

WPA1 – Reworking Brake Line Threading (Workshop Campaign)

Model Line: **911 (992)**
718 Boxster (982)
718 Cayman (982)

Model Year: **As of 2022**

Concerns: **Brake line screw connection between brake calliper and brake hose**

Cause: **On the affected vehicles, the brake line screw connection on the front and rear axles may not have been fully tightened to the prescribed final tightening torque.**

In this case, leakage in the brake system over the service life cannot be ruled out. The vehicles showed no leakage during factory testing. The brake system remains fully functional and the legally required minimum deceleration is maintained even in the event of a failure.

Action: Tighten the brake line screw connections on the front and rear axle to the specified final tightening torque.



Information

The brake lines only have to be replaced in 1% of cases.

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

Required parts and materials

Parts Info:



Information

The required parts and materials are **only required for replacing the brake lines** and are listed in the individual campaign scopes (Scope 3 to Scope 11). ⇒ *Technical Information 'Warranty processing'*

Required tools

- Tool:
- Torque spanner, 6 – 50 Nm (4.5 – 37 ftlb.), e.g. **VAG 1331A torque spanner, 6-50 Nm (4.5-37 ftlb.)**
 - Torque spanner, 150 – 800 Nm (111 – 592 ftlb.), e.g. **VAG 1601 torque spanner, 150 - 800 Nm (111 - 592 ftlb.)**

Additional required tool for vehicles with central wheel bolts (I-no. 1PJ):

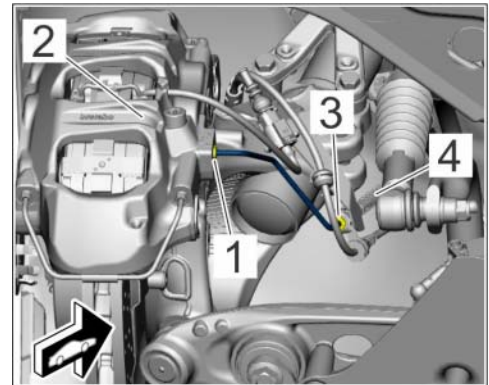
- **9796 - Socket spanner** for central wheel bolt
- **9794 - Assembly aid** for central wheel bolt

Additional required tool for **replacing the brake lines**:

- Suitable brake fluid bleeding equipment, e.g. **VAS 5234 - brake filling and bleeding equipment**

Checking brake line screw connections

- Work Procedure: 1 Move the vehicle onto a lifting platform and raise it. ⇒ *Workshop Manual '4X00IN01 Raising the vehicle'*.
- 2 Remove wheels.
⇒ *Workshop Manual '440519 Removing and installing wheel'*.
⇒ *Workshop Manual '440519 Remove and install wheel with central bolt'*.
- 3 Check brake line screw connections ⇒ *Brake line screw connection -1-* and ⇒ *Brake line screw connection -3-* on the front and rear axles for loss of brake fluid (drop formation).

*Brake line screw connection*

Assessment	Action
No drop formation or leakage visible.	Continue with ⇒ <i>Technical Information '440519 Reworking brake line screw connection'</i> . [Scope 1 or Scope 2]
Drop formation/leakage visible.	Continue with ⇒ <i>Technical Information '440519 Replacing brake lines'</i> . [Scope 3 to Scope 11]

Reworking brake line threading

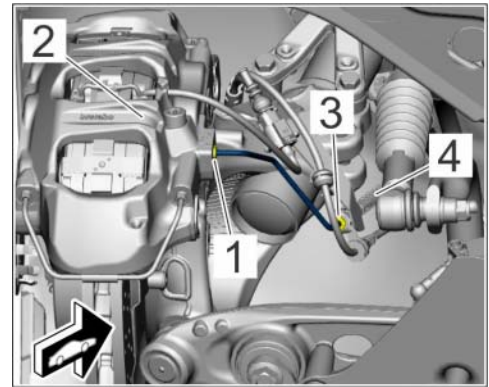
Work Procedure: 1 Tighten screw connections of the brake line ⇒ *Brake line screw connection -1-* and ⇒ *Brake line screw connection -3-* on the front and rear left and right axles with **Tightening torque 13 Nm (9.6 ftlb.)**.

