



**Perkins**

**P4(C) DIESEL CONVERSION PACKS**



**FOR THE**



**LAND ROVER**

# P4C LAND ROVER

## Introduction

THE P4(C) ENGINE is the 4-cylinder unit of the famous "P" series range and, for the "Landrover" installation, is rated to develop a maximum of 55 B.H.P. and has a maximum speed of 3000 r.p.m. At this speed the Landrover has a top speed of 47 m.p.h. without alteration to the transmission. Crown wheels and pinions will be available to increase the axle's ratio and thus give a top speed of 58 m.p.h. The P4(C) engine at this power gives a maximum torque of 123 lbs. ft. at 1500 r.p.m. and not only gives Diesel pulling characteristics to the machine, but also provides ample power with maximum economy to those farmers who use the Landrover for the heavier duties on the land, such as ploughing, threshing, etc.

**ECONOMY.** Tests over an arduous course show that the straight engine conversion gives an average consumption of approximately 30 m.p.g. and that the increased axle's ratio improves this to between 30 and 35 m.p.g.

**RELIABILITY.** Diesel engines have neither carburettor nor ignition systems and thereby over 90% of the troubles experienced on petrol engines are eliminated.

**STARTING** is by means of push button exactly as fitted to ordinary motor cars. To assist starting in very cold weather a heater and Kigass fuel injection system are fitted in the induction manifold; starting is instantaneous.

**INSTALLATION** is quite simple and does not involve any major modifications to the chassis. Step by step fitting instructions are provided by F. Perkins Ltd.

## Specification

**CYLINDER BLOCK. MAXIMUM STRENGTH.** The cylinder block and crankcase are a one piece high duty cast iron alloy casting, scientifically designed to give maximum strength and rigidity combined with lightness, giving exceptional accessibility to all the crankshaft and connecting rod bearings. The water jackets are carried down the full length of the cylinders, which are fitted with renewable high duty cast iron alloy dry liners to give maximum resistance to wear.

**CYLINDER HEAD. UNIQUE DESIGN.** The cylinder head is secured by a large number of through studs, the joint being made by a C.A. gasket. Valves and tappets are carried directly in the head, the rocker gear being mounted on top of the head and enclosed by a die cast light alloy cover. All valves are of special alloy steel, the inlet valves being made larger to secure maxi-

mum volumetric efficiency, and are without masks or deflectors. The spherical combustion chamber is formed half in the head and half by a detachable steel cap, and is the subject of Br. Pat. No. 486,208 and other patents pending.

**CAMSHAFT.** The camshaft is carried high up on the offside of the cylinder block, and is provided with journals of generous bearing area. This construction eliminates push rods.

**CRANKSHAFT. FIVE MAIN BEARINGS.** The crankshaft is extremely rigid, being supported by a bearing between each cylinder, and is statically and dynamically balanced. The crankshaft is machined from a solid nickel chrome molybdenum steel forging and has a large flange formed solid at the rear end for mounting the flywheel.

### Technical Report:

Greg has his long awaited 18" Compomotive alloy rims from the UK via Dr Gordon German, Green Oval Experience, in Perth. These rims fit Discovery 4s clearing the brake rotors and callipers allowing 18" tyres to be used. Wide range of 18" tyres available, many in light truck construction. 18" tyres are standard fitment on some Toyotas and Mitsubishis and are generally easier to obtain than larger diameter tyres.

Daniel Riken from ARB Traralgon and Bairnsdale has checked and ARB are not developing any accessories; bull bars, etc. for All New Discovery at this time. Large backlog of new vehicles to the market to have development work undertaken.

D4 engine cover rubbing on top radiator hose. Neil Sutton from Sutton Motors Land Rover in Alice Springs recommends filing the sharp edge to prevent possible damage to the hose on rough roads.

Ian Blake looking for Hard Top for SWB Series 2A Land Rover.

### Events Co-ordinator's report.

#### Past Events:

##### AUGUST

Saturday the 26th. David Murray ran a trip to sawmill sites in the Neerim South area. Wayne and Sharna gave a trip report. Weather was good until participants got out of the car then sleet fell. The highlight was the tunnel to the sawmill with a few boilers.

