

46 Q7 MY18 Squeal from front brakes

48 22 22 2050737/9 March 7, 2022. Supersedes Technical Service Bulletin Group 46 number 19-11 dated April 10, 2019 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
Q7	2018	All	Not Applicable

Condition

REVISION HISTORY				
Revision	Date	Purpose		
9	-	Revised Warranty (Updated Labor Operations)		
8	4/10/2019	Revised Service (Updated procedure and photos)		
7	3/15/2019	Revised Service (Updated Step 4 and Tip)		
		Revised Required Parts and Tools (Updated Note)		

Customer reports hearing a squealing noise (1.6 KHz) from the front brakes in the following conditions:

- Slow speeds, usually below 20 mph.
- Usually in reverse.
- Cold brakes.
- Temperature and humidity conditions may vary.



Please review the audio/video example below: https://audi-external.kzoplatform.com:443/swf/player/359 (Figure 1).



Figure 1. QR Code for supporting video.



Frequencies can be identified with our Audi Frequency Analysis App, review TSB 2051095: *46 Audi frequency analysis* for further information.

Technical Background

Not applicable.

Production Solution

Not applicable.

Service



Service

Replace front brake pads according to the instruction in Elsa at Repair Manual, *Chassis >> Brake System >> 46*Mechanical Components >> Front Brakes >> Brake Pads, Removing and Installing Steel Brakes.

A. Identify the caliper casting lip of the installed caliper in the vehicle. There are two possibilities for the lip; large and small (Figure 2).

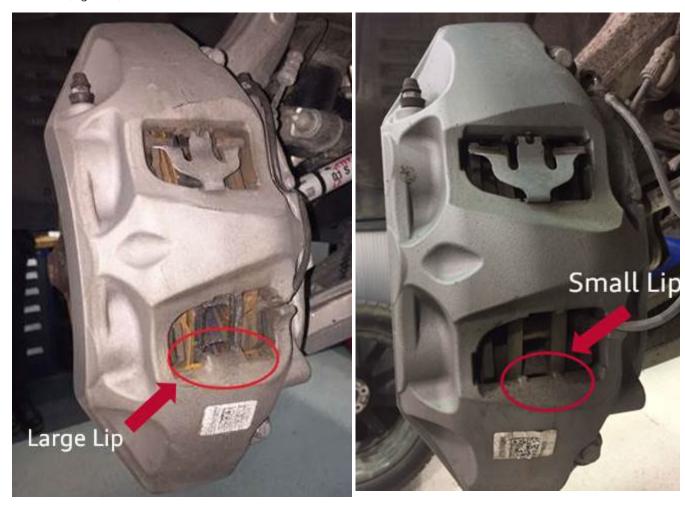


Figure 2. Caliper casting lip configurations.



- B. Install one new lower spring in each caliper. The final configuration must have two springs per caliper (Figure 3). See available spring designs (Figure 4).
- C. According to caliper casting, a specific type of spring must be assembled, as follows:

LARGE CASTING LIP >>> INSTALL SPRING <u>4M0 615 269 C</u>

SMALL CASTING LIP >>> INSTALL SPRING 4M0 615 269 or 4M0 615 269 B

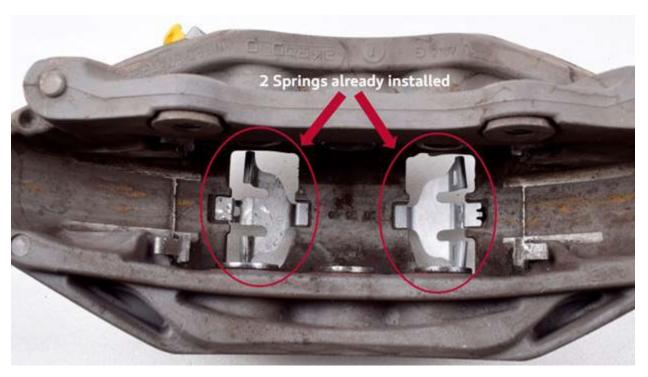


Figure 3. Spring configuration, after installation.





Figure 4. Spring designs.

D. It is mandatory to replace all 4 brake pad intermediate plates per caliper – included in the brake pad box (Figure 5).

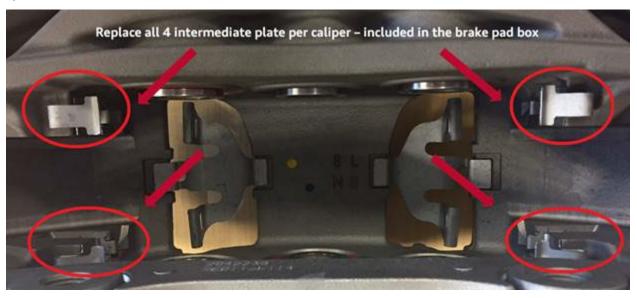


Figure 5. Intermediate plate locations.

