PORSCHE'

Technical Information

Service 103/24 ENU

4

ARBO

ARBO - Replacing Left and Right Brake Hose on Front Axle (Stop Delivery / Recall Campaign)

Change overview:

Release	Date	Change
1	07/19/2024	First publication
2	08/02/2024	 Update of Preparatory work — Step 2 Update of Replacing left and right brake hose on front axle — Step 4 Update of Follow-up actions— Step 2

Model Line: Taycan (Y1A / Y1B / Y1C)

Model Year: As of 2020 up to 2025

Concerns: Brake hoses on front axle

Cause: Brake hoses were installed on the left and right front axle of the affected vehicles that were designed with an insufficient bending radius.

This can lead to material fatigue over the service life of the vehicle and under certain conditions and cause a defect in the brake hose. If this is the case, the driver may feel that braking is less effective and the brake pedal feels different. A corresponding warning message will be displayed on the instrument cluster.

Action:

Replacing left and right brake hose on front axle

Information

Every vehicle is exactly assigned to one campaign scope.

To find out the scope assigned to the vehicle, see PCSS Vehicle Information.

An overview of the campaign scope and the required parts is shown in the "Warranty processing" section. \Rightarrow Technical Information 'Warranty processing'

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

Vehicles:

Required Tools

Tools:

Brake filling and bleeding equipment, e.g., VAS 6860 - brake filling and bleeding equipment
 P90999 - PIWIS Tester 4

- Battery charger with a current rating of at least 90 A, e.g., VAS 5908 battery charger 90 A. For further information about the battery chargers to be used, see the corresponding Workshop Manual. *⇒ Workshop Manual '270689 Charging 12-volt lithium-ion vehicle electrical system battery'*
- Brake tensioner (commercially available)

Preparatory work

Work Procedure: 1Move the vehicle onto a lifting platform and raise it. \Rightarrow Workshop Manual '4X00IN Lifting vehicle'

- 2 Operate the footbrake approx. 3.4 cm/1.18 1.57in downwards and position brake tensioner \Rightarrow *Positioning brake tensioner*. This closes the overrun bore hole in the brake master cylinder and reduces the amount of brake fluid required.
- 3 Remove front wheels. ⇒ Workshop Manual '440519 Removing and installing wheel'



Positioning brake tensioner

Replacing left and right brake hose on front axle

Danger of injury and damage from brake fluid!

- Poisonous if swallowed!
- Irritation and damage to skin
- Avoid contact with paint surfaces
- ⇒ Store brake fluid in suitable, labelled containers only
- ⇒ Wear protective gloves and goggles
- \Rightarrow In the event of contact (eyes or skin), wash immediately with water
- ⇒ In the event of contact with paint surfaces, wash off immediately with water do not wipe off

i Information

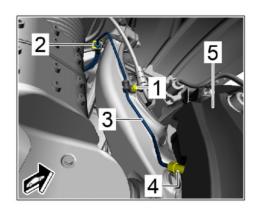
To gain better access for removing the brake hoses, turn the steering fully either to the left or right.

lnformation

The procedure for removing and installing is shown for one side as an example. The procedure for removing and installing for the other side is almost identical.

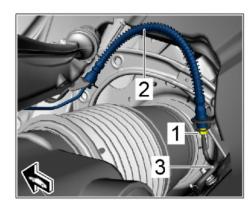
Work Procedure: 1 Loosen the brake line the on front axle.

- 1.1 Unscrew screw ⇒ Front brake line on brake calliper-1-, do not re-use this screw. Loosen and remove the bracket and install it to the new brake line.
- 1.2 Unclip spring clamp ⇒ Front brake line on brake calliper -2- and disengage brake line ⇒ Front brake line on brake calliper -3- from the holder at the top.
- 1.3 Loosen and unscrew the union nut for brake line ⇒ Front brake line on brake calliper -4on brake calliper ⇒ Front brake line on brake calliper -5-.



