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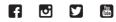
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Snapshot





Snapshot

Matthew Frost Director of Sales & Marketing

Many years ago, a well-known 4x4 personality told me that the thing that really distinguished ARB from its competitors, even more so than the products, was the people. He was referring to the level of passion and expertise that exists amongst our staff and broader network. If you've been following ARB's series of "We Get It" videos, you'll know that for many ARB people, 4WDs are a way of life whether it's off road driving, camping with the family, accessing remote fishing spots, undertaking vehicle restorations or just going bush with a bunch of mates.

Sadly, one of the greats of the ARB world passed away recently. Dennis Oliver, owner of ARB Broken Hill, was a huge personality in the region and was respected far and wide for his in-depth knowledge of 4WD vehicles, accessories and touring the outback in New South Wales. Originally known as Silver City 4WD, the store services a vast area covering hundreds of thousands of square kilometres. The region is remote, experiences climatic extremes and has harsh road conditions, all of which create a punishing environment for vehicles.

Dennis provided ARB with feedback on our products for decades and frequently assisted with the evaluation of prototype items. He helped us out when we busted vehicles on media trips, arranged access to some stunning private property for photo shoots and always entertained us with his tales from the bush.

The broader 4WD community will, however, primarily remember him for throwing his workshop doors open 24 hours a day to support competitors participating in the Outback Challenge, an event started by Ron Moon and the 4X4 Australia magazine in 1999. Anyone involved in this event knew that Dennis, his wife, Julie, and son, Johnathan, could be relied upon for mechanical support, a cuppa and even a hot meal at any time of the day each year when the event was on.

My most striking memory of Dennis and Julie though is the time I first met them, on a station north of Broken Hill in 1999. I had been made their point of contact at ARB Head Office a couple of years beforehand and had received many colourful phone calls from them on a wide range of topics relating to ARB's business. When I heard their distinctive voices, I wandered over to introduce myself. Julie stared at me with suspicion for a few moments before stating loudly, "F@#%, you look like Forrest Gump!"

That was the first of many comical encounters I've enjoyed over the years on my trips to Broken Hill and I, like many, will miss Dennis's yarns and banter.

Another part of the world we've spent a fair bit of time in recently is the Riverland area of South Australia and in particular Loveday 4X4 Park. As well as offering a great selection of 4WD tracks, the park features some stunning camping spots along a very pristine section of the Murray River that is wide and deep, making it suitable for numerous water sport activities. The property offers a range of amenities and is the perfect place to hold our very first 4X4 Culture Live event.

You can read about the event in this issue of 4X4 Culture but in a nutshell, it's an opportunity to experience many of the topics we talk about in this magazine and meet some of the people from ARB and our partners who contribute to the mag. It's sure to be a lot of fun and we hope to see as many customers there as possible. What's New







ARB Performance Cap

Ideal for those sunny days, the ARB Performance cap will complement your outdoor lifestyle. Finished in a sleek black fabric with a subtle ARB reflective logo on the front, the ARB Performance cap has a snap back adjustment strap on the rear. Feature piping and repeat print inner taping completes the sporty theme of this cap, ensuring you stay stylish on or off the track.

Part Number: 217752



ARB Flat Peak Cap

Cap off your outfit with the ARB Flat Peak cap, which will turn anyone into a stylish 4x4 adventurer. Featuring a grey front panel with 3D welded black ARB logo and black mesh back complete with snap back closing. Red piping detail adorns the front panel and repeat print inner taping finishes off this cap, making it a welcome addition to your wardrobe.



ARB Stubby Holder

There's no denying it – after a long day hitting the tracks, there's nothing better than that very first swig of your favourite ice cold brew. No matter if you're settling by the campsite or socialising around the fire, the ARB stubby holder is a must-have when it comes to keeping your drink cool.

Part Number: 217753

Part Number: 217754

Pressure Problem Solved

Mounting compressors in modernday vehicles is becoming more and more challenging as engine bays are increasingly reducing room for added accessories. To combat this issue, ARB's engineers have designed a bracket system to integrate an ARB compressor into these tricky vehicle designs.







Prado 150 compressor location shown





The Toyota LandCruiser 200 Series bracket system allows you to install a twin, single or locker-only compressor to the rear right-hand side of the vehicle behind the trim panels. The bracket system also allows for optional Air Locker solenoids, four-litre air tank, quick connect coupling, switch, manifold kit and ARB LINX PRV to be fitted.

The right-hand side rear guard location was chosen as it provided enough space to cater for a twin compressor and four-litre air tank whilst not interfering with or taking up cargo loading space.



Toyota LandCruiser Prado 150 Compressor Bracket

Like the 200 Series bracket, the Prado 150 compressor bracket allows you to install a single, twin or locker-only compressor with optional Air Locker solenoids, four-litre air tank, manifold kit and ARB LINX PRV. The mounting position chosen by ARB engineers is the rear left-hand side of the vehicle behind the trim panels. An additional bracket mounts the quick connect coupling and switch inside the access panel, providing very easy access for inflation of tyres.

The left-hand side rear guard location was chosen as it provided enough space to cater for a twin compressor and four-litre air tank and doesn't take up precious cargo space.

Remote Remote

The new ARB Classic Series II Fridge/Freezer range brings a new look, a host of technical upgrades to ensure your food and drinks are always stored at the optimum temperature and a communication module that allows you to **control your fridge from your smartphone or LINX device.**





ARB's comprehensive range of Classic portable fridge/ freezers has undergone an extensive makeover and sports a new look as well as technical upgrades and new accessories.

The ARB Classic Series II Fridge/Freezer has four models in the line-up to suit different user requirements and applications: 35-litre, 47-litre, 60-litre and 78-litre models.

All ARB Classic Series II Fridge/Freezers now feature a smart green/grey and black colour scheme that reflects ARB's new corporate look and all models can be equipped with a completely redesigned transit bag, as well as an updated communication module that allows monitoring and control over fridge settings via a smartphone or ARB LINX device.







ARB Classic Series II Fridge/Freezer



New Look

The ARB Classic Series II Fridge/Freezer range sports a new look thanks to a fresh colour scheme and upgraded electronics with new features such as backlit display, 12-volt readout and dimmer control.

The tough cabinet structure of all ARB Classic Series II Fridge/Freezers remains unchanged, which means they feature a tough powder-coated zinc steel cabinet, strong steel handles that double as secure tie-down points and rubber feet integrated into the fridge base for grip and stability. All models also have a removable lid with a recessed seal and a large over-centre cam lock latch that's not only easy to use and creates a positive seal, but can also be angled to prop the lid open for ventilation when the fridge is in storage.

"The metal body and handles of the fridge have been updated with a new green/grey colour, as have the plastic components such as the latch and hinge caps at the rear, while the rest of the components are black," says ARB Product Manager, Rhys Brown.

"The revised fridge colours really reflect the new ARB corporate image," continues Rhys, adding that they will look great in the back of any wagon, ute or camper.

New Electronics

All of the features that have made the ARB Classic fridge so popular with 4WDers have been retained in the Classic Series II range, but the electronics have been upgraded and now offer several new functions as well as compatibility with a new two-way communication module that connects via Bluetooth.

"The electronics have been updated," explains Rhys. "Some new features include a backlit display and buttons that illuminate when pressed, which makes it much easier to operate the fridge at night.

"And on the display, we've added in a dimmable feature so you can cycle through the settings – high to low – enabling you to dim the screen if it's a little too bright at night or if you don't want the fridge to attract attention when it's in the back of a wagon or a ute canopy.

"It now also incorporates a voltage readout on the display so at the press of a button it will tell you what voltage the fridge is receiving from the power source," adds Rhys.

ARB Fridge Connect

ARB has developed a new two-way communication module that utilises Bluetooth connectivity allowing both monitoring and control of the fridge via a smartphone or ARB LINX display.

"We've updated the Remote Fridge Monitor that was used on the original Classic fridge," says Rhys Brown. "With the original monitor, a transmitter mounts to the back of the fridge and you can put your remote display wherever you want; in transit, you'd have it up in the driver's line of sight to monitor what's going on with the fridge."

"Now, with the Classic Series II, we have a new communication module that plugs into a port at the back of the fridge with a strong built-in antenna. The module connects via Bluetooth to whatever device you choose to monitor the fridge on. It will work with LINX, Android and Apple devices."

On the ARB LINX device, the Remote Fridge Monitor module is called the Fridge App Connect module, while on Android and Apple devices users can simply download the app, also called ARB Fridge Connect.

"So once you install the transmitter, simply download the app, connect via Bluetooth and away you go," explains Rhys. "There are some pretty cool new features on it. When connected to a Classic Series II fridge, it provides two-way communication, so you can receive information and you can also control the fridge and what it does, so you can turn it on and off, change the temperature settings, change any of the default settings - such as Celsius or Fahrenheit, battery protection – all the different modes can be changed via your phone or LINX.



"ARB Fridge Connect will also tell you if the fridge lid has been left open, by coming up with a warning, and it will also display 'check' codes, such as if the fridge has gone into battery protection mode. If there are any other messages from the fridge, it will highlight them on the display," says Rhys.

The new remote fridge communication module can also be fitted to existing Classic Series I fridge or Elements fridge models, which will operate with one-way communication. "You'll be able to monitor the fridge on your phone app or LINX, but you won't be able to control fridge functions from the device," explains Rhys.







ARB Classic Series II Fridge/Freezer



New Transit Bag

To complement the redesigned Classic Series II, ARB has also developed a new transit bag that adopts the fridge's colour scheme.

"It's a new design and it really looks smart on the fridge, it's very much modernised the bag," says Rhys.

The new transit bag is made from a fully synthetic material with improved insulation compared with the original Classic Series I polycotton canvas transit bag.

"We have given the bag a sleek, new, modern look," says Rhys. The new transit bag has a nice clean lid line and a pocket that allows you to store the fridge divider when not in use or anything else you wish to put in there. "Being made from a fully synthetic material, as opposed to polycotton canvas, it will also be less susceptible to fading," adds Rhys.

The openings for the fridge's power leads have been relocated higher up on the new transit bag, which will be of particular benefit when the Classic Series II is mounted to a fridge slide or roll-top floor. "At the back of the transit bag, historically we've had two slits down the bottom to run the power leads through," explains Rhys. "On the new transit bag, we've moved these openings up to the top of the bag, so if you're using it on a fridge slide or a roll-top floor, it allows you to run the cable up the bag and keep it away from moving components, so you won't pinch the cord."