2 Install wheels.
 ⇒ *Workshop Manual '440519 Removing and installing wheel'*.
 ⇒ *Workshop Manual '440519 Remove and install wheel with central bolt'*.

3 Lower the vehicle and remove it from the lifting platform.

4 Enter the campaign in the Warranty and Maintenance booklet.

5 Continue with ⇒ *Technical Information '440519 Warranty processing'*.
 [Scope 1 or Scope 2]



Brake line screw connection

Replacing brake lines



Information

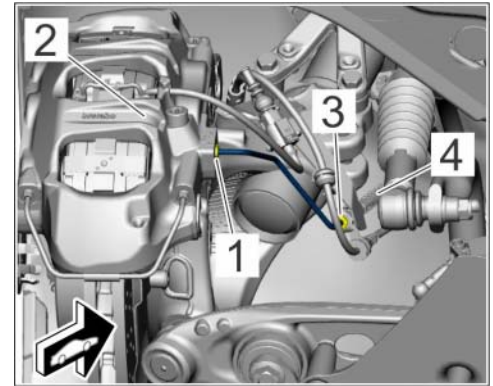
- There are two bleeder valves on the brake calliper. Brake fluid must be drained at both bleeder valves in order to bleed the brakes.
- Always bleed the outer bleeder valve first.

Work Procedure: 1 Photograph and upload the images to the PCSS procedure line with the respective caption, e.g. *brake_line_rear_left_VIN_image 1*.

2 Unclip electric plug connection for the brake pad wear indicator at the brake line.

3 Replace the affected brake line between the brake calliper and front brake hose.

- 3.1 Loosen and unscrew union nut on the ⇒ *Replacing brake line -1-* brake line at the **brake calliper** ⇒ *Replacing brake line -2-*. Collect escaping brake fluid in a suitable container.
- 3.2 Loosen and unscrew union nut on the ⇒ *Replacing brake line -3-* brake line at the brake hose ⇒ *Replacing brake line -4-*. Then remove the brake line and close off the opening on the brake hose using a suitable stopper.
- 3.3 Position **new** brake connecting line on the brake calliper ⇒ *Replacing brake line -2-* and screw in the **union nut** ⇒ *Replacing brake line -1-* **with just a few turns initially**.
- 3.4 ⇒ *Replacing brake line -4-* Insert brake line on the brake hose, align it without tension and secure ⇒ *Replacing brake line -3-* it to the brake hose with ⇒ *Replacing brake line -4-* the union nut.
Tightening torque 16 Nm (11.8 ftlb.)
- 3.5 Tighten union nut for the ⇒ *Replacing brake line -1-* brake connecting line on the brake calliper ⇒ *Replacing brake line -2-*. Make sure not to twist the brake line while doing this.
Tightening torque 16 Nm (11.8 ftlb.)
- 4 Bleed the brake system at all four brake callipers. ⇒ *Workshop Manual '470107 Bleed brake system'*.
- 5 Install wheels.
⇒ *Workshop Manual '440519 Removing and installing wheel'*.
⇒ *Workshop Manual '440519 Remove and install wheel with central bolt'*.
- 6 Lower the vehicle and remove it from the lifting platform.
- 7 Enter the campaign in the Warranty and Maintenance booklet.
- 8 Continue with ⇒ *Technical Information '440519 Warranty processing'*.
[Scope 3 to Scope 11]



Replacing brake line

Warranty processing



Information

The specified labor times were determined specifically for carrying out this campaign and include all necessary preliminary and subsequent rework. The labor time may differ from the working times published in the Labor Operation List in the PCSS.