Front brake line on brake calliper

- 1.4 Remove brake line \Rightarrow Front brake line on brake calliper -3- and close line connections with suitable stoppers while collecting leaking brake fluid with a suitable container.
- 2 Remove the front brake hose.
 - 2.1 Loosen and unscrew union nut ⇒ Front brake hose on vehicle-side brake line -1- on vehicle-side brake line ⇒ Front brake hose on vehicle-side brake line -3- to brake hose ⇒ Front brake hose on vehicle-side brake line -2-.
 - 2.2 Unscrew the screw of the brake hose bracket on the wheel bearing housing, do **not** reuse this screw. Remove the loosened brake hose bracket from the wheel bearing housing.



Front brake hose on vehicle-side brake line

- 2.3 Pull off brake hose ⇒ Front brake hose on vehicle-side brake line -2- and close line connections with suitable stoppers while collecting leaking brake fluid with a suitable container.
- 2.4 Guide out brake hose \Rightarrow Front brake hose on vehicle-side brake line -2-.

3 Install the **new** brake hose.

i Information

When installing the brake hoses, it is essential that the correct installation position be maintained. Otherwise, damage to the new brake hoses cannot be ruled out.

Subsequent bending of the holder or brake line is not permitted!

Only install the new brake hose in conjunction with the new upright side holder. Installing the new hose using the old holder is not possible and not permitted!

- 3.1 Insert brake hose ⇒ Front brake hose to brake line on vehicle-side (including bracket)
 -2- into the vehicle.
- 3.2 Position the new brake hose bracket ⇒ Front brake hose to brake line on vehicle-side (including bracket)-5- on the wheel bearing housing. Screw in the new screw for brake hose bracket ⇒ Front brake hose to brake line on vehicle-side (including bracket)-4- on the wheel bearing housing.
- 3.3 Push brake hose ⇒ Front brake hose to brake line on vehicle-side (including bracket)-2- onto vehicle-side brake line ⇒ Front brake hose to brake line on vehicle-side (including bracket)-3-.
- 3.4 Screw on union nut ⇒ Front brake hose to brake line on vehicle-side (including bracket)
 -1- securing vehicle-side brake line ⇒ Front brake hose to brake line on vehicle-side (including bracket)-3-.
- 4 Check that the newly installed brake hose is in the correct position. ⇒ Correct brake hose position The brake hose can touch the transverse control arm immediately after assembly. As soon as the brake hose relaxes, there is no more contact. A slight preload of the hose during assembly (wheels completely extended on the lifting platform) is intended. The preload is reduced in the compressed state.

Make sure that the wheel position is straight ahead when installing the brake hose.



Front brake hose to brake line on

5

4

Correct brake hose position

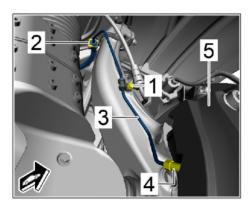
Turning the brake hose by 180° is not permitted! \Rightarrow Incorrect brake hose position

Part number overview of **new** brake hoses and **new** brake hose bracket: \Rightarrow Technical Information '440519 Overview of part numbers for new brake hose and new brake hose bracket'



Incorrect brake hose position

- 5 Position the front axle brake line.
 - 5.1 Hook brake line \Rightarrow Front brake line on brake calliper-3- into the top of the bracket and position it on brake calliper \Rightarrow Front brake line on brake calliper-5-.
 - 5.2 Screw on union nut \Rightarrow Front brake line on brake calliper-4-.
 - 5.3 Position the center bracket for the brake line and tighten **new** screw \Rightarrow Front brake line on brake calliper-1-.
 - 5.4 Clip in spring clamp \Rightarrow Front brake line on brake calliper -2-.