#### Future Events:

##### SEPTEMBER

Saturday the 9th and Sunday the 10th September. David Murray will run a trip in the Toombon/Donnelly Creek area. Walking to the Waterwheel. Members can attend both or just one day. Details in newsletter.

Sunday the 24th of September. Wildflower trip north of Stratford, (easy trip however, yes, you will need four-wheel drive!) Bring a leisurely lunch. The rare Aniseed Boronia (*Boronia galbraithiae*), which only grows only in two small colonies in Central Gippsland, will be in flower. Plenty of other wild flowers out in the foothills at this time of the year too. Trip leaders Greg and Lois Rose. Please let Greg know if you intend to go on this drive.

##### OCTOBER

Monday the 2nd of October. LROCG Meeting.

##### NOVEMBER

Thursday the 2nd of November to Thursday the 9th of November. Melbourne Cup Weekend Base Camp.

Port MacDonnell, SA. Rod has secured 10 caravan sites and 2 cabins (both taken). Site fees are \$25.00 per night. Please advise Rod Catchpole if planning to attend. No deposit is being sought by park; so booking through Rod is preferred. Details of Park if desired are; Port MacDonnell Foreshore Tourist Park E: enquiries@woolwash.com.au P: 08 8738 2095 Rod requires numbers by the next meeting who may be interested in a cruise down the Lower Glenelg River. Rod was interested in visiting the Mt Eccles Lava tubes. Numbers required to book time with a ranger/guide.

**PISTONS.** The pistons are of special light aluminium alloy with ample metal in the crown to carry off the heat of combustion, and are suitably ribbed to take the load directly to the gudgeon pin bosses. Three compression rings, and one scraper ring are provided above the gudgeon pin and one scraper ring below.

**MAIN BEARING.** ANTI-FRICTION METAL. These provide generous bearing area, and consist of removable thin steel shells, lined with suitable copper lead metal, and are locked in position by dowels in the crankcase and caps. The main bearing caps are located in position by two large diameter dowels and are securely fastened to the crankcase by large high tensile steel set bolts.

**CONNECTING RODS.** MOLYBDENUM STEEL. Light "H" section nickel chrome molybdenum steel stampings are used and are kept as light as possible to reduce inertia stresses consistent with ample strength. The big end bearings are lined with suitable anti-friction metal of the same type as those used for the main bearings.

**TIMING GEAR.** The camshaft and fuel pump shaft are driven by a triple roller chain enclosed in the timing case at the front of the engine. Chain whip is taken up by suitable dampers, and an automatic chain tensioner is provided. The camshaft sprocket is provided with an arrangement whereby close adjustment of the timing may be made when necessary.

**LUBRICATION.** EFFICIENT HIGH PRESSURE FORCED. High pressure forced lubrication is used throughout the engine. The oil pump is driven through spiral gears from the fuel pump driving shaft. Additional filters of the by-pass type are available for special installations.

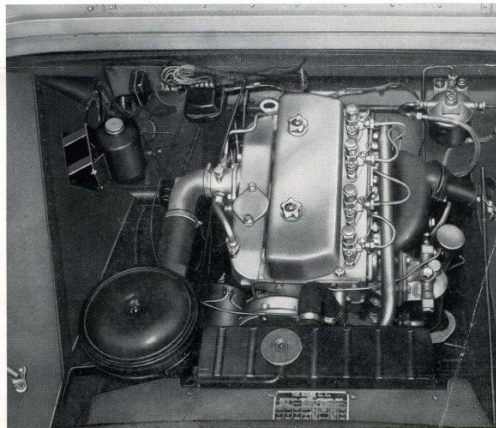
**FUEL PUMP.** PNEUMATIC GOVERNING. The fuel pump is of the unit type fitted with pneumatic governor. Idling speed can be varied at will from the driver's seat. Accelerator pedal pressure is light.

**ATOMISERS.** IMPROVED ACCESSIBILITY. Atomisers are located in a very accessible position on top of the cylinder head and have two sprays, one into the patented combustion chamber and the other into the cylinder itself, giving the engine the same easy starting qualities associated with a direct injection engine.

