

Technical Service Bulletin



46 S4 and S5 squealing from front brakes (PR-1LJ)

46 14 89 2027636/8 July 21, 2014. Supersedes Technical Service Bulletin Group 46 number 14-73 dated March 12, 2014 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
S4	2010 - 2011	All	PR-1LJ
S4	2012	000001 - 007700	PR-1LJ
S5	2008 - 2010	All	PR-1LJ
S5	2011	000001 - 091006	PR-1LJ
S5 Cabriolet	2008 - 2010	All	PR-1LJ
S5 Cabriolet	2011	000001 - 022798	PR-1LJ

Condition

REVISION HISTORY		
Revision	Date	Purpose
8	-	Revised <i>Condition</i> (Added Note) Revised <i>Service</i> (Clarified information) Revised <i>Warranty</i> (Updated labor operations)
7	3/12/2014	Revised header data (Updated engine codes) Revised <i>Technical Background</i> (Updated pad wear limit)
6	6/13/2013	Revised <i>Service</i> (Added screenshots and text) Revised <i>Production Solution</i> (Added information) Revised header data (Added production date)
5	3/13/2013	Revised <i>Service</i> (Added screenshots and text)
4	6/5/2012	Revised <i>Service</i> (Added screenshots and text)
3	2/14/2012	Revised header data (Added production date)
2	1/18/2012	Revised header data Revised <i>Condition</i> (Added production date) Revised <i>Service</i> (Added information to Step 1)
1	11/16/2011	Original publication

- Brakes squeak or squeal when used with light to moderate force.
- The vehicle was produced before September 3, 2012 (calendar week 36).



Note:

This bulletin does not apply to vehicles produced on September 3, 2012 or later. For vehicles built on September 3, 2012 or later, use TSB 2034181: *46 Brake noise analysis and handling*, or other applicable TSBs.

Technical Background

If any of the following conditions occur, this TSB does not apply.

- Foreign bodies between brake disc and brake pad, such as small stones, grit, or sand.
- Un-ground or corroded friction materials.
- Brake discs or brake pads are close to their wear limit. (Front brake disc wear limit: 28mm. Front brake pads wear limit with backing plate and dampening sheet: 10 mm.)
- Metallic deposits from disc material in brake pad (Figure 1).



Figure 1. *Metallic deposits.*


- Deposits in brake pad.

Production Solution

- From June 20, 2011 (calendar week 25), brake discs, brake carriers, and brake pads with noise insulation installed in production.
- From September 3, 2012 (calendar week 36), anti-seize lubricant applied to the guide pins during production.

Service

- Review the following scenarios to determine the correct repair for the vehicle.
- Use ETKA to verify the build date and PR code for the vehicle.
- Only one scenario can be applied to the vehicle.

 **Tip:** Date formats in ETKA:

- >> 20.06.2011: Indicates vehicles built up to 6/20/2011 or June 20, 2011
- 20.06.2011 >>: Indicates vehicles built after 6/20/2011 or June 20, 2011

Scenario A

If the vehicle was built *before* June 20, 2011, with PR-1LJ (29.5MM discs) (Figure 2), and it has not previously received any repairs listed in this TSB, **perform steps 1 – 4** under “Repair Procedure”, below.

POS	PART NUMBER	NAME	REMARK	QTY	MODEL
		disc brake brake caliper caliper carrier brake disc (ventilated)	TRW-GIRLING front 345X29,5MM 5/112		S4+PR-1LJ
		D	>> - 20.06.2011		

Figure 2. ETKA screen shot for vehicles built up to June 20, 2011 with PR-1LJ and 29.5mm front discs.

Scenario B

If the vehicle was built *before* June 20, 2011 but has PR-1ZT (30MM discs) (Figure 3), **perform steps 2 and 4 only** under “Repair Procedure”, below.

If PR-1ZT is present DO NOT INSTALL **8K0698998** and DO NOT use SVM 03A004.

POS	PART NUMBER	NAME	REMARK	QTY	MODEL
		disc brake brake caliper caliper carrier brake disc (ventilated)	TRW-GIRLING front 345X30MM 5/112		S4+PR-1ZT

Figure 3. ETKA screen shot for vehicles that had previous version of this TSB performed which involved installing parts kit **8K0698998** and updating the PR code with SVM 03A004.

