



A New Discovery

Is a new model always better? We put the world's most awarded 4WD up against its replacement.

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How much better is the Discovery 4 than the Discovery 3? There's only one way to answer that question and that is to drive them back to back, so we borrowed a D4 TDV6 HSE 3.0 from Land Rover and invited three owners of 2009 2.7 TDV6 SE D3s to compare it over a weekend. This test reflects all those opinions which naturally differed, but the one universal view is that the D4 is a noticeable improvement over the D3. It's not just one headline – the 3.0 engine -- but rather a multitude of small improvements, with one owner going so far as to say his D3 felt "rough" after the D4 and another said "I've never driven a Range Rover, but this is what I imagine one to be like". So why the praise? The D4's handling is better, not in every respect but the steering is lighter and more precise, as is turn-in particularly in second/third gear corners where there

is less understeer and a lighter, more precise feel. The engine is quieter, smoother and significantly more powerful; the D4 was 2.5 car lengths ahead in a 0-100 sprint and 2 ahead in a 80-110kph roll-on.

Inside, the redesigned dash gives a more premium feel as there are less buttons. However, the curse of modern cars is that you now need to select from menus and scroll where before your hand just went to a dial or button, so while it looks tidier usability is not improved. In the D3 you can always see which radio station you're tuned in to and merely press one of the preset buttons. In the D4, you need to scroll and use the multi-function display. The instrument panel has more information and a clear layout, although the symbols for suspension height and Terrain Response mode aren't as noticeable as the D3. One improvement is that the warning bongs aren't as loud, and the keyless operation is excellent,

same design as the LC200, so you never need to take the key out of your pocket, just open the door with the key nearby and to lock touch the black square on the doorhandle. A keyless bonus is no warning bongs to tell you the key is in the ignition. Standard spec all round has been improved with all cars now fitted with Bluetooth, the 5in screen with satnav, rear park assist, all windows are one-touch and fully retract, and now there's an option for powerfold side mirrors. Finally, the non-electric front seat headrest is adjustable (it was on the D3, but there was a trick to it).

Behind the first row there are no changes, a case of not fixing what's not broken; back in 2006 I tested twelve triple-row 4WDs and rated the D3 the best three-row wagon – in 2010 I can see no reason to change this opinion. It is even possible to fit third-row child restraints for forward-facing boosters to complement the three in the second row, which

also takes ISOFIX seats.

We also compared fuel consumption. On the first day we used a stock 2009 TDV6 3.0 SE with 41,000km on the clock and spent the time driving in high and low range, no freeway, fair bit of offroading. The results were 14.4L/100km for the D4 and 13.2 for the D3, which was carrying perhaps 100kg less weight. On the second day there were two 2009 TDV6 3.0 SEs, one at 16,000km, stock but with mud tyres and the other at 21,000km, which had been highly modified with a roofrack, bar, winch and all the rest. On that day we did a lot more freeway driving. Results; D4 13.8L/100km, stock/mud D3 13.6, modified D3 15.1. The official ADR81/01 figures are in the breakout box and show the D4 is more frugal, so why did it use more? The D4 had less than 2000km on the clock, and all the D3 owners agreed their fuel consumption had improved as the keys racked up. It is noticeable that the closest gap was



The D4's 3.0 engine is superb in rocky conditions - unfortunately, its 19in tyres are not.

to the car with 16,000km and the biggest to 41,000km, and also of interest was that the various accessories on the grey D3 resulted in a 10% fuel consumption penalty compared to its standard brethren. We would expect a D4 to beat a D3 of similar mileage but not by a huge margin.

Offroad the D4 works even better than the D3, or better, with a caveat we'll get to shortly. We drove the D4 down a rocky track, then up, then the same in the D3s to compare, using various Terrain Response modes. The D4 is considerably more controllable and easier to drive than the 2.7 D3 because the throttle is less sensitive and there is more torque available earlier in the rev band. New to the D4 is Rock Crawl Pre-Charge, which simply applies a little brake pressure in first or reverse gear at speeds below 5km/h, so the engine has to turn the wheel against the brakes. In theory, this means wheels don't 'fall off' the back of rocks so much, but the effect is very slight and barely noticeable. You can do your own, better, Pre-Charging by simply modulating the brake pressure with your left foot as you increase the revs to move the vehicle. The gear ratios are the same for both 2.7 and 3.0 engines. Overall, all the electronic offroad systems are slightly better; smoother, more effective but noticeable only on a back-to-back drive.

Around town a major issue many have with diesel 4WDs is the delay between pressing the accelerator and the vehicle moving, which can be significant. The D3 was a reasonable performer for its class but the D4 is better, among the best of the big diesels, quicker to respond than the D3 and much quicker to accelerate. However, drivers used to zippy petrol cars will still need to adjust their driving style.