Scope 1: **Reworking brake line threading**

- For vehicles with standard wheel bolts (M-no. 1PA) or wheel bolts with anti-theft protection (M-no. 1PD)

Labor time:

Reworking brake line threading

Labor time: **85 TU**

Includes: Removing and installing wheels
Checking brake lines

⇒ Damage code WPA1 066 000 1

Scope 2: **Reworking brake line threading**

- For vehicles with central wheel bolts (M-no. 1PJ)

Labor time:

Reworking brake line threading

Labor time: **129 TU**

Includes: Removing and installing wheels
Checking brake lines

⇒ Damage code WPA1 066 000 1

Scope 3: **Replacing brake lines**

Valid for **911 (992)**

- with standard wheel bolts (I-no. 1PA) or wheel bolts with anti-theft protection (I-no. 1PD)
- with M-no. A8C, 1LS, 2EB

Labor time:

Replacing brake lines

Labor time: **147 TU**

Includes: Removing and installing wheels
Checking brake lines

Parts required:

992611771	⇒ Front left brake line	1 pc.
992611772	⇒ Front right brake line	1 pc.
992614771A	⇒ Rear left brake line	1 pc.
992614772A	⇒ Rear right brake line	1 pc.

Required materials (usually already available at the Porsche dealer):

00004330508	⇒ Mounting paste (100 gram/ 3.52 oz tube)	0.04 pc
00004321086	⇒ Brake fluid (30-liter/ 7.9 gal container)	0.06 pc

⇒ Damage Code WPA1 066 000 2

Scope 4:

Replacing brake linesValid for **911 (992)**

- with standard wheel bolts (I-no. 1PA) or wheel bolts with anti-theft protection (I-no. 1PD)
- with M-no. A8F, 1LR, E0A, E7S, 2EB, 2ET

Labor time:

Replacing brake lines

Labor time: **147 TU**Includes: Removing and installing wheels
Checking brake lines**Parts required:**

992611771A	⇒ Front left brake line	1 pc.
992611772A	⇒ Front right brake line	1 pc.
992614771B	⇒ Rear left brake line	1 pc.
992614772B	⇒ Rear right brake line	1 pc.

Required materials (usually already available at the Porsche dealer):

00004330508	⇒ Mounting paste (100 gram/ 3.52 oz tube)	0.04 pc
00004321086	⇒ Brake fluid (30-liter/ 7.9 gal container)	0.06 pc

⇒ Damage Code WPA1 066 000 2

Scope 5:

Replacing brake linesValid for **911 (992)**

- with central wheel bolt (M-no. 1PJ)
- with M-no. A8C, A8F, 1LQ, 1LX, 2EC, 2EU

Labor time:

Replacing brake lines Labor time: **187 TU**
 Includes: Removing and installing wheels
 Checking brake lines

Parts required:

992611771B	⇒ Front left brake line	1 pc.
992611772B	⇒ Front right brake line	1 pc.
992614771D	⇒ Rear left brake line	1 pc.
992614772D	⇒ Rear right brake line	1 pc.

Required materials (usually already available at the Porsche dealer):

00004330508	⇒ Mounting paste (100 gram/ 3.52 oz tube)	0.04 pc
00004321086	⇒ Brake fluid (30-liter/ 7.9 gal container)	0.06 pc

⇒ **Damage Code WPA1 066 000 2**

Scope 6:

Replacing brake lines

Valid for **911 (992)**

- with central wheel bolt (M-no. 1PJ)
- with M-no. A8F, 1LR, EOA, E7S, 2EB, 2ET

Labor time:

Replacing brake lines Labor time: **187 TU**
 Includes: Removing and installing wheels
 Checking brake lines

Parts required:

992611771A	⇒ Front left brake line	1 pc.
992611772A	⇒ Front right brake line	1 pc.
992614771B	⇒ Rear left brake line	1 pc.
992614772B	⇒ Rear right brake line	1 pc.

Required materials (usually already available at the Porsche dealer):

00004330508	⇒ Mounting paste (100 gram/ 3.52 oz tube)	0.04 pc
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00004321086	⇒ Brake fluid (30-liter/ 7.9 gal container)	0.06 pc
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⇒ Damage Code WPA1 066 000 2

Scope 7:

Replacing brake linesValid for **911 (992)**

- with central wheel bolt (M-no. 1PJ)
- with M-no. A8F, EOW, 1LR, 1LS, 2EB, 2ET

Labor time:

Replacing brake lines

Labor time: **187 TU**

Includes: Removing and installing wheels
Checking brake lines

Parts required:

992611771C	⇒ Front left brake line	1 pc.
992611772C	⇒ Front right brake line	1 pc.
992614771B	⇒ Rear left brake line	1 pc.
992614772B	⇒ Rear right brake line	1 pc.

