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# Bearing
# Installation Instructions

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**Bearing**

Installation instructions

**To avoid damages during the wheel bearing assembly please be aware:**

- For mounting no mechanical force may be applied.
- When assembling the bearings, make sure that the wheel bearing is not tilted.
- If necessary, special assembly tools should be used.
- The improper use of an impact tool such as hammer should be avoided.

Much of the premature bearing failures could be prevented by a professional installation!

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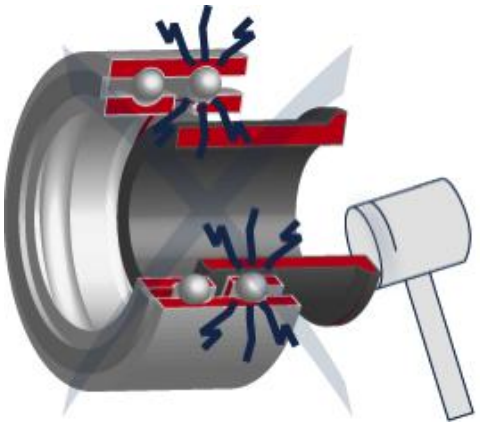
**Installation instructions**

Causes of damages during the wheel bearing assembly:

- Hitting the inner ring



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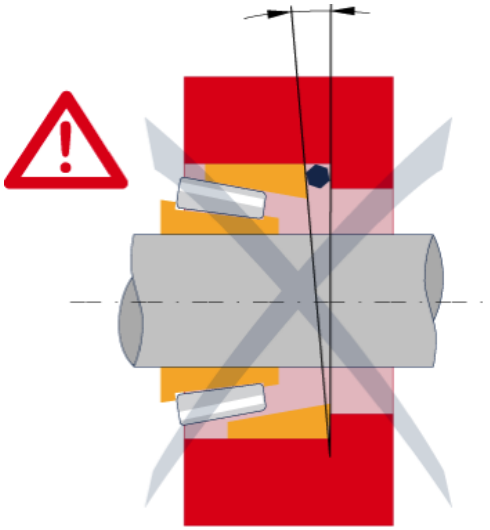
**Installation instructions**

Causes of damages during the wheel bearing assembly

Residues in the bearing seat can cause the disturbance in the functionality of axes;
As a resault there maight be punctual overloading / peeling.



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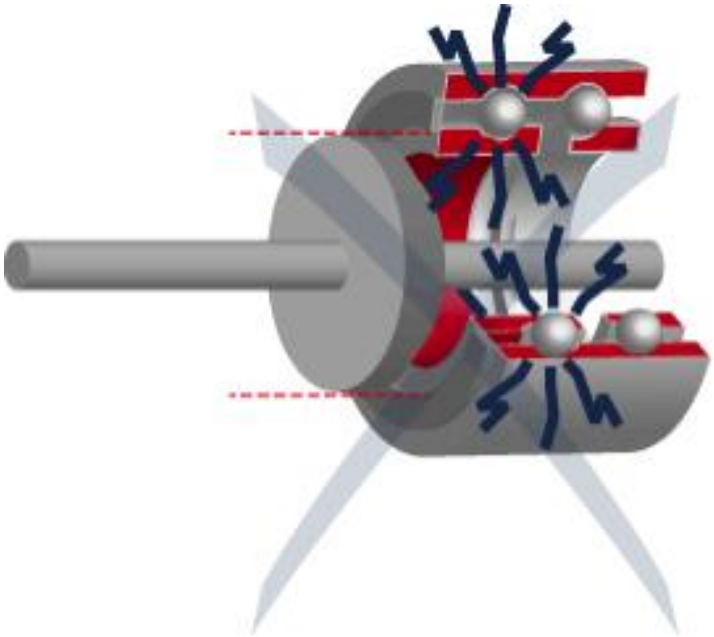
**Installation instructions**

Causes of damages during the wheel bearing assembly

Mounting going over the inner ring.

The resault here is an overload of the contact surfaces.
Damage is peeling at rolling element.



