



**FROM**

**TO**



**1**

**THREE  
TEST RIGS**  
EIGHT MOST  
POPULAR MODS  
TESTED!

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# ULTIMATE \$1000 UPGRADES!

If you had \$1000 to spend on upgrading your 4WD, how would you do it – and what difference would it really make?



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# PROVEN: THE REAL EFFECTS OF THE MODS YOU WANT

From camping to low-range mods, here are the most popular \$1000 upgrades, before-and-after tested

**G**eez it'd be nice if the modification fairy dropped off new parts every week, wouldn't it?

Unfortunately, in the real world where the only fairies that exist are the ones that take you to places like Moreton and Fraser, we've all got to be extremely selective with our coin, and how we spend it. When the opportunity does come up to invest a few bucks in your 4WD, you need to make sure it's exactly the right move for you.

In this issue's test, we're going to look at the most common ways that 4WDers will spend up to \$1000 on setting up their 4WD. We'll look at both camping upgrades to make your next night spend out in the bush that much more enjoyable and comfortable, and we'll also

look at ways to spend \$1000 that'll get your 4WD further off-road. We're going to take three typical 4WDs and first test them as standard. We'll camp out of them, we'll push them up tough tracks, we'll see just how much we can get out of them without any mods.

Then we'll head back to the workshop and to the driveway to fit up a whole range of parts that fall within our \$1000 budget, before we head back out for more camping and 4WDing (it's a hard life eh?) to show the real-world differences between the before-and-after setups. Our aim is to conclusively find out what the very best way to spend \$1000 on your 4WD is. Up until now, everyone's talked about it, but no-one has ever proven it!



No-one wants to spend excess time on the end of a snatch strap

## WHY THE \$1000 AMOUNT?

\$1000 might seem like an arbitrary sort of number, but we've chosen it for a reason. For most of us it's a serious amount of coin, but hopefully it's not completely un-achievable. Maybe it's a tax return cheque that turns up mid-way through the year, or it might be the savings you've put away from finally quitting the durries. Maybe you're just super good at saving and you've been plonking away \$50 a week for a bit now and you've finally found that moment when you can spend it on your 4WD. The thing is, \$1000 opens up a huge amount of modification options these days, especially with newer players on the market like 4WD Supacentre, Raw 4x4, 4WD Systems and Dobinsons Spring & Suspension who all have brought the cost of the most popular modifications down massively.

There's a huge difference between basic camping and doing it in style – and we're going to prove it



## COMMON COMPLAINTS THESE UPGRADES WILL SOLVE

The modifications we're going to test seek to solve the following problems:

- Not enough under-vehicle clearance off-road, leading to the vehicle getting prematurely hung-up on obstacles
- Lack of front-end protection meaning a lack of confidence to drive tough tracks
- Vehicle is sluggish and doesn't respond to throttle input quickly enough, making it hard to control in difficult situations
- Vehicle constantly loses momentum when it lifts a wheel
- No ability to properly organize camping gear which turns every camping trip into an ordeal
- No ability to run fridges, lights, radios and the like means you're not camping as comfortably as you'd like

If any of those complaints sound familiar to you, then this article is right up your alley!

## OUR TEST RIGS Three different vehicles, three perfect test-beds

To test out our variety of modification options, we've assembled three different 4WDs – all three wagons, two modern, one older, two diesel, one petrol. All are common 4WDs, with easily accessible parts – that helps us to do a little more to them under that \$1000 budget, because the more parts there are available, the cheaper they all are to buy.

Vehicle one, and the vehicle we're doing the majority of the testing on, is a 2008 120 Series Prado. Massively under-rated as an off-road family rig, these things have heaps of power, are ridiculously economical for what they are and are stupidly comfortable.

Vehicle two is a 2013 3.0L common-rail ZD30 Patrol. We've owned this vehicle since new, and the vast majority of the time it has sported little more than a bullbar, winch, roofrack and tyres. It's a work rig that plods around the country typically behind the camera, but this time around we're going to bring it out in front of the lens.

Vehicle three is our old faithful 80 Series Landcruiser. This thing might have 400,000km and 20 years on it now, but it just keeps going and going. We've got one particular series of mods up our sleeve which we're certain is going to transform this rig into an absolute off-road animal, all for under \$1000!

