Connecting shaft	1 ea.
9A7409505 X	Front-axle final drive	1 ea.
N 0123741	Circlip	1 ea.
WHT005157	O-ring	1 ea.
9A740763500	Circlip	2 ea.
298407475	Protective ring	2 ea.
971407297	Circlip, 23.5 x 1.6	1 ea.
N 91244301	Hex flange bolt, M12 x 1.5 x 90	8 ea.
N 91260401	Hex flange bolt, M10 x 45	2 ea.
N 10714101	Hexagon flange bolt, M10 x 25	2 ea.
WHT004955A	Hex flange bolt, M8 x 30	1 ea.
N 10687201	Cheese head bolt, M10 x 45	12 ea.
PAF911489	Hex flange bolt, M12 x 1.5 x 60	2 ea.
N 10664503	Hex flange bolt, M8 x 45	2 ea.

N 90666003	O-ring, 11.5 x 3	2 ea.
N 10628301	Hex flange bolt, M12 x 1.5 x 90	2 ea.
PAF104029	Hexagon collar nut, M12 x 1.5	2 ea.
N 10261311	Hexagon nut, M10	6 ea.
N 10272302	Hexagon nut, M10	2 ea.
WHT005819	Hexagon collar nut, M12 x 1.5	2 ea.
WHT005633	Double-hex collar nut, M14 x 1.5	2 ea.
9A700499500	Hexagon nut, M12 x 1.5	2 ea.
WHT008539	Hex flange bolt, M10 x 80	3 ea.
N 10625901	Cheese head bolt, M10 x 70	1 ea.
N 90440003	Hexagon-head bolt, M8 x 35	2 ea.
N 10082913	Internal hexagon round-head bolt, M6 x 16	10 ea.
N 10456004	Internal hexagon round-head bolt, M6 x 12	4 ea.
N 10793603	Hex flange bolt, M12 x 1.5 x 60	2 ea.
N 0150818	Hexagon collar nut, M12 x 1.5	2 ea.

**Additional parts required for vehicles with 18" disc brakes:**

WHT004571	Collared cheese head bolt, M14 x 1.5 x 115	4 ea.
9A769826900	Retainer spring for brake pad	2 ea.

**or**

**Additional parts required for vehicles with 19" or 20" disc brakes:**

WHT004572	Collared cheese head bolt, M14 x 1.5 x 135	4 ea.
9A769826900	Retainer spring for brake pad	2 ea.

**or**

**Additional parts required for vehicles with PCCB disc brakes:**

WHT004572	Collared cheese head bolt, M14 x 1.5 x 135	4 ea.
971698231A	Retainer spring for brake pad (PCCB)	2 ea.

**Materials required:**

00004330586	Anti Seize AS 040P mounting paste, 10 g/ 3.5 oz applicator gun	1 ea.
00004330534	Transmission oil, 1-liter/ 33.8 fl. oz. container	0.5 ea. (= approx. 0.5 liter/ 16.9 fl. oz.)
00004321044	Pentosin FFL-8, 1-liter/ 33.8 fl. oz. container	0.2 ea. (= approx. 0.2 liter/ 6.7 fl. oz.)
00004330508	Mounting paste for drive shaft, 100 g/ 3.5 oz tube	0.1 ea. (= approx. 10 g/ 0.35 oz.)
00004330516	Coolant additive, 20-liter/ 676.3 fl. oz. container	0.1 ea. (= approx. 2 liter/ 67.6 fl. oz.)