Front brake line on brake calliper

- 6 Fasten brake hose.
 - 6.1 Tighten the union nut securing the vehicle-side brake line with Tightening torque 14 Nm (10.3 ftlb.). Do not twist the brake line.
 - 6.2 Tighten the union nut securing the brake calliper with **Tightening torque 14 Nm (10.3 ftlb.)**. Do not twist the brake line.
 - 6.3 Tighten the screw securing the clamp with **Tightening torque 8 Nm (5.9 ftlb.)**.
 - 6.4 Tighten the screw securing the bracket on the wheel bearing housing with **Tightening** torque 8 Nm (5.9 ftlb.).
- 7 Repeat the work procedure for the front axle brake hose on the opposite side.

Follow-up actions

Work Procedure: 1 Remove the brake tensioner from the footbrake.

- 2 Bleed the brake system. First perform **conventional bleeding** and then the **bleeding routine for electric brake boosters (eBKV)**. The Porsche Stability Management (PSM) bleeding routine is **not required**. This step should be skipped. The procedure for conventional bleeding and the bleeding routine for electric brake boosters (eBKV) according to ⇒ *Workshop Manual '470107 Bleeding the brake system'*
- 3 Install front wheels. ⇒ Workshop Manual '440519 Removing and installing wheel'
- 4 Create Vehicle Analysis Log (VAL) using the PIWIS Tester. Mark the Vehicle Analysis Log you have created with the attribute "Post-VAL" and, after carrying out the campaign, return it using the PIWIS Tester.
- 5 Enter the campaign into the Warranty and Maintenance logbook.

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 times may differ from the labor times published in the Labor Operation List in the PCSS.

i

Every vehicle is exactly assigned to one campaign scope.

The scope was assigned based on the compilation of the respective vehicle types and individual brake variants.

A corresponding variant of the brake hose is provided for each scope. Only the specified brake hose may be installed in the affected vehicle.

Scope 1: Replacing left and right brake hose on front axle

- only valid for vehicles with **stop delivery**

	Labor time	:				
	Replacing let	Labor time: 221 TU				
Includes: Replacing front brake hose						
	Replacing brake hose bracket					
	Creating Vehicle Analysis Logs (VALs) after completing					
	campaign					
	Required parts:					
	V04015005	BE	Brake hose, front left	1 piece		

Technical Information		Service		Л
		103/24 ENU	ARBO	4
V04015005BF	Brake hose, front right		1 piece	9
V04015005BS	Bracket, left		1 piece	Э
V04015005BT	Bracket, right		1 piece	Э
PAF100829	Hexagon-head bolt		4 piece	es
Required mater	ials (usually already available in the Porsche Cer	nter):		
00004321086	Brake fluid (30-liter/ 7.9 gal container)		As req (appro 2.5 lite quarts	x. er (2.6
⇒ Damage num	ber ARB0 099 000 2			

Scope 2: Replacing left and right brake hose on front axle – only valid for vehicles with stop delivery

Labor time:					
Replacing left and right brake hose on front axleIncludes:Replacing front brake hoseReplacing brake hose bracketCreating Vehicle Analysis Logs (VALs) after completing campaign		Labor time: 221 TU			
Required pa	arts:				
V04015005	BG	Brake hose, front left	1 piece		
V04015005	BH	Brake hose, front right	1 piece		
V04015005	BS	Bracket, left	1 piece		
V04015005	BT	Bracket, right	1 piece		
PAF100829		Hexagon-head bolt	4 pieces		
Required m	ateria	als (usually already available in the Porsche Center):			
000043210	86	Brake fluid (30-liter/ 7.9 gal container)	As required (approx. 2.5 liter (2.6 quarts))		
⇒ Damage	numt	per ARB0 099 000 2			

Scope 3: Replacing left and right brake hose on front axle

- only valid for vehicles with stop delivery

Labor time:		
Replacing left and right brake hose on front axle Includes: Replacing front brake hose Replacing brake hose bracket Creating Vehicle Analysis Logs (VALs) after completing campaign		Labor time: 221 TU
Required parts	:	
V04015005BJ	Brake hose, front left	1 piece
V04015005BK	Brake hose, front right	1 piece
V04015005BS	Bracket, left	1 piece
V04015005BT	Bracket, right	1 piece
PAF100829	Hexagon-head bolt	4 pieces
Required mate	rials (usually already available in the Porsche Center):	
00004321086	Brake fluid (30-liter/ 7.9 gal container)	As required (approx. 2.5 liter (2.6 quarts))
\Rightarrow Damage nur	nber ARB0 099 000 2	

Scope 4: Replacing left and right brake hose on front axle

only valid for vehicles with stop delivery

Labor time:					
Replacing le Includes:	ft and ri Repla Repla Creat camp	Labor time: 221 TU			
Required p	Required parts:				
V04015005	BL	Brake hose, front left	1 piece		
V04015005	BM	Brake hose, front right	1 piece		
V04015005	BS	Bracket, left	1 piece		
V04015005	БВТ	Bracket, right	1 piece		

103/24 ENU ARBO

Service

4

	Hexagon-head bolt	4 pieces
Required materi	als (usually already available in the Porsche Center):	
00004321086	Brake fluid (30-liter/ 7.9 gal container)	As requi (approx. 2.5 liter quarts))
\Rightarrow Damage num	ber ARB0 099 000 2	
- only valid for vehic	I right brake hose on front axle cles with stop delivery	
Labor time:	right brake hose on front axle	Labor time: 22
Repl Crea	acing front brake hose acing brake hose bracket iting Vehicle Analysis Logs (VALs) after completing paign	
Required parts:		
	Brake hose, front left	
V04015005BN	Drake nese, nement	1 piece
V04015005BN V04015005BP	Brake hose, front right	1 piece 1 piece
		-
V04015005BP	Brake hose, front right	1 piece
V04015005BP V04015005BS	Brake hose, front right Bracket, left	1 piece 1 piece
V04015005BP V04015005BS V04015005BT PAF100829	Brake hose, front right Bracket, left Bracket, right	1 piece 1 piece 1 piece

Scope 6:

Scope 5:

Replacing left and right brake hose on front axle – only valid for vehicles with **stop delivery**

Labor time:		
Labor time:		
Replacing left and	Labor time: 221 TU	
Includes: Replacing front brake hose		
	blacing brake hose bracket ating Vehicle Analysis Logs (VALs) after completing	
	npaign	
Required parts:		
V04015005BQ	Brake hose, front left	1 piece
V04015005BR	Brake hose, front right	1 piece
V04015005BS	Bracket, left	1 piece
V04015005BT	Bracket, right	1 piece
PAF100829	Hexagon-head bolt	4 pieces
Required mater	ials (usually already available in the Porsche Center):	
00004321086	Brake fluid (30-liter/ 7.9 gal container)	As required
		(approx.
		2.5 liter (2.6
		quarts))
\Rightarrow Damage nun	nber ARB0 099 000 2	

Scope 7: Replacing left and right brake hose on front axle

- only valid for vehicles with stop delivery

Labor time	e:		
Replacing le Includes:	Repla Repla	ight brake hose on front axle acing front brake hose acing brake hose bracket ting Vehicle Analysis Logs (VALs) after completing paign	Labor time: 221 TU
Required	oarts:		
V0401500	5M	Brake hose, front left	1 piece
V0401500	5N	Brake hose, front right	1 piece
V0401500	5BS	Bracket, left	1 piece
V0401500	5BT	Bracket, right	1 piece
PAF100829	9	Hexagon-head bolt	4 pieces

lechnical Information			Service 103/24 enu	ARBO	4
	Required materi 00004321086	ials (usually already available in the Porsche Center Brake fluid (30-liter/ 7.9 gal container)	'):	(appro	ter (2.6
	\Rightarrow Damage num	ber ARB0 099 000 2			
Scope 8:	Replacing left and - only valid for reca	d right brake hose on front axle Iled vehicles			
	Labor time:				
	Replacing left and right brake hose on front axle Includes: Replacing front brake hose Replacing brake hose bracket Creating Vehicle Analysis Logs (VALs) after completing campaign			bor time: 2	237 TU
	Required parts:				
	V04015005BE	Brake hose, front left		1 piec	ce
	V04015005BF	Brake hose, front right		1 piec	ce
	V04015005BS	Bracket, left		1 piec	ce
	V04015005BT	Bracket, right		1 piec	ce
	PAF100829	Hexagon-head bolt		4 piec	ces
	Required materi	i als (usually already available in the Porsche Center	<i>-</i>):		
	00004321086	Brake fluid (30-liter/ 7.9 gal container)		(appro	ter (2.6
	 ⇒ Damage num	ber ARB0 099 000 2			

Scope 9: Replacing left and right brake hose on front axle - only valid for recalled vehicles

2		
Labor time:		
Replacing left a Includes: F (Labor time: 237 TU	
Required par	ts:	
V04015005B	G Brake hose, front left	1 piece
V04015005BI	H Brake hose, front right	1 piece
V04015005B	S Bracket, left	1 piece
V04015005B	T Bracket, right	1 piece
PAF100829	Hexagon-head bolt	4 pieces
Required ma	terials (usually already available in the Porsche Center):	
0000432108	6 Brake fluid (30-liter/ 7.9 gal container)	As required (approx. 2.5 liter (2.6 quarts))
⇒ Damage n	umber ARB0 099 000 2	

Scope 10: Replacing left and right brake hose on front axle

- only valid for **recalled** vehicles

Labor time	e:		
Replacing le Includes:	Repla Repla	ight brake hose on front axle acing front brake hose acing brake hose bracket ting Vehicle Analysis Logs (VALs) after completing paign	Labor time: 237 TU
Required p	oarts:		
V0401500	5BJ	Brake hose, front left	1 piece
V0401500	5BK	Brake hose, front right	1 piece
V0401500	5BS	Bracket, left	1 piece
V0401500	5BT	Bracket, right	1 piece
PAF100829)	Hexagon-head bolt	4 pieces

Technical Information			Service 103/24 enu	ARBO	Z
	Required materi	i als (usually already available in the Porsche Cente Brake fluid (30-liter/ 7.9 gal container)	r):	As req (appro 2.5 lite quarts	ox. er (2.
	⇒ Damage num	ber ARB0 099 000 2			
Scope 11:	Replacing left and - only valid for reca	d right brake hose on front axle Iled vehicles			
	Labor time:				
	Includes: Rep Rep Crea	right brake hose on front axle lacing front brake hose lacing brake hose bracket ating Vehicle Analysis Logs (VALs) after completing npaign		abor time: 2	:37 T
	Required parts:				
	V04015005BL	Brake hose, front left		1 piec	e
	V04015005BM	Brake hose, front right		1 piec	e
	V04015005BS	Bracket, left		1 piec	e
	V04015005BT	Bracket, right		1 piec	e
	PAF100829	Hexagon-head bolt		4 piec	es
	Required materials (usually already available in the Porsche Center):				
	00004321086	Brake fluid (30-liter/ 7.9 gal container)		As req (appro	•
				2.5 lite quarts	

Scope 12: Replacing left and right brake hose on front axle - only valid for recalled vehicles

Labor time:			
Replacing left and right brake hose on front axle Labor time: 237 Includes: Replacing front brake hose Replacing brake hose bracket Creating Vehicle Analysis Logs (VALs) after completing campaign			
Required pa	rts:		
V04015005B	SN Brake hose, front left	1 piece	
V04015005B	BP Brake hose, front right	1 piece	
V04015005B	S Bracket, left	1 piece	
V04015005B	BT Bracket, right	1 piece	
PAF100829	Hexagon-head bolt	4 pieces	
Required ma	aterials (usually already available in the Porsche Center):		
0000432108	Brake fluid (30-liter/ 7.9 gal container)	As required (approx. 2.5 liter (2.6 quarts))	
⇒ Damage r	number ARB0 099 000 2		

