



UD TRUCKS



Going the Extra Mile

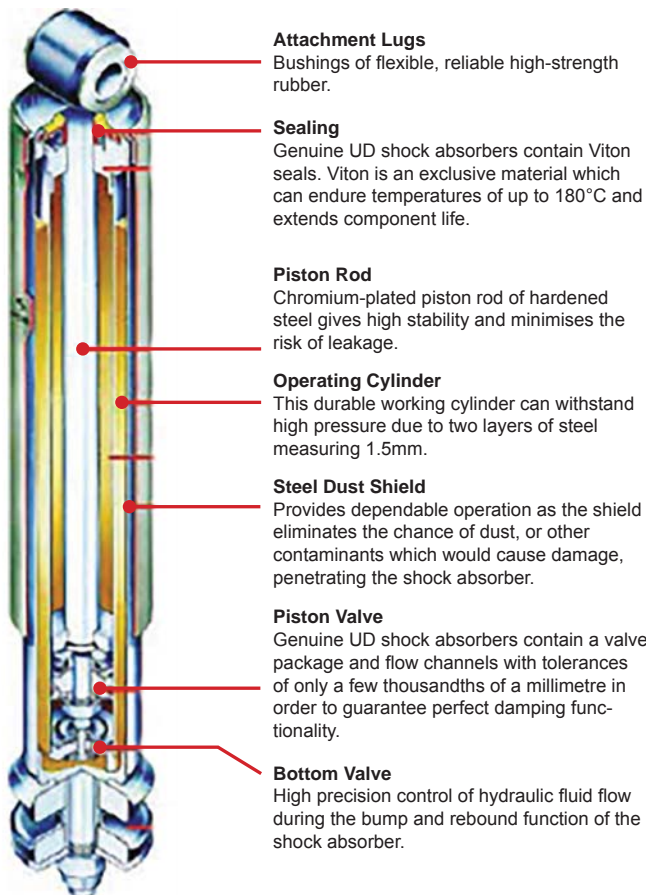
**UD Genuine Parts - Shock Absorbers**

# GENUINE VS NON GENUINE

To ensure optimum levels of comfort and handling for drivers it is critical to choose Genuine UD shock absorbers. They are manufactured to operate with the complete UD suspension and steering systems to help your truck stay safely on track. Using a sub-standard alternative, a truck can become unstable – particularly in its road holding and braking characteristics. This can have a negative impact on the functionality of the suspension system. Using UD shock absorbers maximises the safety of both the driver and the truck which ensures effective operation of our customers business.

Just because two parts look similar does not mean they are designed and manufactured in the same way. There are no standard shock absorbers for UD trucks. Each model has specifically developed shocks corresponding to applications they operate in. It is important that the shocks integrate and interact optimally with other components on the truck.

When choosing aftermarket shock absorbers here are some of the key areas where the UD offer is different:



## FEATURES & BENEFITS

FEATURES	BENEFITS
Genuine UD Shock Absorber	<ul style="list-style-type: none"> <li>○ Safety – comfort and road handling due to correct resistance and rate of stroke</li> <li>○ Peace of mind knowing that it is designed to operate in tandem with other components of the suspension system</li> <li>○ Economy – Genuine UD shock absorbers will last longer than other suppliers, lowering the cost of operation and having a positive impact on other factors such as tyre wear</li> <li>○ Increased Driver Comfort and decreased Driver Fatigue — due to better handling characteristics</li> </ul>
Designed specifically for UD	<ul style="list-style-type: none"> <li>○ Forces are correctly dampened, optimising steering control, road holding and comfort</li> <li>○ Easy to install – increasing vehicle uptime</li> <li>○ Limited wear and tear due to correct installation dimensions</li> </ul>
Heat Resistant Seals	<ul style="list-style-type: none"> <li>○ Durable seals which reduce the chance of leaks, reducing potential repair costs</li> <li>○ Allows the shock to operate in extreme temperatures for longer</li> </ul>
Correct Stroke	<ul style="list-style-type: none"> <li>○ No damage to the shock absorber due to “bottoming out” – increasing truck productivity</li> <li>○ The tube will not collapse under this pressure meaning safe, reliable operation</li> </ul>
Chromium-plated Piston Rod	<ul style="list-style-type: none"> <li>○ Made to measure</li> <li>○ Surface treatment protects against corrosion, reducing potential downtime</li> <li>○ Manganese Phosphate pistons and piston rods ensure long life and uptime</li> </ul>
Extensive Testing	<ul style="list-style-type: none"> <li>○ Endurance, Corrosion, Performance and Field Tests ensure a reliable suspension system for our customers</li> <li>○ During testing parts are subjected to harsh and demanding conditions ensuring durability and quality</li> <li>○ It can take up to 3 years to develop and approve shock absorbers that meet UD requirements</li> </ul>