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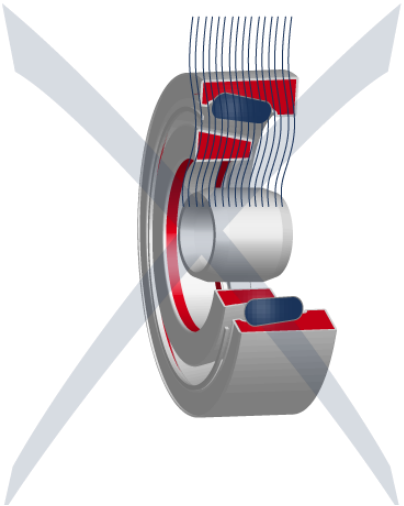
**Installation instructions**

Causes of damages during the wheel bearing assembly

Too small an amount or unsuitable lubricant leads to overheating of the bearing components.



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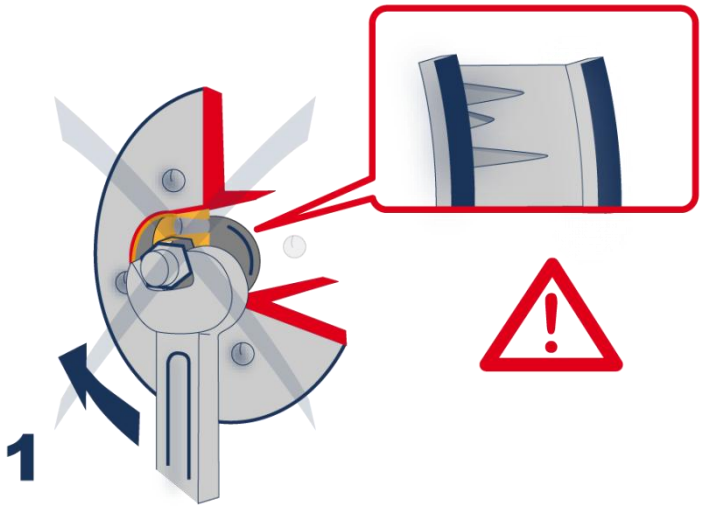
**Installation instructions**

Causes of damages during the wheel bearing assembly

Too high start torque effect which causes the overheating of the bearing components



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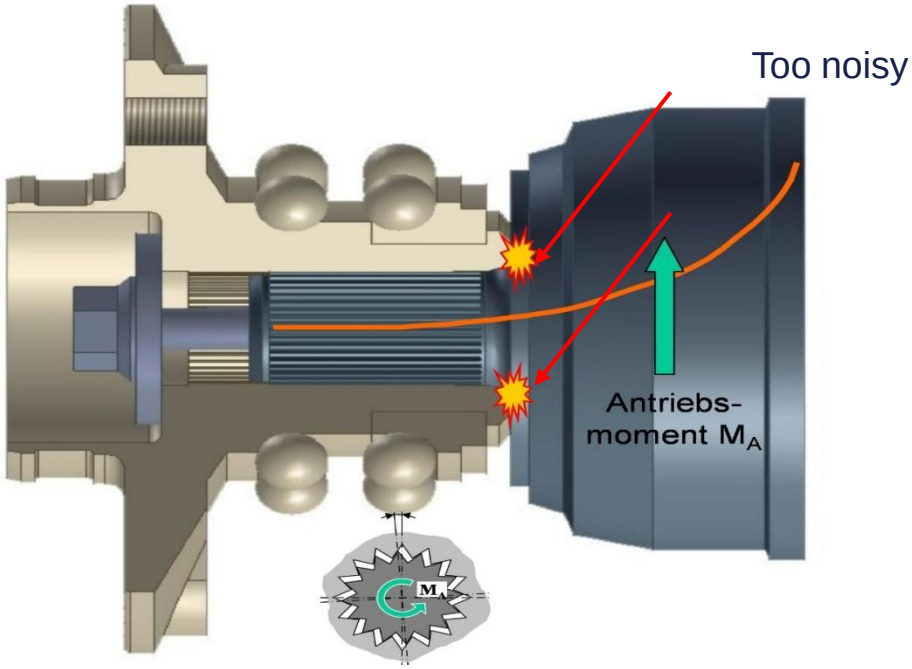
**Installation instructions**

