

Safety Recall Code: 4709

Subject

Brake Master Cylinder

Release Date

April 25, 2019

Affected Vehicles

U.S.A. & CANADA: Certain 2018-2019 Model Year Audi Q5 & Audi SQ5 Vehicles

Check Campaigns/Actions screen in Elsa on the day of repair to verify that a VIN qualifies for repair under this action. Elsa is the <u>only</u> valid campaign inquiry & verification source.

- ✓ Campaign status must show "open."
- ✓ If Elsa shows other open action(s), inform your customer so that the work can also be completed at the same time the vehicle is in the workshop for this campaign.

Problem Description

In certain vehicles, the brake master cylinder casting may be too short. If the brake master cylinder casting is too short, the driver may experience a sudden loss of hydraulic brake performance, with the brake pedal possibly going down to the floor. This can lead to a crash without warning.

The electronic parking brake and its emergency brake function are not affected and will still function.

Corrective Action

Inspect and, if necessary, replace the brake master cylinder.

The expected replacement rate for the brake master cylinder is estimated to be very low (less than 1%). Audi expects to find only five (5) vehicles worldwide in the whole affected volume that will require a replacement part.

Parts Information

Due to the small number of affected vehicles there will be no initial allocation of parts. If parts are needed to support a vehicle repair,

- US Dealers contact AVA with the VIN to order.
- Canadian Dealers contact the Parts Specialists via phone (800-767-6552), email (<u>VWoAPartsSpecialists@vw.com</u>) or chat/text with VIN to order.

Code Visibility

On or about April 25, 2019, affected vehicles will be listed on the Inventory Vehicle Open Campaign Action report under My Dealership Reports (found on www.accessaudi.com & OMD Web). A list will not be posted for dealers who do not have any affected vehicles.

On or about April 25, 2019, this campaign code will show open on affected vehicles in Elsa.

On or about April 25, 2019, affected vehicles will be identified with this campaign code in the VIN Lookup tool at www.safercar.gov.

Owner Notification

Owner notification will take place in April 2019. Owner letter examples are included in this bulletin for your reference.

Additional Information

Please alert everyone in your dealership about this action, including Sales, Service, Parts and Accounting personnel. Contact Warranty if you have any questions.

IMPORTANT REMINDER ON VEHICLES AFFECTED BY SAFETY & COMPLIANCE RECALLS

New Vehicles in Dealer Inventory: It is a violation of federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied. By law, dealers must correct, prior to delivery for sale or lease, any vehicle that fails to comply

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with an applicable Federal Motor Vehicle Safety Standard or that contains a defect relating to motor vehicle safety.

<u>Pre-Owned Vehicles in Dealer Inventory:</u> Dealers should not deliver any pre-owned vehicles in their inventory which are involved in a safety or compliance recall until the defect has been remedied.

Dealers must ensure that every affected inventory vehicle has this campaign completed <u>before</u> <u>delivery to consumers</u>.

The information in this document is intended for use only by skilled technicians who have the proper tools, equipment and training to correctly and safely maintain your vehicle. These procedures are not intended to be attempted by "do-it-yourselfers," and you should not assume this document applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Audi dealer. ©2019 Audi Group of America, Inc. and Audi Canada. All Rights Reserved.

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Claim Entry Instructions

After campaign has been completed, enter claim as soon as possible to help prevent work from being duplicated elsewhere. Attach the Elsa screen print showing action <u>open on the day of repair</u> to the repair order. If customer refused campaign work:

- ✓ <u>U.S. dealers:</u> Submit the request through Audi Warranty Online under the <u>Campaigns/Update</u> option.
- ✓ Canada dealers: Upload the repair order [signed by customer] to Audi WIN/Operations/Campaign Closure.