**AUTOMATIC TIMING.** Owing to the characteristics of the Perkins patented combustion system, the timing of combustion is automatically varied to give maximum efficiency at all loads and speeds.

**AIR INTAKE.** AIR COMPLETELY FILTERED. The air is drawn into the engine through a large air cleaner which excludes dust and prolongs cylinder life. The air cleaner is mounted on a venturi inlet, housing the butterfly throttle valve, which, apart from the stopping lever, is the only control on the engine.

Plan view showing P4(C) engine mounted in Landrover chassis.



**EXHAUST MANIFOLD.** HEAT KEPT AWAY FROM FUEL PUMP. An upswept exhaust manifold complete with connecting flange for 2 in. diameter exhaust pipe is included as standard with the engine.

**COOLING.** FAN AND WATER PUMP 1½ TIMES ENGINE SPEED. The circulating pump is fitted in an accessible position and is belt driven from the crankshaft. A fan is fitted on the forward end of the pump pulley. Cooling water from the pump is delivered to a manifold feeding three connections on the cylinder head. Ample surfaces are provided in the cylinder head and cylinder block. Large passages between the two allowing the block to be cooled by thermo-syphon action.

**SUSPENSION.** FOR EASY AND SIMPLE MOUNTING. The rear end is arranged to be carried by suitable brackets off the flywheel bell housing, whilst the forward end is supported from facings with four studs on either forward side of the cylinder block, which by suitable brackets is arranged for four point mounting.

**COLD STARTING EQUIPMENT.** Comprises injector pump, atomiser, priming tank, piping, induction heater and starter/heater switch. Application of the induction heater, subject of Br. Pat. No. 541,400, is not in contact with the burning gases in the cylinder. Located in the venturi adaptor and is in use only during starting under very cold conditions.

### Standard Engine Equipment

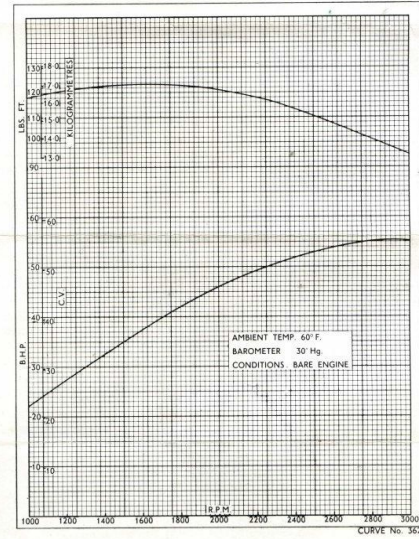
Comprises of Engine complete with Fuel Injection Equipment, Fuel Lift Pump, Fuel Filter, Air Filter, and large capacity Lub. Oil Filter, Exhaust Manifold, Fan, Water Pump, Lub. Oil Pressure Gauge, Idling and Stop Control, Cold Starting Equipment, Turning Handle.

**ELECTRIC EQUIPMENT.** Comprising Electric Starter (12 Volt), 12 Volt Dynamo (earth return) complete with control and fuse box. Press Button Heater and Starter Switches supplied.

## P4(C) Diesel Engine Details

| Bore and Stroke | Gross Output              | Gross Maximum Torque | Weight (with electrical starting equipment) |
|-----------------|---------------------------|----------------------|---|
| 3½" and 5"      | 55 b.h.p. at 3,000 r.p.m. | 123 lbs./ft.         | 543 lbs.                                    |

The P4(C) can be rated to give up to 60 b.h.p. at 3,000 r.p.m. for particular car applications



DIESEL ENGINES . . . for Vehicle, Tractor, Marine and Industrial Applications

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Monday the 13th November. LROCG Meeting.

Monday the 20th of November to Wednesday the 22nd of November.

LROCG / Parks Victoria combined working days at Horseyards with accommodation at Surveyors Creek Camp. Currently fifteen people booked in – more welcome. Planning has been done. Greg spoke regarding this weekend.

### DECEMBER

Sunday the 10th of December.

LROCG Christmas Meeting will be held at the Mt Erica car park. Marquis will be supplied by Parks Victoria/Wayne Foon. Toilets are available on location.