Every new transit bag is also supplied with an ARB-branded bottle opener that slides into a dedicated pocket at the front of the bag, so you'll always know where it is when it's needed.







Classic Features

The Classic Series II operates in much the same way as the previous model, from turning it on to cycling through the menu options, albeit with the addition of the dimmable screen function. And like the original ARB Classic fridge, the Series II has an evaporator that's an integral part of the cabinet that maximises useable interior space and results in smooth, easy-to-clean cabinet walls and floor. A built-in drain plug also makes it easier to clean the fridge.

A separate dairy compartment makes access to food and drinks simple and the Classic Series II has a reversible basket with a movable divider to provide multiple storage options for fridge contents.

The Classic Series II utilises a proven and efficient Secop compressor, which is also very quiet, ensuring there's no rattling or buzzing at the campsite that might otherwise disturb the serenity. Generous cabinet insulation also improves fridge efficiency and the Classic II's average current draw ranges from just 0.85 to1.07 A/h (depending on model) tested at 3°C cabinet temperature in 26°C to 31°C ambient temperature.

All Classic Series II fridge models can be run as a fridge or a freezer and they have a cooling range setting from +10°C to -18°C. All can be run on either a 12-volt DC or 240-volt AC power source and feature an integrated battery protection system that will see the fridge shut down if voltage drops below a preset level.

Whether you use your 4WD for solo weekends away or for extended outback adventures with the whole family, with models ranging in size from 35 litres to 78 litres, there's an ARB Classic Series II Fridge/Freezer that will perfectly suit your requirements.

Contact your local ARB store or stockist for pricing and availability

Australian Travel

BACK ROAD TO THE BIGHT

Words and Photography by Emma George



Australian Travel



he clouds were ominous and as the front approached, we should have been preparing for the storm instead of revelling in the drop in temperature from the scorching 43°C day. The same storm had ripped roofs off houses in the Goldfields overnight and I was kicking myself for letting the kids go exploring, oblivious to the approaching thunderstorm. We had just finished setting up the camper at Fraser Range Station following an 800-kilometre drive from Perth. This was our rendezvous point near the Eyre Highway where we were to meet up with three other vehicles for a week-long expedition along the south-west coast from Toolinna Cove to Israelite Bay.

A preceding dust storm covered our food with sand and I was struggling to see, hoping that the kids would be back before dark and, more importantly, the storm. As the first drops of rain fell, I went into overdrive, throwing things haphazardly into the car, rushing to pack away the kitchen and prepare for the onslaught. Thankfully, my three boys came running after summiting the nearby peak. Although the storm gave plenty of notice, we didn't expect the ferocity of what would come.

Deafening thunder roared overhead – the storm was directly above us – and the wind

was unlike anything I had ever experienced before. The canvas on the camper billowed inwards with the vinyl floor lifting upwards as the wind shook the Tvan side to side. "Will our van flip over?" came the scared question from Bailey, our eight-year-old, as he tried to escape onto the bed under the fiberalass shell rather than the flimsy canvas. reassured him it definitely wouldn't; however, I was slightly nervous knowing that this storm had already done damage to houses and imagining what it might do to our little camper. At that stage, I was happy the van was still attached to our car. The rain and hail was so loud, we had to yell to each other to be heard. All we could do was try to enjoy the lightning show, admire the strength of nature and ride out the biggest storm in our camping history.

It was a long and wild night, and considering the amount of rain, we were pretty impressed with how the van coped. The morning brought sunshine, the storm had passed and everything was clean and fresh apart from the red mud, which was just a taste of things to come. Our fellow tourers had taken shelter in one of the houses available at Fraser Range and were attempting to dry tents before refuelling at Balladonia Roadhouse.

We pulled off the Eyre Highway towards the Great Australian Bight and within less than a kilometre, red mud splattered the windscreen. I scrambled for the wipers, regaining control as I endeavoured to navigate the track to Toolinna Cove, one of the most remote stretches on the West Australian south coast. The storm had transformed the once dusty road into a lake overnight, turning what was to be a slow yet easy drive into a nail-biting, filthy one.

The radio jibes had already started with three Toyota vehicles wondering if Red Dog, our experienced yet ageing Nissan Patrol, would even make the distance. As our 4WD skated along the inundated track, I was happy to be mid-convoy, watching difficult passages ahead and trying to prevent my camper trailer from fishtailing. The thought of even standing in the sludge, let alone attempting a recovery and facing the embarrassment of getting bogged, heightened my concentration. The boys were encouraging me not to let Team Nissan down. The responsibility was great but our car was performing perfectly, apart from when our camper swung almost perpendicular to the Patrol. I was thankful we had adjusted the tyre pressures at the beginning of the muddy track and for the radio warnings from the lead vehicle.

After an hour's driving, it was time to take a break and with a huge pool of water ahead, we decided to assess the situation. It was difficult just exiting the car; everything was covered in sticky, red mud and I was feeling sorry for our sheepskin covers already. The packet of 80 baby wipes was already on rations, only 20 each for the week, so I was going to have to start minimising my usage but they were perfect to wipe off the centimetres of mud we accumulated just opening the doors.

The 80-metre pool of water adjoined to one of the wells, which was overflowing due to the immense amount of rain. This stretch of road was some of the most difficult driving I have ever done as usually I leave the hardcore driving to my husband but since he was working and couldn't join us, I was left in the hot seat. Admittedly, it was also the most fun I have ever had driving a car, even though the last thing I wanted was to get stuck in the massive bog. I picked second-high 4WD, with a bit of speed but not too much, and Red Dog pulled through beautifully. This time, I remembered to put the windscreen wipers on before I hit the water.







Toolinna Cove

Red Dog had morphed into brown, completely covered in mud as we finally reached the campsite at Toolinna. The small shrubs didn't provide much shelter from the breeze coming straight off the Indian Ocean but we tried to tuck away as much as possible. It had been a long drive and the convoy suffered damage from two jackknifed trailers and some electrical faults (the Toyotas) but Team Nissan wasn't bragging just yet as we still had a long way to go. The short walk amongst the ground covers and wild flowers was pretty but it wasn't until we reached the Great Australian Bight that the sheer rugged beauty of the cliffs and surrounding water could be appreciated.

A small ladder could be seen tucked at the back of the cliffs for intrepid climbers to access the sandy beach below. Despite the kid's protests, no-one was allowed on the rickety ladder as it was far too dangerous. Being so remote, it is not a place where you want to have anything go wrong and I was already nervous watching the kids launching rocks from the top of the Baxter Cliffs into the ocean below.

It was a quick overnight stay and we were packed early for the 70-kilometre trip to Point Culver. I was warned of the rocky and slow road but I never expected it to take six hours. Stopping to remove branches from the road and picking our way through the sharp limestone rocks was excruciatingly slow. The only bonus was that the track was so tight in many spots that the bush was acting as a remote car wash. All the dried mud was scrubbed away, leaving the car almost clean, albeit sporting a number of new scratch marks along the side of the vehicle and camper. It didn't worry me as our rig was already adorned with numerous scrapes; I was, however, feeling for our friend's brand new Patriot camper, which was on its maiden voyage. Despite our slow pace, the sharp rocks shredded a tyre on the third Toyota, making the Patrol the only incident-free car.

The scrubby, rocky road follows the old telegraph track, which is littered with remnants from the past. Some of the old wooden telegraph posts erected in the late 1800s are still standing and broken pieces of the porcelain insulators can be found scattered amongst the scrub. We stopped to look at some of the ancient Aboriginal gnamma holes, which are holes in the limestone rock that act like natural water tanks. These water sources were also used by the camel traders who used the telegraph track to bring supplies from east to west.









Point Culver & Bilbunya Dunes

After another full day of driving, the Southern Ocean came back into sight and we got our first glimpse of the stunning Bilbunya Dunes. There is a big drop from Wylie Scarp down to the beach and I was concerned about the extremely soft sand. I was happier to be going down the scarp as opposed to up but I didn't have to worry as a beltway comprising of recycled conveyor rubber has been installed to make the climb easier. Wattle Camp was vacant and it provided beautiful views of the ocean and sand dunes in addition to protection from the wind. The kids decided it was too far from the beach so we camped on the sand where they could practise on their boogie and sand boards in readiness for the Bilbunya Dunes.

It was good to set up camp for two nights and after letting our tyres down even further and checking the tides, we hit the beach towards the biggest sand dunes in the southern hemisphere. The sand was squeaky white and I was tiring after reaching only a guarter of the way up the dune. The kids had run up and were already halfway down, crashing into the sand as they attempted to tame the boogie and sand boards. Austin and I, with a combined weight of over 100 kilograms, flew down the dunes on his waxed-up boogie board. Out of control, it was only going to end one way and half way down the dune, we were hurled off the board with sand covering us head to toe.

The dunes, whilst so much fun, were totally exhausting. It was time for a change of pace; to visit the cliffs at Point Culver and view the start of the Great Australian Bight. Although "OUT OF CONTROL, IT WAS ONLY GOING TO END ONE WAY"







a renowned fishing spot, we were battling an onshore wind and our lures were only catching seaweed. Despite the lack of fish, it was a great place to explore the cliffs and relax on this iconic stretch of beach.

Israelite Bay was our final destination. We had calm weather and the beach was in good condition so we packed up camp early to make the most of the low tide. Sailing along the beach was absolute bliss compared to the rocky and muddy terrain we had faced earlier on the trip. I didn't want to leave the beach but after an hour of driving and making good progress, we decided to cut through the dunes and back onto the Telegraph Track. As the beach approaches Israelite Bay, it can become soft and weedy, with little opportunity to access the track. We didn't want to chance our luck but we were pleasantly surprised that the Telegraph Track was in much better condition here than that at Toolinna Cove. The terrain had changed to low-lying salt pans but again we were careful to keep to the track as any deviation could end in disaster.

Exploring the remains of the old Telegraph Station at Israelite Bay was a fitting end to our trip. It was an incredible remote expedition; we survived a super storm, witnessed amazing scenery and conquered diverse terrain from mud and sand to rock and beaches. Three Toyotas were left with varying wounds but Red Dog only accrued a few more surface scratches. Even though our 20-year-old Patrol was by far the oldest, it was definitely the victor in our Toyota versus Nissan showdown.