Test rig 1: 2008 Prado



Test rig 2: 2013 GU Patrol 3.0L



Test rig 3: 1995 80 Series LandCruiser



# WHAT WE'RE TESTING

The modifications we're making to our test rigs, what they cost and where you can get 'em

## 4WDING MODS TESTED

Here's the off-road mods we're testing within our \$1000 budget

**BULLBAR** – Once the domain of those who had at least \$2,000 to spare, these days there are a couple of companies bringing quality bullbars to market for under, or extremely close to, the \$1000 mark. A bullbar's not just somewhere to hang a winch off and spotties off – it's an essential safety item that dramatically increases the strength of a vehicle used off-road. We've enlisted the 4WD fanatics at **Dobinsons Springs & Suspension** to supply one of their classic steel bullbars for the 120 Prado, which comes in at a tiny bit over \$1000.

**Price: \$1100**

**Get this gear:** [www.dobinsonsprings.com](http://www.dobinsonsprings.com)

**SUSPENSION** – Every 4WD needs quality suspension, even if it's a brand new vehicle. That's not to say you need to lift your 4WD twenty inches up into the sky, but the right suspension kit will both provide a bit of extra under-vehicle clearance, as well as firming up the ride for better ride quality and load-carrying ability. For this test we spoke to the gurus at **Raw 4x4**, who provided a tailor-built RAW Nitro suspension package that amazingly came in under \$1000.

**Price: \$976**

**Get this gear:** [www.raw4x4.com.au](http://www.raw4x4.com.au)

**DIFF LOCK** – Yep, this is a big one, and you can indeed get a diff lock for well under \$1000! There's nothing that will turn any 4WD into a true off-road weapon like a locker will. **4WD Systems** manufacturer and retail a massive range of 'Lokka' automatic diff locks that typically come in at around the \$500 mark. If you own a part-time 4WD with manual-locking hubs and selectable 2WD/4WD range, then you have the choice of fitting an auto locker to either the front or rear of the vehicle. If it's a full-time 4WD, then you have two options – either fit it to the rear, or if the parts are available, have the vehicle converted to part-time.

**Price: ~\$500**

**Get this gear:** [www.4wdsystems.com.au](http://www.4wdsystems.com.au)

**EXHAUST & THROTTLE CONTROLLER** – We've known since the dawn of 4WDs that fitting a larger exhaust brings with it the benefits of better fuel economy and more power, but it's a whole new ball-game with modern vehicles again that run electronic throttle-by-wire setups. No longer is there a physical cable that links the throttle to the injector pump; instead it's all done electronically. The thing is, there's a lot of lag in factory electronic throttles, which is where a throttle controller works beautifully in conjunction with an exhaust. We got onto **4WD Supacentre** to supply a 3inch aluminised steel exhaust and we also got ahold of a throttle controller to suit the same 3.0L CRD Patrol.

**Price: ~\$680**

**Get this gear:** [www.4wdsupacentre.com.au](http://www.4wdsupacentre.com.au)

Surely you can't get a quality bullbar for less than \$1000, right? Wrong...



## CAMPING MODS TESTED

4WD upgrades aren't just about getting further off-road. Here's what we're testing to improve our camping ability

**STORAGE MODS** – It's one thing to make your 4WD perform better on the tracks, but it's another altogether to ensure you can comfortably camp out of it when you get to that perfect campsite! There's no better way to do that, than to increase your vehicle's storage ability. In this case, we hit up the legends at **4WD Supacentre** and got ahold of two of their most popular items – a set of the incredible Titan rear storage drawers, and a full-length steel roofrack. Whereas both of these items would have, at one time, bent your credit card to the tune of \$2500 or more, we paid just over \$700 for both delivered, AND we got a free awning too!

**Price: ~\$700**

**Get this gear:** [www.4wdsupacentre.com.au](http://www.4wdsupacentre.com.au)

**12V SYSTEM** – The final piece of our sub-\$1000 kit out puzzle is a proper 12V dual-battery system. Dual batteries might just be the greatest insurance against problems since the invention of the winch! Fit a proper dual-battery kit up to your vehicle and not only will you never have to worry about your vehicle not starting, but you'll be able to run a fridge, lights, stereo and everything you want at camp. We're using a **4WD Supacentre** dual-battery isolator kit for \$70, a **Century** deep-cycle battery that cost us \$190, a **Piranha Off-Road Products** battery tray that runs to \$285.00 and about \$100 worth of heavy-duty cabling, connectors and sockets.