E. Before the installation of the new intermediate plates (Figure 6), clean the caliper area where the intermediate plates will be installed (Figure 7).





Figure 6. Intermediate plates (also known as retaining plates).



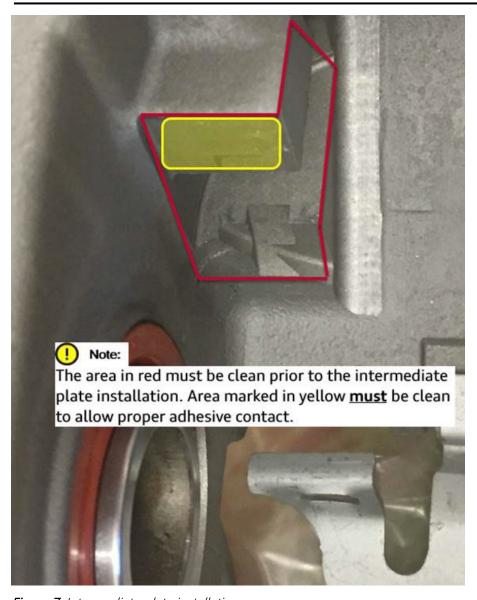


Figure 7. Intermediate plate installation area.



After removing the protective foil from the intermediate plates, avoid touching the glue surface to ensure the proper contact with the aluminum surface of the caliper.

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F. It is mandatory to clean and apply lithium grease in the area shown in the picture. Repeat it for all pads. (Figure 8).



Figure 8. Apply a small amount of lithium grease in the area marked.

G. It is mandatory to pay attention to the labeling on the brake pad (Figure 9). Once installed the arrow (1) on the backing plate must point upward (the pads should be installed with the arrows following the forward rotation of the wheel). If available, labeling (2) indicate correct assembly position (left outer/inner, and right outer/inner).



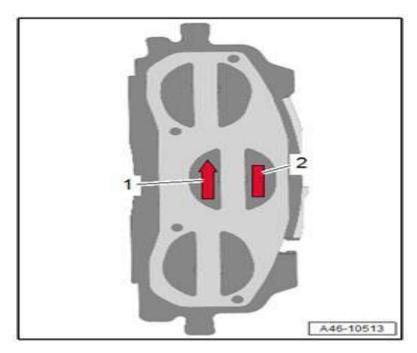


Figure 9. Correct installation position for the brake pad.

H. Brake Embedding:

- a. Perform 10 stops from approximately 35 mph to 10 mph with medium brake application.
- b. Drive for approximately 2 minutes 40 mph without braking to allow the brakes to cool down.
- c. Repeat steps A and B if necessary.



- A. This bulletin does not apply if there is an improper operation or misuse of the vehicle.
- B. Do not perform ABS stops as a way of embedding the brakes. Brake pads and discs may be permanently damaged if brakes are overheated prior to being properly embedded.
- C. Do not replace current springs already installed in the caliper. It is mandatory to install two springs per vehicle.



Tip: Rust/Corrosion build-up, grooves, or glazing on the braking surface of the brake disc may cause noise and must be considered when replacing brake pads. If this TSB has not been completed, complete the repairs as outlined in this TSB. If this TSB has already been completed and the noise has returned, please review TSB 2034181.

Warranty

Claim Type:	 110 up to 48 Months/50,000 Miles. If the vehicle is outside any warranty, this Technical Service Bulletin is informational only. 			
Service Number:	4636			
Damage Code:	0010			
Labor Operations:	Wheels remove + reinstall (front)	4405 2000	See SRT	
	Brake pads front remove + reinstall	4636 2050	See SRT	
Diagnostic Time:	GFF	No allowance	0 TU	
	Road test prior to service procedure	0121 0002	10 TU	
	Road test after service procedure	0121 0004	10 TU	
Claim Comment:	As per TSB 2050737/9			

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	Quantity
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4M0698151BD or any available supersession	Set of front brake pads	01
4M0615269 or 4M0615269B or 4M0615269C	Spring (According to caliper casting design) Note: Packaging may vary with 1 or 2 parts, according to the supplier.	02 springs per vehicle/repair
G052150A2	Lithium grease	0.1
See ETKA	Sender wire. Note: Pad wear indicator, replace only if defective. Vehicles with very low mileage probably will not require replacement.	02
See ETKA	Fasteners, Bolts, Nuts, and Screws as needed per the Repair Manual	See ETKA/ELSA

Additional Information

The following Technical Service Bulletin(s) will be necessary to complete this procedure:

• TSB 2051095: 46 Audi frequency analysis.

All parts and service references provided in this TSB (2050737) are subject to change and/or removal. Always check with your Parts Department and/or ETKA for the latest information and parts bulletins.

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