

### 46 Q5 squealing from front brakes, 2.0T, & 3.2L, & Hybrid (PR-1LA)

46 14 90 2033102/4 July 21, 2014. Supersedes Technical Service Bulletin Group 46 number 14-74 dated March 12, 2014 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
Q5	2010 - 2011	All	2.0T & 3.2L with PR-1LA
Q5	2012	000001 - 005957	2.0T & 3.2L with PR-1LA

### Condition

REVISION HISTORY			
Revision	Date	Purpose	
4	-	Revised Condition (Added Note) Revised Service (Clarified information)	
3	3/12/2014	Revised Technical Background (Updated pad wear limit)	
2	2/14/2014	Revised Required Parts and Tools (Corrected quantity)	
1	07/22/2013	Initial publication	

Brakes on vehicles produced before September 3, 2012 (calendar week 36 of 2012), squeak or squeal when used with light to moderate force.



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

## **Technical Background**

### If any of the following conditions are present, 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: 10mm).



Metallic deposits from disc material in brake pad (Figure 1).



Figure 1. Metallic deposits.

Deposits in brake pad.

## **Production Solution**

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

## **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-1LA (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	TRW-GIRLING front		PR-1LA
		caliper carrier	TOTAL		
		brake disc (ventilated) D >> - 20.06.2011	320X30MM 5/112		
		D >> - 20.00.2011			

Figure 2. ETKA screen shot for vehicles built up to June 20, 2011 with PR 1LA.

#### Scenario B

If the vehicle was built *before* June 20, 2011 with PR-1LA but now has PR-1ZB (Figure 3), this TSB does not apply since it has already been performed.

If PR-1ZB is present DO NOT INSTALL 8R0698998A 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 320X30MM 5/112		PR-1ZB

Figure 3. ETKA screen shot for vehicles that had steps 1 – 4 of this TSB performed previously.

### Scenario C

If the vehicle was built *after* June 20, 2011 with PR-1LA (Figure 4), but *before* September 3, 2012, perform steps 2 and 4. DO NOT INSTALL **8R0698998A** and DO NOT use SVM 03A004.

POS	PART NUMBER	NAME	REMARK	QTY	MODEL
	C	disc brake brake caliper caliper carrier brake disc (ventilated) D - 20.06.2011>>	TRW-GIRLING front 320X30MM 5/112		PR-1LA

Figure 4. ETKA screen shot for vehicles built after June 20, 2011 with PR 1LA.

# Audi

## Technical Service Bulletin

### **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 8R0698998A. 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

See Elsa >> Repair Manual >> Chassis >> 46 Mechanical Components >> Removal and Installation >> Front Brakes, FBC-57 >> Front Brake Pads, FBC-57.



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

 Apply a thin coat of anti-seize lubricant (G 052560A2) to the guide pins of the caliper carrier prior to installing the brake pads (Figure 5). Only apply the 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 lubricant applied where the pads make contact.

3. Follow all instructions in TSB 2011732, 00 Software Management (SVM), operating instructions, to update the vehicle's 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	
Q5 2.0T & 3.2L	PR-1LA	PR-1ZB	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.

# Audi

# Technical Service Bulletin

## **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 to a different service 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 C (Steps 2 and 4)  2 Front brake calipers removed and reinstalled (Does not require brake system bleed)  70 TU			
	Clean guide pins and apply anti-seize	4739 9999	10 TU	
	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 allowand	e details)	
Claim Comment:	As per TSB #2033102/4			

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
8R0698998A	Q5 Parts Kit (parts listed below are included in the kit)	1
	Set of brake pads with wear indicator (1 set)	Included in kit
	Front brake discs (x2)	
	Brake carriers (x2)	
	Hex. collar bolts (x4)	
	Hexagonal countersunk screws (x2)	

## **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 (2033102) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.