### 2018.

#### FEBRUARY.

Saturday the 17th. Victorian 4x4 Show Set Up Day. Lardner Park.

Sunday the 18th. Victorian 4x4 Show. Lardner Park. Alan explained that the site has been booked. LROCV nominated 5 sites.

#### MARCH.

Friday 9th, Saturday the 10th and Sunday the 11th. Centenary of the Wonnangatta Murders. Major gathering at Wonnangatta Valley hosted by the Friends of Wonnangatta.

#### MARCH/APRIL

Easter Friday the 30th of March to Monday the 2nd of April.

Land Rover's 70th Birthday Celebrations and Get Together at Cooma. More information as it comes to hand.

#### PARKS VICTORIA DATES FOR 2018.

May. Saturday the 5th and Sunday 6th.

Venue to be decided early 2018. Wonnangatta, Kelly Lane Huts and Mayford have all been mentioned so far.

July. Sunday the 22nd.

Bar-b-que lunch along the Wellington River campsites north of Licola and general tidy up of the 14 campsites.

November. Monday the 19th, Tuesday the 20th and Wednesday the 21st. Talbotville revisited.

Four Wheel Drive Victoria Delegate's Report: by Greg Rose. Greg and Lois visited the new offices of FWDV recently. Much better than previous site. Next Trackwatch should be out this month.

FWDV membership stickers for 2017/18 given out.

#### Bicycle ride

I went to the liquor store Friday afternoon on my bicycle, bought a bottle of Scotch and put it in the bicycle basket. As I was about to leave, I thought to myself that if I fell off the bicycle, the bottle would break. So I drank all the Scotch before I cycled home. It turned out to be a very good decision, because I fell off my bicycle seven times on the way home.

On behalf of FWDV Greg gave a presentation of 4x4 tourism and 4x4 driving in Central Gippsland to the Heyfield Traders Group last Monday.

General Business.

Venue for LROCG Christmas/December meeting. Sunday the 10th of December. Decision has been Mt Erica.

Victorian 4x4 Show, Lardner Park, February 17th and 18th. Alan MacRae.

Seasonal Closure Gates. Greg Rose (as FWDV Regional Representative, Southern Alpine National Park) has accompanied Wayne Foon Parks Victoria Ranger Heyfield, on a few more Season Gate checking and repair expeditions.

ParkConnect. Up and running and Wayne Foon will help members to create their profile. Allows other groups to connect with each other. Wayne showed club members how to set up their profile.

Misconception that there are restrictions. It is set up for management purposes. No age or health restrictions.

Volunteer activity plan to create trained up volunteers and assists with funding training or specific gear in the future. Aiming for volunteer trailer. (LROCG).

Welcome back to Brodie Jarvis.

Another Dinner Plain trip to be planned for March 2018. See Charlie to add your name to the list.

Meeting Closed at: 9.38 p

### **Discovery 4 Top radiator Hose Rubbing.**

As one of the Land Rover Owners Club of Gippsland members has experienced, the top radiator hose on a Discovery 4 can rub on the plastic engine cover. There is a possibility of the sharp edge on the engine cover eventually rubbing through the hose causing a coolant leak.

I spoke to Neil Sutton at Sutton Motors Land Rover in Alice Springs. He has encountered a few vehicles with the problem. The advantage of talking to the Alice Springs dealership is that they see problems that metropolitan and Eastern seaboard dealerships would not normally come across. Even though there appears to be sufficient gap between the hose and the engine cover, on rough roads with everything moving under the bonnet, there is enough play for the rubbing to occur.

On my D4, that has travelled less than 10,000 km, there are already rub marks on the hose.

The fix is easy. You can simply file the cover to remove the sharp edge and make the gap between the hose and the cover larger. This can be done carefully with the cover in place. I would recommend putting something like a sheet of paper or rag under the area to be modified to catch the filings.

These little touring problems reinforce the importance of doing regular (daily in rough conditions) checks of all hoses, belts, wiring, etc. Crawling over, under and around your vehicle at night with a torch will show up any wet spots that indicate leaks or shiny spots that could be a loose bolt or broken fitting. It's a good time to look at both the inside and outside of tyre sidewalls for damage too.

