



SUSPENSION
RANGE

DIAGNOSTIC EXPERT

ANALYSIS & RECOMMENDATIONS

NTN **SNR**

www.ntn-snr.com



With You



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.



1

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





2

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





3

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





4

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





5

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





SUSPENSION RANGE

NOTES