Loose meshing engagement



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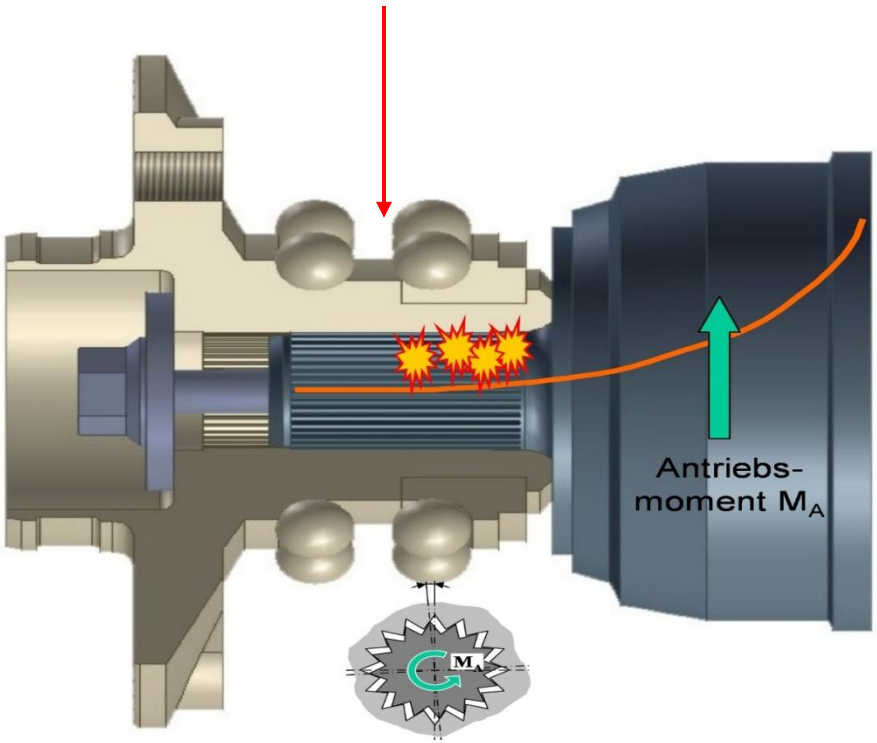
**Installation instructions**

Loose meshing engagement

too noisy



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## Installation instructions

Loose meshing engagement

**Affected vehicles**

Volvo 850, C70, S70, V70

**Problem:**

Vibrations and cracking noises in the front area of the axle.

**Cause:**

After re joint drive shaft without glue remained minimal clearance between the wheel hub gearing and joint shaft.

**Remedy**

Glue the hub with a suitable metal adhesive – e.g.Volvo.

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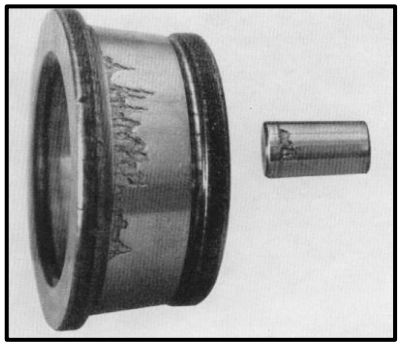
**Damages:**

**Shelling**

is a result of an edge load for tapered roller bearings

- Disruption of functional axes
- Excessive tightening torque



Advanced hulling to edge loads

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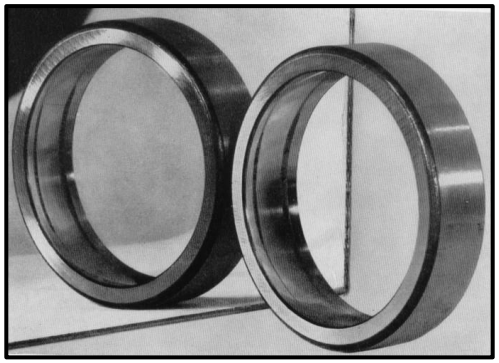
## Damages

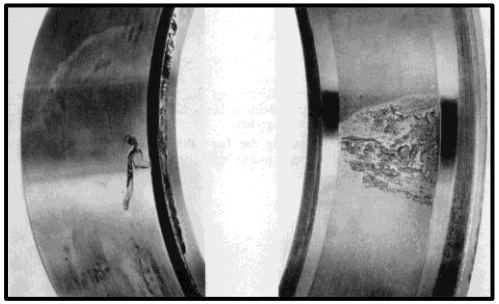
### Flattening

is a result of jamming

- Residues in the wheel bearing housing
- Damage to the wheel bearing housing / hub
- Chips, dirt particles between outer ring and housing



radial load
(Oval jammed rings)



Impression of a chip and corresponding peeling worse as a result circulation in housing

