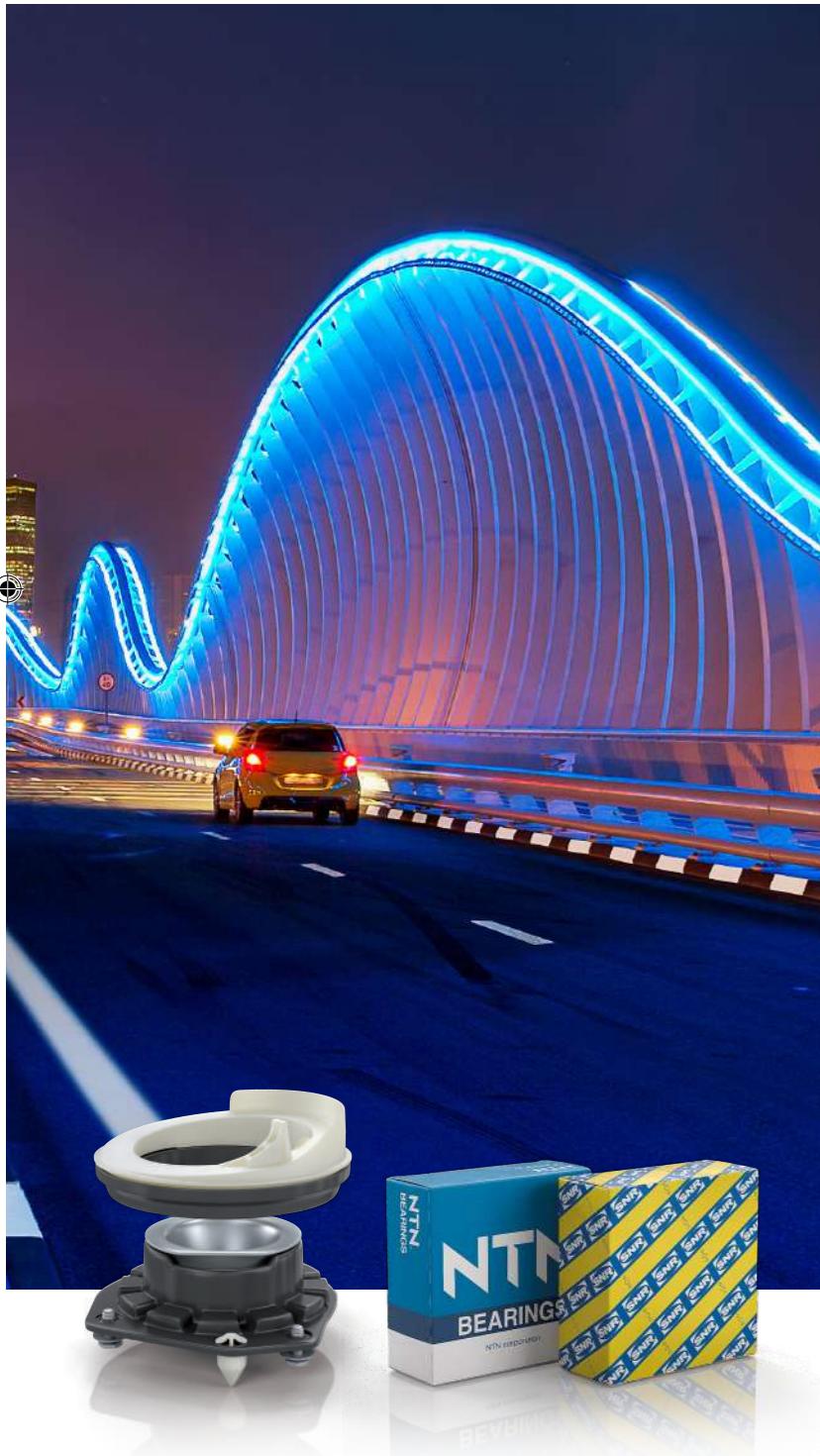


SHOCK ABSORBERS

We don't go with the flow,
we shape it!



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NTN Europe - 1 rue des Usines - 74000 Annecy
RCS ANNECY B 325 821 072 - Code APE 2815Z - Code NACE 28.15
www.ntn-europe.com

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SNR
Brand of **NTN Group**



NTN | **SNR** | **BCA**TM
BEARINGS | **BOWER**[®] | Brands of
NTN Group

SNR gas shock absorber benefits

Improved performance

Gas shock absorbers are a guarantee of performance. Replacing the air with compressed nitrogen enables the assembly to react more rapidly, ensures good road handling and reduces heating sensitivity.