A roll of one of the many hose repair tapes that are available is worth carrying in your toolbox in case you do have a leaking hose.

Greg Rose.



### **CLUB FEES.**

There are a few club members who have not renewed their membership for this year. If this applies to you could you please contact Charlie Calafiore at VSL motors or Alan MacRae the club treasurer as soon as possible. This will allow Alan to finalise all our membership details with Four Wheel Drive Victoria and allow you to travel on club trips. Remember if you are not financial you are not covered by the insurance the club has through Four Wheel Drive Victoria. Trip leaders therefore cannot be expected to take the responsibility of allowing you on a trip.

### **Cooma Land Rover's 70th Anniversary Easter 2018.**

Cooma events and accomodation are apparently booking out quickly. The text below is from the Cooma Committee. A celebration of 70 years of Land Rover Vehicles. Enthusiasts will flock to Cooma NSW to enjoy 4 full days of everything Land Rover whilst savouring the delights of the Snowy Mountains Region. Day trips through the beautiful region, camping, BBQ's and entertainment plus a formal Gala Dinner & Land Rover vehicle exhibitions and terrapod displays are just a few of the highlights on offer.

To attend any of the events in the Land Rover 70th program you must be registered - \$40 pp

Bookings for camping at the event site and for the official functions are limited and will book out quickly.

For all the information about the event go to [www.landrover70thcooma.com](http://www.landrover70thcooma.com)

Cheers, Snowy Monaro Regional Council & Land Rover 70th Committee.

## **Aberfeldy Track working bee**

Sunday 22nd October

The plan for this weekend to do some maintenance on the Toombon mine site. The work involved will be cleaning of signs, brush cutting of walking tracks and mine sites. We have also been requested to widen the walking track to the haunted house site, so mattocks, picks and shovels will be needed.

Meeting Time: 8:30

Meeting Place: Rawson recreation reserve

Trip Standard: Easy

Equipment: Suitable protective clothing, equipment for clearing signs and walking tracks. The Aberfeldy track team have two brush cutters that we can borrow, but if we have more it would be better. Pick, Mattocks, crowbars would also be good for widening the track.

Given how far most of the work will be from where we can park the vehicles, it would be good if you could carry lunch with you.

Contact: Craig Murray 0438 109 063

## **Parks Victoria / LROCG Joint Project.**

Following the cancellation of the intended work at Horseyard Flat earlier this year there has been a re-think of the joint projects work for this year. The following points outline what is proposed plus a brief background for new members.

History.

LROCG members have worked as volunteers with Parks Victoria staff from Heyfield and Dargo for a number of years. We have an ongoing club commitment to two multi day events each year. One in Autumn and one in Spring. We have just completed a two year project at Talbotville. Previously we have worked at Wonnangatta Valley, Wellington River campsites, Howitt Hut, Moroka Hut, Horseyard Flat, Kelly Lane, Kellys Hut, McMichaels Hut, Guys Hut carpark and Snowy Range airstrip.

Tasks.

Initially the club did basic clean-up work; collecting rubbish, digging out fire pits, grass cutting, etc. We now concentrate more on building permanent assets and improving major remote camping areas to benefit all users of the Alpine National Park.

On Site Inspection June 2017.

On the 15th of June Greg Rose (LROCG President and Four Wheel Drive Victoria Regional Representative, Southern Alpine National Park) and Mike Dower (Parks Victoria Area Chief Ranger, Foothills and Southern Alps) met a contractor at Horseyard Flat. The plan for rehabilitating some of the camping areas and access tracks was formalised. From this meeting we were able to decide on work the club volunteers could undertake.

November 2017.

Monday the 20th, Tuesday the 21st and Wednesday the 22nd of November are the dates for the Horseyard Flat volunteer work.

Accommodation will be at Surveyors Creek camp. Cabins, hot showers, flushing toilets, dining area, kitchen, lounge, etc.

Meeting Point and Time, Licola Store, 9:00 Monday the 20th.

Tasks. Planting of young trees indigenous to the area in rehabilitation zones. Construction of three or four concrete fire rings.

