

Juddering/shuddering at the rear axle brakes

Topic number	LI42.10-P-067183
Version	1
Function group	42.10 Service brake
Date	10-18-2017
Validity	BR 205 without AMG
Reason for change	
Reason for block	

Complaint:

Juddering/shuddering of the brakes at the rear axle can be felt when braking.

Valid for cold juddering:

Cold juddering occurs when braking normally at any speed and is identifiable as pulsation of the brake pedal.

As opposed to cold juddering, thermal juddering occurs when braking sharply at high speeds.

This document is not valid for juddering related to heat!

Cause:

Grinding creates a thickness error in the brake disk.

Possible causes:

- Different torque due to improper tightening of the wheel threaded connection
- Wheel contact surface damaged or soiled
- Imbalance at the wheel
- Wheel suspension damaged
- Defective wheel flange

Remedy:

Always check the wheel assembly components:

1 Check operational condition of disk brake and brakepads (AP42.10-P-4256EW, see attachment), particularly the sliding elements.

2 Check the wheel for imbalance (including vertical runout if possible) and rebalance if necessary.

3 Ensure operational condition of wheel suspension.

XENTRY TIPS

4 If none of the components mentioned above are visibly or measurably damaged, then carry out the following repairs:

4.1 Replace brake disks.

Note:

- Please observe "Note on processing, transporting and storing compound brake disk" (AH42.10- P-9406-12LF, see attachment)!

4.2 Replace brakepads.

5 Mount wheels as follows:

Note:

- An impact wrench must NOT be used for assembly!

5.1 Clean, check and protect the wheel threaded connection components from corrosion before assembly (see attachment AR40.10-P-1100-02A).

5.2 Fit wheel bolts crosswise by hand to max. 20 Nm (see picture in attachment "Wheel threaded connection tightening sequence").

5.3 First tighten wheel bolts crosswise with a torque wrench by max. 70 Nm (see picture "Wheel threaded connection tightening sequence").

5.4 Lower vehicle until the wheels are prevented from spinning.

5.5 Tighten wheel bolts crosswise with a torque wrench to the vehicle-specific prescribed tightening torque (see picture "Wheel threaded connection tightening sequence").

5.6 Lower vehicle completely.

5.7 Retorque wheel bolts with vehicle-specific prescribed tightening torque.

Attachments	
File	Description
Anzugreihenfolge Radverschraubung.jpg	Wheel bolts are to be tightened in the 1-2-3-4-5 sequence displayed in the picture

Symptoms
Chassis/suspension / Brake system / Service brake / Function / Vibrates/shudders

Parts

Attachments	
File	Description
AH42.10-P-9406-12LF.pdf	Note on processing, transporting and storing compound brake disc.
AP42.10-P-4256EW.pdf	Note on evaluating the condition of brake discs.
AR40.10-P-1100-02A.pdf	Note on checking and cleaning the wheel threaded connection.

XENTRY TIPS

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			42201 H4	Rear axle brake disk