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**Damages**

**Corrosion**

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**Damages**

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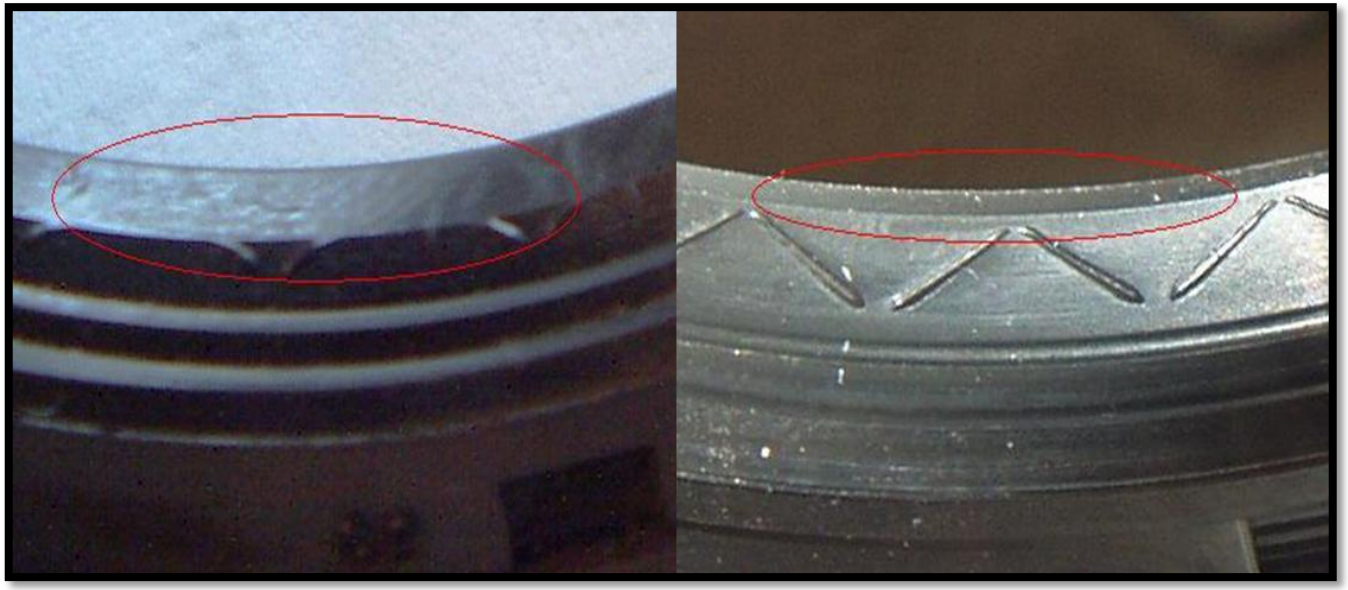
**Damages**

**Corrosion**

Damage to the wheel hub will destroy the seal.



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**Damages**

**Corrosion (RS-1027 )**

Audi A1/A2,
VW Polo 9N
T5 / Tuareg etc.

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**Damages**

**Sounds**

Peeling the roll body distance
Overload of the inner ring
Hitting marks to the inner ring

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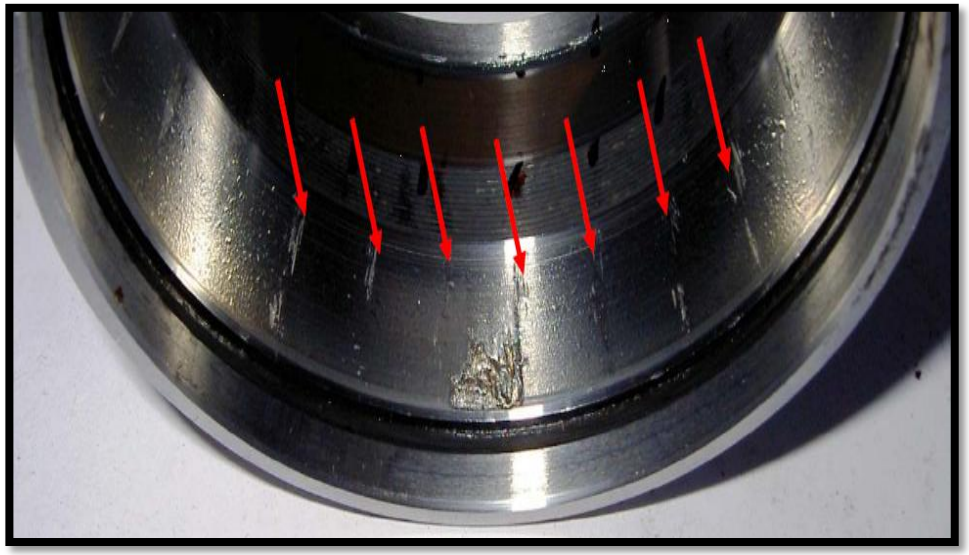
**Damages**