The D4 has a sand launch control mode, activated in Sand Mode which prevents wheelspin on soft sand, so we tried accelerating from rest up a sandy incline in Sand and Normal modes and it didn't seem to make any difference, we could get the car to bog in using both modes; just use the correct sand driving technique instead.

Hill Start Assist is one of those gizmos that holds the car on the brakes while you shift your foot from the brake to accelerator. The system on the D4 is the best we've seen which means it's merely quite dangerous. Sometimes it works, sometimes the car rolls back first, so we'd just ignore it and



D4 looks cleaner, but the loss of the secondary screen and buttons is not a usability improvement. The D3 is not stock-standard. Note steering wheel differences too.

left-foot-brake for hillstarts. Gradient Release Control is a gizmo to smooth the transition between starting downhill and the car moving to the Hill Descent Control target speed. Again, careful brake pressure does a better job and it's not hard to be smoother than the computers.

The Land Rover tow hitch supplied with the D3 has come in for heavy criticism so it's good to see Land Rover has redesigned it so it sits much higher, permits the spare wheel to be removed, and can be retrofitted to the D3. We completed all our tests with it fitted and there were few scrapes, but we'd

COMPARISON Land Rover D3 V D4

The D4 looks to be an even better towcar than the D3.



still rather take the Mitchell Bros hitch, which sits even higher and becomes a handy step. The maximum towball mass is 350kg but not to exceed the rear axle limit, and 3500kg braked tow, and while we didn't test it to that limit we did borrow a 1100kg Kimberley Kamper trailer. Hooking up with the Tow Assist rear camera view (see photos) is an absolute dream and I can see many couples buying the D4 for this feature alone in order to save their marriages. All we could use was the rear camera view and projected towball path but that was enough. You can also place a special placard on the trailer so the car can tell you how far back to go (see your dealer), but we were unable to test that and to be quite frank if it gets any easier to hook up a trailer people will do it for fun.

Once under way you have ample power – the D4 3.0 pulling a camper accelerates like the 2.7 without -- excellent handling and all D4s are standard with TSA or Trailer Stability Assist, a development of electronic stability control designed especially to combat the onset of trailer sway.

Our test D4 was an HSE and fitted with the five-camera surround. The rear camera for tow setup is great and very useful. We were less impressed with the others, which have their uses, but the side cameras have a limited field of view and the resolution isn't ideal for detailed work. You could easily see a child's buggy on a driveway, but it is difficult to assess the state of a 4WD track using the cameras.

Other minor changes; the vehicle now accepts 5% biodiesel to the EN590 standard, you can pull away in first, second or third low or first or second high, there's an instant fuel consumption display as well as average, the steering wheel feels different and has a better switch layout. There are apparently two air intakes on the sides but in fact one is not fed to the engine. Even the cupholder inserts are improved and they can be fitted to D3s. So all up our test crew was much impressed with the D4, and even Mrs P was moved to comment that an upgrade may be authorised at some point. Unfortunately, as far as touring offroaders are concerned the D4 is not all improvement.

Let's be clear that there is no question the 3.0 is much better in every way than the 2.7, but it comes with disadvantages, starting with cost. The figures below were valid in late 2009, but they still give a good basis for comparison. The base 2.7 model is \$14,000 cheaper than the TDV6 SE 3.0. The differences are 19in rims, leather seats, 7 seats, bi-xenon adaptive headlights, LED rear lamps and powerfold mirrors which if added to the 2.7 still make it \$6,250 cheaper. Out of that lot, offroaders would definitely



A different, but not necessarily better, instrument display. The D4's tank is full. Note the locations and size of the icons.

not want the 19s but the adaptive lights would be great at \$1050, and any offroading D4 should have the optional rear locker at \$1060. Families could opt for the \$2500 7-seat option which also changes the second row, and still save over the 3.0, so even with some options you're looking at saving \$10,000. For many people it simply won't be worth the extra, and that's before we get to the other drawbacks. A minor one is payload. Opt for the 5-seater 2.7 and you'll gain over 50kg of payload and the car is 100kg lighter. But the big problem is that yet again Land Rover has gone for bling-sized minimum rims. The smallest diameter you can fit is 19in, which is just too large for serious offroading and that is a problem for me and for many others – see 'Profiling Tyres' for why.

The other point is that while the 3.0 is fantastic, the 2.7 is hardly a steam engine. The D3 was still winning awards right up until it was replaced, and while it can't match the very latest European turbodiesels it can certainly move along nicely. After this comparo I drove my own D3, heavily laden with kit on the roof rack, through the fast, hilly, winding roads around the NSW/Victoria coastal border and had no difficulty flowing around the bends, keeping up to the speed limit or overtaking. More power would have been nice, but not essential.