Service Number	4709			
Damage Code	0099			
Parts Vendor Code	002			
Claim Type	Sold vehicle: 7 10			
	Unsold vehicle: 7 90			
Causal Indicator	Mark labor as causal			
Vehicle Wash/Loaner	Do not claim wash/loaner under this action			
Criteria I.D.	01			
	Check brake master cylinder; master cylinder length is ok, no further work required			
	Labor operation:	0183 00 99	30 T.U.	
	-OR-			
	Check brake master cylinder; master cylinder is too short, replace master cylinder and bleed brakes			
	Labor operation:	4715 55 99	200 T.U.	
	Quantity	Part Number	Description	
	1.00	80A611021	Brake master cylinder	
	1.00	B 000750M3	Brake fluid (one bottle = 1.0 liter)	

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Customer Letter Example (USA)

<MONTH YEAR>

<CUSTOMER NAME> <CUSTOMER ADDRESS> <CUSTOMER CITY STATE ZIPCODE>

This notice applies to your vehicle: <VIN>

NHTSA: 19V277

Subject: Safety Recall 4709 – Brake Master Cylinder

Certain 2018-2019 Model Year Audi Q5 and Audi SQ5 Vehicles

Dear Audi Owner,

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. Audi has decided that a defect, which relates to motor vehicle safety, exists in certain 2018-2019 model year Audi Q5 and Audi SQ5 vehicles. Our records show that you are the owner of a vehicle affected by this action.

What is the issue?

In certain vehicles, the brake master cylinder casting may be too short. If the brake master cylinder casting is too short, the driver may experience a sudden loss of hydraulic brake performance, with the brake pedal possibly going down to the floor. This can lead to a crash without warning. The electronic parking brake and its emergency brake function are not affected and will still function.

What will we do?

To correct this defect, your authorized Audi dealer will inspect and, if necessary, replace the brake master cylinder.

- The inspection will take about half an hour to complete. In rare cases, the brake master cylinder will need to be replaced. Audi expects to find only five (5) vehicles worldwide in the whole affected volume that will require a replacement part.
- Should the brake master cylinder in your vehicle require replacement, your dealer will order the part for your vehicle and assist you in arranging alternate transportation. Once the new brake master cylinder arrives at the dealership, the replacement will take about two hours to complete.
- Both the inspection and replacement (if necessary) will be performed for you free of charge.

Please keep in mind that your dealer may need additional time for the preparation of the repair, as well as to accommodate their daily workshop schedule.

What should you do?

Please contact your authorized Audi dealer without delay to schedule this recall repair. For your convenience, you can also visit www.audiusa.com and click on the "Find a Dealer" link to locate a dealer near you and schedule this service.

Lease vehicles and address changes

If you are the lessor and registered owner of the vehicle identified in this action, the law requires you to forward this letter immediately via first-class mail to the lessee within ten (10) days of receipt. If you have changed your address or sold the vehicle, please fill out the enclosed prepaid Owner Reply card and mail it to us so we can update our records.

Can we assist you further?

If your authorized Audi dealer fails or is unable to complete this work free of charge within a reasonable time, please contact Audi Customer Experience at 1-800-253-2834 or via our "Contact Us" page at www.audiusa.com.

for open Recalls and **Service Campaigns**

Checking your vehicle To check your vehicle's eligibility for repair under this or any other recall/service campaign, please visit the Recall/Service Campaign Lookup tool at www.audiusa.com and enter your Vehicle Identification Number (VIN).

If you still cannot obtain satisfaction, you may file a complaint with: The Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153); or go to http://www.safercar.gov.

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your safety and continued satisfaction with your vehicle.

Sincerely,

Audi Customer Protection

Customer Letter Example (CANADA)

<MONTH YEAR>

<CUSTOMER NAME> <CUSTOMER ADDRESS> <CUSTOMER CITY STATE ZIPCODE>

This notice applies to your vehicle: <VIN>

Safety Recall 4709 - Brake Master Cylinder Subject:

Certain 2018-2019 Model Year Audi Q5 and Audi SQ5 Vehicles

Dear Audi Owner,

This notice is sent to you in accordance with the requirements of the Motor Vehicle Safety Act. Audi has decided that a defect, which relates to motor vehicle safety, exists in certain 2018-2019 model year Audi Q5 and Audi SQ5 vehicles. Our records show that you are the owner of a vehicle affected by this action.