**Price: ~\$645**

**Get this gear:** [www.4wdsupacentre.com.au](http://www.4wdsupacentre.com.au),

[www.centurybatteries.com.au](http://www.centurybatteries.com.au), [www.piranhaoffroad.com.au](http://www.piranhaoffroad.com.au)

This RAW 4x4 complete suspension kit with Nitro struts and shocks comes in under \$1000 - but how much will it transform our 4WD?



The factory suspension on this Prado lets it down. It's relatively comfortable while empty, but there's not enough wheel travel to keep the wheels planted off-road, and no-where near enough clearance



## 'BEFORE' TESTING: CAMPING AND 4WD ABILITY

To figure out how much each mod improves our 4WDs, we first need to establish a baseline to see how the vehicles perform without any mods

Before we put a spanner or a part to any of the 4WDs, we decided we'd head bush to see how they performed. We dialed in a typical off-road overnight trip – some good tough tracks during the day, then onto a perfect little beach campsite for the evening. Here's how the vehicles performed.

### OFF-ROAD ABILITY

We took each vehicle out watching for different things. The Prado, which was to receive the bullbar and the suspension install, we watched to see how it performed on rocky, rutted tracks that challenged approach angle as well as suspension travel. It was immediately obvious that a lack of wheel travel hurt the family wagon – it would quickly run out of suspension, and sit there spinning its tyres uselessly. Even more apparent was just how much the lack of a bullbar was hurting the vehicle's off-road progress. We were extremely worried about damaging the front of the vehicle on rocks, which meant a lot of the time we'd be crawling so slow that we'd lose all progression quickly.

In the Patrol, we were mainly looking for two things. Power application, and throttle feel. It was quickly apparent that the CRD 3.0L GU had an incredibly laggy throttle – even compared to the Prado – and anyone who has owned one will tell you that the thing is definitely not any sort of powerhouse. This would definitely be an interesting one to watch, as we were certain there'd be massive room for improvement.

Now onto the 80 Series. While it does have solid axles and coil springs front and rear, along with a nice aftermarket set of shocks and springs from Raw 4x4, it was obvious that the 80's three-link front suspension still held it back. It would lift front wheels fairly easily, and while it had the clearance for most obstacles, that wasn't enough when the front tyres couldn't hold proper contact with the ground, and all the power would be sent to the tyre in the air. Odds-on, the diff lock would transform this vehicle immensely!

### CAMPING ABILITY

After more than a couple of sessions on the snatch strap, it was time to head over to our campsite for the night with the nearly-standard Prado. Both the GU Patrol and the 80 Series have been kitted out to be comfortable camping machines, so we left them back at the shed then piled in the Prado. Before we'd even left the driveway it was obvious that a lack of storage space was a serious problem. We had everything piled in the back of the vehicle, and to grab a cold bottle of water out of the esky was a 10minute unpack-and-repack exercise. Still, not the end of the world, at least we're going camping, right? Don't get us wrong, there's nothing like camping by the light of a fire – except camping by the light of a fire, with some LED lights to let you see what you're doing cooking without having to get the missus to hold your phone over your shoulder! Yep, we can definitely see some big improvements that can easily be made in the camping department too, so back to the shed to get back into it.



Camping with a factory-standard 4WD; a frustrating experience that means unpacking the back of the vehicle every time you want a can of coke!



# ONE-WEEKEND 4WD TRANSFORMATION!

How we turned our three test rigs into off-road weapons in a single weekend

## ↓ BULLBAR

**DIY SUITABILITY:** Fitting a bullbar is definitely a DIY job. It may seem daunting, and it's not the quickest job out there, but it's well within everyone's abilities if you own basic hand-tools. For the majority of vehicles it's just a case of pulling the factory bumper off, and then bolting the new one together. We love the fact that the Dobinsons bar has a separate winch cradle, so we took the opportunity to fit up a new 4WD Supacentre Grande Mk3 winch at the same time. The separate cradle makes the install way easier.