Required materials (usually already available at the Porsche dealer):

00004330508	⇒ Mounting paste (100 gram/ 3.52 oz tube)	0.04 pc
00004321086	⇒ Brake fluid (30-liter/ 7.9 gal container)	0.06 pc

⇒ Damage Code WPA1 066 000 2

Scope 8:

Replacing brake linesFor **911 Turbo (992)**

- with central wheel bolt (M-no. 1PJ)
- with M-no. A8C, A8F, 1LQ, 1LX, 2EB, 2ET

Labor time:

Replacing brake lines

Labor time: **187 TU**

Includes: Removing and installing wheels
Checking brake lines

Parts required:

992611771B	⇒ Front left brake line	1 pc.
992611772B	⇒ Front right brake line	1 pc.
992614771E	⇒ Rear left brake line	1 pc.
992614772E	⇒ Rear right brake line	1 pc.

Required materials (usually already available at the Porsche dealer):

00004330508	⇒ Mounting paste (100 gram/ 3.52 oz tube)	0.04 pc
00004321086	⇒ Brake fluid (30-liter/ 7.9 gal container)	0.06 pc

⇒ **Damage Code WPA1 066 000 2**

Scope 9:

Replacing brake lines

For **911 Turbo (992)**

- with central wheel bolt (M-no. 1PJ)
- with M-no. A8C, A8F, 1LQ, 1LX, 2EC, 2EU

Labor time:

Replacing brake lines	Labor time: 187 TU
Includes: Removing and installing wheels	
Checking brake lines	

Parts required:

992611771B	⇒ Front left brake line	1 pc.
992611772B	⇒ Front right brake line	1 pc.
992614771	⇒ Rear left brake line	1 pc.
992614772	⇒ Rear right brake line	1 pc.

Required materials (usually already available at the Porsche dealer):

00004330508	⇒ Mounting paste (100 gram/ 3.52 oz tube)	0.04 pc
00004321086	⇒ Brake fluid (30-liter/ 7.9 gal container)	0.06 pc

⇒ **Damage Code WPA1 066 000 2**

Scope 10: **Replacing brake lines**

- Valid for **911 GT3 (992)**

Labor time:		
Replacing brake lines		Labor time: 190 TU
Includes:	Removing and installing wheels Checking brake lines	
Parts required:		
9GT611707C	⇒ Front left brake line	1 pc.
9GT611708C	⇒ Front right brake line	1 pc.
9GT611775	⇒ Rear left brake line	1 pc.
9GT611776	⇒ Rear right brake line	1 pc.
Required materials (usually already available at the Porsche dealer):		
00004330508	⇒ Mounting paste (100 gram/ 3.52 oz tube)	0.04 pc
00004321086	⇒ Brake fluid (30-liter/ 7.9 gal container)	0.06 pc
⇒ Damage Code WPA1 066 000 2		

Scope 11: **Replacing brake lines**

- Valid for **718 Boxster (982) / Cayman (982)**

Labor time:		
Replacing brake lines		Labor time: 147 TU
Includes:	Removing and installing wheels Checking brake lines	
Parts required:		
992611771	⇒ Front left brake line	1 pc.
992611772	⇒ Front right brake line	1 pc.
98135558102	⇒ Rear left brake line	1 pc.
98135558202	⇒ Rear right brake line	1 pc.
Required materials (usually already available at the Porsche dealer):		
00004330508	⇒ Mounting paste (100 gram/ 3.52 oz tube)	0.04 pc

00004321086 ⇒ Brake fluid (30-liter/ 7.9 gal container)

0.06 pc

⇒ **Damage Code WPA1 066 000 2**

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