Mark from @nofixedaddressoz road-tests this month's ARB product, the lifesaving Jump Starter Pro.



t's 5.30am, it's dark, my fishing rods are packed and we are ready to drive the seven kilometres from our camp at Sheltered Bay in Western Australia to Steep Point. Spanish mackerel is the target. I jump into the driver's seat of my GU Patrol and flick on the ignition to glow the big 4.2 diesel. I notice my REDARC volt gauge is displaying just under 11 volts on the main battery. That's unusual. I turn the key and the engine turns over slowly once, then nothing. The battery is dead flat. Not great.

I think back to the sign I saw yesterday. "148kms of rough road. High clearance 4WD only. Allow three hours one way." A sign like that is every 4WDer's dream, but apparently not so for my battery.

Road Tested

Luckily, a few days before I left Perth, I called by ARB in Canning Vale and picked up, among other things, an ARB Jump Starter Pro. I grab it from behind my driver's seat and open the sturdy case. Inside is the battery pack, which is surprisingly small, a set of very short battery clamp leads that attach to the unit with a plug, two charging cables, one for 240 volt and one for 12 volt, and a universal phone charging plug.

Now, I've never used a jump starter pack before, but I do know from past experience that the Patrol is quite hard to jump, even with a quality set of jumper leads so I'm quite dubious about the small device I'm holding.

I plug the leads into the battery pack and then connect it to my battery. The clamps seem quality and tightly grip the battery terminals, forming a good connection. A light displays on the unit, telling me it's connected correctly and ready to go. I then turn the key on the Patrol and it starts instantly! What a ripper!

I proceeded to use the Jump Starter Pro every time I needed to start the car for the next week and a half. I was getting at least three but usually four jumps per charge. However, I rarely let it drop below 40 per cent so technically it would have had capacity for another few jumps before needing a charge. The unit has a battery level gauge on the side, so you always know how much power you have left.

Plugged into the Patrol's cigarette lighter, it would only take between 45 minutes to an hour to charge it back to 100 per cent.

The Jump Starter Pro has other cool features like a built-in LED torch. The torch throws a bright wide light, which is perfect for emergency car repairs at night, which I assume is what it was designed for. It also has a 12-volt cigarette lighter outlet and a few USB ports for charging devices. The included universal phone charger cable is also a nice touch.

Overall, after using the Jump Starter Pro multiple times a day for about 10 days, I can say I'm very impressed and it has definitely found a permanent home in my Patrol.

Part No. 10500095 RRP: \$259.00







ARB Jump Starter Pro

- Safely starts 12-volt vehicles, up to five-litre V8 diesel or six-litre petrol engines
- Suitable for cars, 4WDs, motorcycles, boats, RV and power sports
- Power to jump start up to 20 times on full charge, relevant to engine size
- Heavy-duty, high amperage, spring loaded clamps
- Intelligent jump cables with boost function, reverse polarity and spark protection
- In-built smart charger prevents overcharging and excess discharging
- 12-volt cig socket to power devices such as lighting and 12v accessories Two USB ports for charging
- electronic apparatus
- Smart USB cable, capable of charging either a micro or lightning USB smartphone
- 100 lumen in-built flashlight with four modes (high, strobe, SOS, off)
- 240-volt AC and 12-volt DC chargers
 included
- Convenient, sturdy and compact EVA nylon storage case







Navigator is an outdoor, caravan, camping and adventure specialist brand that provides accessories and tools for the modernday nomad to assist in having the best possible adventure with as little stress as possible.

The Navigator Story

In 2013, Navigator founder and experienced caravanner, Mark Sedran, had a light bulb moment whilst exploring the vast Gibb River Road on an outback Kimberley trip. After using Velcro strips and stubby holders to create a nifty caravan hack to keep his sauce bottles upright and neatly stored, Mark realised that there was a market for practical items to enhance the experience of caravanning. That was the last messy caravan trip Mark ever had.

Since then, Mark and his team have been busy creating an entire range of items that are practical, designed to make life easier and don't hamper limited space and or weight requirements for the current day tourer.

Navigator Awning Buddy



Available in a twin or single pack, the Navigator Awning Buddy reduces wear and tear caused by wind whilst also stopping awning noise and flutter. Fitted with two female buckles, the Navigator Awning Buddy perfectly pairs with the Navigator Kitchen Buddy and Navigator Outdoor Storage Buddy accessories.

Features:

- Designed to fit into the sail track on your caravan awning and most 4WD awnings
- Magnet to hold Navigator Bottle Opener
- Reflective tape at base for increased visibility and safety
- Includes storage bag

Single Pack

Part Number: NAV1002 RRP: **\$26.99**

Twin Pack Part Number: NAV2002 RRP: **\$47.99**

Navigator Sullage Buddy



The Navigator Sullage Buddy keeps your sullage hose organised and easy to find every time you set up your caravan.

Features:

- Full length twin zipper for complete access
- Side rubber mesh panels to allow moisture to escape
- Rubber base with heavy-duty feet

Part Number: NAVO22 RRP: **\$47.99**

Navigator Outdoor Storage Buddy



Marie Kondo, eat your heart out! The Navigator Outdoor Storage Buddy provides outdoor enthusiasts with endless opportunities for storing whatever they desire! Whether it be shoes, kids' toys, pantry items or camping gear, this versatile storage solution is a must-have!

Features:

- Three handy mesh pockets
- Large zip storage compartment featuring 10 sectioned shelves
- On the reverse side, the Outdoor Storage Buddy features another seven large sleeve pockets

Part Number: NAV021 RRP: **\$89.99**

Navigator Utility Buddy



Being out on the road, there are always a few things you just never know where to put. Never fear, the Navigator Utility Buddy is here! Whether it be your fresh water hose and fittings, power leads or guy ropes and pegs, this versatile case just loves to safely store your bits and bobs.

Features:

- Interchangeable woven badges to identify contents
- Side rubber mesh panels to allow moisture to escape
- Rubber base with heavy-duty feet
- Removable internal zip pocket to store additional accessories

Part Number: NAVO23 RRP: **\$47.99**

Navigator Kitchen Buddy



Just because you're away from home doesn't mean meal time should be a chore. Keep your cooking utensils, boards and spices in easy reach and organised with the super nifty Navigator Kitchen Buddy.

Features:

- Magnet to hold Navigator Bottle Opener
- Eight sleeve pockets for organising cooking utensils
- Four mesh pockets to store cooking spices
- Large lower storage pocket with zip closure
- Two large handy sleeve pockets can hold chopping boards
- Folds in half for convenient storage
- *Cutlery and spices not included

Part Number: NAVO2O RRP: **\$89.99**

Navigator Microwave Dish Buddy



Forget stuffing your microwave with towels or using pool noodles to keep your microwave dish safe and secure, keep things simple with the Navigator Microwave Dish Buddy. Simply slide the microwave dish into the Microwave Dish Buddy, zip closed and place back into the microwave for protection through all your journeys, both on and off road.

Features:

- Padded layers to protect microwave dish
- Fits most microwave plates (up to 32cm diameter)

Part Number: NAV014 RRP: **\$28.99**

Navigator Collapsible Laundry Buddy



Make laundry time a breeze with the Navigator Collapsible Laundry Buddy. Not only is it a laundry hamper, when full it turns into a handy laundry carrier with its removable shoulder strap... genius!

Features:

- Heavy-duty sealed lining for moisture protection and easy cleaning
- Large front zip pocket to store shoulder strap and coins for the laundry
- Folds completely flat when not in use

Part Number: NAV018 RRP: **\$89.99**

Navigator Collapsible Bin Buddy



Enjoying our beautiful country also means looking after it. Make sure you keep your rubbish secure and in the right place with the Navigator Collapsible Bin Buddy.

Features:

- Large heavy-gauge zipper opening with clip in buckles to keep those dreaded blowflies out and trap smells in
- Heavy-duty sealed lining for moisture protection, making it easy to clean
- Large zip pocket at the front to store spare bin liners
- Four metal "D" rings to keep in place on windy days
- Folds completely flat when not in use
- Fits 82-litre garbage bags

*Always use a rubbish bin liner with your Bin Buddy

Part Number: NAV027 RRP: **\$89.99**

Navigator Quick Fix Seat Buddy

"Are we there yet?" The repetitive mantra no parent wants to hear with the knowledge of hundreds of kilometres of road in front of them. Make the back of your seat an organised entertainment hub for your kids with the boredom-busting Navigator Quick Fix Seat Buddy.

Features:

- Clear PVC pocket for iPad storage and use (can store iPad up to 12 inches)
- Two large mesh and sleeve pockets to store colouring books and pencils

Part Number: NAV009 RRP: **\$38.99**

Navigator Visor Buddy



With a centre console packed with empty lolly packets, phone charger cords and petrol receipts, it can be impossible to find anything. Whether it's a pen, your sunglasses or the garage door remote, the Navigator Visor Buddy can hold just about anything.

Features:

- Installs quickly and easily onto most vehicle sun visors
- One mesh pocket for storage of business cards/notepad/swipe cards
- Heavy-duty "criss-cross" elastic bands for organised storage of multiple items

Part Number: NAV007 RRP: **\$23.99**

Navigator Pantry Wine Buddy



The further and more remote you go, the harder and more expensive it is to find a decent drop. Which is why it is so important to keep the wine you do have nice and safe, exactly what the Navigator Pantry Wine Buddy is designed to do.

Features:

- Conveniently stores flat when not in use
- Reversible velcro to allow each buddy to be attached together
- Fully adjustable to fit most standard bottles
- Sold in packs of three

*Wine not included

Part Number: NAV029 RRP: **\$28.99**

Navigator Pantry Jar Buddy



Equally as important as that bottle of pinot is the jar of Nonna's pasta sauce or that hot death chilli you can only get in one remote town 2,500 kilometres behind you. Make sure your pantry items are safe and secure with the Navigator Pantry Jar Buddy.

Features:

- Conveniently stores flat when not in use
- Reversible velcro to allow each buddy to be attached together
- Fully adjustable to fit most standard jars
- Sold in packs of three

*Jars not included

Part Number: NAV016 RRP: **\$26.99**

Navigator Build It Seat Buddy



Want to customise your in-car storage to your (or your back seat passengers') specific requirements? The Navigator Build It Seat Buddy allows you to add and build pockets to suit any need. Even more genius is that the Build It components can be unclipped from the car and attached to a camping chair arm or even to the handle bar on a pram.