**DIFFICULTY:** 3/5 – and that's if you have to cut the factory bumper to make a neat little in-fill panel for under the headlights. The hardest part, in our opinion, is feeling around to figure out how the factory bumper unclips. Don't rush or force it, as that's how you'll end up with a less-than-satisfactory job.

**TIME TO INSTALL:** Four hours, going slow – and that's with all the new foglights and blinkers wired up properly, and a sneaky winch installed at the same time.

**TOOLS REQUIRED:** Spanners, sockets, medium sized breaker bar for nipping up mounting bolts, soldering iron and pliers for wiring up lights.

**TRAPS FOR NEW PLAYERS:** Depending on how your new bullbar is packaged, be very careful using a knife to un-wrap it. If you're anything like us, you won't be happy with a fat scratch in the powdercoating before it's even gone off-road once!



The Dobinsons steel bullbar took us about an hour to install – a massive upgrade for the time it took



We decided to leave the suspension install to the experts at Raw 4x4. Without a hoist and the proper tools, it's an inefficient job to do at home

## ↓ SUSPENSION

**DIY SUITABILITY:** Okay, this is one that we're going to go ahead and rate as NOT being DIY suitable. The truth is you can, of course, fit suspension at home – and it's something we've done plenty of times before. But as we've grown a little older, not much wiser and a lot fatter, we've realized that when it comes to suspension, unless you have a hoist and multiple gearbox jacks, you're just wasting time fitting it yourself. We paid a little over \$300 to have the gurus at Raw 4x4 install the kit for us, and it's money we'd pay time and time again.

**DIFFICULTY:** 4/5 – particularly for vehicles with coil-over struts like the Prado we've had the suspension installed on. Again, you can do this at home if you have the time and the tools, and if that's the case then awesome – you'll save yourself serious coin. But considering you NEED a pair of coil-spring compressors (the scariest tool outside of a 9inch grinder with a bent mounting spindle) you aren't going to save a whole heap if you need to buy specialist tools yourself.

**TIME TO INSTALL:** Four hours on a hoist – allow up to a full day if you're at home on the ground.

**TOOLS REQUIRED:** Trolley jack, axle stands, breaker bar, sockets, spanners, coil spring compressor.

**TRAPS FOR NEW PLAYERS:** Don't forget that after any suspension change, you'll need a wheel alignment to ensure your steer tyres are still pointing perfectly true. Don't cheap out on it here – you'll just scrub your tyres out quickly and find yourself up for replacements too soon.



The storage upgrades are all incredibly easy to install at home

## ↓ STORAGE MODS

**DIY SUITABILITY:** Fitting up a roofrack and drawers is definitely a DIY job! In fact, it's one of the most satisfying jobs you'll ever do. Both the flat steel rack and the Titan drawers we got from 4WD Supacentre are designed to be easily installed at home. The drawers feature a universal mounting system that allows you to pick up any threaded nutsert within the floor, and the wing kits all bolt together like a giant Mechano set too. As for the roofrack, it's not difficult at all – just a little length, with lots of fasteners to put together.

**DIFFICULTY:** 2/5 – and that's probably over-selling it a bit. Put it this way, if you can put fuel in your 4WD, you can fit the drawers and roofrack no worries.

**TIME TO INSTALL:** We had both the drawers and roofrack done in about four hours, and that was going extremely slowly the whole time.

**TOOLS REQUIRED:** Spanners, sockets, as a bonus ratchet spanners, and a small drill-driver or similar to speed up the process.

**TRAPS FOR NEW PLAYERS:** It's a good general rule for anything you fit to your 4WD, but as you go along fitting all the fasteners up, don't tighten up a single one further than hand-tight until they're all in place and you're happy with the fitment and positioning. Only when it's sitting perfectly should you then tighten everything up.

## ↓ 12V SYSTEM

**DIY SUITABILITY:** 12V is a funny thing when it comes to DIY installs. You can get away with an okay install if you're pretty new to it, as long as you follow the basic principles – don't rush, don't cut corners, always protect every circuit with a fuse or circuit breaker and make sure it's all secured properly. Of course, if you really want one of those pro-level type installs that everyone loves sharing pics of these days, then you really do need to speak to a professional auto electrician

**DIFFICULTY:** Overall, probably a 3/5. Nothing's particularly hard, mainly just fiddly – especially when running wiring from the front of the vehicle to the back.