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Can we assist you further?

If your authorized Audi dealer fails or is unable to complete this work free of charge within a reasonable time, please contact Audi Customer Relations Monday through Friday from 8AM to 8PM EST at 1-800-822-2834 or via our "Contact Audi Canada" page at www.audi.ca.

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your safety and continued satisfaction with your vehicle.

Sincerely,

Audi Customer Protection

U NOTE

- These repair instructions may differ from the labor operations and labor times listed in ELSA.
- Damages resulting from improper repair or failure to follow these work instructions are the dealer's responsibility and are not eligible for reimbursement under this action.
- This procedure must be read in its entirety prior to performing the repair.
- Due to variations in vehicle equipment and options, the steps/illustrations in this work procedure may not identically match all affected vehicles.
- Diagnosis and repair of pre-existing conditions in the vehicle are not covered under this action.
- When working during extreme temperatures, it is recommended that the vehicle be allowed to acclimate inside the shop to avoid temperature-related component damage/breakage.

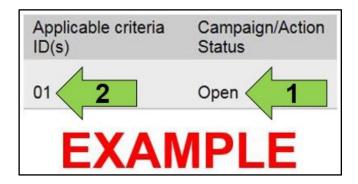
Repair Overview



• Inspect brake master cylinder and replace if necessary.

Repair Instruction

Section A - Check for Previous Repair



• Enter the VIN in Elsa and proceed to the "Campaign/Action" screen.

i TIP

On the date of repair, print this screen and keep a copy with the repair order.

- Confirm the Campaign/Action is open <arrow 1>.
 If the status is closed, no further work is required.
- Note the Applicable Criteria ID <arrow 2> for use in determining the correct work to be done and corresponding parts associated.

Proceed to Section B

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Section B - Master Cylinder Inspection



Open left plenum cover:

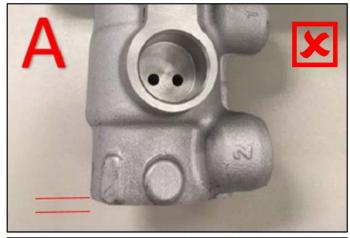
 Carefully release the three locking tabs <arrows> and open the left plenum cover <1>.

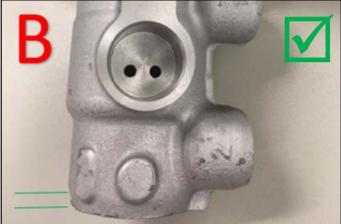


Inspect end of master cylinder:

 The end of the master cylinder <circle> will be inspected to determine if the master cylinder is the correct length.

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- If master cylinder is too short <image A>:
 - o Master cylinder must be replaced.
 - Proceed to section C.
- If master cylinder is the correct length <image B>:
 - o Master cylinder is OK.
 - Close left plenum cover.
 - Proceed to Section D.

U NOTE

Master cylinder shown removed. The master cylinder does not require removal for the inspection.

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Section C - Master Cylinder Replacement



WARNING

Risk of injury. Refer to "Warning and Safety Precautions", found in Appendix A at the end of this document.

Required Parts

<u>Criteria</u>	<u>Quantity</u>	Part Number	Part Description
01	1	80A.611.021	Brake master cylinder
	1.0 L	See ETKA	Brake fluid

O IMPORTANT PARTS INFORMATION

Brake Fluid Ordering/Claiming Information

- Any brake fluid part number listed in ETKA specific to the VIN can be used.
- For claiming purposes, for every 1.0 liter of brake fluid used, 1.00 units of B 000750M3 should be entered onto the SAGA claim.



