

Technical Service Bulletin



46 Brakes squeal

46 13 35 2017130/11 April 2, 2013. Supersedes Technical Service Bulletin Group 46 number 11-16 dated December 9, 2011 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
TT (without TT RS)	2008 – 2013	All	Not applicable
A3	2006 – 2013		
A4 (B6/B7)	2005 – 2008		
A4 Cabrio (B6/B7)	2005 -2009		
A6 (C6)	2005 – 2011		
A8 (D3)	2004 – 2010		
Audi Q7	2007 – 2013		

Condition

REVISION HISTORY		
Revision	Date	Purpose
11	-	Revised header data (Removed models) Revised <i>Warranty</i> (Modified Diagnostic Time)
10	12/9/2011	Revised header data (Removed and added models)
9	3/10/2011	Revised header data (Added models) Revised <i>Service</i>
8	5/5/2010	Revised header data (Removed models) Revised <i>Warranty</i> (Modified Diagnostic Time)
7	2/26/2010	Revised <i>Warranty</i> (Modified Diagnostic Time) Revised header data (Added model years)
6	11/20/2009	Revised <i>Warranty</i>
5	8/17/2009	Revised <i>Service</i> (<i>Brake disc, cleaning, Brake caliper, cleaning</i>)

Technical Service Bulletin



4	2/17/2009	Revised header data (Added model years) Revised <i>Warranty</i> (Claim Type)
3	12/16/2008	Revised Title to add Repair Group

Customer complains of brake squeal.

Technical Background

Not applicable.

Production Solution

Not applicable.

Service



Note:

Before proceeding with any of the following steps, check the overall condition of the brakes. If the following conditions exist, this TSB does not apply:

1. Brake discs or brake pads are close to or below their wear limit.
2. Rotors are covered with excessive rust due to long periods of the vehicle not being driven.
3. Foreign bodies between brake disc and brake pad, such as small stones, grit, or sand.
4. Rotors are severely grooved.
5. Aftermarket pads or rotors.

For vehicles within the New Vehicle Limited Warranty, Audi of America is requesting your cooperation in supplying us with technical information regarding this condition.

1. Verify the brake noise with a test drive.
2. Complete the attached Brake Noise Questionnaire.
3. Obtain a sound recording of the brake noise (a cell phone recording is OK as long as the noise can be clearly identified).
4. Email the questionnaire and sound recording to: **alignment@audi.com**.



Warning:

Never use compressed air to clean brake dust from a brake system.

Perform the braking sequence as follows:

Brake disc, cleaning

1. With careful consideration of the traffic situation, perform 2-3 ABS stops (e.g. from speeds above 50 MPH). Between each stop, please allow the brake components to cool. (Drive vehicle for more than 1 minute at speeds greater than 50 MPH.)
2. If necessary, perform additional ABS stops allowing the brakes to cool between each stop (max. 5). Only proceed to the next step (Brake pad, cleaning) if the brake noise was not eliminated.

Brake pad, cleaning

1. With the wheels removed, mark the position of each brake pad to ensure reinstallation in the same position. Work on one brake at a time to avoid mixing up parts.
2. On some models, the front brake pads are glued to the brake caliper. Do *not* remove the pads for this procedure. Treat the pad as described in this TSB with it attached to the brake caliper. If these pads are unglued they must be replaced.
3. Some front/rear brake pads have an anti-vibration backing plate (non-sticky). Do *not* remove this type of backing plate.
4. Use Guided Functions to release the rear brake calipers for vehicles with Electronic Parking Brake (EPB). It is not necessary to re-adapt the parking brake for this procedure.
5. Clean face of the brake pad with sandpaper (Figure 2).

