DIAGNOSTIC EXPERT
ANALYSIS & RECOMMENDATIONS
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MOST COMMON FAILURES OF SUSPENSION BEARING AND DAMPER BUSH

Most failures are detected by the *noise* and by the *sensation of stiffness in the steering system*

**Bearing failures:**
- 1. Corrosion
- 2. Fracture
- 3. False Brinelling

**Damper bush failures:**
- 4. Tearing
- 5. Weathered material
GENERAL RECOMMENDATIONS

- Replace the suspension bearing and the damper bush at the same time as the shock absorber (before 100,000 km and as a pair): this guarantees 100% safety and comfort.

- Always replace all the parts supplied in the NTN-SNR kits (screws, nuts, washers, etc.).

- Check to be sure that all parts are reinstalled in the right sequence and in the right orientation. TAKE CARE to install the bearing in the proper orientation: otherwise steering system rotation will be impaired!

- Never re-install a part that has been damaged (crack, shock impact, immersion in liquid) - otherwise its service life will be very short.

- Use original quality parts that ensure compliance with OEM specifications, high-quality steel and rubber, as well as perfect adhesion between the rubber and the steel.
CORROSION

EVIDENCE
• Continuous squealing while turning or on rough roads
• Stiff steering
• Poor seal, damaged bellows

PROBABLE CAUSES
• Ingress of contaminants such as water, salt, mud, sand, etc.

NTN-SNR RECOMMENDATION
• Carefully check the condition of the bellows and of the suspension bearing
FRACTURED SUSPENSION BEARING

EVIDENCE
• Noise on poor road surfaces or while turning
• Stiff steering

PROBABLE CAUSES
• Poor road conditions: driving repeatedly through potholes, over speed bumps.
• High-speed impacts (curbs, sidewalks, etc.)

NTN-SNR RECOMMENDATION
• Follow standard recommendations
• Check the condition of the damper bush and suspension bearings when replacing the shock absorber
FALSE BRINELLING

EVIDENCE
• Right from the first few kilometers, the sound of a spring “rattling” on rough roads.

PROBABLE CAUSES
• Damage due to micro-vibrations during vehicle transport

NTN-SNR RECOMMENDATION
• Change the suspension bearing
DAMAGED DAMPER BUSH

EVIDENCE

• Perceptible play in the front suspension
• Deterioration in the performance of the suspension
• Perforation of the damper bush by the shock absorber shaft

PROBABLE CAUSES

• Poor road conditions
• Inappropriate driving (speed bumps or sidewalks at high speed, etc.)
• Defective shock absorber bearing
• Ingress of contaminants (water, salt, sand, etc.)

NTN-SNR RECOMMENDATION

• Check the condition of the damper bush when replacing suspension bearings
WEATHERED MATERIAL

EVIDENCE
• Diminished comfort
• Shortened service life

PROBABLE CAUSES
• Use in regions subject to extreme conditions (very high or very low temperatures)
• Chemical contamination (coolant, brake fluid, oils)

NTN-SNR RECOMMENDATION
• Check the condition of the damper bush when replacing suspension bearings