

Technical Service Bulletin



46 Squeal from the front brakes - Audi e-tron quattro

46 23 44 2056700/5 May 19, 2023. Supersedes Technical Service Bulletin Group 46 number 23-42 dated March 17, 2023, for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
e-tron quattro	2019	All	Not Applicable
e-tron Sportback quattro	2020		

Condition

REVISION HISTORY		
Revision	Date	Purpose
5	-	Revised <i>Required Parts and Tools</i>
4	03/17/2023	Revised <i>Required Parts and Tools</i>
3	01/08/2021	Revised <i>Required Parts and Tools</i> (Added Part) Revised <i>Additional Information</i> (Added reference)

Customer States:

- They hear a squealing noise in multiple frequencies (1.7 kHz, 2.5 kHz, and 10.5 kHz) from the front brakes in the following conditions:
- Driving forward or reverse, warm brakes, slow speeds (10.5 kHz).
- Driving forward or reverse, cold brakes, first application, slow speeds (1.7 kHz, and 2.5 kHz).
- Ambient temperatures and humidity conditions may vary.



Please review the audio/video example by scanning the QR Code, or visiting <https://audi-external.kzoplatform.com/player/medium/1541501619189847414> (Figure 1).



Figure 1: QR code to supporting video.



Note:

- Frequencies can be identified with our Audi Frequency Analysis App, review TSB 2051095: *46 Audi frequency analysis* for further information.
- Please describe the frequency found in the vehicle in the warranty claim comments section (1.7 KHz and/or 2.5 KHz and/or 10.5 KHz).

Technical Background

Not Applicable

Production Solution

Not Applicable

Service

1. Parts Replacement:

Replace front brakes pads according to the Repair Manual instructions in ELSA at *Chassis >> Brake System >> 46 Mechanical Components >> Front Brakes >> Brake pads, Removing and installing 1LE, 1LF, 1ZK.*

2. Brake Embedding:

- a. Perform 10 stops from approximately 35 mph to 10 mph with medium to high brake application.

Technical Service Bulletin



- b. Drive approximately 2 minutes at 40 mph without braking to allow the brakes to cool down.
- c. Repeat steps a, and b if necessary.



Note:

- This bulletin does not apply if there is an improper operation or misuse of the vehicle.
- Do not perform ABS stops as a way of embedding the brakes. Brake pads and discs may be permanently damaged if the brakes are overheated prior to being properly embedded.



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: *46 Brake noise analysis and handling*.

Warranty

Claim Type:	<ul style="list-style-type: none">• 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 with associated operations
	Brake pads front remove + reinstall	4636 2050	See SRT with associated operations
Diagnostic Time:	GFF	No allowance	0 TU
	Road test prior to the service procedure	0121 0002	10 TU
	Road test after the service procedure	0121 0004	10 TU
Claim Comment:	As per TSB 2056700/5		

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



The part numbers mentioned in this TSB are different than the ones listed in ETKA. Only use parts listed in this TSB, this includes superseding part numbers!

Part Number	Part Description	Quantity
See ETKA	Fasteners, Bolts, Nuts, and Screws as needed per the Repair Manual	See ETKA/ELSA
See ETKA	Set of front brake pads	01
G052150A2 G052150S0 (This number should be used in the SAGA warranty claim only)	Lithium grease	1
See ETKA	Spring	02
See ETKA	Sender wire	02

Additional Information

More information on this system can be found in the following resources: [Elsa: Chassis >> Brake System >> 46 Mechanical Components >> Front Brakes >> Brake pads, Removing and Installing 1LE, 1LF, 1ZK.](#)

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

- TSB 2051095, *46 Audi frequency analysis.*
- TSB 2034181, *46 Brake noise analysis and handling.*

All parts and service references provided in this TSB (**2056700**) are subject to change and/or removal.

©2023 Audi of America, Inc. All rights reserved. The information contained in this document is based on the latest information available at the time of printing and is subject to the copyright and other intellectual property rights of Audi of America, Inc., its affiliated companies, and its licensors. All rights are reserved to make changes at any time without notice. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, nor may these materials be modified or reposted to other sites, without the prior expressed written permission of the publisher.