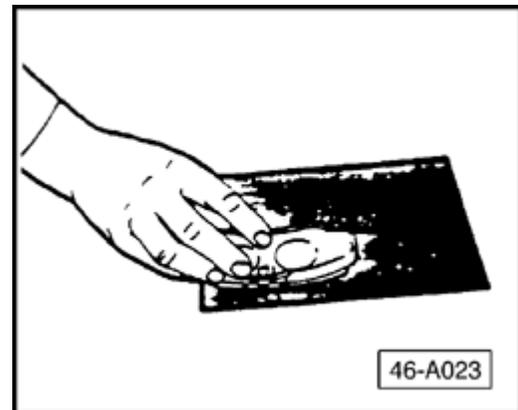


Figure 2. *Cleaning face of the brake pad with sandpaper.*

5. Clean all grooves with a suitable workshop hand tool (Figure 3).

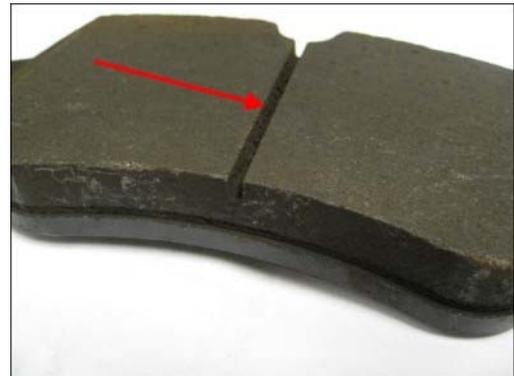


Figure 3. Clean brake pad groove.

6. Slightly chamfer edges of brake pads with a file (Figure 4).

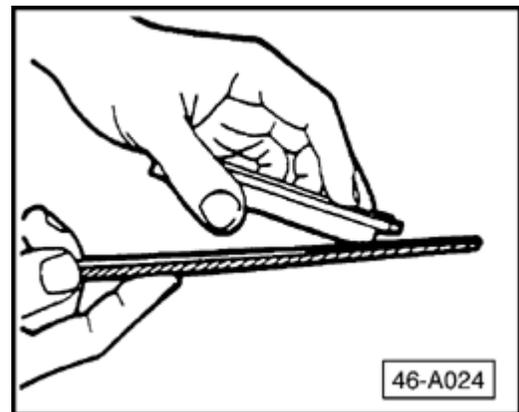


Figure 4. Chamfering brake pad edge.

Brake caliper, cleaning



Note:

The following steps require a thin coat of Plastilube Moly3® high temperature grease to be applied to various parts of the brakes. This grease must *never* come in contact with:

- The braking surface of the brake pads or brake discs.
- The caliper piston.

These areas must *always* be free of grease.

1. Thoroughly clean all contact points (Figure 5) where the brake pad backing plate makes contact with the brake caliper and/or the brake carrier.

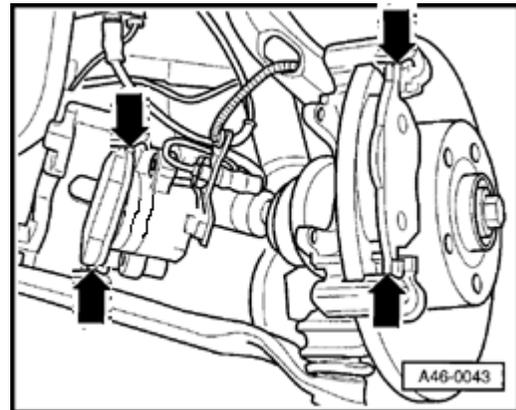


Figure 5. Contact points to be lubricated.

Reassembly

1. Prior to reinstalling the brake pads, apply a thin coat of Plastilube Moly3® high temperature grease to contact points (Figure 5) where the brake pad backing plate makes contact with the brake caliper and/or the brake carrier.
2. For brake pads that have springs (common on rear brake pads), apply a thin coat of Plastilube Moly3® high temperature grease to the springs where they make contact with the brake caliper.