() NOTE

The specified part numbers reflect the status at the start of this recall. Interim updates made in ETKA can cause a listed part number to become unavailable. In this case, the new part number specified in ETKA should be used.

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Required Tools



Torque Wrench 40 - 200 Nm -VAG1332-(or equivalent)



Torque Wrench 5-50Nm -VAG1331-(or equivalent)



Brake Bleeding Tool Set
-VAS6564(or equivalent)



Brake Filling and Bleeding Equipment -VAS6860- or -VAS5234-

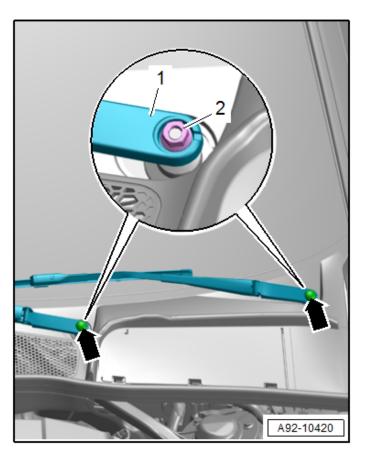


Engine Bung Set
-VAS6122(or equivalent)



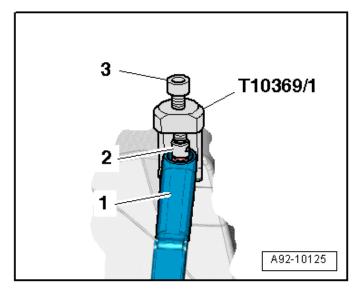
Puller - Wiper Arm Kit -T10369-

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Prepare wiper arms for removal:

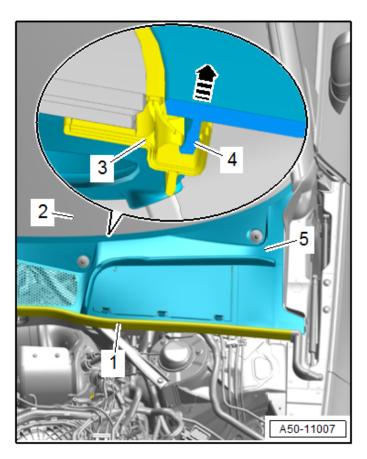
- Mark the wiper park position with tape.
- Pry off caps <arrows> with a screwdriver.
- Loosen nuts <2> several turns, but do not completely remove.



Remove wiper arms:

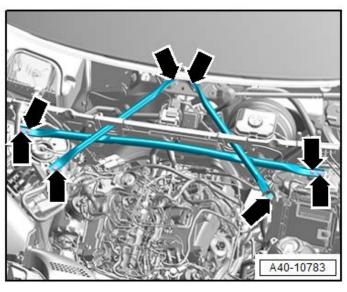
- Position the -T10369/1- on the windshield wiper arm <1> as shown.
- Position the thrust piece <2> on the windshield wiper axle.
- Turn the bolt <3> clockwise until the windshield wiper arm is removed from the windshield wiper axle.
- Remove the nuts completely and remove the windshield wiper arms.

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Remove plenum chamber cover:

- Remove seal <1>.
- Coat the transition between the windshield
 2> and the plenum chamber cover <5> with some soapy water.
- Starting at the window edge, carefully remove the plenum chamber cover vertically upward from the retainer on the windshield.
- Remove the plenum chamber cover <5> by carefully removing the plenum chamber cover tab <4> in the direction of the <arrow> from the windshield mount <3>.



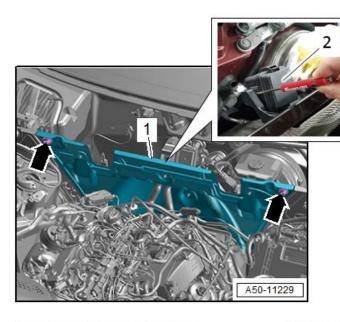
Remove tower braces:

Remove the bolts <arrows> and remove the tower braces.