Assembly of four picnic table and seat sets. Some fencing. Erecting new signs. Rehabilitation of old fire scars. Grass cutting.

Finally.

Currently we have fifteen volunteers booked in. We can always use more people. It would be excellent to have some of our newer members come along. There will be more detailed information as the event gets closer. For more information or an offer to volunteer talk to Greg at a club meeting.

## **Parks Victoria Volunteer Dates for 2018.**

Over the past few years a feature of our club has been the volunteer work we undertake with Parks Victoria. We made a commitment to work with PV on two multi day activities per year. These ventures have been very successful. We have accomplished some great things and made lasting improvements to the Alpine National Park while having a fantastic time in the bush.

On behalf of the club I recently met with Parks Victoria Team Leader Sarah Noonan in Heyfield. These events have to be planned well in advance so that PV staff and budgets can be put in place.

The dates set for 2018 are:

Saturday the 5th and Sunday the 6th of May. The fall back dates would be the 19th and 20th of May so that we do not have a complete cancellation situation like this year. Location to be decided in early 2018.

Monday the 19th, Tuesday the 20th and Wednesday the 21st of November. These days will most likely be back at Talbotville to do stage three of the project there.

Sunday the 22nd of July. We have added this single day event as a fun day to get out of the house in mid winter. The plan is to do a quick tidy up of the fourteen campgrounds along the Wellington River and have a bar-b-que or picnic lunch and some socialising.

A new feature of the volunteer work from now on will be the gradual implementation of ParkConnect so that our records are kept digitally rather than on paper as we have been doing.

For further information on our work with Parks Victoria talk to Wayne Foon or myself at a club meeting. I would also like to have another club member or two who are able to attend some of the planning sessions and get to know how the system works. The downside is that the meetings take place on weekdays. Give it some thought.

Greg Rose.



The Editors mouse after completing the newsletter

## The Old and the All New.

In human terms a generation is thought to be approximately twenty-five years. In the family history of the Land Rover Discovery that time frame spans five generations; Series 1, 2, 3, 4 and "All New Discovery".

The Discovery 1 was launched at the Birmingham Motor Show in 1989. It was an immediate success. Although it was based on the Range Rover platform, the original 3 door only exterior styling and revolutionary interior design by Jasper Conran, gave the vehicle a fresh modern look that created huge sales demand. Two engines were available, the fuel injected 3.5 litre petrol V8 and the 200 Tdi 2.5 litre four cylinder turbo charged intercooled diesel. The five speed manual LT77 gearbox was later joined by an automatic.

As many club members know from personal experience the Discovery 1 was and still is, capable, strong and agile. It has stood the test of time well. The design still looks good. Land Rover updated the Discovery Series 1, then brought out the Discovery 2 with the excellent Td5 diesel engine and much more refinement.

Discovery Series 3 and 4 marked significant design and technological leaps forward. The most notable innovations were the Terrain Response selectable 4x4 system, the air bag suspension replacing coil springs and the V6 diesel engine. Although more luxurious and physically larger than the Series 1s and 2s, the vehicles were still superb off road and made excellent tow vehicles with 3.5 tonne towing capacity. There is now a wide range of after market accessories and modifications available for these models.

The latest generation is the "All New Discovery".

The somewhat strange naming is a good marketing ploy, as it highlights the fact that it is not an update of the Discovery 4, but a complete rethink of engineering and design. There are a couple of design cues from the original like the slightly raised rear roofline and the asymmetric rear tailgate line and number plate position. It is unmistakably a member of the current Land Rover family with similar front profile to other Land Rover and Range Rover products.

The model I have been driving is a Carpathian grey All New Discovery SE SD4. With its ebony leather interior and black design pack it's a bit like driving a stealth aircraft. The 2 litre twin turbo four cylinder engine is a surprise packet. My 2016 Discovery 4 has the well known 3 litre twin turbo V6. The 2 litre SD4, probably thanks to the reduced mass of the new Discovery, has very similar on road performance. Compared to my Tdi 200 diesel Series 1 Discovery it is the difference between the USS Enterprise in impulse drive compared to warp drive (apologies to non "Star Trek" fans – in normal speak that means it's really quick). The weight saving in the new Discovery largely comes from a move away from the previous model's body on frame construction to a monocoque design. There is a 3 litre V6 engine available.

