

# Mechanical Subsystem

## Q2 Suspension Types

### LEAF SPRING SUSPENSION

Leaf spring suspension consists of several curved, thin strips of steel that are clamped together. They are then attached to the chassis/axle of the vehicle to absorb shock. When the vehicle encounters a bump on the road, the leaves flex and bend. They dissipate energy, reducing the impact on chassis. When load is removed, the leaves unbend and restore the vehicle to its original position.

This suspension system also helps in proper alignment of wheels in some vehicles.

These suspension systems are extensively used in high load vehicles like trucks, vans and off road vehicles.

Earlier in the 20th century, they were the primary suspension system because of its simple design and easy implementation.

The usage of this suspension system has become limited because of its bulky nature. Many of its more flexible alternatives are available now with better adjustments.

