

Technical Information

Service

188/23_{ENU} 3988

3

Leaks on the Flange Shaft of the Front Right All-Wheel Drive to the Front-Axle Final Drive(188/23)

Vehicle Type: **Panamera 4 (971) / Panamera 4S (971) / Panamera GTS (971) / Panamera Turbo S (971)**

Model Year: **As of 2022 up to 2023**

Concerns: **Right drive shaft**

Concerns: **Customers complain about oil leaks in the front area of the vehicle. The leakage can be clearly determined on the sealing ring for the flange shaft on the right of the final drive of the all-wheel drive.**

Cause: Damage to the right sealing ring for flange shaft on all-wheel drive may occur due to faulty coating of the transmission-side pin of the right front drive shaft.

Action: In the event of a leak on the sealing ring for flange shaft all wheel drive on the front right, check the flange shaft and replace it if necessary.

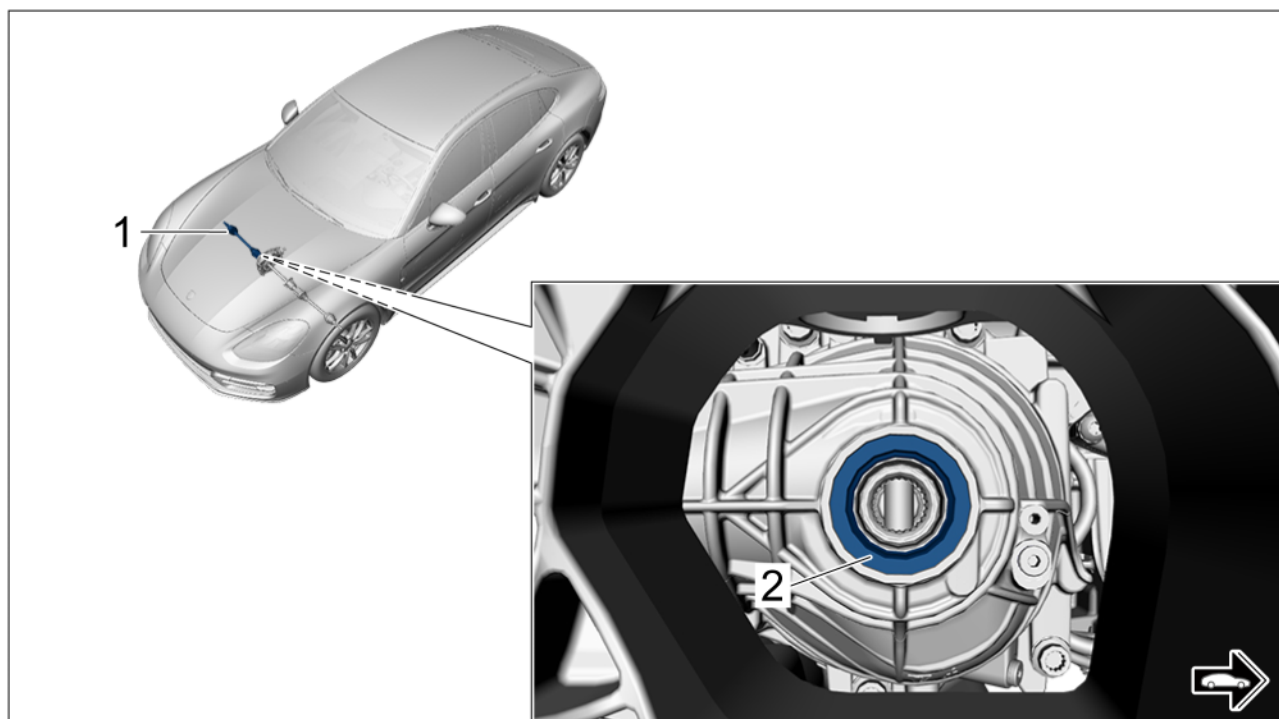


Information

This default value only applies to vehicles from the production period specified below.