Features:

- iPad flat strap located at the top suits up to 9.7 inches (standard iPad)
- Three pockets across the centre two open, one zippered
- Huge zipper pocket across the bottom with soft protective lining
- Folds flat in half to pack away conveniently when empty

Part Number: NAV024 RRP: **\$94.99**

Navigator Build It Pocket Buddy



- Features three bellow pockets, two with velcro flaps and one with zip closure
- Bellow pockets include additional sleeve pockets, making a total of six pockets
- Four military-style press-studded webbing straps across the back allowing guick application or removal
- For in car use, attach to Build It Seat Buddy or get creative and attach to your cargo barrier, camping chair or even your fridge if it has a handle

Part Number: NAV025 RRP: **\$36.99**

Navigator Build It Kids Pocket Buddy



- Generous insulated drink bottle holder with bungee cord
- Built in neoprene pencil case with zipper
- Three sleeve pockets to store colouring books and the "babysitter" (aka iPad)
- Four military-style press-studded webbing straps across the back allowing quick application or removal
- For in car use, attach to Build It Seat Buddy or get creative and attach to your cargo barrier, camping chair or even your fridge if it has a handle

Part Number: NAV026 RRP: **\$36.99**



Everyone loves to get dirty while out camping. Send us a photo of your grimiest adventure, whether that be your muddy 4WD, dusty caravan, greasy passenger, sticky-faced kid or even your filthy furry friend, for your chance to win one of five awesome Navigator organiser solutions packs worth over \$500!

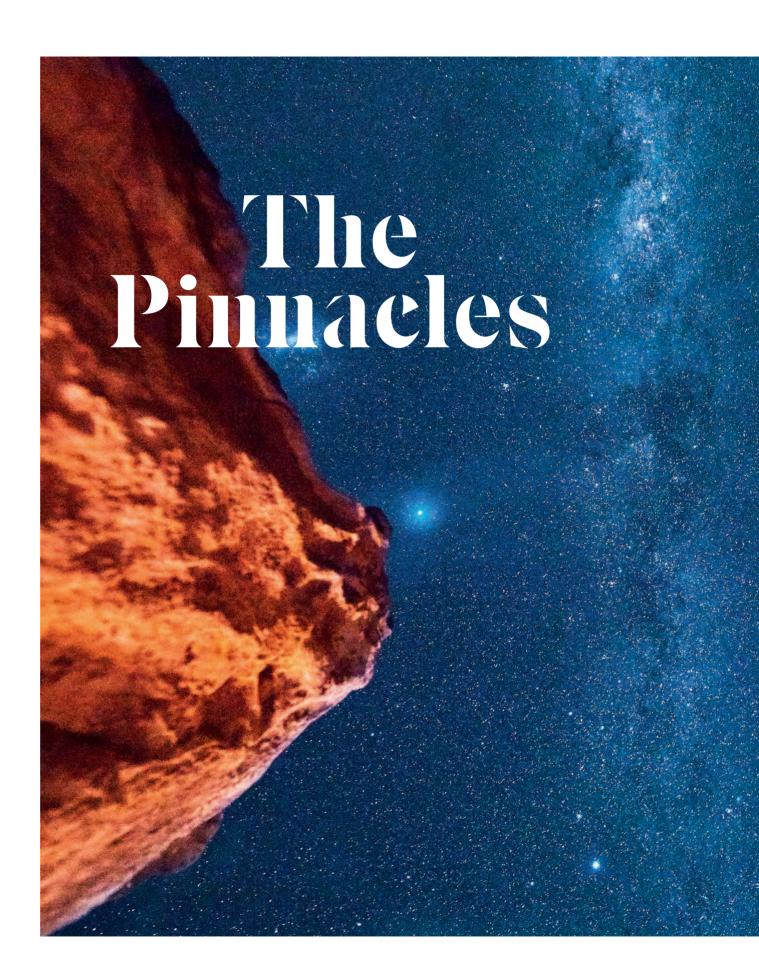




Each winner will receive:

Build It Seat Buddy x 2 Build It Kids Pocket Buddy x 2 Build It Pocket Buddy x 2 Visor Buddy x 2 Collapsible Laundry Buddy

Email your photo, name and address to promotions@arb.com.au.





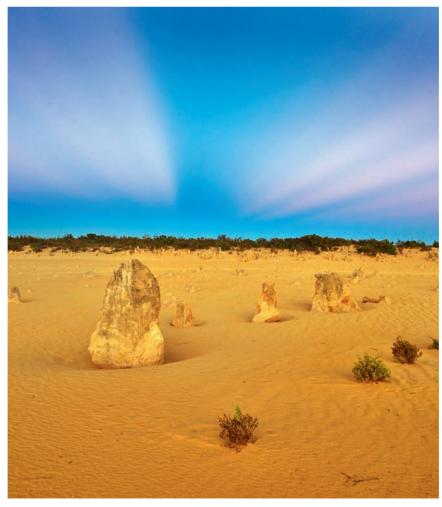
Adventures Close to Home

Words and Photography by Steve Fraser



I had a rare break at home and decided to visit and photograph one of the most incredible landscapes in Australia – the Pinnacles of Nambung National Park.





Pinnacle of Adventure

I had a rare break at home and decided to visit and photograph one of the most incredible landscapes in Australia – the Pinnacles of Nambung National Park.

If you are not familiar with the Pinnacles, they are only 220 kilometres north of Perth near Cervantes, which is pretty much in my backyard. It's a really unique area, containing thousands of weathered limestone pillars. These are amazing natural limestone structures, some standing as high as 3.5 metres. Some are jagged, sharp-edged columns, rising to a point, while others resemble tombstones and some have a mushroom-like shape.

The region has some other great spots that are pretty interesting, including some really cool sand dunes and a beach that is famous for its super soft sand. Over the years, a lot of 4WDs have come to a wet and sandy grave on the beach between Yanchep and Cervantes.

Sand and Sunsets

One Tuesday morning, I packed up the Troopie with my camera gear and the swag, a fridge full of food and a few cold drinks, and it was time to head north. I don't really care sometimes how far I travel, but I always enjoy a road trip. It is such a great feeling of freedom when the 4WD is cruising on the open road, not a care in the world, and the biggest issue of the day is finding a good camping spot.

The plan was to head to the sand dunes just south of the Pinnacles and photograph the dunes at sunset. Before that, I ventured into Cervantes and set up the swag at the local caravan park. It's not a bad spot with lots of shade and decent toilets, a perfect spot for the night. Sunset was only an hour or so away, so I headed back down the coast and into the sand dunes. If you love photographing sand dunes, one of the greatest challenges is to use the patterns and textures of the dunes; otherwise it can all look at bit average. As the sun started to set, the colours of a gorgeous west coast sunset brought the dunes to life. I was high on top of the largest dune with a 360-degree view, there was a warm summer breeze blowing and a cold drink at my feet. What could be better? I love the outdoors.

I hung around for about an hour after the sun hit the horizon. Sometimes the best light is after the sun has set. After that, it was time to head back into Cervantes for a feed. At this point, I need to warn you that the options on a weeknight after 8.00pm in Cervantes are very limited – it's a pizza at the local pub or nothing. I decided pizza sounded pretty good and, to be fair, it wasn't half bad. I've photographed this area a few times before; however, the main reason for this trip was to capture the Pinnacles with a billion star backdrop around midnight. I couldn't have planned the night any better; it was crystal clear and the Milky Way was incredible.

Now, I like a good fireworks show as much as the next guy but, honestly, standing in the midst of such an incredible landscape looking at a sea of stars, that, my friends, is pure gold. There is something special about going to some of our favourite spots in the middle of the night – they can take on a whole new personality.

As the sun started to set, the colours of a gorgeous west coast sunset brought the dunes to life.

Cervantes sand dunes

Western Australia Travel





Night Photography Tip

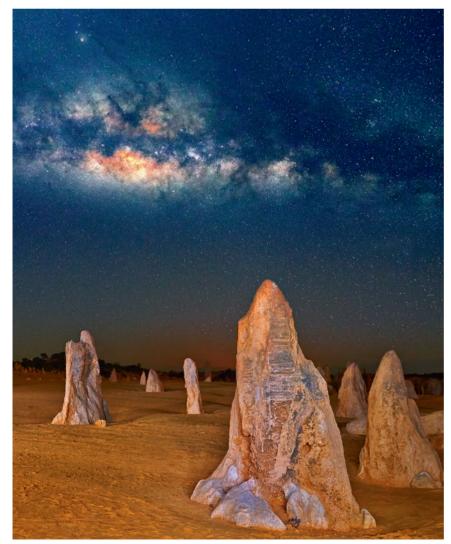
If you are keen to capture some great night images, here are a couple of pointers that might help.

Firstly, you are going to need a tripod because of the super long exposures.

Once you have worked out what your composition is going to be, try starting with your camera settings at ISO2500, f5.6 and around a 25-second exposure. This is just a starting point and, depending on a bunch of different factors, you may need to alter some or all of those settings, but it's a good place to begin.

If you use an exposure longer than 25 seconds, the stars are going to elongate. (Remember, we are on a planet that spins at around 1,600 kilometres per hour.)

Camera quality will have an impact but even if you don't get a decent photo, you've had a night under the stars, which is always great.



Western Australia Travel



Three hours later, I jumped back in the Troopie and headed for my super comfy swag and a good night's sleep.

The next morning, it was an early start back to the Pinnacles for sunrise. While I was waiting for the sun to do its thing, it was time to challenge my culinary skills. I think it's fair to say I will never be on MasterChef (in fact, I am a crap cook). However, the bacon and eggs turned out okay and I washed it all down with a nice cuppa. Everyone kicked a goal!

I had a bit of time on my hands before I tried for another sunset, so I headed onto the beach and made my way down to Wedge Island to check out a few of the shacks that are famous on this stretch of the coast. You can get there by going back on the main road, but that's no fun, so it was time to hit the beach.

Now be warned, a lot of newbie 4WDers have come to grief on this extremely soft and challenging sand, so let the tyres down and give due respect to the high tide mark.

After playing on the beach for a while, I arrived at Wedge and started weaving my way through the myriad of shacks. Some of them are like time capsules, others have been dressed up to reflect the character of the locals. Either way, I love this sort of Aussie ingenuity.