**TIME TO INSTALL:** Six hours – you don't want to rush this stuff.

**TOOLS REQUIRED:** Sockets, spanners, drill, pliers, soldering iron, multimeter.

**TRAPS FOR NEW PLAYERS:** Under-sized wiring and poor earths are the number one cause of electrical problems. If it works momentarily then flickers in and out – check that the earth back to the body or chassis solid. If it's on, but the fridge isn't working like it should – then you probably need to upgrade to fatter, better-quality cabling.

## ↓ EXHAUST & THROTTLE CONTROLLER

**DIY SUITABILITY:** Okay, so an exhaust sounds like a fairly daunting job, but in reality it's actually not that big a deal. The exhaust we got from 4WD Supacentre is designed to be an excellent DIY fit, and bolts together with easy-to-use flanges so you can install the exhaust in sections. And as for the throttle controller... this might just be the single easiest accessory you'll EVER fit to a 4WD! It's literally plug and play, installing in minutes with the hardest bit being that you need to find somewhere to mount the control unit and then run the wiring down to the top of your throttle.

**DIFFICULTY:** 3/5 – and it's only a three because sometimes the bolts holding the factory exhaust together are seized or in a tricky to reach spot.

**TIME TO INSTALL:** Four hours, if everything goes well. If you're replacing a fifteen year old factory exhaust, allow extra time because it's probably going to fight you a little.

**TOOLS REQUIRED:** Spanners, sockets.

**TRAPS FOR NEW PLAYERS:** The exhaust obviously needs to be cold to work on, so make sure the vehicle's parked where you can work un-interrupted the night before. When it cools down, hit every bolt and hanger you can see with liberal, massive doses of WD40 or similar spray, including the turbo dump pipe. Hit everything again first thing in the morning, and then give it a final soak just before you start.

## ↓ DIFF LOCK

**DIY SUITABILITY:** Can a diff lock be installed at home without massive amounts of specialist gear? The short answer is yes – if it's the 4WD Systems automatic Lokka, and you follow their instructions to a tee. The main issue with installing a diff lock at home is that you typically need a dial gauge to properly reset the backlash on the crownwheel gears and check that the diff is perfectly dialed in. However, with the Lokka there is the ability to install it without changing any of the vital spacing of the diff gears, so if you have the ability to do, say, a swivel hub rebuild, then you have the ability to fit the diff lock at home.

**DIFFICULTY:** 5/5 – in terms of DIY jobs, yes it's definitely doable, but it is still up there in its difficulty.

**TIME TO INSTALL:** Allow six hours – you may be able to get it done in less, but this'll give you plenty of time up your sleeve.

**TOOLS REQUIRED:** Spanners, sockets, screwdrivers, all the typical hand tools.

**TRAPS FOR NEW PLAYERS:** **READ THE INSTRUCTIONS!** They're extremely detailed and they do a great job of explaining the right way to do the job. If you're still not 100% sure, then by all means enlist your mechanic to do the job.





# TESTED: UPGRADED 4WD ABILITY

How much further did the mods get our vehicles off-road?

## BULLBAR

After spending a couple of hours installing the Dobinsons Spring & Suspension bullbar, we couldn't wait to hit the tracks to test it out. Forgive us for a second for sounding wanky, but the difference in looks is enormous – this one mod transforms the vehicle from 'soccer mum's car' to 'offroad weapon'. We went straight back out onto the tracks to watch how our test driver would go with the bullbar, and the difference in confidence levels was immediately obvious. Where he would have tentatively idled up to an obstacle, instead he now drove with confidence, crawling up to big steps and carrying enough momentum for the vehicle to comfortably climb big steps without stalling out.

However, the real benefit came when the confidence levels exceeded the vehicle's ability just that little bit. In a quick moment the rear diff, still wearing factory-sized tyres for now, jammed itself hard into a bit of granite rock and the vehicle moved no further forward. It was one of those spots where it was tricky to get another vehicle and a snatch strap up to – but luckily we had the freshly installed winch on hand. Instead of stuffing around with a potentially iffy snatch recovery, it was as simple as a quick winch forwards and the vehicle was free again.