⇒ **Damage Code WLA8 066 000 2**

Scope 3:

**Checking connecting shaft for front-axle final drive – Replacing connecting shaft and front-axle final drive**

**Only relevant** for vehicles with the following **version/equipment**:

- Vehicles **without** hybrid drive
- Vehicles **with PDCC (I-no. 1P7)**

**Working time:**

Checking connecting shaft for front-axle final drive – Replacing connecting shaft and front-axle final drive

Labor time: **1151 TU**

- Includes:
- Supporting engine on the body
  - Disconnecting 48 V system/ starting 48 V system
  - Disconnecting and connecting the battery
  - Removing and installing wheel
  - Removing and installing front wheel housing liners at the left and right
  - Removing and installing front-axle support
  - Removing and installing spring struts with front drive shafts
  - Draining and filling the coolant system (includes bleeding)
  - Removing and installing front-axle carrier
  - Removing and installing all-wheel final drive
  - Checking oil level in front-axle final drive and topping up oil
  - Checking and topping up ATF
  - Performing suspension alignment and adjusting the vehicle
  - Calibrating assistance systems

**Parts required:**

9A730720300	Connecting shaft	1 ea.
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9A7409505 X	Front-axle final drive	1 ea.
N 0123741	Circlip	1 ea.
WHT005157	O-ring	1 ea.
9A740763500	Circlip	2 ea.
298407475	Protective ring	2 ea.
971407297	Circlip, 23.5 x 1.6	1 ea.
N 91244301	Hexagon flange bolt, M12 x 1.5 x 90	8 ea.
N 91260401	Hex flange bolt, M10 x 45	2 ea.
N 10714101	Hexagon flange bolt, M10 x 25	2 ea.
WHT004955A	Hex flange bolt, M8 x 30	1 ea.
N 10687201	Cheese head bolt, M10 x 45	12 ea.
PAF911489	Hexagon flange bolt, M12 x 1.5 x 60	2 ea.
N 10664503	Hex flange bolt, M8 x 45	2 ea.
N 90666003	O-ring, 11.5 x 3	2 ea.
N 10628301	Hexagon flange bolt, M12 x 1.5 x 90	2 ea.
PAF104029	Hexagon collar nut, M12 x 1.5	2 ea.
N 10261311	Hexagon nut, M10	6 ea.
N 10272302	Hexagon nut, M10	2 ea.
WHT005819	Hexagon collar nut, M12 x 1.5	2 ea.
WHT005633	Double-hex collar nut, M14 x 1.5	2 ea.
9A700499500	Hexagon nut, M12 x 1.5	2 ea.
WHT008539	Hex flange bolt, M10 x 80	3 ea.
N 10625901	Cheese head bolt, M10 x 70	1 ea.
N 90440003	Hexagon-head bolt, M8 x 35	2 ea.
N 10082913	Internal hexagon round-head bolt, M6 x 16	10 ea.
N 10456004	Internal hexagon round-head bolt, M6 x 12	4 ea.
N 10702302	Hexagon flange bolt, M12 x 1.5 x 50	2 ea.

**Additional parts required for vehicles with 18" disc brakes:**

WHT004571	Collared cheese head bolt, M14 x 1.5 x 115	4 ea.
9A769826900	Retainer spring for brake pad	2 ea.

**or**

**Additional parts required** for vehicles with **PCCB disc brakes**:

WHT004572	Collared cheese head bolt, M14 x 1.5 x 135	4 ea.
971698231A	Retainer spring for brake pad - PCCB	2 ea.

**Materials required:**

00004330586	Anti Seize AS 040P mounting paste, 10 g/ 3.5 oz applicator gun	1 ea.
00004330534	Transmission oil, 1-liter/ 33.8 fl. oz. container	0.5 ea. (= approx. 0.5 liter/ 16.9 fl. oz.)
00004321044	Pentosin FFL-8, 1-liter/ 33.8 fl. oz. container	0.2 ea. (= approx. 0.2 liter/ 6.7 fl. oz.)
00004330508	Mounting paste for drive shaft, 100 g/ 3.5 oz. tube	0.1 ea. (= approx. 10 g/ 0.35 oz.)
00004330516	Coolant additive, 20-liter/ 676.3 fl. oz. container	0.1 ea. (= approx. 2 liter/ 67.6 fl. oz.)