**Sounds**

Indentations on the running surface of the outer ring



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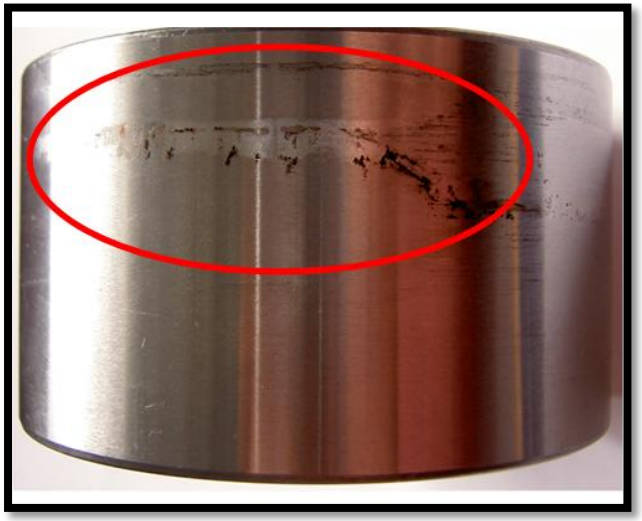
**Damages**

**Failure after a short running time**



Flattening in the bearing housing

Flattening

Separate lanes at the tread

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**Damages**

**Failure after a short running time**

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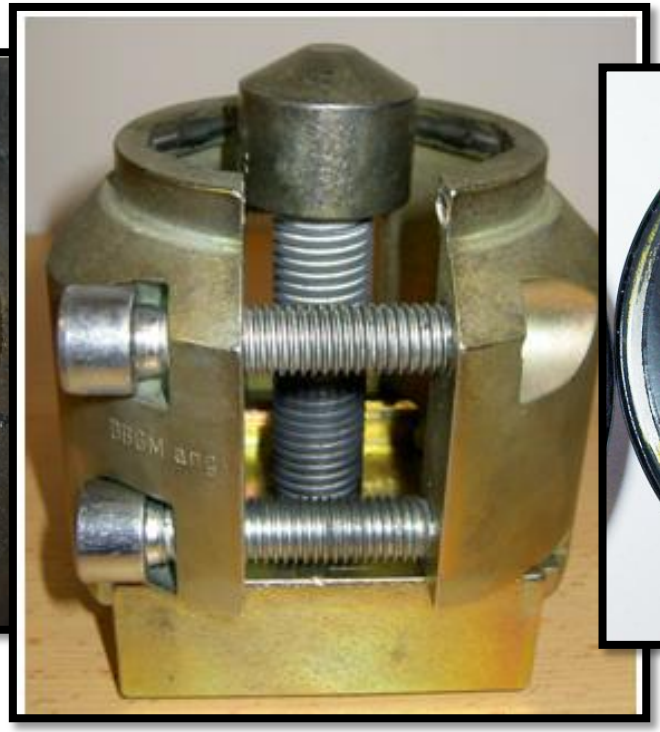
**Damages**