The chart below has some interesting figures to compare and highlights the advances in engine technology.

| Model             | Engine | Power | Torque | Vehicle Mass |
|-------------------|--------|-------|--------|--------------|
| Discovery 1       | Tdi200 | 83kW  | 265Nm  | 1900kg       |
| Discovery 4       | TDV6   | 155kW | 520Nm  | 2570kg       |
| All New Discovery | SD4    | 177kW | 500Nm  | 2200kg       |

Other developments include a second generation Terrain Response "off road" system which can be left in auto mode so the vehicle sorts out what it needs for the terrain or manually selectable modes. There is even an optional "cruise control" for off road driving.

Options are worth mentioning. You really need to spend considerable time studying the various options, accessories and option packs available. The Discovery can then be built to your specifications. The vehicle I have been driving has; Technology Plus Pack, Drive Pro Pack, Black Design Pack, plus a few other options and accessories that take the drive away price to \$120,971. My Discovery 1 when it was purchased in 1993 cost \$53,000.

In the time I had the Discovery I was able to do a few easy to medium standard four wheel drive tracks. As expected from Land Rover the vehicle excels in the rough stuff. Once you master the various settings the Terrain Response makes the driver's task easy. Traction, even with the 20" road biased tyres, is excellent.

The ride height can be altered, thanks to the air suspension, allowing plenty of clearance on rocky or rutted tracks. The ride seems a little stiffer than my Discovery 4. Discoverys, if you have not experienced them, can be quite deceptive. I have seen showroom standard vehicles tackle Victoria's iconic tracks like Mayford, Blue Rag Range, Wonnangatta Valley via a variety of routes, very easily, even when the tracks have been wet and slippery.

If you are interested in just how incredibly capable the new Discovery is have a chat to Shaun Johnson (LROCG and LROCV member and part of the Land Rover Experience team) about his experiences driving the vehicle at Moab in Utah.

On long highway drives the All New Discovery is a very pleasant place to be. There are all the USB ports you would expect, Bluetooth, excellent navigation system (that had a surprising number of





4x4 tracks), seating for seven and clever storage areas in all sorts of places. The large one piece rear tailgate lifts up unlike the split tailgate on the Series 3 and 4 cars. Visibility is very good all round. Lighting is excellent. The rear cargo area is large with the third row of seats folded.

I have an issue with this folding. The third row does not fold completely flat resulting in a slight slope in the cargo area. Another thing I am not happy about are the corners of the raised tailgate. If you are tall the edge might be a problem. I'm also not sure about the battery location in the side of rear of the cargo area. There are, however, some cleverly placed jumpstart points under the bonnet.

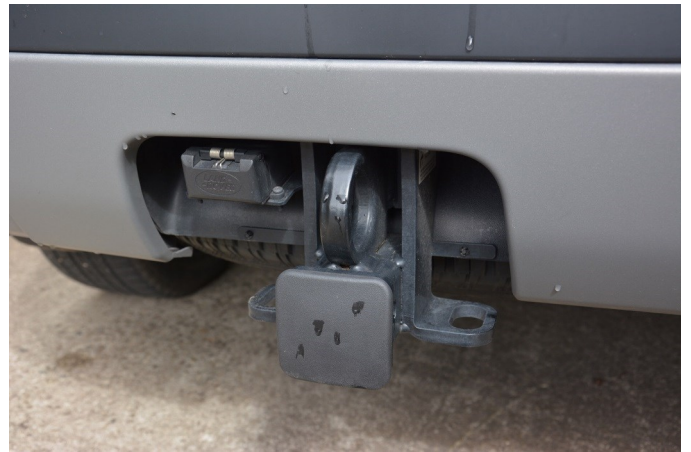
Like many modern diesel engines the SD4 requires AdBlue. This urea and water solution helps reduce emissions. AdBlue should not be a problem for travellers. A full AdBlue tank will last about 10,000km and it is easy to fill with a cap under the bonnet on the passenger side. There are warnings well before the top up is needed but if the AdBlue tank is empty the vehicle will not start. Although AdBlue is readily available I think I would carry some on an extended trip.