Does a bullbar make your vehicle get further up a track? Well, maybe, depending on how you look at it. Driver confidence is everything, and there's a huge amount of confidence to be found in properly protecting the front of the vehicle. And that's even before you take into account the ability to hang a winch, or spotties, or a UHF off the front of a vehicle.

A bullbar used to be a massive investment, something that more often than not you either bought second-hand, or added onto the finance of a new vehicle you bought. It's easy to assume that a \$1000 bullbar can't be any good, but it's so far from the truth it's not funny. This Dobinsons steel bullbar runs in at a tiny bit over \$1000 and has to be one of the best value bullbars on the market.

## SUSPENSION

After having the suspension gurus at RAW 4x4 install our new suspension kit with RAW Nitro struts and shocks, we didn't even have to head out bush to realise how much of an improvement had been made. It was immediately apparent even as we drove out of the workshop just how the ride had firmed up beautifully, without being overly harsh in any way. We'd used Raw 4x4's online suspension builder before the install (a bloody handy tool by the way; [www.kitbuilder.raw4x4.com.au](http://www.kitbuilder.raw4x4.com.au)) and spec'd up everything we were going to fit to the vehicle – bullbar, dual-batteries, rear drawers, roofrack, etc. That let the team build the suspension to the exact weight, because funnily enough, 'heavy duty' doesn't suit all 4WDs. The spring rate has to be matched to the load to be carried, and if you aren't carrying all the gear, then you don't need the heaviest springs possible.

Okay, so straight away it was plain to see that ride quality had been improved massively. That's a huge one for something like a Prado, which has been built to be comfortable to punch out massive kays in. But what about where it really counts – out in the scrub? To test the new suspension out, we went straight for our local playground, a maze of tracks filled with big ruts, rainforestry sections and long rocky steps. The Prado, while not exactly being a hardcore rock-crawler, was instantly more comfortable in the rough stuff. You could tell that it was keeping all four wheels planted a lot longer, particularly due to the extra wheel travel in the rear. That had the effect of pushing the opposite corner of the vehicle down into the terrain, keeping the weight over the front and preventing the front wheels from lifting.

The extra ground clearance was a big one too – particularly with ramp-over angle, which is typically a problem on a vehicle with a decently long wheelbase like the Prado. Still running its factory side-steps, where they would have dragged on big ramp-over mounts before, they noticeably cleared a lot more terrain. Better clearance, extra wheel travel and a vastly improved ride – and all from a suspension kit that costs less than \$1000. Incredible.

## EXHAUST & THROTTLE CONTROLLER

With the Prado parked off to the side for a moment, it was time to jump in the GU and have a play with the big fat exhaust and throttle controller. The exhaust definitely sounded instantly meaner – nothing ridiculous, but like a 4WD should sound – tough! But sounding tough ain't what we're most interested in (although it's a nice little bonus) – we wanted to know how the vehicle would perform.

Like with the suspension, we didn't even need to leave the tarmac to realise that the combination of the exhaust and throttle controller had made a massive difference. Straight away the vehicle was a lot more willing to take off, and it was instantly obvious that the turbo was spooling up just that little bit quicker and more freely. With a little less back-pressure working against the flow of the exhaust out of the turbo, that made a lot of sense – it's exactly what you'd expect it to do.

The huge difference, however, was in the throttle controller. Righto, anyone who says there's no way a throttle controller can make any difference to how your vehicle performs, simply hasn't driven one. The first time we took off round a corner that we'd normally roll round in third at about 1800rpm, the turbo was already on boost and with no throttle lag... it literally put us back in our seats. So much so that we spend the next hour or so turning it on and off again, playing with the different settings. What we loved was the ability to dull the throttle response right down when we were off-road, so instead of it being touchy and jumpy in the rough stuff, it smoothed the throttle application right out. Highly, highly recommended.



