



Brand of NTN corporation

# POSSIBLE DEGRADATION OF STRUT BEARINGS AND STRUT DAMPING BLOCK



SUSPENSION  
RANGE



<b>1</b>	<b>Corrosion</b> .....	5
<b>2</b>	<b>Fracture</b> .....	6
<b>3</b>	<b>False brinelling effect (FBE)</b> .....	7
<b>4</b>	<b>Tearing of the strut damping block</b> .....	8
<b>5</b>	<b>Material Damage</b> .....	9
<b>6</b>	<b>Inverted installation</b> .....	10




## 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 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)

Find our tutorial on  **YouTube** :



**Removal and installation:**  
of a Strut Mount Kit

FOLLOW OUR NEWS

**Thanks to our  
TechScaN'R app**, find all our  
technical data that you may  
need about our products.  
Download the app to  
your smartphone!



**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

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



### RECOMMENDATIONS

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



This document is the exclusive property of NTN-SNR ROULEMENTS. Any total or partial reproduction thereof without the prior consent of NTN-SNR ROULEMENTS is strictly prohibited. Legal action may be brought against anyone breaching the terms of this paragraph.

NTN-SNR ROULEMENTS shall not be held liable for any errors or omissions that may have crept into this document despite the care taken in drafting it. Due to our policy of continuous research and development, we reserve the right to make changes without notice to all or part of the products and specifications mentioned in this document.

© NTN-SNR ROULEMENTS, 2022 international copyright.

NTN-SNR ROULEMENTS - 1 rue des Usines - 74000 Annecy  
RCS ANNECY B 325 821 072 - Code APE 2815Z - Code NACE 28.15

[www.ntn-snr.com](http://www.ntn-snr.com)