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Scenario C

If the vehicle was built *after* June 20, 2011, but before September 3, 2012, with PR-1LJ (30MM discs) (Figure 4), **perform steps 2 and 4 only** under "Repair Procedure", below. **DO NOT INSTALL 8K0698998** and **DO NOT** use SVM 03A004.

POS	PART NUMBER	NAME	REMARK	QTY	MODEL
		disc brake brake caliper caliper carrier brake disc (ventilated) D - 20.06.2011>>	TRW-GIRLING front 345X30MM 5/112		S4+PR-1LJ

Figure 4. ETKA screen shot for vehicles built after June 20, 2011 with PR-1LJ and 30mm front discs.

Repair Procedure

Only perform the necessary steps listed under the applicable scenario above. All of the following steps may not be required.

1. Install parts kit with part number **8K0698998**. The kit includes the following components:

- 1 set of brake pads with wear indicator for disc brakes
- 2 front brake discs
- 2 brake carriers
- 4 hexagonal collar bolts
- 2 hexagonal countersunk screws

Refer to the Elsa Repair Manual for front brake pad instructions.



Tip: Brake pads must be securely glued to the calipers.

2. Apply a thin coat of anti-seize (**G 052560A2**) lubricant to the guide pins of the caliper carrier prior to installing the brake pads (Figure 5). Only apply this lubricant to the section of the guide pins that will be contacted by the brake pads.



Figure 5. Caliper carrier guide pins with anti-seize (**G 052560A2**) lubricant applied where the pads make contact.

3. Follow all instructions in TSB 2011732: *00 Software Management (SVM), operating instructions*, to update the vehicles front brake PR code data using the SVM action code listed in the table below. Use Audi *Flashing >> Software Version Management (SVM) >> SVM – Direct input: SVM code for vehicle conversion*.

Models	Old front brake PR code	New front brake PR code	SVM Action Code
S4 / S5 / S5 Cabriolet	PR-1LJ (29.5MM)	PR-1ZT (30MM)	03A004



Tip: The change is necessary to ensure correct parts are installed during future brake service. This SVM code should only be performed for repairs listed in **Scenario A**.

4. Road test the vehicle to seat the breaks and to verify that the noise has been eliminated.



Tip: If the vehicle still exhibits brake noise after all of the repairs stated above have been accurately performed:

- Obtain a sound recording, create a TAC ticket, and attach the sound recording.
- Do not open a TAC ticket without a sound recording.

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Warranty

There must be an original customer complaint of the specified symptom on the repair order for this Technical Service Bulletin to apply. Adding this procedure on is not permitted.

Claim Type:	110		
Service Number:	4617		
Damage Code:	0020		
Labor Operations:	Scenario A (Steps 1 - 4)		
	2 Wheels remove and reinstall	4405 2000	20 TU
	2 Brake pads, front remove and reinstall	4636 2050	50 TU
	2 Front brake disc remove and reinstall	4650 2050	40 TU
	SVM update	0150 0000	Time stated on diagnostic protocol (Max 30 TU)
	Road test prior to service procedure	0121 0002	10 TU
	Road test after service procedure	0121 0004	10 TU
	Scenario B or C (Steps 2 and 4 only)		
	2 Front brake calipers removed and reinstalled	4739 2000	90 TU
	Clean guide pins and apply anti-seize	4739 9999	10 TU
Diagnostic Time:	Road test prior to service procedure	0121 0002	10 TU
	Road test after service procedure	0121 0004	10 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 #2027636/8		

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



Note:

In the event of a parts request, all parts included in the repair should be sent to the WPRC.

Part Number	Part Description	Quantity
G 052560A2	Anti-seize lubricant	0.10
8K0698998	S4/S5 Parts Kit (parts listed below are included in the kit)	1
	<ul style="list-style-type: none">• Set of brake pads with wear indicator (1 set)• Front brake discs (x2)• Brake carriers (x2)• Hex. collar bolts (x4)• Hexagonal countersunk screws (x2)	Included in kit

Additional Information

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

- TSB 2011732: *00 Software Management (SVM), operating instructions.*

All parts and service references provided in this TSB (2027636) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.