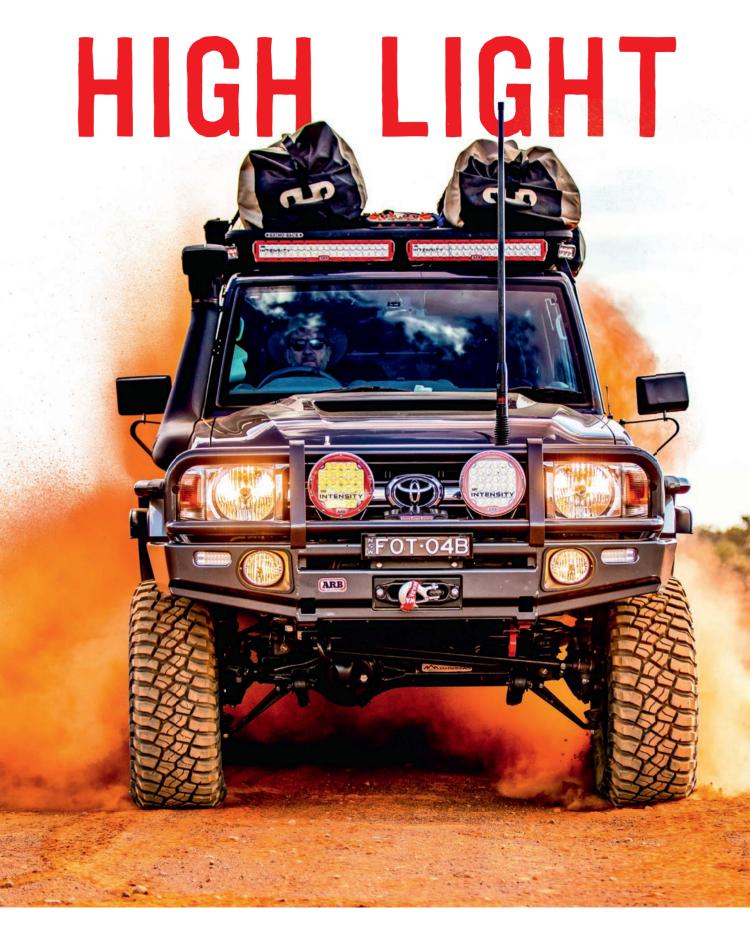
As Perth continues to expand, I'm not sure how much longer this awesome spot will remain untouched. I, for one, hope it's for a very long time.

After a spot of lunch, I made my way back to the Pinnacles to get a few more images and set up for sunset. This is starting to become a popular tourist spot. Not many tourists are up at sunrise but it can get a bit busy at sunset. The nice thing about the Pinnacles is that they cover a few kilometres so you don't have to travel far to get away from the main tourist spots. As I watched the sunset against the beautiful backdrop, I said to myself, "You're the luckiest guy in the world."

The main challenge on the drive home was to keep an eye out for roos. There are lots of them on this stretch of road, so if you plan to head up this way at night, make sure you have good spotties and a roo bar.

I'd only been away from home for 36 hours and yet I felt totally relaxed after spending time in a really special part of my own Western Australian backyard. Plus, there was the bonus of getting a few good photographs.

Adventures close to home can be just as fun as those thousands of kilometres away. I think a few more adventures closer to home could be on the cards.



ARB HAS DEVELOPED A NEW MOUNTING SOLUTION FOR FITMENT OF ARB INTENSITY AR40 LIGHT BARS TO THE RHINO-RACK PIONEER" RANGE.







Developed and manufactured by ARB in Melbourne, the robust mounting system includes 5mm powder-coated steel brackets and utilises AR40 Intensity hardware for a perfect fit while allowing for tilt and lateral and longitudinal adjustment of the light bar.

Using the new mounting system, which is compatible with Rhino-Rack Pioneer[®], Tray, Tradie and Universal platforms, the AR40 Intensity light bar is situated neatly between the platform and the roof of the vehicle. In some applications, spacers may be required to provide adequate roof clearance.

The ARB Intensity AR40 light bar features 40 LEDs in two rows with a 50,000-hour lifespan and is available in either spot or combination beam variations. In terms of light performance, the AR40 packs up to 700 metres of light in spot configuration and in combo, up to 40 metres of spread and up to 540 metres of distance.with its

40 LEDs working in conjunction with finely tuned reflector technology to direct light precisely where required, whether driving on straight outback roads, twisting country roads or on tight off road tracks.

The Intensity AR40 light bar is built tough, featuring a high-pressure cast aluminium body, an extremely tough polycarbonate lens, and dust and water resistance rated to IP68. In addition to the new Rhino-Rack mounting system, the AR40 has been designed for seamless fitment to the full range of ARB bull bars and roof racks.

Each mounting system is designed for fitment of one AR40 Intensity light bar, so for applications where two light bars are to be fitted, two roof rack mount brackets are required.

Part Number: ARMR RRP: **\$129.00**



140°40'46.6"E

BY TRIP IN A VAN



REGION: MOUNT GAMBIER

TRACK GRADE: Easy

SEASON: November to April

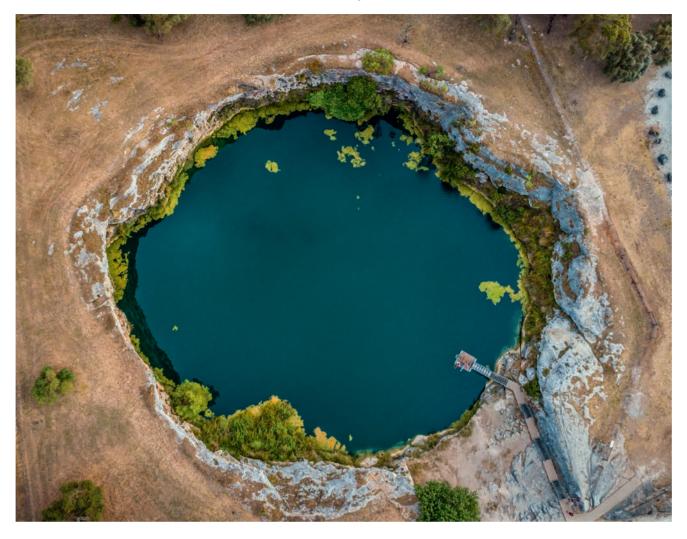
DESTINATION: Little Blue Lake

POPULAR FOR: Swimming, sightseeing, cave diving



Mount Gambier, located on the Limestone Coast in South Australia, is often dismissed by travellers or merely seen as a midway point for those travelling between Melbourne and Adelaide. However, this bustling country town offers so much more, from stunning blue lakes, sinkholes, caves, wineries, 4WD tracks and delicious coffee. In our eyes, it's most definitely worth a stopover on your travels.

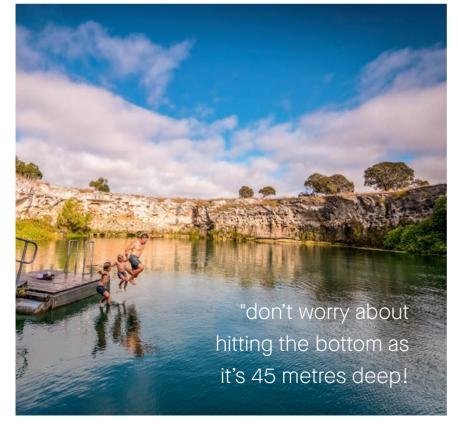
After spending a few days in this location exploring all its wonders, I thought it was appropriate to tell you about our favourite attraction in Mount Gambier. This popular tourist spot is only a short 15-minute drive from where we stayed at the BIG4 Blue Lake Holiday Park in Mount Gambier.



LITTLE BLUE LAKE

A water-filled sinkhole with a surprisingly warm water temperature, Little Blue Lake is a swimming hole well known by locals and is also used as a cave diving site. If you're game enough, you can attempt the cliff jump into the water (which is about eight metres high) but don't worry about hitting the bottom as it's 45 metres deep! The lake is 40 metres in diameter and really is an incredible site.

Little Blue Lake's name came about due to its original crystal clear blue-coloured lake. However, over time, this colour has now turned to an emerald green. Visibility isn't the greatest due to the accumulation of rubbish dumped in the lake over several decades including a car, traffic signs and witches hats. This, in conjunction with algae growth, has resulted in the colour change. After recent cleaning projects, the council has now had the site cleaned up for safety and activities for locals and sightseers.



HOW TO GET THERE

When heading out to the site, those driving should take the turn-off near the Bellum Hotel. It is bitumen road all the way until you arrive at the access road and car park, which is gravel. There is plenty of room to pull up a caravan if you have one in tow. Once you park, it's only a few metres to the edge of Little Blue Lake where you'll be greeted with a lovely view over the lake and sinkhole. This is where you'll head down a stairway to walk out onto a small floating pontoon, which gives you excellent access to the lake for a swim.

WHERE TO STAY

There are many options for your budget in Mount Gambier. However, we stayed at the BIG4 Blue Lake Holiday Park. Others include Pine Country Caravan Park or the Mount Gambier Showgrounds, which cost as little as \$15 per night with your caravan. Here is where you will find a private dump point (private, meaning a small charge if you're not staying).

We had an absolute blast here and even the kids dived in for a swim. We actually had to bribe them with an ice cream to get them out of the water! Little Blue Lake is definitely well worth a stop in to view this incredible phenomenon and if you strike a warm day, be sure to pack your swimmers! Not only is there the Little Blue Lake to see, but it is among many other wonderful attractions in the area. These include Umpherston Sinkhole, which is also known as the Sunken Garden and a must see, Blue Lake, which will blow your mind if you're visiting at the right time the year (the summer months), Coonawarra Wines and Naracoorte Caves to name a few.

If you love a coffee and delicious food like we do, we can highly recommend Presto Eatery. They serve a variety of meals and Justin and I opted for the healthy option, an acai bowl, whereas the kids ate from the children's menu (nachos, fish and chips, etc). The coffee was spot on, that good we grabbed a takeaway for the drive.

It's a fantastic place to explore for a few days with the family.



YOU'RE INVITED TO ARB'S INAUGURAL 4WD EVENT,

A LANDER REALING A MARINAL AND A REAL AND AND A REAL MARINA AND A REAL AND A

AXA CULTURE

LOCATED SOUTH-WEST OF RENMARK, SOUTH AUSTRALIA, AND STRUNG ALONG 14 KILOMETRES OF MURRAY RIVER FRONTAGE,

· (2)

You love camping and 4WDing, we love camping and 4WDing... we should go camping and 4WDing together!

Next March, ARB will be hosting a national camping and 4WDing event open to all ARB customers and friends. 4X4 Culture Live will be based around all the diverse aspects of 4WDing we cover in the pages of this magazine: family travel, new products, vehicle set-ups, education, camping and everything that goes along with it.

Hosted at Loveday 4x4 Adventure Park, attendees will be spoilt with a weekend full of activities including tagalong tours of the 8,000-acre 4WD park, scavenger hunts, prize giveaways, camp cooking and fishing classes, special guests, product experiences and industry experts across ARB and partners. While the event will be supported by a full program, attendees will have the opportunity to make the weekend their own.