Technical Service Bulletin



Warranty

Claim Type:	Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only.		
Service Number:	Front - 4636 Rear - 4638		
Damage Code:	0020		
Labor Operations:	Brake pads, front - convert	4636 9999	90 TU
	Brake pads, rear - convert	4638 9999	100 TU
Diagnostic Time:	GFF – release rear brake calipers Only applicable to vehicles with EPB: A8(D3) & A6(C6)	0150 0000	Time stated on diagnostic protocol (Max 50 TU)
	Front road test	4636 8099	25 TU
	Rear road test	4638 8099	25 TU
	Technical diagnosis at dealer's discretion (Refer to Section 2.2.1.2 and Audi Warranty Online for DADP allowance details)		
Claim Comment:	As per TSB #2017130/11		

All warranty claims submitted for payment must be in accordance with the *Audi Warranty Policies and Procedures Manual*. Claims are subject to review or audit by Audi Warranty.

Required Parts and Tools

Part Number	Part Description
ZVP264103	Plastilube Moly3®

Additional Information

All parts and service references provided in this TSB are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.

Questionnaire - Brake Complaint: Acoustics, Noise

Vehicle Data:

Type:		Registration Date:		Dealer:	Auburn Hills
VIN:		Milage:		Name	Auburn Hills
Engine No.:		special equipment (tow bar, Tuning etc)		Tel.-No.:	248 754
BA ID:				Rep-Date:	

Test drive:

done: <input type="checkbox"/> yes	Customer complaint confirmed: <input type="checkbox"/> yes <input type="checkbox"/> no	
Type of noise (if possible): <input type="checkbox"/> "Moo"-noise <input type="checkbox"/> grinding / scraping <input type="checkbox"/> Squeaking <input type="checkbox"/> creaking <input type="checkbox"/> Rattling	when does the noise occur? forward drive: <input type="checkbox"/> reverse: <input type="checkbox"/> <input type="checkbox"/> always <input type="checkbox"/> light braking stop <input type="checkbox"/> <input type="checkbox"/> often <input type="checkbox"/> hard braking (e.g. traffic light) <input type="checkbox"/> rarely <input type="checkbox"/> without braking Driving bends <input type="checkbox"/> <input type="checkbox"/> very rarely <input type="checkbox"/> emergency braking	where does the noise occur? <input type="checkbox"/> Motorway <input type="checkbox"/> country / A-roads <input type="checkbox"/> Town

Notes

Where does the noise possibly come from?

front <input type="checkbox"/>	back <input type="checkbox"/>	don't know <input type="checkbox"/>	exact location, if possible:
--------------------------------	-------------------------------	-------------------------------------	------------------------------

Noise-Level:

<input style="width: 50px; height: 20px;" type="text"/>	<input type="button" value="▲"/> <input type="button" value="▼"/>	Notes
---	--	-------

Does the complaint occur after standing?

no <input type="checkbox"/>	if yes, after what time of stand still? <input style="width: 50px;" type="text"/> hours	was the handbrake, pedal for parking brake activated? <input type="checkbox"/> yes <input type="checkbox"/> no
-----------------------------	---	--

Is the noise still present after several brakings:

yes <input type="checkbox"/>	no <input type="checkbox"/>
------------------------------	-----------------------------

Residual thickness of the brake pads:

<input style="width: 80px; height: 20px;" type="text"/> %	<input type="button" value="▲"/> <input type="button" value="▼"/>	Notes
---	--	-------

Residual thickness of the brake discs:

 %

Notes
▲
▼

State of the brake discs:

o.k.. rusty Hotspot: scores outside scores inside completely scored

Speed (range):

from / at

mph

▲
▼

to

mph

▲
▼

Outside Temperatures (range):

from / at

 F°

▲
▼

to

 F°

▲
▼

Weather:

weather: wet dry Snow

Type / state of roads:

smooth surface rough surface cobbles

since when does the noise occur?

Please create a noise file!

from the beginning just recently since milage

Notes

Conditions of use?

Taxi Driving school Rental car Others:

Notes:

which measures / repairs have been carried out?

repeated repairs: yes which
 no

Notes: