



TRAK RYDER
4WD SUSPENSION

ON Road comfort
OFF Road control

- Suspension Kits
- Spring & Shock Combo Kits
- Shock Absorbers
- Coil Springs
- Leaf Springs
- Torsion Bars
- 4" Lift Kits

- GVM Upgrade Kits
- Air Bag Kits
- Bushes
- Brake Upgrades
- Skid Plates



TRAK  **RYDER**
4WD SUSPENSION





Range Overview

Since 1950, Pedders has been designing and manufacturing suspension products specifically for harsh Australian conditions. Our market leading range of quality products is designed and developed in Australia and sold throughout our 120+ Australian store and dealer network. The TrakRyder range is tested and proven in Ambulance, Mining and International Law Enforcement Agency vehicles in some of the harshest environments in the world. Over 60 years of experience gives Pedders the leading edge in knowing what you the customer demands. TrakRyder delivers the rugged performance that will get you to your destination and back, whilst maintaining the ride quality that modern 4WDs have to offer.

TrakRyder also upgrades older model 4WDs with a boost in off road performance and ride quality. It's the product of all our years of R & D experience which enables us to deliver a premium level of ride comfort and handling for 4WD vehicles. In fact, we are so confident in our quality product that we back it up with a 2 year/40,000km 'No Fuss' nationwide warranty, which means that should a hassle occur, you can rest assured that you're covered.

TRAK **RYDER** **4WD SUSPENSION**

TrakRyder is suitable for 4WD owners who want to:

- Enhance the ride, control, comfort, off road ability and traction of their 4WD.
- Upgrade or replace their old or worn 4WD suspension.
- Increase ground clearance and articulation (the ability of the suspension to flex all four wheels onto the ground firmly, even when negotiating uneven terrain).
- Boost towing and load carrying ability.
- Minimise excessive body squat (body tilts down in rear) when accelerating or when driving with a heavy load.
- Minimise excessive body dive (body tilts down in front) when braking.
- Reduce rear end sag under load carrying or towing conditions.
- Drive in severe off road conditions.
- Control and minimise body roll when cornering.
- Enhance the safety of the vehicle.
- Reduce wear on vehicle components.
- Prolong the life of the tyres.

Comprehensive 4WD Parts Range

Pedders' TrakRyder suspension range includes thousands of quality components that have all been designed to improve the ride and handling characteristics of specific 4WD vehicles.

The range includes:

- Shocks & Air Bags
- Coil & Leaf Springs
- Torsion Bars & Suspension Bushes
- Shackle & U Bolt Kits
- Alignment Kits
- Steering Dampers
- Adjustable Pan Hard Rods
- CV Shafts & Swivel Hub Seal Kits
- PLUS a host of additional ancillary products such as Towbars and Brakes.



TrakRyder Lift Kits

Pedders TrakRyder Kits Overview

Pedders range of TrakRyder 4WD suspension upgrade kits have been designed to accommodate your choice of Touring, Expedition or Outback adventures. Each kit includes a set of 4 Pedders TrakRyder Shocks and Heavy Duty Coil Springs. Check the website for further details.

TrakRyder Touring (up to 1/2" or 13mm lift)

The spring and shock absorber rates were developed to provide an improved ride quality, a reduction in body roll and improved stability. This kit is primarily designed to return the vehicle's ride height to

its original specification (up to 0.5"/13mm lift) and to reenergise the suspension capabilities through the addition of new shock absorbers.

Compatibility:

For vehicles used primarily as a commuter vehicle with general use, such as commuting to and from work or the occasional long distance road trip as well as the odd occasion of travelling "off road". This kit is suitable for vehicles fitted with a nudge bar, driving lights and standard wheels and tyres. The kit will also increase the capability of carrying a slightly heavier load such as a bike rack, sporting equipment for your favourite pastime and for light weight towing.



TrakRyder Lift Kits

TrakRyder Expedition (up to 1" or 25mm lift)



The spring and shock absorber rates were developed to provide an improved load carrying capacity, with the advantage of increasing the stability leading to less body roll, while at all times having consideration for the ride comfort. This kit is primarily designed to reinstate the ride height to as new with a minor enhance of up to 1" (25mm). The Expedition Kit will also improve the braking and steering of the vehicle when towing, provided you have a weight distribution tow pack fitted.

Compatibility: For vehicles used primarily for towing and/or load carrying. Ideal for carrying heavy loads, towing horse floats or caravans, and the odd weekend of fun in the bush. This kit would be suitable for vehicles fitted with a nudge bar with driving lights, standard wheels and tyres, and general equipment such as a fridge or tool box, but not excluding vehicles with extras such as: roof racks, long range fuel tanks, a rear drawer storage system and tool boxes.

TrakRyder Outback (up to 2" or 50mm lift)



The spring and shock absorber rates were developed to provide improved ground clearance and increased suspension travel, while improving vehicle stability on all road surfaces. This kit provides improved articulation on uneven road surfaces and improves tractability of all four wheels in difficult situations. It also allows for increased loads, such as camping or similar equipment. The increased ride height of up to 2" (50mm) enables the vehicle to ford creek or river crossings without getting your feet wet, (within reason) as well as improving the entry and exit angle of severe undulating terrain.

Compatibility: For vehicles being used for on and off road, as well as general commuting. Ideal for towing caravans, horse floats, camper and general trailers. The kits would be ideal for vehicles fitted with a bull bar and driving lights, a dual battery system, or standard wheels with off road tyres fitted. The kit also has the ability to manage the extra weight of items, such as under car protection plates, roof racks, long range fuel tanks and rear drawer storage systems.



Shock Absorbers

Key Features:

TrakRyder Gas Charged Shock

- Premium grade oil used to withstand high operating temperature and continued rigorous use.
- Multi lip high pressure seal prevents shock absorber leaks and is designed to permanently seal the oil and gas inside the shock.
- Large 35mm bore and piston is greater than most original equipment size and provides an increased oil capacity for greater ride improvement.

Key Features:

TrakRyder Foam Cell Shock

The foam cell technology found in the Pedders TrakRyder foam cell shock absorber virtually eliminates shock fade, by allowing full oil contact with both the inner and outer housings. The TrakRyder foam cell shock provides larger cooling areas to improve shock performance and durability.

The TrakRyder foam cell shock eliminates the mixing of the oil and air which ensures optimum damping control in all conditions.

- Extra large 40mm bore and piston is much greater than original equipment size and provides an even larger increased oil capacity for greater ride improvement.



TrakRyder Gas Shock Absorber



TrakRyder Foam Cell Shock Absorber

TrakRyder Shock Absorber Common Features & Benefits:

- Heavy Duty twin-tube construction technology & heavy duty reinforced double welded mountings for long term durability.
- Rugged multi-purpose design improves stability and ride comfort for touring, load carrying, towing and 4wd applications.
- Advanced control for a comfortable ride and precise handling.
- Ideal for standard or raised height 4WDs and matched to Pedders range of TrakRyder springs.
- Individually shock dyno tested for quality assurance.
- Severe Off Road Vehicle Compliant



The heavy duty TrakRyder Ezi Fit Spring and Foam Cell Shock Absorber combination kits were designed, developed and manufactured to provide precise control without compromising ride comfort. Supplied as a complete assembly of matched suspension components, the TrakRyder Ezi Fit Spring and Foam Cell Shock Absorber combination kits are suited for all types of driving conditions – whether it is for severe off road or simply driving to work. One of the added benefits of these kits is that you can choose your ride experience by selecting your preferred coil spring type to match your driving needs. A choice of Standard, Raised or Loaded ride heights is available to order with various kits.

All New Design

The “All New” design Pedders TrakRyder Foam Cell shocks are made with a huge 40mm bore. This allows it to control the undulations of the road which is ideal for greater driver and passenger comfort. The Foam Cell virtually eliminates shock fade (loss of effective shock absorber performance due to cavitation and aeration), therefore these units will work harder for longer. Pedders TrakRyder Coil Springs are produced under a strict manufacturing process, and this ensures that Pedders TrakRyder Coil Springs exceed original equipment tolerances and are equal to or better than other manufacturers in the world for consistency, loaded ride height and reliability.

The Key Features:

- 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.
- Reduced installation time as the components are supplied pre-assembled and ready for direct fitment.
- The foam cell virtually eliminates shock fade by allowing full oil contact with both the inner and outer housings. The TrakRyder foam cell shock provides larger cooling areas to improve shock performance and durability. The TrakRyder foam cell shock eliminates the mixing of the oil and air which ensures optimum damping control in all conditions.
- The TrakRyder Foam Cell Shock Absorber features an extra large 40mm bore and piston which is much greater than original equipment size, and provides an even larger increased oil capacity for greater ride improvement.
- Individually shock dyno tested for quality assurance.
- Severe Off Road Vehicle Compliant.
- Heavy Duty twin-tube construction technology & heavy duty reinforced double welded mountings for long term durability.
- Rugged multi-purpose design improves stability and ride comfort for touring, load carrying, towing and 4wd applications.
- Advanced control for a comfortable ride and precise handling.
- Ideal for standard or raised height 4WDs and matched to Pedders range of TrakRyder springs.



GVM Upgrade Solutions!

Lock and Load with Pedders GVM Upgrade Solutions!

If you carry loads for a living or are serious about what you take with you on your next journey then look no further. Pedders GVM Upgrade Solutions offer one of the best suspension upgrades for your vehicle, proudly backed by our nationwide network of certified installers and service centres.

When your vehicle is fully loaded for the journey ahead or if you're carrying the tools of your trade, the chances are that your car may be overloaded beyond its GVM and you may not even know it. Common items such as tools, tool boxes, cargo, bull bars, winches, towbars, recovery gear and even your passengers all combine to increase the overall gross vehicle mass. It is also important to note that if you have purchased a cab/chassis, the weight of the tray is not part of the "curb weight". Every vehicle on our roads today has an official legally allocated gross vehicle mass rating (GVM). The GVM rating is a legal weight figure (in kgs) that results in the total maximum allowable weight of a vehicle when fully loaded. It's essentially the maximum legal weight that you can safely drive at for that particular vehicle.

Pedders offer a GVM upgrade solution for selected models to assist in compliance for GVM ratings. The reason for this solution is to satisfy the following requirements: OH&S motor vehicle insurance, warranty issues and being road legal. Through exhaustive and detailed testing, the Pedders GVM Upgrade Kits have been approved by the Federal Department of Infrastructure and Transport.

So if you're unsure about the GVM of your vehicle or if you think that you are running your vehicle over the legal weight limit, then book your car into one of our Test Lane or Test Lane Plus Stores for a Pedders Tech Check and Report. With the use of our Test Lanes we can check the axle weight and corner weights of your vehicle to determine the overall GVM figure, and advise you if your vehicle is overloaded, and what options are available for your vehicle.

GVM Upgrade Solutions from Pedders:

- We offer Australian certified suspension upgrade kits that comprise heavy duty Pedders Suspension components. This means that all of our GVM upgrade solutions kits are endorsed and certified by the Department of Infrastructure and Transport.
- All components installed as part of a Pedders GVM upgrade package are backed by a Pedders 2 Year/40,000kms Nationwide Warranty.
- Ideal choice for towing caravans, horse floats, camper and general trailers that need that extra load carrying capacity.
- Great for serious four wheel drives fitted with bull bars, winches, recovery equipment, drawer systems, camping gear and underbody protection looking for compliance to federal and state GVM laws.

- When the GVM Upgrade kit has been installed to a new vehicle by the trained Pedders technicians at a Pedders store, a compliance plate will be fitted. The new vehicle can now be registered with new increased GVM. This procedure allows the vehicle to be legally used in all states of Australia. For vehicles that have already been road registered, the vehicle is to be inspected by an authorised Automotive Engineer in that state and issued with a compliance certificate.
- So, if you are planning a load carrying vehicle purchase, or have realised that your current vehicle isn't quite handling the load, we have the solution.



TrakRyder 4" Lift Kits

If you're looking for a complete 4" lift kit for your Toyota Landcruiser or Nissan Patrol then look no further, because Pedders has the solution for you!

Our 4" lift kits are supplied with the following rough terrain compliant components:

- TrakRyder raised extra heavy duty coil springs
- TrakRyder long travel foam cell shock absorbers
- Sway bar links

- Alignment products

- Extended brake hoses plus assorted chassis parts

- For the ABS models we also include the brake line as an extra component.



Things you should know about Lift Kits:

Suspension Lift Kits

A suspension lift kit raises the entire suspension system, which allows 4WD owners to install much larger tyres and safely take the four wheel drive off road and into rougher terrains. Unlike other types of lift kits, suspension lift kits actually suspend the entire frame (with all the major parts including the engine and powertrain) to increase the distance between the chassis and the axles. Pedders Suspension lift kits raise the entire suspension by changing the shocks and the front and rear springs.

Pedders 4" Lift Kits to suit Nissan GQ-GU Patrol

Part #	Make	Model	Description
919027	Nissan	Patrol Y60 (GQ) - Y61 (GU)	Non ABS
919127	Nissan	Patrol Y60 (GQ) - Y61 (GU)	With ABS



TrakRyder 4" Lift Kits

Key Features & Benefits of Pedders' 4" Spring Lift Kits:

- The Pedders' 4" Lift kits are available as a kit. Simply fit the parts, get the vehicle wheel aligned and you're ready to go!
- The 9500 series foam cell eliminates shock fade. The extra-large 40mm bore and piston is much greater than original equipment size and provides an even larger increased oil capacity for greater ride improvement.
- The TrakRyder raised extra heavy duty coil springs are made from premium quality grade steel, are stress relieved and 100% QA inspected.

- All sway bar links, alignment products, extended brake hoses plus assorted chassis parts have been designed, produced and tested off road to enhance the off road experience. All items are suited to rough terrain driving conditions.

NOTE:

- Vehicles can be further improved with the fitment of heavy duty/longer trailing arms, drag links and heavy duty steering dampers. See in-store for further details.

Competition Use Only. Not for Road Registered Vehicles.



Driving With a Lift Kit

Raising a four wheel drive's suspension means increasing the car's centre of gravity. It's possible that the 4WD can become unstable, especially when turning at very high speeds. Adding a suspension lift kit can change the way a car feels to the driver, who may be used to a different way of handling the vehicle. Raised four wheel drives may also be more prone to leaning into banked turns. After installing a lift kit, drivers should practice driving the vehicle to get a better feel of the new suspension before doing any major off-roading.

Additional Adjustments

Installing a lift kit (particularly suspension lift kits) is a major overhaul. This may require 4WD owners to make additional adjustments. For example, some 4WDs may have to be re-gearred after adding larger tyres to compensate for the new tyre circumference. In addition, when oversize tyres are fitted it is highly recommended to install a Pedders heavy duty TrakRyder big bore steering damper.

Pedders 4" Lift Kits to suit Toyota 80/105 Series Landcruiser

Part #	Make	Model	Description
919047	Toyota	Land Cruiser 80/105 Series	Non ABS
919137	Toyota	Land Cruiser 80/105 Series	With ABS



TrakRyder Springs



Key Features:

- TrakRyder coils are heavy duty units that provide the precise rate needed to carry the mass of heavy 4WD vehicle bodies and wheel assemblies.
- TrakRyder coils are made at Pedders' hi-tech spring manufacturing facility in Melbourne, Australia from the highest quality Australian spring steel.
- Produced according to a strictly controlled design, manufacturing and testing process that ensures Pedders' coils exceed original tolerances and are equal to or exceed the best in the world in consistency of rate, loaded height and reliability.
- Standard height and raised height coils for extra ground clearance are available for most vehicles and higher rated coils can be used to compensate for the extra weight of a bull bar, winch, rear step, or to improve a vehicle's load carrying or towing ability.

- Coils are matched to TrakRyder shocks to reduce body roll, rolling pitch and brake dive and to improve overall handling, comfort and traction through superior suspension control.
- Built to ISO 9001 International Standards, ISO 14001 International Standards & AS/NZS 4801 Safety Standards to ensure a quality product in every coil produced.
- Stress relieved and 100% QA inspected.
- Loaded Height Tested.
- Severe Off Road Vehicle Compliant for harsh conditions

Coil Spring Air Assist & Leaf Spring Air Assist Features & Benefits:

- Exceptional load assistance characteristics
- Improved towing and load carrying capability
- Compensate for general instability associated with heavy loads
- Increase shock life, improve braking and reduce body roll
- Full adjustability to allow the Air Assist Bag to be matched to the load
- Assist spring, shock & bush life
- Maintain superior comfort levels while providing that extra level of suspension control needed when towing



PEDDERS
AIR ASSIST
ADJUSTABLE AIR SUSPENSION



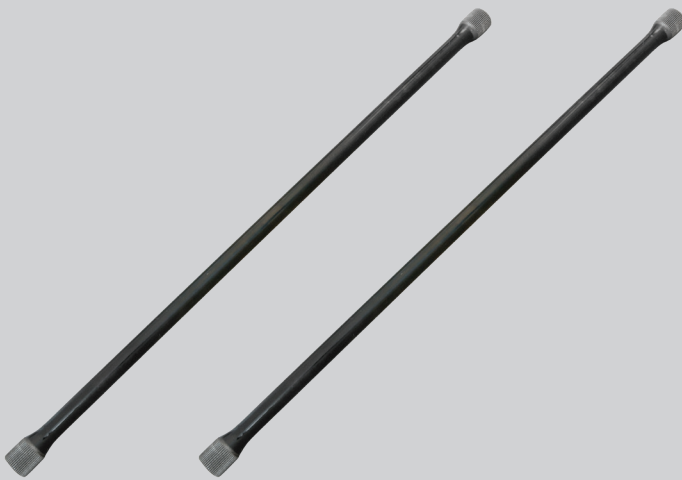
Torsion Bars

- Like Pedders' coil springs, TrakRyder torsion bars are made from the highest quality alloy spring steel and are manufactured according to strict quality production procedures.
- TrakRyder torsion bars are fully tempered (heat treated) for high durability, hardness and long term consistency.
- The ends (splined area) of the torsion bars are forged (shaped) to produce a stronger structure which assists in longer product life.
- TrakRyder torsion bars are made to a larger diameter than most original bars, providing a firmer rate for greater control and improved load carrying ability.
- Heavy-duty replacement units provide a permanent upgrade for the front suspension.
- Whether your vehicle is in standard form or has been fitted

with a bull bar, winch, dual battery system or any other heavy accessory, TrakRyder torsion bars provide extra control, stability and traction for enhanced performance.

Leaf springs

- Pedders TrakRyder Leaf Springs are ideal for heavy load carrying and towing or as a direct replacement for sagged leaf springs.
- TrakRyder 4WD Leaf Springs from Pedders feature inter-leaf friction pads and some feature metal eye sleeves to minimise binding or noise.
- Constructed from only the highest grade steels for the most durable performance.
- As an alternative to total replacement of leaf spring packs, Pedders offers a leaf spring resetting service that involves inserting a new higher rated leaf into the spring pack which is then re-cambered to the desired ride height.



