# **SHOCKABSORBERS**



Get the ride that's right for you





### The function and operation of shock absorbers are widely misunderstood. Here we present the bare facts on shocks and your many options in shock absorbers.

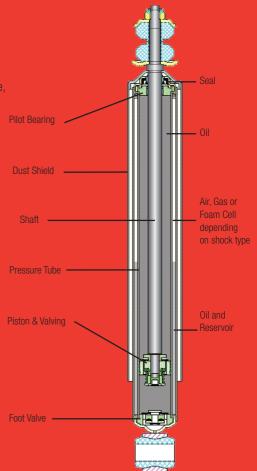
The first lesson to be learnt about shocks absorbers is that their name is deceiving. for shock absorbers do not absorb shocks - or at least that is not their primary role. Shock absorbers are dampers that resist movement and their main function is to control unwanted movement of the car's springs maintaining tyre contact with the

### SHOCKS IN ACTION

When a tyre hits a bump in the road surface, the wheel and suspension moves upwards, causing the spring to compress. The spring absorbs the energy of the

is necessary to allow the tyre to pass over the bump without causing the body of the car to rise the same and compression of the spring after what a shock absorber is designed to prevent.

Shock absorbers, like springs, are generally mounted between the axle and the car body. When a spring the shock absorber. The shock resists this movement by controlling the flow of oil inside the shock through a number of control valves.



# HOW A SHOCK ABSORBER WORKS

With each extension and compression of the shock, known as a 'stroke', a piston moves up and down inside the shock and oil flows between the inner and outer chambers of the shock, known respectively as the 'pressure cylinder' and 'reservoir'. The oil must pass through a complex valving system which open and close depending on the direction of the flow. The valves are precisely engineered to provide a measured resistance to the oil flow. The spring-loaded valve only opens to allow oil to pass through when enough force is supplied. This force is generated by the speed at which the shock is extending and contracting. As the stroking speed of the shock increases, more stages of the valving come into play to control the flow of the oil.

Thus the shock is sensitive to the length and speed of suspension movement and is designed to supply precisely the amount of damping resistance required at any time. This ensures that the suspension's spring remains in control, performing its intended role and promoting maximum tyre grip on the road surface.

### PEDDERS SHOCK ABSORBERS

As the industry's leading Shock Absorber, Steering and Suspension Specialist, Pedders prides itself on being able to offer a complete range of quality shock absorbers through its store and dealer network throughout Australia and across the globe.

Pedders provides a comprehensive choice of shock absorber models from our range. Our brands include; Pedders Shock Absorbers, Pedders EziFit, SportsRyder and SportsRyder eXtreme XA Adjustable Coilovers. For motorists who drive european models - Bilstein ShockAbsorbers are also available. You can count on Pedders to find the right shock to suit your driving needs.



Pedders Shock Absorbers are premium quality gas shock absorbers whose features include; precisely tuned valving, heavy duty construction and accurate nitrogen gas pressurisation. These key features deliver confident road holding with smooth ride characteristics. Pedders Shocks, Spring seated shocks and Struts are the ideal replacement for worn or leaking dampers.



For those owners of Four-Wheel Drive vehicles there is simply no better than TrakRyder. Two shock absorbers are available within the TrakRyder Range, Pedders 4WD Gas SportsRyder and Pedders 4WD Foam Cell. With TrakRvder shock absorbers and especially when incorportated with the other components of the TrakRyder range, 4WD owners can enjoy the best of both worlds. The benefits of owning a 4WD plus comfort and handling more like a family SUV.

Pedders' TrakRyder steering dampers enhance driving feel and comfort by further reducing the jolts and impacts that feed back through the steering wheel caused by heavy off road wheels and rough conditions. TrakRyder steering dampers feature an extra large 35mm bore. This provides optimum performance via the Foam Cell technology that enables the steering damper to operate at any angle. TrakRyder steering dampers are available to replace original equipment on most 4WD models.







### **EziFit**

The Pedders TrakRyder EziFit range is supplied as a matched set of pre-assembled suspension components including Pedders TrakRyder Foam Cell Shock Absorber, Pedders TrakRyder Heavy Duty Spring and Pedders TrakRyder Strut Mount. Installation time is reduced as the components are supplied pre assembled and ready for direct bolt on fitment saving time and money and eliminating the need for spring compressors and other specialized equipment. The Heavy Duty twin-tube construction & reinforced double welded mountings provide long term durability. The large 40mm piston and precise internal valving deliver stability and ride comfort for touring, load carrying, towing and off road applications. The TrakRyder EziFit range is assembled with Pedders premium TrakRyder coil springs making them Ideal for standard height, raised or loaded raised applications to suit your varying needs.

TRAKRYDER EziFit Shock Absorbers





Pedders Ezifit Shock Absorbers



Pedders Suspension also supplies a range of selected Bilstein shock absorbers to suit most European makes and models. Bilstein improves the comfort and handling performance of your european car, light commercial or SUV. That's why many of the world's finest automotive manufacturers choose Bilstein as their original equipment.



Bilstein Shock Absorbers

# SPORTSRYDER SUSPENSION

SPORTSRYDER

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SULPINS

For motorists who are after that extra level of performance and sports handling Pedders Suspension has a product range called SportsRyder. The gas-charged GSR SportsRyder shock range uses precise valve tuning and tailored nitrogen gas pressure for ultimate control without compromising on ride quality.

Gas SportsRyder sealed struts and cartridges are high performance, heavy duty replacement units which deliver a new standard of road holding ability for today's hi-tech, lighter vehicles. At the pinnacle of the SportsRyder range comes the eXtreme XA, a world class, height adjustable coil over unit featuring 30 position adjustable bump and rebound damping, set at the click of a button.





Pedders SportsRyder Supercar adjustable coilover kit offers eXtreme ride control for the hardcore enthusiast. The sophisticated driver will be able to tune their suspension like a pro. The incomparable benefits of the massive 52mm monotube body are definitely for the enthusiast. The larger piston and reservoir provides smoother ride with more control and the ability to adjust bump and rebound damping separately to 30 different positions allows you to click-tune-play, like a Supercar.