A range that meets your needs

The list of part numbers is often very long: to simplify your administrative tasks, the SNR range has been standardised. This approach makes it possible to cover multiple applications with a single part number, which provides significant benefits:

- **Simplification of product identification:** the shock absorber identification process facilitates your operations and your administrative functions.
- **Easier part number management:** the standardised approach simplifies the administration of multiple part numbers, which saves you time, reduces complexity and minimises the risk of error (stock problems, better quality control, etc.).
- **Warehouse space optimization:** the product range standardisation enables you to manage your storage space more efficiently.

Ease of installation

Gas shock absorbers make repairs simpler. Basically, the pressure inside the shock absorber makes it much easier to extend the shaft (initially compressed in the tube). Compared with hydraulic shock absorbers, there is no longer any need to apply high compressive force.

Discover our tutorials

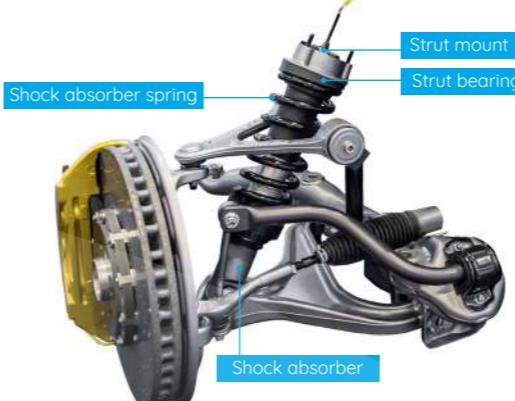


Shock absorbers and suspensions:

Functions

Suspensions play an essential role in vehicle safety and good road handling.

- **Safety:** They help maintain contact between the wheels and the road surface at all times (while accelerating, braking and changing direction).
- **Comfort and performance:** They affect a vehicle's road handling, steering and ride.



Purpose of the shock absorber

Shock absorbers are an essential part of a vehicle's suspension system. By absorbing shocks and reducing vibration in the passenger compartment, they ensure comfortable and perfectly controlled road handling.

In terms of safety, shock absorbers play a vital role: they minimise the risk of losing control on curves or on rough roads.

When they encounter potholes, speed bumps or uneven road surfaces, shock absorbers adapt by compressing and releasing. As a result, this chain reaction maintains continuous contact between the tyres and the road surface, thereby assuring safety and good road handling.

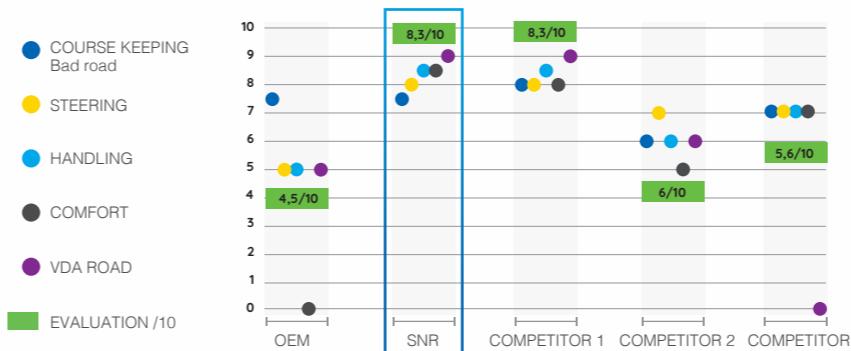
Suspension - More than 1400 references

- More than 20 million strut bearings are produced every year
 - Shock Absorbers SA##.##
 - Suspension kits KB##.##
 - Rear suspension arm kits KS##.##
 - Strut bearings M##.##
 - Strut Mounts KBLF##

SNR offers you:

- **Safety:** Road holding and better maneuverability
- **Comfort:** Steering comfort on all types of roads
- **Performance :** Optimal product life

Testing on Citroën C3 : stability, security & comfort



Replacement recommendations

Why replace the suspension bearing and the insulator?

Safety: Enhanced road holding and full braking distances (worn suspension: +15% braking distance)

Comfort: Softer and more precise steering (reduction of stresses), lower vibration (as much as 25% less on poor road surfaces)

Performance: Better maneuverability

Reduced cost: Nowadays, on average, only one suspension bearing is replaced for every three shock absorbers. However, more and more dealers and garages refuse to guarantee the shock absorber if the entire assembly is not replaced too.

When replacing the shock absorbers, take advantage of the opportunity to replace all the suspension components. Doing so during MacPherson strut replacement requires no additional time and guarantees the level of security and optimum comfort for your customer.

When should the suspension bearing and the top mount be replaced?

Suspension system components are becoming more and more reliable, but they do have a limited service life due to hardening of the rubber, weathered suspension bearing, etc.

NTN Europe recommends replacement:

- Whenever a shock absorber is replaced: between 75,000 and 100,000km
- When suspension bearings or surrounding parts show signs of wear
- When steering becomes stiff or noisy

When should the arms to replaced?

- When the seal, plug or metal cap are deteriorated
- When metallic noises can be heard upon riding over the bump
- When there is clearance in the rear axle