**Failure after a short running time**



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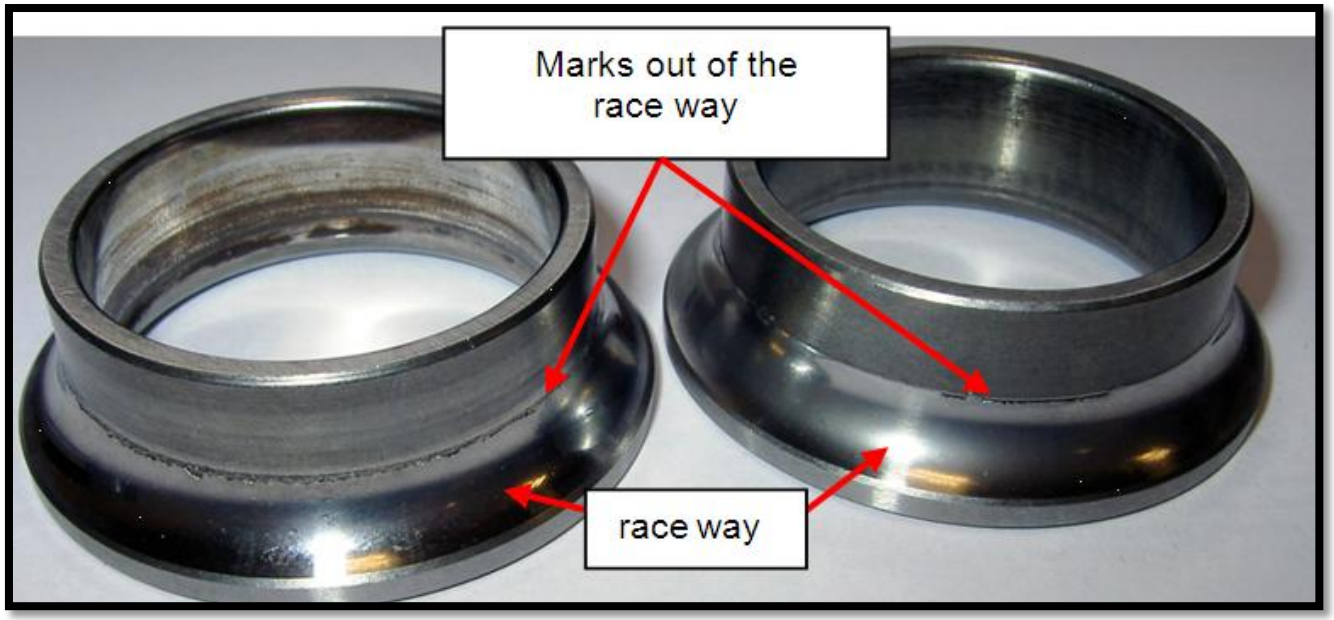
**Damages**

**Failure after a short running time**

Bearing preload too low



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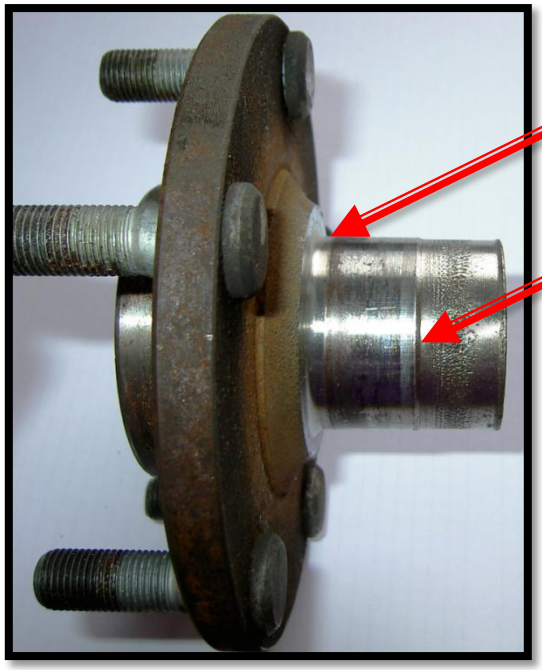
**Damages**

Bearing preload too low

Failure after a short running time



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**Damages**

**Failure after a short running time**

Bearing preload too high

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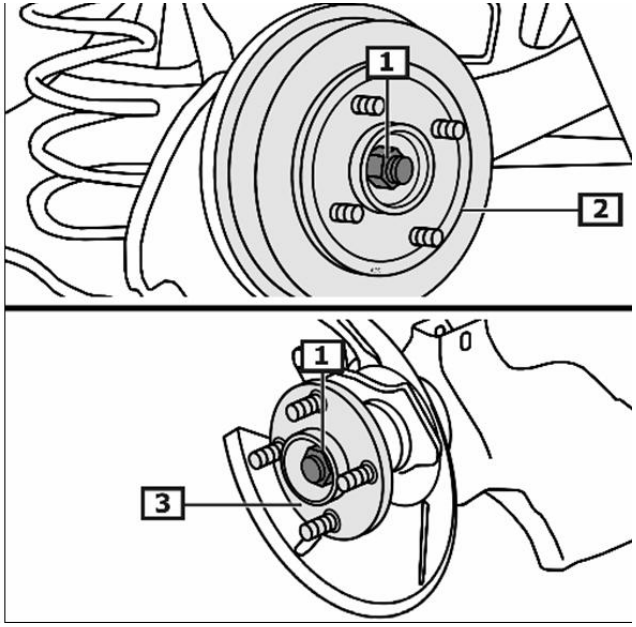
**Tips and tricks**