As the sun sets over the riverside campsites, the park's own licensed tavern will come to life with music, catering and hours of socialising. For those with little tackers in tow, a grassed yard adjourning the tavern will keep the youngsters entertained with a host of kids' activities and entertainment.

ABOUT LOVEDAY 4X4 ADVENTURE PARK

Located south-west of Renmark, South Australia, and strung along 14 kilometres of Murray River frontage, Loveday 4x4 Adventure Park is surrounded by over 8,000 acres of 4WDing grounds. Complemented with the civil conveniences of flushing toilets, hot showers and a licensed tavern and cafeteria, it's the perfect location for a weekend getaway.

Access to the park and campgrounds is suitable for all vehicles, however, this will be a 4WD event only!

Within the boundaries of the park, visitors will have access to:

- Riverside bush camping (off grid generators allowed)
- · Kilometres upon kilometres of 4WD touring tracks
- · Sand dunes to explore
- 4x4 playground a purpose-built area of 4WDing obstacles, hill climbs and bog holes
- Fishing alongside the river (boat and jet ski access)
- Air Locker hill climb (three grades of hill climb to test your vehicle)
- · Licensed tavern with meals available
- Flushing toilets and hot showers
- Kids' playground



YOUR 4X4 CULTURE LIVE PASS

Tickets for the event go on sale soon and will be available in Adult, Teen and Child passes. Register your interest now at www.arb.com.au/4x4culture-live for exclusive updates and early bird ticket information.

Your ticket to adventure includes:

- Park access and camping fees suitable for caravans, camper trailers, tents and swags
- Saturday night tapas and dinner (children's meals available)
- Sunday night tapas and dinner (children's meals available)
- · Access all areas (classes, demonstrations, tours, etc.)
- · Evening entertainment
- · Kids' entertainment

Attendees will be responsible for all their own camping equipment, fuel and additional meals.

To register your interest in attending and be the first to know when tickets go on sale, visit **www.arb.com.au/4x4culture-live** and fill out your details.





Loveday tavern



TRAILER FAILURE

Words by Mark Butters – No Fixed Address

My wife, Christie, and I are currently planning a big lap of Australia. In the past, we have camped in swags, traditional tents and rooftop tents, but for this trip we have decided to buy a camper trailer. The big question we were faced with was which trailer? There are literally thousands of different trailers on the market.

To try and narrow it down, I was putting together a list of things I thought important in a trailer, and that got me thinking about all the times I have seen trailers fail and the bush repairs required to get them moving again.

TOOL TIP



MADE FOR AUSTRALIAN CONDITIONS?

A few years ago, I was travelling with a group exploring the Capricorn Coast. One of my mates had just purchased a cheap-as-chips "off road" rear fold camper trailer. It was a noname job but for the price he paid, it looked great. We were exploring Byfield National Park, heading towards Five Rocks Camp. To get to the camp, you must traverse what the locals call "Big Sandy", a massive rutted out dune. I was waiting at the top, filming the rest of the convoy coming up when I saw the camper come over the crest. Instantly, I could tell something was terribly wrong. I started jumping up and down, frantically signalling for my mate to stop. The camper was bent like a banana! We crawled underneath to see what was going on and we found that the camper's drawbar had broken where it was welded to the chassis! Upon closer inspection, we discovered that the drawbar material was a less than two-millimetre thick piece of steel and the weld hardly penetrated the surface.

Using ratchet straps and some star pickets somebody had left at camp, we were able to limp the trailer into the local community of Stockyard. There is no power in Stockyard but we found a friendly guy who had a welder made from an old car engine. We were able to weld the drawbar well enough to get us out and to a real shop for permanent repairs.

LESSON LEARNT?

Not all "off road" trailers are suited to the tough Australian conditions. Using a reputable trailer builder would go a long way to avoiding issues like this.



5 COMMON TRAILER FAILURES

- > Wheel bearings
- > Tyre blow-outs
- > Suspension U-bolts
- > Suspension springs and/or shocks
- > Electrical fire due to wiring rubbing



SUSPENSION

In 2013, I witnessed a great example of how suspension in a camper is vitally important. We had been camping for a week on the west coast of Cape York Peninsula. It was time to leave and in a convoy of five cars and one trailer, we set off cruising along Vrilya Beach. The trailer was imported, it was on the cheaper side and no modifications had been completed on it. Everything had been going smoothly when all of a sudden a voice came over the UHF. "Uh, Geoff, I think there is something wrong with your trailer. It looks to be sagging on the right-hand side..." Here we go, I thought.

The convoy stopped and everyone gathered around the trailer. Yep, sagging was an understatement. Every leaf in the pack of four had snapped in half at the locator pin. Problem.

We got the Hi-Lift out and jacked up the trailer. The leaf springs literally fell out once the weight was off them. We still had the U-bolts and plates, which was good. We started throwing ideas around. Could we weld the leaf pack? Strap a piece of driftwood under there somehow? Then somebody said, "What about the Hi-Lift jack shaft? Do you think the shackle bolts would fit though those holes?" Genius.

A quick game of rock-paper-scissors determined whose jack would be sacrificed. The jack was broken down, positioned and... it worked! The shackle bolts fit through the Hi-Lift shaft holes and the trailer U-bolts just reached to attach it to the axle. After a slow 120 kilometres, we pulled into Loyalty Beach. The Hi-Lift shaft had a small bend in it but we made it. The next hurdle was sourcing a part for the camper, which became a very lengthy and expensive issue.

LESSON LEARNT?

Suspension is so important, especially if you are going to be covering great distances on corrugated tracks. Good quality aftermarket springs and shocks are a must on both your trailer and your tow vehicle. Old Man Emu by ARB make excellent suspension to suit most popular vehicles.



I THOUGHT I HEARD A NOISE...

In 2017, I was cruising down the Savannah Way towards Mataranka in the Northern Territory and this time, I was the one towing a trailer. Not a camper, mind you, a small boat trailer. I made the trailer myself and I thought it was pretty tough. The chassis was made from thick Australian steel, gussets and fishplates at every possible weak point. This thing looked like it could survive an IED attack. Leaf springs by Old Man Emu to suit a HiLux. Strong and should be easy to find in an emergency. I was doing 110 kilometres an hour on a stretch of bitumen when I felt a shudder. Looking out at my left-hand mirror, I saw the wheel shaking. I started to brake but it was too late; the wheel flew off and overtook me on the right-hand side, disappearing into the bush. I hit the brakes hard and came to a stop in a shower

of sparks. Not what I needed this late in the day. Walking around to inspect the damage, I saw that the axle end was buried in the dirt, no hub to be seen.

I trudged off into the bush, following the trail of destruction left by the big 33-inch Mickey Thompson. I found it about 100 metres away, the hub still attached to the rim. It looked to be okay but the bearings were destroyed. That was fine because I had a spare set of bearings in the car.

Back at the car, the rest of the convoy had now arrived. Everybody was standing around staring unhappily; it had been a big drive day and everyone was ready to get to camp and relax.

My mate, while cracking a beer, said, "You know, back at that last roadhouse when you took off, I thought I heard a noise coming from the trailer..." We jacked up the trailer and as the axle rose out of the dirt, the real problem sank in. In the time it took me to stop, the axle had worn down to a point. The axle nut was gone and the axle thread had been destroyed.

LESSON LEARNT?

Check your wheel bearings before you set off on a drive day. A quick shake of the wheel will tell you if they need tightening. You don't even need to jack it up most of the time. Even better, put together a list of things to check specific to your trailer. It only takes a few minutes but it can save you a lot of hassle. And if you, or your mate, hears a noise, stop and check it out! I got out my spares. The bearing races were destroyed so we knocked them out and fitted new ones. Bearings were greased and then we assembled the hub onto the axle. There was enough axle left to support the hub, which was good. How were we going to keep the hub on was the question we were all asking. Sorting through my spares, my mate Glenn found a large washer. "What if we welded this washer to the axle?" Bush welding? I'd read about it, seen it done on YouTube, but I'd never actually seen it in person. "Let's do it."

We pulled the batteries out of my car, linked them together in series to create 24 volts and we were ready to go. Glenn is a metal fabricator by trade so I handed him the welding rods. He shook his head but got to work. The one thing I didn't have (but has since been added to my kit), was a way to protect eyes while welding. Glenn ended up using three sets of sunglasses stacked on top of each other. Not great but it did the job.

WELDING ON THE TRACKS

I have made a welder using an old jumper lead and an electrode holder. Combine this with two batteries and a set of jumper leads and you can do some surprisingly good welds! Check out videos on YouTube to see how it works.

So are we any closer to choosing a trailer? Not really! However, I will be paying close attention to all of these factors when making a decision and hope the lessons I have learnt mean you can have a smoother trip, too!

MY EMERGENCY REPAIR KIT

18-volt angle grinder, fencing wire, ratchet straps, zip ties, assorted nuts and bolts including wheel studs and nuts, wheel bearings, grease, arc welding rods and jumper leads.





Mitsubishi MR Triton



Mitsubishi MR Triton



When Mitsubishi unveiled its new-look Triton late last year, it was immediately obvious that the brand was taking a more aggressive stance with the styling of its popular one-tonne ute. After all, this approach has worked so well for Ford with its top-selling Ranger that even Toyota has been forced to give its ever-popular HiLux a tougher look.

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BODY UPGRADES

The MR Triton's new front end styling treatment falls under the banner of Mitsubishi's "Dynamic Shield Concept", which MR Project Director Koichi Namaki describes as giving "expression both to the powerful performance sought in a pick-up truck and to the peace of mind that stems from its role in protecting both vehicle and occupants".

Marketing guff aside, the new Triton certainly looks tougher than before, with a total front end redesign that sees the headlights located higher and a more pronounced grille surrounded by thick chrome sections. Daytime running lamps (DRL) are now housed in the headlight units and they use a distinctive design signature that echoes the styling of the grille.

The side and rear of the Triton have also been given minor makeovers. The cargo bed is deeper thanks to a lower bottom edge and revised rear bumper, and the taillights are now large square units. The top edge of the cargo bed has also been revised.

Minor interior design updates include the adoption of new styled silver garnish sections and soft pads, metallic frames around the air vents, and new trim and stitching colours.