Pay attention to the tower brace positioning to ensure they are reinstalled in the correct positions.

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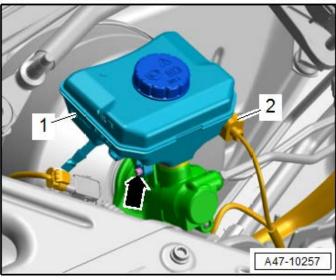


Remove plenum bulkhead:

- Using a pocket screwdriver, unclip relay <2> from bulkhead <1> and set relay aside.
- Remove nuts <arrows> and remove bulkhead
 upward.

! NOTE

The bulkhead seal may come off the bulkhead during removal. Make sure the seal is on the bulkhead before reinstallation.



Remove brake fluid reservoir:

MARNING

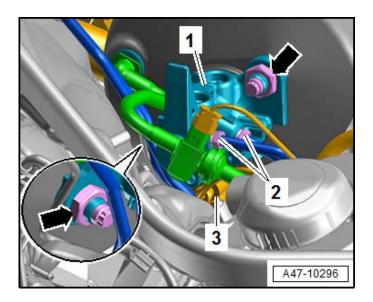
Leaking brake fluid increases the risk of skin irritation and injury. Wear safety gloves and safety glasses.

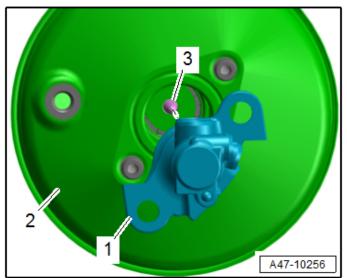
- Extract all fluid out of the brake fluid reservoir using -VAS6860- or -VAS5234-.
- Disconnect the connector <2> for the Brake Fluid Level Warning Switch -F34-.
- To prevent brake fluid from escaping, place enough lint-free cloths in the area under the brake master cylinder.
- Remove the locking pin <arrow> on the side of the brake fluid reservoir and from the brake master cylinder.
- Remove the brake fluid reservoir <1> from the plugs.
- Immediately seal any open lines and connections with clean plugs from the Engine Bung Set -VAS6122-.

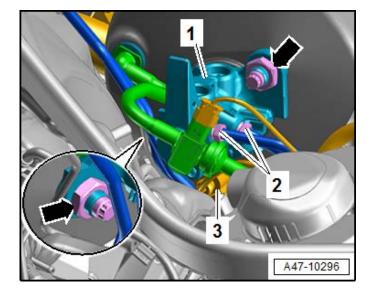


Risk of damage due to improper handling of the brake fluid. Avoid contact with paintwork. Avoid brake fluid contact with fluids containing mineral oils (oil, gas, cleaning solutions).

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Remove master cylinder:

- Disconnect the connector <3> for the Brake Lamp Switch -F-.
- To prevent brake fluid from escaping, place enough lint-free cloths in the area under the brake master cylinder.
- Remove the union bolts <2> for the brake lines and remove the brake lines from the brake master cylinder.
- Immediately seal the open connection points with clean plugs from the Engine Bung Set -VAS6122-.
- Remove and discard the nuts <arrows>.

Install new master cylinder:

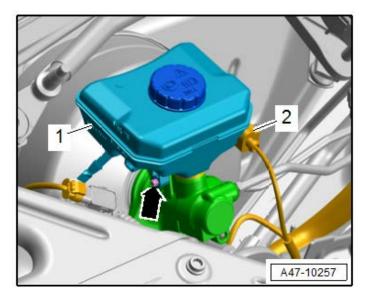


Do not let any brake fluid run into the brake booster.