“Only genuine UD parts are tailored and specified to UD trucks suspension systems.”

## WHAT IS IT & HOW DOES IT WORK?



Genuine UD shock absorbers are designed to optimise driver comfort and road handling. Without them, a truck in transport will be uncomfortable and difficult to control. Shock absorbers are double acting, hydraulic, telescopic dampers which compress and extend depending on the transport conditions. In simple terms, the shock absorber is an hydraulic ram that is mounted between the frame and the axle. It's function is to "dampen" or control the energy created by the leaf springs on the suspension as they flex.

This kinetic energy is absorbed by the shock and dispersed through hydraulic fluid. UD shock absorbers are velocity-sensitive – they provide greater levels of resistance as the movement of suspension components increases. This enables the truck to adjust and control all unwanted motions that can occur when driving including bounce, sway, handling, braking and acceleration.

As the shocks are double acting, they absorb both downward (compression cycle) and upward (extension cycle) movement.

### COMPRESSION CYCLE:



This happens when the piston moves down, compressing hydraulic fluid in the chamber below the piston. The fluid is partially pressed through a bottom valve to the outer cylinder and the remainder through the piston valve above the piston. Here, the amount of dampening force is determined by the bottom valve.

During this "bump" phase the fluid is held, building resistance, meaning the piston is braked. The compression cycle controls the motion of the trucks un-sprung weight.

### EXTENSION CYCLE:



This happens when the piston moves up toward the top of the pressure tube, compressing the hydraulic fluid in the chamber above the piston. In this cycle, fluid is drawn through the bottom valve and from the outer cylinder. During the "rebound" phase the dampening force is controlled by the piston valve. The hydraulic brake device operates approx. 15mm before the shock absorber is fully extended. The extension cycle controls the heavier-sprung weight.

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## MAINTENANCE TIPS

Check the following to assess the condition of your trucks shock absorbers:

- External damage that can cause leaking or hardware malfunctions.
- Loose fasteners connecting brackets at the top and bottom that may need to be re-torqued.
- Bushings as well as the body, for cracks or separation from the collars.
- Leaking, which indicates worn seals. While slight "misting" is common during compression and extension, a more pronounced leaking indicates the shock should be replaced.

## VALUE OF UD SERVICE

Only UD trained technicians have the ability to use the service information to apply correct and safe installation of new suspension parts. UD workshops can provide greater levels of vehicle uptime due to their ability to correctly diagnose, plan and perform required repairs with no additional waiting time due to missing parts or technician availability.

Each shock absorber can be replaced individually. However, best practice recommends that to ensure optimum, safe and balanced working conditions they be changed as a pair. Following a failed shock on one side, it is likely that the other side may be weak and vulnerable. It is also worth noting that other relevant parts such as fitting bolts, which are relatively inexpensive, should be changed at the same time. This will provide greater levels of safety and reliability.

All UD suspension parts fitted in our workshops are fitted by trained UD Trucks technicians whose objective is to get the repaired vehicle back on the road as quick as possible.



# We go the extra mile for you

**UD Genuine Parts is specially designed and tested for UD Trucks which guarantee quality, value and productivity.**



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