MECHANICAL UPGRADES

As well as this new look, Mitsubishi has made plenty of under-the-skin changes to the Triton with this MR update. While it retains the same 2.4-litre, four-cylinder, turbo-diesel engine that makes claimed peak outputs of 133kW at 3,500rpm and 430Nm at 2,500rpm, a new six-speed automatic transmission with a taller top gear results in improved refinement at highway speeds. The six-speed manual transmission is still available on certain model grades.

The new Triton also retains its class-leading Super Select 4WD-II selectable full-time 4WD system. Super Select allows the driver to choose between 2H or 4H on the hard surfaces, 4HLc (4WD locked centre diff) on low-grip surfaces and 4LLc (4WD low range) for more difficult off road terrain. In addition, there's now an Off Road Mode selector, offering "Gravel", "Mud/Snow", "Sand" and "Rock" modes to maximise off road performance in different terrain types by regulating throttle response, transmission characteristics and braking. The Triton GLS Premium model is also equipped with a factory rear diff lock, while Double Cab GLS and GLS Premium models come standard with Hill Descent Control (HDC).

SAFETY IMPROVEMENTS

An upgraded safety package on the new Triton consists of Forward Collision Mitigation (FCM), Blind Spot Warning with Lane Change Assist, Rear Cross Traffic Alert (RCTA) and Ultrasonic Misacceleration Mitigation System (UMS). These systems rely on a series of cameras, laser radar systems and ultrasound sensors to help prevent accidents. Triton GLS Premium is also equipped with a Multi-Around Monitor and parking sensors.

MAKING TRITON BETTER

ARB's engineers were presented with a number of styling challenges when developing a new Summit bull bar to suit the radically redesigned MR Triton. The result not only retains the design-registered components of the ARB Summit bull bar but also complements the front end styling of the MR Triton, as well as being compatible with the vehicle's new active safety features. It also features an airbag-compatible mounting system.

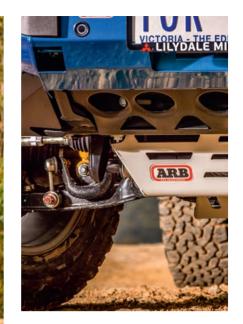


The front camera, which is part of the MR Triton's Multi-Around Monitor, is located in the Summit bull bar's split pan grille. The bar has also been designed to ensure correct operation of the Triton's Forward Collision Mitigation (FCM), Blind Spot Warning with Lane Change Assist and Ultrasonic Misacceleration Mitigation System (UMS).

The Summit bull bar also has laser-cut provision for fitment of the Triton's front parking sensors in the lower pan and each wing. When the Triton is fitted with larger diameter tyres and/or a suspension lift kit, the position of these parking sensors is affected. ARB has conducted real world testing to ensure the system operates as intended, evaluating the operation of the sensors against items such as rubbish bins, parking bollards, wire fences, large rocks and steep driveway entrances. The test results have shown that OE parking sensor performance is as close as possible to standard.



Mitsubishi MR Triton



The MR Triton's OE windscreen washer bottle, located behind the front bumper assembly, is not compatible with the design of the Summit bull bar, so ARB supplies a replacement washer bottle that allows the bar's under panels to be located as high up as possible to maximise vehicle approach angle.

Like all Summit bull bars, the new bar to suit the MR Triton is manufactured from durable steel and features a multi-fold upswept wing, 30mm radius on the wings, a split pan for strength and airflow to the vehicle's cooling system, large diameter 60.3mm tube outer frames and centre cross bar, wide 62.6mm press-formed cover straps and durable twopiece buffers. The MR Triton Summit bull bar is winch compatible and there's a three-piece grille in the split pan with an opening that allows for access to the winch clutch handle. Winch options for the Summit bull bar include several models from Warn, Smittybilt and Bushranger, up to 10,000lb capacity. When the bar is not fitted with a winch, it is supplied with a recessed press-formed winch cover panel.

Standard features on the Summit bull bar include two aerial brackets, provision for fitment of a range of ARB Intensity LED driving lights or a range of Bushranger and IPF driving lights, twin ARB Jack or Hi-Lift jack points, indicator and clearance lights, and fog light







surrounds compatible with large ARB halogen fog lights or the new ARB LED fog lights (see page 61). The surround is supplied with a screw-in cover if no fog light is to be fitted.

The MR Triton Summit bar is compatible with ARB's Under Vehicle Protection (UVP) system, which provides comprehensive protection under the vehicle's engine, gearbox and transfer case.

In addition to the new ARB Summit bull bar, there is a comprehensive range of ARB equipment to suit the new MR Triton, including OME suspension systems, an ARB recovery point, a Frontier long-range fuel tank, a range of canopies and much more.

See arb.com.au for details or drop in to your nearest ARB store or stockist.

Eldee Easter Veckend



Words by Ron Moon Photography by Offroad Images "the kids had decided that there was fun to be had in the dirt of the outback station"

> ids were being kids as dust bombs sailed through the air to land with a soft "phulump" in an explosion of dust and dirt. There was much laughter and many shrieks between the two opposing mixed teams of young girls and boys, but as the dust cloud grew in size to envelope half of the campsite, adults came in to spoil the fun.

> It was my first impression of Eldee's Easter weekend and while I had been to the property many times over the years, this was my first Easter gig. While the planned activities weren't due to start until the next day, the kids had decided that there was fun to be had in the dirt of the outback station, 50 kilometres north-west of the once mining colossus of Broken Hill.

What Lies Beneath

For many first time visitors to western New South Wales, the adventure and fun begins well before arriving at Eldee Station. The focus of the whole region is still Broken Hill and while mining is going on deep underground, much of it has been automated with heavy machinery ripping the now notso-rich-ore out of the ground. I haven't been underground there for 20 years or so but even back then, when I plucked up the courage to head down into the dark bowels of the earth, there was a bloody huge cavern under what is the outback city of Broken Hill. Some say the town will vanish into a gigantic hole one day!

In the meantime, the town relies more on the outlying mines and a growing tourist trade, many of whom come to this city in the west for its vibrant art scene, its growing Priscilla, Queen of the Desert fame and its Broken Heel Festival. I'm not sure what the early tough miners, who dug gigantic holes with pick and shovel, would think of those seismic and much more colourful changes to their society!

On the way to Eldee Station, you pass through the "ghost town" come artist enclave of Silverton. Once a booming mining town (before Broken Hill), there are a few art galleries, an interesting local museum, the Day Dream Mine just out of town and the famous Silverton pub with bakery nearby. It's always worth a stop to check the place out, have a coldie and go underground in the historic mine.

Eldee Station, about 30 kilometres northwest of Silverton, sits on the edge of the vast Mundi Mundi Plains tucked up beside the rounded, rugged, rocky hills of the Barrier Range. The dusty plains of Eldee and surrounds have a rich historical legacy. Aboriginal people have long wandered the hills and the surrounding flatlands and, in places, left the etched engravings of their art in hidden caves and overhangs. Pioneer European settlers first moved into the region in the late 1850s barely 15 years after Charles Sturt and his men struggled north on their doomed attempt to find an inland sea, naming the Barrier Range in the process. The vast Mundi Mundi pastoral lease was taken up in the 1850s and sprawled across 600 square miles (approximately 155,000 hectares) of this part of western New South Wales and adjoining South Australia.



Silver was discovered near Silverton in 1875 but was quickly overshadowed by the huge deposit of Broken Hill, which was soon to become the richest silver, lead and zinc mine in the world and the foundation rock of BHP, the "Big Australian".

The government resumed many of the pastoral leases in the late 1800s and early 1900s and Eldee was shaved off the Mundi Mundi lease. Steve and Naomi, the current owners of Eldee, trace their heritage in Australia to the 1830s and by the late 1800s, Stephen's great-grandfather was working in the area. Today, the property runs a few thousand sheep and a few hundred cattle, the numbers depending on the season. Diversifying into tourism over 10 years ago has seen Steve, Naomi and Eldee win numerous awards for their well-established farm stay and country hospitality. Once you've been here, you'll understand why!



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Weckend Fun

Friday evening saw the last of the stragglers arrive at the homestead, while kids wandered the open paddocks getting to know the lay of the land and the other kids who had joined them. The adults were doing much the same, most with a beer in hand.

After a lazy start to Saturday, the first of the many challenges for the weekend were held along the nearby creek that is lined with old red gum trees that made great obstacles to zig and zag around.

One of the funniest events here was a form of blind man's bluff where the driver was blindfolded and the navigator had to give directions – very specific directions it turned out, as you can probably gather. While a few scrubby bushes were mown down in the process, nobody hit the big gum tree that was the centrepiece of the course.

Slow and steady was the name of the game here.

Nearby, there were a couple of higher speed courses, the Mini Dakar being a standout where all competitors were allowed two runs around it to try and improve on their time. The route started in the sandy creek bed, blasted up the bank between some big gums and then swept around through the scrub before returning to the creek via a series of whoopty doos that saw quite a few teams grab some air in their endeavour to get around the course in the fastest possible time.

That evening, Steve and Naomi led the convoy of cars to the top of the Barrier Range for a sunset view over the Mundi Mundi Plains that few will forget, even though the sun and clouds could have put on a better show. Still, it was an enjoyable spot to have a meal and a few beers, or a glass or two of wine, before descending the range. The snaking line of vehicle lights, as they wound their way down the range, was a particularly impressive view.

Eldee Easter Weekend









Sunday Best

Sunday morning started off with the allimportant Easter egg hunt that saw the kids running, searching and finding dozens of Easter eggs scattered along a section of the creek, while chocolate bunnies hid in the nearby scrub. Most kids ended the hunt with bags stuffed full of chocolate. Sadly, we adults didn't get any... unless some kindhearted kid gave us some!

That was followed by more lighthearted challenges; the Sheepyard Shenanigans were really enjoyed by the teams as they competed against other families and friends in a vehicle race through the confines of the sheep mustering yards. Then there was the navigational challenge – which really was a challenge to some – where without the use of GPS, a basic map was supplied with eight latitude and longitude points that had to be calculated, marked on the map and then visited on the ground. With a paddock larger than 4,000 hectares and a straight line between points not advisable, it was about two hours before the teams rolled past the finish line.

The rest of the day was taken up by the kids competing in the RC Challenge on the custom-made race track built by photographer extraordinaire (and RC race nut) Michael Ellem, who also kept the track and the race cars in tip-top order under the onslaught and gruelling pace of the kids.





Winner Winner Easter Dinner

Late that afternoon, prizes were handed out to the kids for their efforts, the six fastest winning their very own RC rock crawler. Prizes for the adults followed and while nobody missed out on a bag of goodies, each prize got more impressive as you got closer to the top point scorer. First prize was worth at least \$4,000 and like all the rest were supplied by the event sponsors, which included ARB 4x4 Accessories, Cooper Tires, Shimano, RFI Antennas, Torquit, Offroad Images and 4X4 Australia magazine.

