

SUSPENSION range

## **POSSIBLE DEGRADATION OF STRUT BEARINGS**

AND STRUT DAMPING BLOCK

NTN. SNR.

With You



- 1 Corrosion
- 2 Fracture
- 3 False brinelling effect (FBE)
- 4 Tearing of the strut damping block
- 5 Material Damage
- 6 Inverted installation

### **GENERAL RECOMMENDATIONS**

- Use original quality parts
- Never reinstall a damaged part
- Replace the Strut bearing and the strut damping block when replacing the shock absorber

- Replace in pairs (left and right)
- Replace all parts supplied in the NTN-SNR kits (Screws, nuts, etc.)
- Make sure to install all parts in the correct order and in the correct orientation.



A damaged strut bearing extends braking distance by 15%

Don't forget to change the struts bearing and their strut mount each time you change the shock absorbers (always in pairs)



### **Removal and installation:**

of a Strut Mount Kit

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### TechScaN'R







### 1 CORROSION

#### **DRIVING IMPRESSIONS**

- Steering is heavier
- Continuous squeal when turning steering wheel or on damaged road surfaces

### CAUSES

- Damaged boot (poor quality part, weather conditions)
- Bad seal integrity
- Ingress of contaminants such as water, salt, mud, sand, etc.
- Vehicle age

### **EFFECTS**

· Corrosion of the strut bearing

### RECOMMENDATIONS

• Locate contaminant water ingress and replace corroded strut bearing and probably the boot as well





### <sup>2</sup> FRACTURE

#### **DRIVING IMPRESSIONS**

- Steering is heavier
- Noise on damaged road surfaces or when turning steering wheel



### **CAUSES**

- Bad road condition (repeated passage through potholes) across speed bumps)
- Too frequent shocks
- Defective strut bearing

### **EFFECTS**

Strut bearing fracture



### RECOMMENDATIONS

• Determination of the cause and repair by replacement of the complete strut mount on both sides

## 3 FALSE BRINELL EFFECT (FBE)

#### **DRIVING IMPRESSIONS**

• Noticeable immediately on first use of vehicle, "clack" sound of spring on damaged road surfaces



### **CAUSES**

• Micro-vibrations during transportation of vehicles on truck or train

### **EFFECTS**

Damage of the strut bearing

# RECOMMENDATIONS

• Replacement of strut bearings or complete Strut mount in pairs

### 4 TEARING OF THE STRUT DAMPING BLOCK

#### **DRIVING IMPRESSIONS**

- Feeling of float in front axle
- degraded suspension performance
- Uneven wear of front tyres

### **CAUSES**

- Poor road surface condition
  Inappropriate driving (driving up
- Inappropriate driving (driving up onto the curb at high speed, etc.)
- Ingress of contaminants

- Defective Shock absorber
- Missing components from the assembly (support cup)





### **EFFECTS**

- Perforation of strut damping block by the shock absorber piston rod
- Windscreen fracture

### RECOMMENDATIONS

• Replacement of the two complete strut mount kits



### **5 MATERIAL DAMAGE**

#### **DRIVING IMPRESSIONS**

· Reduced comfort

#### CAUSES

- Extreme weather conditions (very low or very high temperatures)
- Chemical contamination (brake fluid, oil, etc.)

#### **EFFECTS**

• Reduced product service life due to material damage



### RECOMMENDATIONS

• Determination of the cause and repair by replacement of damaged strut damping block

### 6 INVERTED INSTALLATION

#### **DRIVING IMPRESSIONS**

- Increased torque
- Risk of parasitic noise

### CAUSES

• The strut bearing was not installed in the correct orientation

#### **EFFECTS**

- Damage of the strut damping block
- Possible failure to pass motor vehicle inspection



## RECOI • Careful

### RECOMMENDATIONS

 Carefully follow the correct order and orientation of each component make and make ensure no parts are missing.





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