## DIFF LOCK

Phwoar. We knew going into it that the diff lock would transform the 4WD – after all, we've spend the last couple of decades driving both locked and unlocked 4WDs. What none of us really expected, however, was just how much fitting a locker to the front of the 80 Series would turn it into a next-level off-road animal again. After all, with coils and solid axles at either end, and heaps of clearance too, the 80 should already be a weapon. And it is – but this is like going from a rusty old .22 to a .50 cal. Point, shoot, obliterate whatever's in your path.

Having the two front wheels locked in together when needed instantly allowed us to slow our pace of driving right down. Where before we'd rely on momentum to carry us up and through a tricky obstacle, now we had the ability to crawl slowly through the tough stuff. It's a complete game-changer and it's something you can very easily get used to.

What surprised us the most, was the fact that the locker was just about invisible in its operation. It's not clunky, it doesn't thump in and out when you're on the throttle and most surprising of all, it doesn't drastically effect steering operation. In reality, it's about the same amount of load on the steering as dropping from say 26psi down to 16psi would offer. For \$500 this is not just a game-changer – it's a must-have.



# TESTED: UPGRADED CAMPING ABILITY

What the new modifications did to transform the camping ability of our test rigs

## STORAGE UPGRADES

Out of all of the modifications we'd performed on the test rigs for this feature, the one we were looking forward to the most strangely had nothing to do with off-road ability. The poor Prado had a hell of a time with a couple of blokes camping out of it and nothing in the way of storage gear, so to massively upgrade its ability to neatly carry everything would be a massive bonus.

The 4WD Supacentre Titan storage drawers have to be, without a doubt, the most popular drawers on the market, and it's not hard to see why. They're ultra strong – ten times stronger than the old plywood sets we used to knock together – and come with side wings to suit a huge variety of vehicles. You get the universal twin drawer kit as one unit, and then all you do is fit up the side brackets and the in-fill wings. Way too easy!

We know it seems fairly obvious, but the way they upgrade a vehicle's ability to carry everything neatly and securely has to be seen to be believed. Goodbye old broken tubs of camping gear – stuff that! There's nothing like having everything in the one drawer, sitting there all organized and ready to pull out at a moment's notice. And then on top of that, you've got the fridge slide that'll give you full access to your fridge without having to unpack the entire rear of the vehicle!

We chose to fit a flat steel rack to the Prado, also sourced through 4WD Supacentre. Doesn't matter how neat your storage inside your vehicle is, there's still stuff like swags that you will naturally want to storage up on top of the roof. Being able to bung it all up there and strap it down in seconds makes packing for a weekend away, a piece of cake. For just over \$700 we've completely transformed the vehicle's ability to store heaps of gear. Doesn't get better than that.



## 12V SYSTEM

Okay, so we mentioned a moment ago that we had fit a fridge up on the drawers' included fridge slide. You're not going to get far running one off your crank battery – not unless you enjoy flat batteries of a morning – which is where the 12V system comes into place. In terms of time-frame of install, the 12V setup that we added to the Prado probably was one of the lengthier installs. It took us a good five to six hours to fit the tray, the battery, the isolator and the wiring all the way to the back of the vehicle. We were going slowly admittedly, taking our time to make sure the install was done the right way so we didn't have to go back over it.

In terms of the basic dual-battery system, the install couldn't be easier. Where we invested a little extra was in the Piranha purpose-built battery tray. It ran in at about \$280 but bolted straight into the vehicle perfectly, saving a lot of headaches in the long run. The Adventure Kings dual-battery kit comes with everything you need to install dual batteries under your bonnet, save for the battery and the tray. It's all seriously good quality stuff and saves you big time compared to purchasing individual parts.

Not having to worry about a flat battery or a warm fridge at camp is a god-send! You can run all the lights you want, leave the stereo going and have the fridge cranked all night and still be confident that the vehicle is going to start in the morning. Definitely a massive upgrade and a win in our books.



## MY ULTIMATE \$1000 UPGRADE – BRENN

"I've thought about this long and hard," says Brenno. "In fact, I've had a couple of mates ask me this exact question over the last couple of weeks. For me, it's hard to go past upgrading your vehicle's storage. You can always find another, easier track to get up, or not go as hard in the bush. But for my money, there's absolutely nothing that transforms a vehicle like upgrading its storage ability. It blows me away that in this test, we were able to kit one of the vehicles out with a proper, heavy-duty steel roof rack (with a bonus awning as a freebie!) AND a fully 4WD-proof set of extremely high quality storage drawers for a little over \$700. It wasn't that long ago that you'd spend that much JUST on the roof rack, and you'd have to drop another couple of grand on drawers. I've built a couple of sets of my own drawers now over the years out of plywood, and I end up spending multiple weekends and hundreds of bucks on something that isn't a tenth as strong. No comparison for me – if I had \$1000 to spend, I'd upgrade a vehicle's storage ability."