**Tightening torque**

Ford Fiesta div.

axle nut
tightening torque
235 nm



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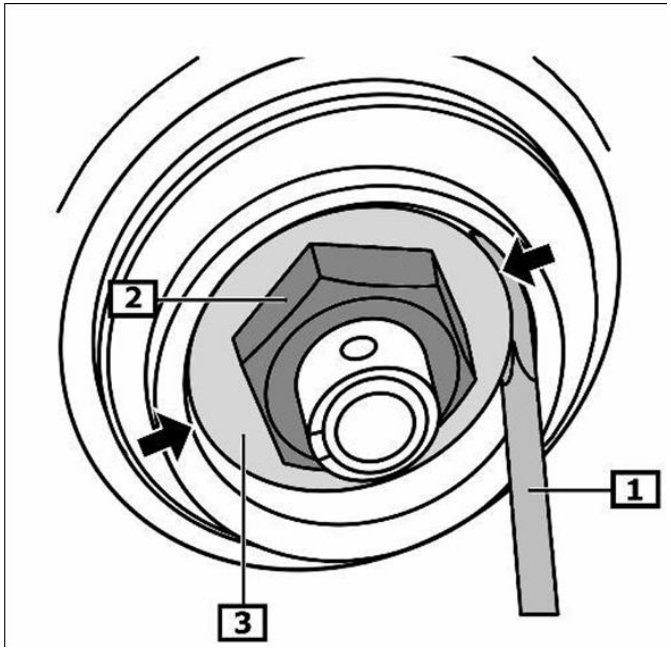
**Tips and tricks**

**Choose correct wheel bearing play**

Adjust the wheel bearing loose in accordance with the manufacturer's instructions.
e.g. W203
Wheel bearing clearance 0.01 - 0.02mm



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**Tips and tricks**

**Correct mounting (RS-1027 )**

Not mounted using the appropriate tool!

Audi A1/A2,
VW Polo 9N
T5 / Tuareg etc.

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**Tips and tricks**

**Correct mounting (RS-1027)**

Audi A1/A2,
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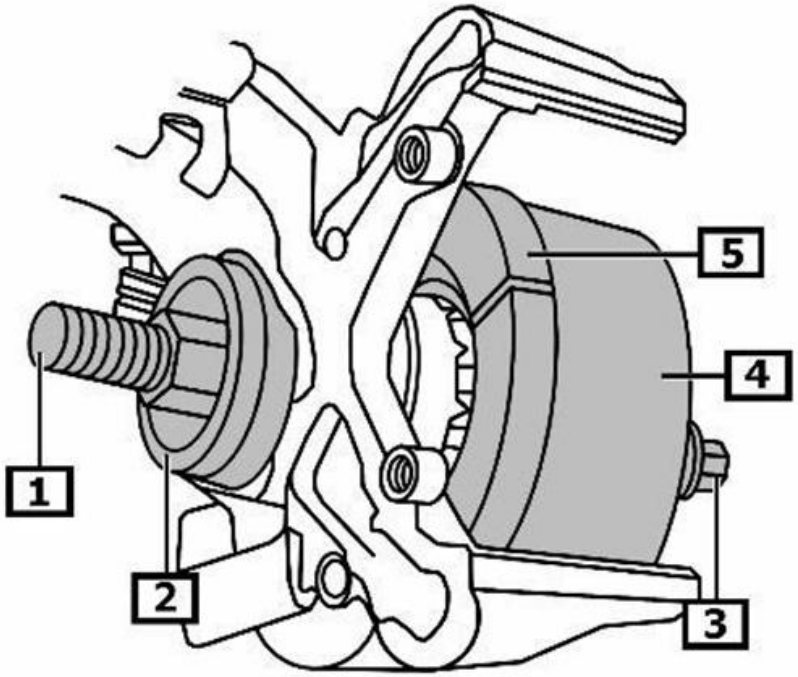