The fuel economy improvement sounds impressive at 9% but that translates into a 71km range improvement with the combined figure, and for the cruise figure the improvement



A difficult, loose, cross-axling climb the D4 managed by virtue of its engine and rear locker.

The Aftermarket

We spoke to several aftermarket companies who have accessories for the D3 and most of them have plans for D4 accessories. In some cases the D3 kit fits directly, for example Mitchell Bros tow hitch and the 4X4 Intelligence rear carrier. Don't hesitate to call and ask as this is how most companies gauge demand. Kaymar have brought out a D4 rear bar, Traxide have a D4 dual battery kit, Safari are working on a snorkel and ARB will bring out a D4 bar. It looks like you'll be able to buy all the kit you need to turn a D4 into an offroad tourer. There may even be aftermarket 18" rims available for the D4 3.0, and if so we'll certainly let readers know.

Statistics

Both D3 TDV6 2.7 and D4 TDV6 3.0 have an 11.45m kerb turning circle, 83L fuel tank and in Offroad mode, a 700mm wading depth, approach/ramp/departure angles at 37.2 / 27.9 / 29.6 degrees, 240mm of clearance.



The new Land Rover towbar vs the Mitch Hitch.



The D4's truly amazing, marriage-saving, trailer hookup system.

is only 2% or a 21km range improvement. Both cars will need long-range tanks as fuel consumption will worsen when offroad and kitted out for touring. All D4 buyers should option the rear locker, which proved its worth as the D4 with it managing a very steep rutted hill where the D3 without really struggled. The D4's stronger engine and thus ability to manage the gradient in second low, rather than first was also a contributing factor.

One great feature of the D3 was its under-bonnet space, rare for a modern vehicle. There was an ideal location for a second battery opposite the main, but on the 3.0 and new 2.7 that space has been used for the ABS system. The second battery will now need to go ahead of the main, a favourite spot to mount compressors in the D3. On the positive side it is great to see that the recovery points are still there,

It is always disappointing to review a new model and discover problems from the previous one have not been addressed. For example, the spare wheel winch still requires the third row to be raised, the compressor is still vulnerable, the electronic park brake design has not been changed and is still prone to mud problems, and of course the suspension still warns at 40kph and lowers at 50kph. The D4 continues



Covers off. Note the lack of room top-left in the D4. The D3 has an ARB compressor added.

the D3 tradition of interesting warning signals. The first run was a bumpy, windy dirt road where the vehicle's acceleration, braking, handling and ride is really put to the test, which the D4 passed with consummate ease, giving the driver a feeling of confidence as well as being a real pleasure to drive (low-profile ride excepted). But at the end of the road the car displayed the following errors; park brake, gearbox, stability control disabled, EBD, air suspension locked to normal and Terrain Response unavailable. Not bad for a ten minute drive, but as ever, switching the engine on and off cleared the faults and they never recurred. It only takes one missed signal for errors to light up and while I've seen quite a few over the years never yet have I experienced any that couldn't be fixed by switching the engine on and off, and nor has any car gone into limp mode.

Summary

Back in 2004 the Discovery 3 broke new ground as it was the first 4WD to achieve excellence in the four very different disciplines of offroad, onroad, towing and as a suburban family taxi.

Yet the D4 is an improvement in almost every way and it has that intangible, but important extra of charisma which means owners enjoy the car as more than a mere means of transport. One tester who is agonising between an LC200 and a D4 went so far as to describe the D4 as "seductive", so we didn't leave him alone with the car but the point is well made. The 3.0 with its big rims makes sense if you can afford it and don't plan on venturing far into low-range territory, but offroaders should consider the still excellent and much cheaper 2.7 to save money and especially avoid the bling-sized rims. Either way the Discovery 4 is a fine vehicle and looks set to build on the D3's many successes.

Weights			
Model	Kerb	GVM	Payload
5S 2.7	2401	3180	779
7S 2.7	2471	3240	769
7S 3.0	2508	3240	732

All tow 3500kg with a TBM up to 350kg, roof load 75kg.

All figures from Land Rover with 75kg deducted from the kerb weight as the EC definition includes a 68kg driver and 7kg of luggage.

ADR 81 Fuel consumption (L / 100km)			
	D3	D4	%
Freeway	8.5	8.3	2.4%
Range (km)	926	950	2.5%
Combined	10.2	9.3	8.8%
Range (km)	764	842	9.3%

Performance					
	Weight	Kw / RPM	Nm / RPM	kg/kw	0-100Km/h
D3 2.7 TDV6	2471	140 / 4000	440 / 1900	17.7	12.8
D4 3.0 TDV6	2508	180 / 4000	600 / 2000	13.9	9.6