Installation

Position:



Installation position for right drive shaft and sealing ring for right flange shaft all-wheel drive

- 1** – Right drive shaft
2 – Sealing ring for all-wheel drive flange shaft on the right

Required parts

Parts Info:

Part No.	Designation – Location	Number
9A740939910	⇒ Shaft seal – All-wheel drive	1 piece
971407271x*	⇒ Drive shaft – front right	1 piece
N 10628301	⇒ Hexagon-head bolt, M12 x 90 – Spring strut to lower trailing arm	1 piece
PAF104029	⇒ Hexagon collar nut, M12 x 1.5 – Spring strut to lower trailing arm	1 piece

N 10261311	⇒ M10 hexagon nut – Spring strut to body	3 pieces
WHT005819	⇒ Hexagon collar nut, self-locking M12 x 1.5 – Upper trailing arm on wheel bearing housing	1 piece
PAF005633	⇒ Twelve point nut, self-locking M14 x 1.5 – Lower trailing arm on wheel bearing housing	1 piece
WHT007021	⇒ Hexagon nut, self-locking with washer M22 x 1.5 – Drive shaft to wheel hub	1 piece
9A700499500	⇒ Hexagon nut, M12 x 1.5 – Tie-rod ball to wheel bearing housing	1 piece
N 10456004	⇒ Internal hexagon round countersunk screw, self-locking, M6 x 12 – Brake disc to wheel hub	2 pieces
N 10272302	⇒ Hexagon collar nut, self-locking M10 – Connecting link on wheel bearing housing	1 piece

*Determine the variant of the right drive shaft required for the respective vehicle using the vehicle identification number in the Porsche Spare Parts Catalogue (PET2).

Additionally required parts for vehicles with the following equipment: Load group 1 FA / 1 RA (M-No. 0J2)

PAF004571	⇒ Cheese head bolt with multiple-tooth head, M14 x 1.5 x 115 – Brake calliper to wheel bearing housing	2 pieces
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Additionally required parts for vehicles with the following equipment: Load group 1VA / 2 HA (M-No. 0J3), load group 2VA / 2 HA (M-No. 0J5), front disc brake PCCB (M-No. 1LQ) and front disc brake PCCB, high-gloss Black (M-No. 1LX)

PAF004572	⇒ Cheese head bolt with multiple-tooth head, M14 x 1.5 x 135 – Brake calliper to wheel bearing housing	2 pieces
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Additional required parts for vehicles with the following equipment: PDCC / eAWS (M-No. 1P7)

N 10702302	⇒ Hexagon-head screw, M12 x 1.5 x 50 – Anti-roll bar to connecting link (PDCC)	1 piece
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Additionally required parts for vehicles with the following equipment: Conventional anti-roll bar