Scope 13: Replacing left and right brake hose on front axle

- only valid for **recalled** vehicles

Labor time:						
Replacing left and right brake hose on front axle Labor time: 237 T Includes: Replacing front brake hose Replacing brake hose bracket Creating Vehicle Analysis Logs (VALs) after completing campaign Creating Vehicle Analysis Logs (VALs)						
Required parts:	Required parts:					
V04015005BQ	Brake hose, front left	1 piece				
V04015005BR	Brake hose, front right	1 piece				
V04015005BS	Bracket, left	1 piece				
V04015005BT	Bracket, right	1 piece				
PAF100829	Hexagon-head bolt	4 pieces				

lechnical Information		Service		Λ	
		103/24 ENU	ARBO	4	
	Required mater 00004321086	ials (usually already available in the Porsche Center Brake fluid (30-liter/ 7.9 gal container)):	As rec (appro 2.5 lit quarts	ox. er (2.6
	\Rightarrow Damage num	ber ARB0 099 000 2			
Scope 14:	Replacing left and right brake hose on front axle - only valid for recalled vehicles				
	Labor time:				
	Includes: Rep Rep Cre	right brake hose on front axle lacing front brake hose lacing brake hose bracket ating Vehicle Analysis Logs (VALs) after completing npaign		abor time: 2	237 TI
	Required parts:				
	V04015005M	Brake hose, front left		1 piec	e
	V04015005N	Brake hose, front right		1 piec	e
	V04015005BS	Bracket, left		1 piec	e
	V04015005BT	Bracket, right		1 piec	ce
	PAF100829	Hexagon-head bolt		4 piec	ces
	Required materials (usually already available in the Porsche Center):				
	00004321086	Brake fluid (30-liter/ 7.9 gal container)		As rec (appro 2.5 lit quarts	ox. er (2.

Scop- e	Part number for this campaign	Part number	Designation	Quantity per Vehicle
1, 8	V04015005B E / V04015005B F	9J1611707 K / 9J1611708 K	Brake hose, front left/right	1 piece each

2,9	V04015005B G / V04015005B H	9J1611707 L / 9J1611708 L	Brake hose, front left/right	1 piece each
3, 10	V04015005B J / V04015005B K	9J1611707 M / 9J1611708 M	Brake hose, front left/right	1 piece each
4, 11	V04015005B L / V04015005B M	9J0611707 D / 9J0611708 D	Brake hose, front left/right	1 piece each
5, 12	V04015005B N / V04015005B P	9J0611707 E / 9J0611708 E	Brake hose, front left/right	1 piece each
6, 13	V04015005B Q / V04015005B R	9J0611707 F / 9J0611708 F	Brake hose, front left/right	1 piece each
7,14	V04015005 M / V04015005 N	9J1611707 N / 9J1611708 N	Brake hose, front left/right	1 piece each
all	V04015005B S / V04015005B T	9J1611845C / 9J1611846C	Bracket, left/right	1 piece each

Important Notice: Technical Bulletins issued by Porsche Cars North America, Inc. are intended only for use by professional automotive technicians who have attended Porsche service training courses. They are written to inform those technicians of conditions that may occur on some Porsche vehicles, or to provide information that could assist in the proper servicing of a vehicle. Porsche special tools may be necessary in order to perform certain operations identified in these bulletins. Use of tools and procedures other than those Porsche recommends in these bulletins may be detrimental to the safe operation of your vehicle, and may endanger the people working on it. Properly trained Porsche technicians have the equipment, tools, safety instructions, and know how to do the job properly and safely. Part numbers listed in these bulletins are for reference only. The work procedures updated electronically in the Porsche PIWIS diagnostic and testing device take precedence and, in the event of a discrepancy, the work procedures in the PIWIS Tester are the ones that must be followed.

© 2024 Porsche Cars North America, Inc.

Aug 2, 2024 Page 16 of 16