





FRAME, SPRING, DAMPING AND WHEELS

# Shock absorber

#### Renault Trucks offer

Renault Trucks original shock absorbers are doubleacting hydraulic telescopic cylinders. They cannot be disassembled and must always be entirely replaced in pairs. In after-sales, changing the shock absorbers helps prevent premature wear of many vehicle parts such as tires, anti-roll bars or silent blocks.

#### RISKS OF INSTALLING AN ADAPTABLE PART 1



Using a lower quality shock absorber can seriously compromise the function of an operator's truck suspension system. Driving with shock absorbers that do not meet Renault Trucks technical specifications can be unpleasant or even dangerous. Renault Trucks shock absorbers are developed for each model. It is important that shock absorbers interact optimally with other components of the suspension system, particularly springs and air cushions.

CHARACTERISTICS	BENEFITS
Adequate characteristics.	Forces are properly dampened, ensuring optimal comfort, stable steering, and good road handling. No indirect damage caused by vibrations in the chassis and other components.
Heat-resistant seals.	Forces are properly dampened, ensuring optimal comfort, stable steering, and good road handling. No indirect damage caused by vibrations in the chassis and other components.
Correct installation dimensions.	Minimal stress on materials in both the shock absorber and the suspension. Simple to install, reduces vehicle downtime.
Correct cadence.	The shock absorber not reaching its limit doesn't suffer damage. The shock absorber doesn't cause damage to other components.
Chrome-plated piston rod.	The correct thickness of the surface treatment ensures protection against corrosion. Reduced risk of leaks.

# Key arguments

A specific design adapted to each vehicle



- Optimal integration in the vehicle
- Design to match the properties of other suspension components

Renault Trucks shock absorbers are specific to each vehicle and developed to match each model perfectly in its use, load, axles, and suspension. It is important the shock absorbers interact optimally with other suspension system components, particular the springs and air bellows.

When replacing the shock absorbers, make sure only the original type of model is fitted to the vehicle.

# **Quality materials**

- "Genuine" parts
- Resistance to heat and high pressure

Original Renault Trucks shock absorbers contain Viton® seals, a highly heat-resistant material preventing dirt and oil from penetrating the interior.

Renault Trucks shock absorbers are filled with a specific quantity of high-quality hydraulic oil. This will not boil or evaporate prematurely and retains its damping properties.

The soft rubber ring and double-walled working cylinder provide resistance to high pressure. The correct thickness of the chrome surface treatment of the steel piston rod provides corrosion protection to maximize shock absorber life.

# Appropriate characteristics

- Quality design
- High precision valve set
- Appropriate cadence

With Renault Trucks shock absorbers, the forces are perfectly damped through the valve set and flow channels with tolerances of only a few thousandths of a millimeter.

A correct stroke is another key aspect of successfully installing the shock absorber and ensuring it operates correctly. With the right displacement amplitude, the shock absorber does not come to halt or suffer any damage and none of the associated components are damaged in any way.

## **Customer benefits**

# Safety

- Industrial process strictly followed
- Shock absorbers replaced in pairs

Renault Trucks original shock absorbers meet the manufacturer's specifications. They are tested and approved by our design office teams to fully comply with each business application's requirements.

The shock absorbers should be replaced in pairs to ensure damping is symmetrical on both sides of the vehicle. If one shock absorber is faulty, driving the vehicle can be dangerous. This may lead to excessive offset in crosswinds, or even extend braking distances.

# Comfort

- Avoid the risk of vibrations and poor handling
- Make driving easier and reduce driver fatigue

Renault Trucks shock absorbers adapt to deformations in the road, damping all the undesirable movements of the rolling vehicle. These concern the effects of rebound, rolling, plunging during braking and nose lifting during acceleration. The relevant forces are properly absorbed, ensuring optimal comfort, stable steering, and good road handling.



If absorbance is insufficient, the vehicle can become difficult to control and subject to crosswinds. Conversely, shock absorbers that are too resistant transmit vibrations to the chassis, which make driving uncomfortable and can damage other parts of the vehicle.

# Savings

- Optimised overall vehicle performance
- Vehicle parts benefit from longer lives
- Reduced vehicle downtime

Renault Trucks original shock absorbers optimize the truck's overall performance. The optimal integration of shock absorbers - valve, working cylinder and piston rod in the suspension system - prevents many of the vehicle's parts from wearing prematurely.

The vehicle's excellent road holding also extends the tires' life by several thousand kilometers.

The Renault Trucks shock absorber is easier to install, which reduces vehicle downtime.