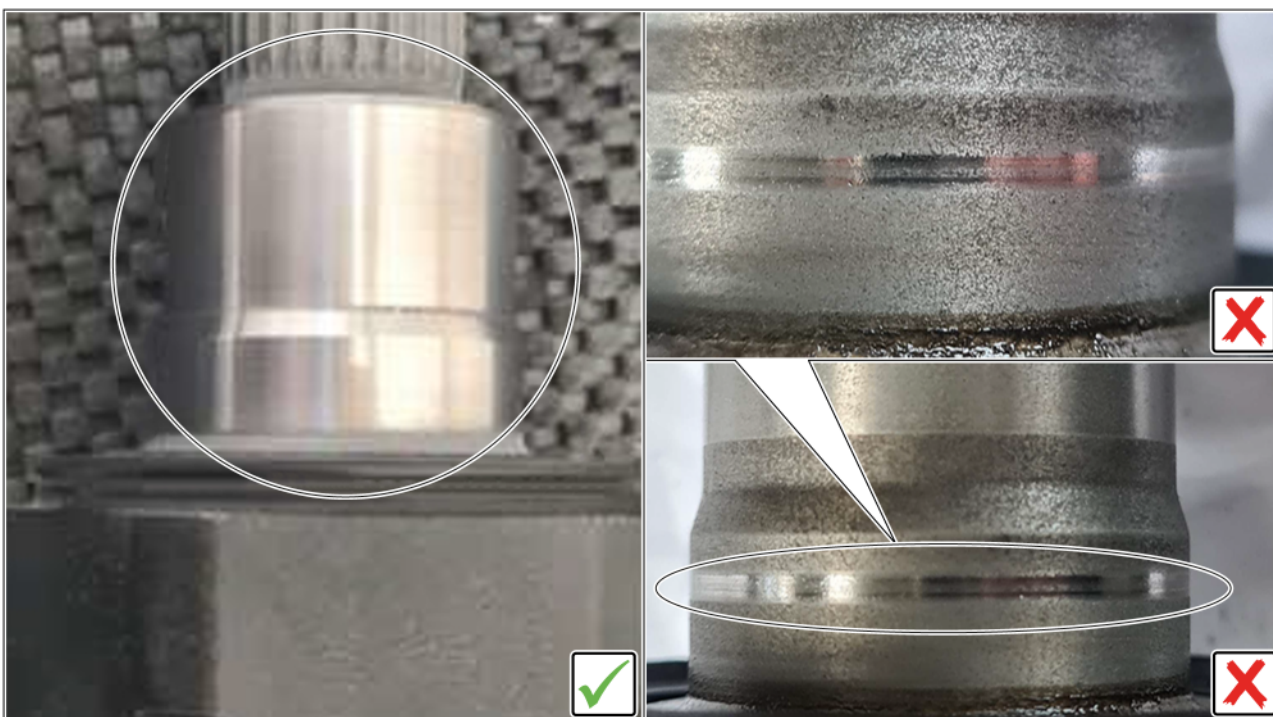
N 10793603	⇒ Hexagon-head bolt M12 x 1.5 x 60 – Anti-roll bar to connecting link (conventional)	1 piece
N 0150818	⇒ Hexagon collar nut, M12 x 1.5 – Anti-roll bar to connecting link (conventional)	1 piece

Required tools

- Tools:
- 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, 20-100 Nm (15-74 ftlb.), e.g., **VAS 5820 - torque wrench, 20-100 Nm (15-74 ftlb.)**
 - Torque wrench, 40-200 Nm (30-148 ftlb.), e.g., **V.A.G 1332A - torque wrench, 40-200 Nm (30-148 ftlb.)**
 - Torque wrench to at least 600 Nm (442.5 ftlb), e.g., **V.A.G 1601 - torque wrench 15-800 Nm (11-590 ftlb.)**
 - Transmission and gearbox jack, e.g. **VAS 6931 - Transmission and gearbox jack**
 - **T20143 - Puller hook**
 - **9941 - Pressure piece**
 - **9811 - Pressure piece**
 - **Puller set**
 - **T10187 - Press-out tool**
 - **VW552 - Spring compressor**
 - **9229/1 - Puller hook**
 - **T10439 - Assembly pin**
 - **9472 - Brake piston resetting fixture**
 - **VAS 6965 Puller set**

Checking flange shaft for front right all-wheel drive

- Work Procedure: 1 Remove front right drive shaft.
For procedure, see: ⇒ *Workshop Manual 'Removing and installing front drive shaft'*
- 2 Check flange for final drive on the right front drive shaft.



Coating / grinding traces Flange for final drive on the right front drive shaft

Assessment		Action
(✓)	A continuous shiny metallic or uniform surface can be seen on the flange for final drive and the production period of the vehicle is between 30/05/2022 – 24/08/2023 .	Replace sealing ring for all-wheel drive flange shaft on the right. ⇒ Workshop Manual '395955 Replacing sealing ring for all-wheel drive flange shaft'
(X)	A greyish, matt, possibly speckled surface with shiny running channel of the sealing ring for flange shaft, all-wheel drive on the right , can be seen on the flange for final drive and the production period of the vehicle is between 30/05/2022 – 24/08/2023 .	Replace sealing ring for flange shaft on right all-wheel drive and right drive shaft. For procedure, see: ⇒ Workshop Manual '395955 Replacing sealing ring for all-wheel drive flange shaft' ⇒ Workshop Manual '404119 Removing and installing front drive shaft'

Labor position and PCSS encryption

Labor position:

APOS	Labor operation	I No.
39595510	Replacing sealing ring for all-wheel drive flange shaft on the right	

PCSS encryption:

Location (FES5)	4041R	Drive shaft, front right,
Damage type (SA4)	1054	mechanical processing incomplete

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