It is too early in the model life for the after market companies to have anything available for the All New Discovery. I would guess there will be quite a few R&D engineers looking at ways to fit dual battery systems, winch mounts, roof racks and storage systems. With the addition of a few accessories the All New Discovery will make a superb touring vehicle and early sales interest would suggest there will be a lot of them on the road.

A feature I really like is the revised tow bar arrangement. The Discovery 3 and 4 system was unnecessarily complicated. On the new Discovery the goose neck, which comes in its own carry case, simply slides into place without the need to attach the cumbersome receiver of the previous models. The Discovery still has a towing capacity of 3.5 tonnes with a ball weight limit of 350kg.

So, how does the All New Discovery fit as a distant relative of the Discovery 1? Very well I think. It continues the innovation standard set by the original. It can be all things to all drivers. The Discovery is very easy to live with in urban traffic, on a school run or for a stylish night out. The legendary Land Rover off road ability has if anything been improved with the new technology. As a long distance tourer it is comfortable, quick and fuel-efficient. The quality control, fit and finish of the vehicle is something of which Land Rover can be proud.

Thanks to Charlie Calafiore and Marco Tripodi of Gippsland Land Rover for trusting me with the vehicle.  
Greg Rose.



## LAND ROVER'S 70TH BIRTHDAY IN AUSTRALIA

COOMA SHOW GROUND, NSW.

Friday 30th March to Monday 2nd April, 2018



### SAVE THE DATE

Plans are underway for the celebration of Land Rover's 70th birthday. Following on the success of the 60th, we have been welcomed back to Cooma by the Snowy Monaro Regional Council and the Cooma Car Club for a four-day event over Easter 2018. With Land Rover's close ties with one of the world's greatest engineering feats, the Snowy Mountains Scheme, it's fitting that we should return to Cooma.

Land Rover Australia have already signed up as a key sponsor, and as in past events will have all the latest models on display.

All sorts of events are being planned by the sponsors and organisers, the Land Rover Owners' Club of Victoria, The Land Rover Owners' Club of Sydney, the Range Rover Club of New South Wales and the Land Rover Club of the ACT. The 60th in 2008 event attracted over 750 Land Rovers and nearly 1,400 enthusiasts. The organisers of the 70th are hoping for 1,000 Land Rovers. Any owner of any type of Land Rover or Range Rover, be it modified or un-modified, old or new, in original condition or fully restored should attend. But you really need only to be a Land Rover lover – you don't have to own one to enjoy the weekend.

Activities at the 70th will include:

- Displays by trade exhibitors.
- Trips of varying standards in and around the Cooma and Snowy Mountains district.
- A motorkhana.
- One (and possibly 2) Terrapod test tracks, supplied by Land Rover Australia.
- The Grand Parade of Land Rovers through the main streets of Cooma.
- A swap meet.
- Demonstrations of recovery techniques.
- Attractions for the children.
- A Gala Dinner with award presentations, with guest speakers.

The time has come for all those Land Rover lovers who have been putting off restoring their beloved old vehicles to get to it.



### MC Announced

It is with great pleasure we announce the MC for the night of the Gala Dinner will be Michael Bishop.

A lot of you will be familiar with Mike as a leading authority on the Land Rover S1 and the author of the book 'We Found Our Engineer' the discovery of Arthur Goddard now living in Brisbane Australia who was the project engineer working for Rover on the Land Rover project in 1948. Mike (from Melbourne Australia) now lives in the UK and heads up the Land Rover Classic program bringing Series 1 Land Rovers and Range Rover Classic (2 door) from all over the world back to original 'new' specification. He will be attending the 70th celebrations over the 4 days and looks forward to catching up with old friends and talking about projects past and present.



We urge all of you who are interested in joining the festivities to book as soon as you can. The new website has all the details – tickets to the event and dinners together with a booking site for the camp grounds, motels, etc.

[www.landrover70thcooma.com](http://www.landrover70thcooma.com)

More news on the big event soon. Expect lots more surprises.

Chris Baker, PR.

Mark Oakes-Richards, Event Coordinator