TrakRyder Product Range

Steering Dampers

- Pedders' TrakRyder steering dampers enhance driving feel and comfort by further reducing the jolts and impacts caused by heavy 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 even when the vehicle is on a severe incline.



Urethane & Rubber Bushes

- TrakRyder urethane bushes are the superior material choice for when high levels of suspension control and durability are required. They are particularly suited to applications requiring heavy load carrying ability, firm suspension control, or where regular exposure to corrosive materials is expected.
- Pedders' TrakRyder urethane bushes also incorporate a special cross hatch dimple profile on the working surface to enhance grease retention.
- Pedders TrakRyder rubber bushes are manufactured from high quality, durable rubber and are a direct replacement for the original bush.
- Designed to Provide excellent NVH suppression while maintaining vehicle specific levels of front axle movement and articulation.



Shackle Kits

- Pedders' TrakRyder greasable shackle kits have heavier side plates. Some feature anti-inversion brackets as standard to avoid the problems of overextension of raised leaf springs.
- TrakRyder shackle kits are anodised and designed as bolt-on replacements for most leaf sprung 4WDs, including Patrol, LandCruiser and Hilux.



Alignment Products

- Pedders' TrakRyder wheel alignment parts include components that enable the adjustment of camber and caster to optimise tyre contact with the road, extend the life of expensive 4WD tyres and improve handling.



TrakRyder Product Range

U Bolts

- Front & Rear heavy duty U-Bolt for direct fitment to leaf springs.
- Grade 10.9 to ensure additional strength in heavily loaded situations.



Adjustable PanHard Rods

- Made from tough heavy duty steel with anodised finish.
- Comes with pre fitted heavy duty urethane bushes or spherical joints (subject to application fitments).
- Adjustable steering damper brackets (on selected models).
- Heavy Duty construction and bushings to handle the tough rigours of off road conditions.
- Adjustability allows correction of axle alignment for better trackability on raised vehicles.



CV Shafts

Pedders comprehensive range of replacement CV Shafts are made to exacting specifications including European SGS international quality ISO9001, QS9000, VDA6.1 and TS16949 certifications.



Swivel Hub & Wheel Bearing Kits

Pedders swivel hub and wheel bearing reconditioning kits come packed with high-quality seals, gaskets, felts and all of the axle needle rollers you will need to get your swivel hubs and wheel bearing looking and performing the way they should; clean and leak-free.

Towbars

Our range of towbars and towing accessories are available at selected Pedders outlets. We also have all of the big brands in brakes to cater for your stopping needs.



Brakes

Choose from our comprehensive range of brake parts from the worlds leading brake manufacturers.



TrakRyder Product Range

Skid Plates & Underbody Protect Ion

Quality skid plates for off road vehicles have one of the highest design, performance and finish standards in the world. Asfir offers various skid plates protecting the underbody parts of the vehicle such as front, gear, transfer and fuel tank. The skid plates are made of quality aluminum and are screwed to original holes in the vehicle. Service openings in the skid plates enable servicing the vehicle without dismantling the plates.



ASFIR
4x4

Pedders is Australia's Number 1 chain of franchised under-car specialist stores. We offer a comprehensive range of products and services for all suspension, braking, towing, load carrying and steering needs to suit passenger cars, four-wheel drives, light commercials and high performance vehicles.

Since 1950, Pedders has been designing, manufacturing, selling, fitting and servicing its world class products through its own network of warehousing, service and authorised dealer centres throughout the world.

Every Pedders store offers the most comprehensive specialist under-car diagnosis and repairs with unmatched courteous advice and service. Pedders' range of high quality parts is backed by the commitment of our service centres and regional authorised dealers, who are only too happy to offer advice on how you can improve your vehicle's ride, braking, towing, handling and steering.

Warranty

Pedders Suspension provides a comprehensive two-year, 40,000km nation wide warranty on Pedders brand-name products designed for road use, including shock absorbers, struts, springs and steering gears.#

#Some exceptions apply. Please contact your local store for further information.

pedders.com.au