## MY ULTIMATE \$1000 UPGRADE – JOCKO

"I would love to say tyres first, but you'd be doing well to get a good set of boots for for \$1,000 I reckon," says Jocko. "With that in mind, I would look into some reliability mods as most new 4WDs are so highly strung, that a bit of protection goes a long way. I'd fit a snorkel and a diesel pre-filter and if I had enough cash left over, then I'd spend the rest on diesel to break the new girl in!"







# RESULTS & CONCLUSIONS

What mods make the most difference, and where's your upgrade money best spent?

Now the dust has settled and the mud has been washed off, let's take a look back over the real effects of the different modifications we've installed, and come up with a conclusion as to where your money is best invested.

## OFF-ROAD MODS

In the Patrol, the 4WD Supacentre exhaust and the throttle controller literally transformed the vehicle. What was originally a dulled, mundane driving experience turns into seat-of-the-pants sort of stuff. We loved the fact that we could play with the throttle controller settings and sharpen up or smooth out the throttle depending on vehicle application.

Fitting up the 4WD Systems diff lock to the old LandCruiser was another game-changing modification. While it wasn't exactly short of off-road ability to start with, the 4WD Systems Lokka turned the 80 Series in an absolute track-tearing animal that would stop at nothing. If you've never driven a vehicle with a diff lock then it has to be seen to be believed. If getting further up a track is what you're looking to do, then the diff lock is what you need.

Bolting the Dobinsons bullbar to the front of the Prado was an incredibly quick way to enhance its off-road cred and ability. In an hour or so, you turn a vehicle that's much more suited to shopping centre car parks, into a proper off-road machine ready to do battle with whatever track you can throw at it. The fact we were able to bolt up a winch to the vehicle at the same time goes even further towards building that off-road ability. It's an incredible upgrade, and it's highly recommended for multiple reasons. It's close to our ultimate upgrade, but it gets ever so slightly nudged out by our final off-road \$1000 mod.

That brings us to our final \$1000 off-road mod – suspension. We can't stop raving about the RAW 4x4 lift kit with Nitro struts and shocks that we had installed into the Prado. It improved the vehicle's ride both on and off the road, let us safely carry a lot more weight and even let the vehicle flex a lot better at the same time! In terms of total transformation of vehicle, it stood out head and shoulders above the rest. That's why we're calling it our ultimate \$1000 off-road mod upgrade!

## CAMPING MODS

We had two groups of modifications that we installed to improve our test vehicles' camping ability. The first was a 12V system, including a dual battery kit and enough associated parts to properly run a fridge. It's a sensational setup by all means, and it's brilliant being able to run fridges and lights all night without having to worry about a flat battery. But is it the ultimate \$1000 camping upgrade? Not quite...

That gong goes to the storage setup we added to the vehicle. To say it improved our 4WD is an understatement – it genuinely transformed it. After a night's camping it was obvious how chalk-and-cheese the camping experience was with proper storage in place. It makes everything ten times easier, and comfortable camping is all about making things easy on yourself!

So there you have it. Suspension and storage mods – the best way you can spend \$1000 to upgrade your vehicle.



## GET THIS GEAR ON YOUR OWN 4WD!

Thanks to the following companies for being involved in this article. We highly recommend researching their products further if you're in the market.

### RAW 4X4

W: [www.raw4x4.com.au](http://www.raw4x4.com.au)  
Ph: [02] 4949 0000

### DOBINSONS SPRING & SUSPENSION

W: [www.dobinsonsprings.com](http://www.dobinsonsprings.com)  
Ph: [07] 4927 7444

### 4WD SUPACENTRE

W: [www.4wdsupacentre.com.au](http://www.4wdsupacentre.com.au)  
Ph: 1800 88 39 64