- When inserting the brake master cylinder <1>, make sure that the pressure rod <3> is seated correctly in the brake booster <2>.
- If necessary, have a second technician press the brake pedal downward slightly. This allows the brake master cylinder to be guided into the pushrod more easily.
- Install new nuts <arrows> and torque to 49 Nm.
- · Remove any sealing plugs used.
- Install brake lines <2> and torque fittings to 14
 Nm
- Connect connector <3> for the brake light switch.

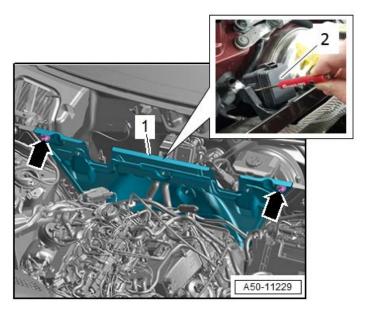
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Install brake fluid reservoir:

- Coat the plugs on the brake fluid reservoir with brake fluid.
- Insert the brake fluid reservoir <1> into the plugs in the brake master cylinder.
- Install locking pin <arrow>.
- Connect brake fluid level sensor <2>.

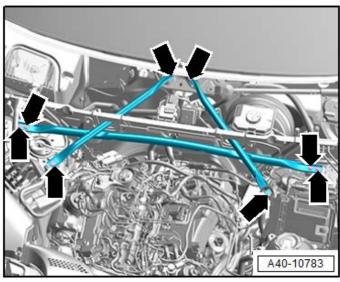


Install plenum bulkhead:

• NOTE

The bulkhead seal may have come off the bulkhead during removal. Make sure the seal is on the bulkhead before reinstallation.

- Install bulkhead into the guides on the firewall.
- Install bolts <arrows> and torque to 8 Nm.
- Install relay <2> in opposite direction of removal.



Install tower braces:

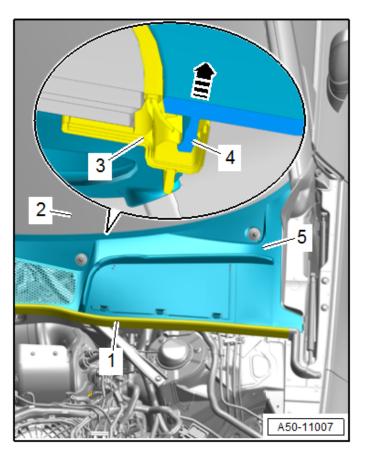
 Install tower braces in the reverse order of removal and torque bolts <arrows> to 20 Nm.



Pay attention to the tower brace positioning to ensure they are reinstalled in the correct positions.

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Install plenum chamber cover and seal:

- Installation is the reverse order of removal.
- Spray windshield mount <3> with soapy water or glass cleaner to aid in installation of tab <4>.

U NOTE

Striking the plenum chamber cover into the windshield retainer may cause the windshield to crack. Damage to the windshield or plenum chamber covers will not be covered under this action.

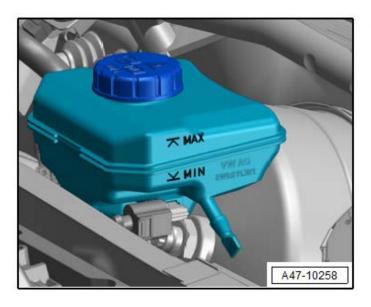


Install wiper arms:

- Installation is the reverse order of removal.
- Pay attention to the different lengths of the wiper blades for the driver and front passenger side.
- Torque nuts <2> to 21 Nm.
- Install caps <arrows>.
- If necessary, adjust the wiper arms:
 - See ELSA Repair Manual: Repair manual > Electrical system > 92 Windshield Wiper/Washer System > Windshield Wiper Arms, Adjusting