⇒ **Damage Code WLA8 066 000 2**

Scope 4:

**Checking connecting shaft for front-axle final drive – Replacing connecting shaft and front-axle final drive**

**Only relevant** for vehicles with the following **version/equipment**:

- Vehicles **with hybrid drive**
- Vehicles **without** PDCC

**Working time:**

Checking connecting shaft for front-axle final drive – Replacing connecting shaft and front-axle final drive	Labor time: <b>1228 TU</b>
Includes:	
Supporting and securing engine on the body	
Isolating high-voltage system from power supply/Starting high-voltage system	
Disconnecting and connecting the battery	
Removing and installing wheel	
Removing and installing front wheel housing liners at the left and right	
Removing and installing front-axle support	
Removing and installing spring struts with front drive shafts	
Draining and filling the coolant system (includes bleeding)	
Removing and installing front-axle carrier	
Removing and installing all-wheel final drive	
Checking oil level in front-axle final drive and topping up oil	
Checking and topping up ATF	

Performing suspension alignment and adjusting the vehicle  
Calibrating assistance systems

**Parts required:**

9A730720300	Connecting shaft	1 ea.
9A7409505 X	Front-axle final drive	1 ea.
N 0123741	Circlip	1 ea.
WHT005157	O-ring	1 ea.
9A740763500	Circlip	2 ea.
298407475	Protective ring	2 ea.
971407297	Circlip, 23.5 x 1.6	1 ea.
N 91244301	Hexagon flange bolt, M12 x 1.5 x 90	8 ea.
N 91260401	Hex flange bolt, M10 x 45	2 ea.
N 10714101	Hexagon flange bolt, M10 x 25	2 ea.
WHT004955A	Hex flange bolt, M8 x 30	1 ea.
N 10687201	Cheese head bolt, M10 x 45	12 ea.
PAF911489	Hexagon flange bolt, M12 x 1.5 x 60	2 ea.
N 10664503	Hex flange bolt, M8 x 45	2 ea.
N 90666003	O-ring, 11.5 x 3	2 ea.
N 10628301	Hexagon flange bolt, M12 x 1.5 x 90	2 ea.
PAF104029	Hexagon collar nut, M12 x 1.5	2 ea.
N 10261311	Hexagon nut, M10	6 ea.
N 10272302	Hexagon nut, M10	2 ea.
WHT005819	Hexagon collar nut, M12 x 1.5	2 ea.
WHT005633	Double-hex collar nut, M14 x 1.5	2 ea.
9A700499500	Hexagon nut, M12 x 1.5	2 ea.
WHT008539	Hex flange bolt, M10 x 80	3 ea.
N 10625901	Cheese head bolt, M10 x 70	1 ea.
N 90440003	Hexagon-head bolt, M8 x 35	2 ea.
N 10082913	Internal hexagon round-head bolt, M6 x 16	10 ea.
N 10456004	Internal hexagon round-head bolt, M6 x 12	4 ea.
N 10793603	Hexagon flange bolt, M12 x 1.5 x 60	2 ea.
N 0150818	Hexagon collar nut, M12 x 1.5	2 ea.

**Additional parts required for vehicles with 19" or 20" disc brakes:**

WHT004572	Collared cheese head bolt, M14 x 1.5 x 135	4 ea.
9A769826900	Retainer spring for brake pad	2 ea.

**or**

**Additional parts required for vehicles with PCCB disc brakes:**

WHT004572	Collared cheese head bolt, M14 x 1.5 x 135	4 ea.
971698231A	Retainer spring for brake pad - PCCB	2 ea.

**Materials required:**

00004330586	Anti Seize AS 040P mounting paste, 10 g applicator gun	1 ea.
00004330534	Transmission oil, 1-liter/ 33.8 fl. oz. container	0.5 ea. (= approx. 0.5 liter/ 16.9 fl. oz.)
00004321044	Pentosin FFL-8, 1-liter/ 33.8 fl. oz. container	0.2 ea. (= approx. 0.2 liter/ 6.7 fl. oz.)
00004330508	Mounting paste for drive shaft, 100 g/ 3.5 oz. tube	0.1 ea. (= approx. 10 g/ 0.35 oz.)
00004330516	Coolant additive, 20-liter/ 676.3 fl. oz. container	0.1 ea. (= approx. 2 liter/ 67.6 fl. oz.)

⇒ **Damage Code WLA8 066 000 2**

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