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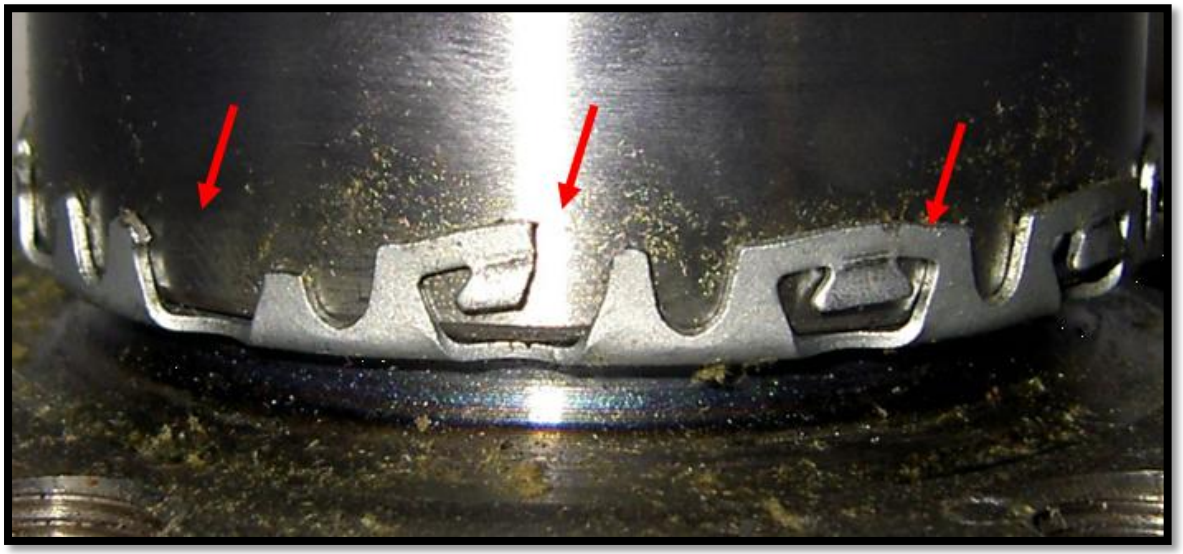
**Tips and tricks**

**Correct mounting (RS-1027 )**

The wheel bearing was fitted correctly!

Audi A1/A2,
VW Polo 9N
T5 / Tuareg etc.



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**Hub**

Check the runout of the wheel hub

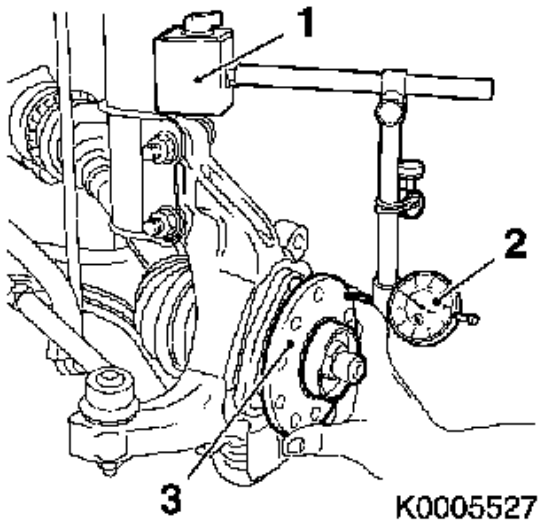
Excessive hub shock caused:

-Noise

-Flapping

-Unequals pad wear

- Poor braking action




Check the runout of the wheel hub according to the manufacturer's instructions!

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**Hub**

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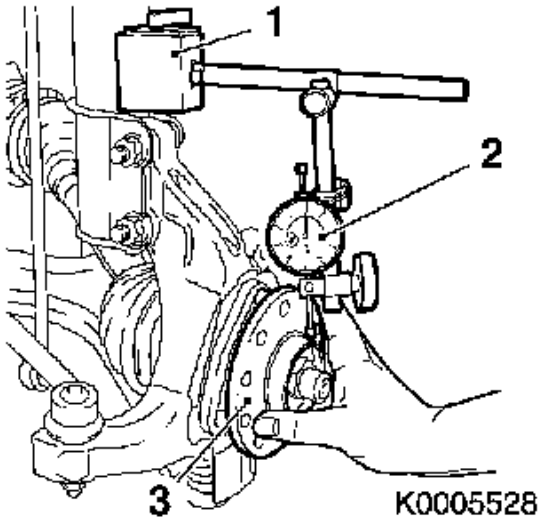


Check the runout of the wheel hub according to the manufacturer's instructions!

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Thank you for Your attention!