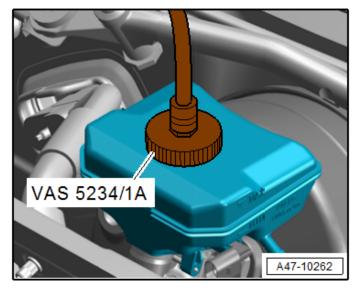
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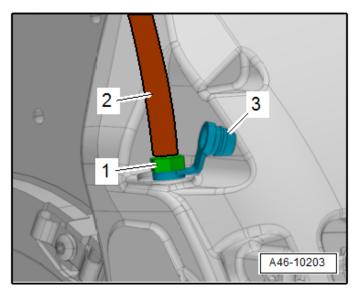
Bleed the brake system:

- Fill the brake fluid reservoir up to the "MAX" mark.
- Connect the Brake Filling and Bleeding Equipment -VAS5234- OR -VAS6860-.



- Attach the Brake Bleeder Adapter
 -VAS5234/1A- on the brake fluid reservoir.
- Remove the wheels.

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- Remove the protective cap <3> from the bleed screw <1> on the respective brake caliper.
- Connect the bleeder bottle hose <2> as shown.

U NOTE

Use a suitable bleeder hose. It must be seated tightly on the bleed screw so that no air can enter the brake system.

- Bleed the brakes in the following sequence using the Brake Filling and Bleeding Equipment -VAS6860- or -VAS5234-:
 - 1. Outer Left Front Brake Caliper
 - 2. Inner Left Front Brake Caliper
 - 3. Outer Right Front Brake Caliper
 - 4. Inner Right Front Brake Caliper
 - 5. Left Rear Brake Caliper
 - 6. Right Rear Brake Caliper
- Leave the bleed screw open with the brake fluid hose connected, until brake fluid flows out clear and without air bubbles.
- Torque the bleed screws to 10 Nm, remove the bleeder hose and place the dust cap on the bleed screw.
- Repeat the bleeding procedure in the specified sequence for the remaining brake calipers.
- Fill the brake fluid reservoir up to the "MAX" mark and tighten the cap.

U NOTE

Do not add brake fluid above the "MAX" mark otherwise it will leak out of the reservoir.

- Start the engine and check the brake pedal travel and pressure.
- If the pedal travel is too long, check the brake system for leaks or repeat the bleeding procedure.



Risk of accident!

Make sure the brakes are working correctly before driving the vehicle for the first time.

Install wheels and torque to 140 Nm.

Proceed to Section D.

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Section D – Campaign Completion Stamp

I certify that this campaign has been performed in strict accordance with the applicable Audi repair procedure.		
SAGA Code:		
Technician:		
Date:		

Item#: AUD4927ENG

-OR-

Je certifie que cette campagne de rappel a été exécutée suivant les strictes directives de réparation d'Audi
Code de SAGA:
Technicien:
Date:

- Once the campaign has been completed, the technician should stamp the repair order.
- Stamps are available for ordering through the Compliance Label Ordering Portal.
- Proceed to Section E.

Item # AUD4927FRE

Section E - Parts Return/Disposal

Properly store (retain), destroy or dispose of removed parts in accordance with all state/province and local requirements, unless otherwise indicated and/or requested through the Warranty Parts Portal (WPP) for U.S. and the Part Destruction and Core Disposition Report for Canada.

Appendix A - Warning and Safety Precautions

WARNING

- Brake fluid is poisonous, and must never be siphoned by mouth under any circumstances.
- Wash off any brake fluid that comes into contact with the skin with a lot of water.
- If it contacts the eyes, wash out the eye and see a doctor.
- Brake fluid must never come into contact with fluids containing mineral oils (oil, gas, cleaning solutions).
 Mineral oil damages the plugs and rubber grommets in the brake system.
- Brake fluid is hygroscopic, meaning that it absorbs moisture from the surrounding air, and must therefore be stored in air-tight containers.
- When bleeding, brake fluid that has been flushed through must not be reused and must be disposed of properly.
- Observe waste disposal regulations!
- Due to its corrosive effect, brake fluid cannot come in contact with paint or painted parts.

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