Third place went to the Ellis family from Horsham, Victoria, in a very well-sorted GQ Patrol, while second place went to the Skinner family from Aldinga, South Australia, in an old, battle-hardened 4Runner. Top spot went to the Mason family, again from western Victoria in a well-set-up 76 Cruiser wagon. Friends of the Ellises said they had been locked in friendly rivalry since they had started the challenges, and emphasised the family and congenial nature of the whole weekend.

That evening, a local band rocked the homestead (they were really good) while a bit of a stage show played homage to Priscilla, the desert queen, which was colourful and funny – I'll leave it at that! An auction of prints, donated by Steve and Naomi, and a painting donated by Silverton artist John Dynon raised over \$2,000 for the Ronald McDonald House Adelaide charity, something many people in the bush use when their kids have to go south for hospital treatment.

All in all, it was a fabulous weekend, thoroughly enjoyed by all who took the drive to western New South Wales and Eldee Station. Next year will be the 10th running of this unique event and it will be big; mark it in the calendar and we'll see you there!



Gordge

ord Everest Ambiente and Trend 2015 onwards owners now have more options when it comes to their storage and cargo organisation. Whether it be for a quick getaway or an aroundthe-country adventure, ARB's range of Outback Solutions Drawers make life so much easier.

Completely modular, the Outback Solutions range of drawer systems can be individually tailored to your needs and vehicle, and are available in roller drawer, roller floor, mid-size roller drawer and roller drawer with built in fridge slide.

Key features:

- Anti-rattle design
- Key lockable, push-pull, slam-shut latches
- · Long-lasting, UV-stable commercial carpet
- Cross-folded floor with maximum weight-bearing loads of 150 kilograms per drawer, 300 kilograms combined
- · Fully sealed, dust and water resistant
- · Integrated fridge slides on roller floor models
- Vehicle-specific side floor kit with easy latches for additional storage areas within the cabin or tray
- · Water-resistant bonded marine ply with steel reinforced guards
- Folded stainless steel bearing runners
- Self-locking anti-roll back system locks into place in fully open position
- · Class-leading deep drawers with internal heights up to 250mm



Contact your local ARB store or stockist for more information.

ALL-WEATHER VISIBILITY



ARB HAS DEVELOPED LED FOG LIGHTS AVAILABLE IN SMALL AND LARGE CONFIGURATIONS TO SUIT A RANGE OF ARB BULL BARS WITH THE PROVISION FOR FOG LIGHTS.

he new ARB LED fog lights emit a crisp 240 lumen output tailored to optimum visibility on the road in inclement weather, while providing a modern, tinted appearance when the lights are off, perfectly matching the latest range of ARB Intensity LED driving lights.

The LED fog lights are housed in tough, glass-filled nylon shells and they have super tough, hard-coated polycarbonate lenses. They have an IP67 ingress protection rating and are supplied with waterproof Deutsch connectors (DT04-2P). Additional plugs are included so they can be easily retrofitted to existing wiring looms or a dedicated wiring loom can be purchased separately. A fine thread screw adjuster allows for correct aiming of the lights and a certified fog light pattern ensures the new ARB LED fog lights have full Australian and international compliance (ECE R19/R10, R0HS, SAE DOT).

The LED technology results in low power consumption (just 4.7 watts per light at 12 volts) and the LED fog lights have an impressive 50,000-hour lifespan. Suitable for ARB bars with the provision for fog lights.

Small fog light kit

Part Number: 3500890 RRP: **\$131.00**

Large fog light kit Part Number: 3500910 RRP: **\$152.00**

ORTBACK EXPERIENCE Date

Words by Jessica Vigar Photography by Offroad Images

Wildman Wilderness Lodge



Jess, Glenn and Mike continue their wild adventure in the Northern Territory outback. Check out Part I in 4x4 Culture Issue 54.



s we turned the corner back into camp, a bolt of lightning split the sky, its thunderous crack following only moments later. We had joined the last hunt of the season and Karl (the owner of Goodhand Outback Experience) had already expressed his concern about when the wet season would hit.

We all piled out of our 4WDs and whilst Mike, Glenn and I were eager to hit the showers, Ritchie and Pete still had plenty to do in order to start the process of preparing Bob's trophy before it got dark. Emma emerged from the kitchen, eager to hear about our adventures. As this was the last hunt of the season, she had spent the day cleaning out the kitchen and prepping for our final dinner.





WET SEASON ARRIVES

After we'd cleaned up, we all met in the dining room. The walk from our hut felt extremely precarious as lightning was now cracking overhead more and more frequently. Everyone was exhausted from the day's excitement and the punishing heat, and we all fell into a relaxed silence whilst watching Tom Cruise in the movie American Made. During the mouth-watering dinner served up by Emma, we noticed the startling drop in temperature. No sooner had we finished talking about it, the heavens opened and what felt like a tidal wave hit the roof. We immediately started getting wet and everyone scrambled outside to zip up the windows. I managed to escape window duty and as I looked around the room, I noticed a steady stream of water running from the mouth of a pig's head mounted on the wall.

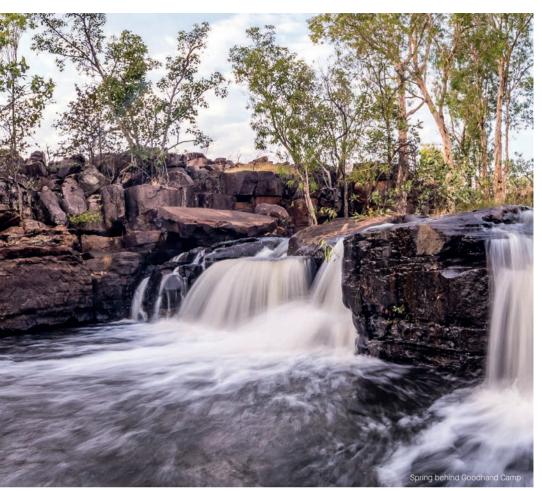
The guys returned inside, all looking like they'd just been swimming fully clothed in the spring out the back. Well and truly awake from the excitement, the mood of the group instantly lifted as we all returned to the dining table to find a delicious dessert waiting for us. After a few drinks and some unrepeatable but hilarious stories, we decided to hit the hay. The rain hadn't eased whatsoever and didn't let up until well past midnight. Whilst exciting for us, I could tell that Karl was anxious to get out of camp, nervous with the very real possibility that with all this rain, we might not actually be able to.

The next morning, Glenn and I met the crew back at the kitchen. After assessing all the buildings, we were surprised at how well they had stood up to the punishing weather. After breakfast, it was time to pack up the camp. Whilst this is not something paying guests would usually assist with, we were tag-alongs and were more than happy to help out, especially before the day got too hot. Within a matter of hours, almost the entire place was packed into a shipping container where it would wait until the next season opened. Mike was driving Karl out in his formidable 79 Series machine, Glenn and I were in ARB Darwin's Ford Ranger and the rest of the crew took out the remaining vehicles

"the heavens opened and what feft like a tidal wave hit the roof."



NT Travel



SAD TRUTHS

As we were driving through the station property, Mike suddenly stopped the 79 Series in front of us. As we pulled up behind, we saw Karl climb out of the cab, grab a gun from the back and disappear into the bush. Two gunshots later, he climbed back into the car and we moved off. Over the radio, he explained that he had spotted a cow being harassed by two dingos. Our cars had scared off the dogs but the cow had been struck down with rickets from eating the local palm leaves and couldn't walk.

Whilst this is the sometimes brutal necessity of nature and outback living, it reiterated the important conservational aspect of Karl's job and life. Pest control is a large part of Goodhand Outback Experience and Karl donates tens of thousands of dollars to conservation projects annually. An absolutely fantastic tour guide, Karl kept us entertained on the drive, pointing out tree and flora species, telling Aboriginal stories, the history of the area and the proper pronunciation of Aboriginal names and places.





NT Travel





TYRE TROUBLES

Nearing the Daly River crossing, our car suddenly started to beep. Not used to 4WDing in such a modern vehicle (Glenn and I have a classic GQ Patrol at home), it took a few moments to identify which part of the vehicle was emitting the warning. Our Tyre Pressure Monitoring System was alerting us to low pressure in our rear tyre. We pulled over to have a look and after crawling under the rear bar, it was immediately apparent what the problem was. A huge chunk was missing from the inner rim of our left-hand tyre. Thank goodness it was on the awning side as the temperature was pushing 39°C and there was no shade anywhere. I pulled the awning out whilst Karl and Glenn got to work replacing it with the spare. The lug nuts had chrome covers on them that meant the

tyre iron wouldn't fit to remove the nuts. After many frustrating attempts, we managed to pry the covers off with a screwdriver and pliers to get the tyre removed and replaced.

Back on the road, we reached the Daly River. The water was significantly higher than when we crossed over but not as high as Karl had feared. We attached a tree trunk protector to Karl's portal kit-lifted truck just to be safe but made it through no problems. After stopping again for lunch at the Lazy Lizard in Pine Creek, we were back on the road towards Karl's resort. Wildman Wilderness Lodge. Along the way, Karl continued to share amazing facts with us like the study of termite mounds for use in skyscraper cooling systems, the rarest palm in the world and the origin of the term "fair dinkum". The time flew by and before we knew it, we were pulling through the gates at our destination.



WILDMAN WILDERNESS LODGE

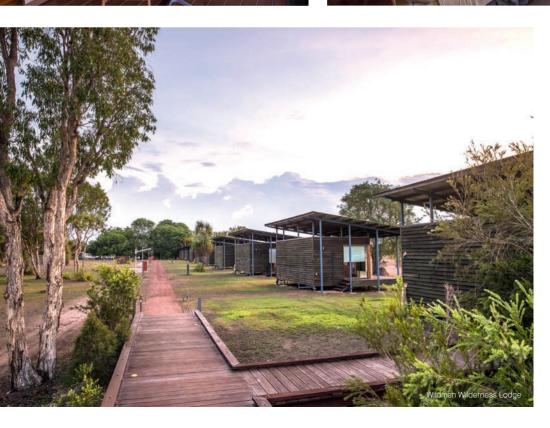
Described as Australia's last frontier of unique and unspoilt adventure, Wildman Wilderness Lodge opened in 2011 and is situated on the beautiful Mary River Wetlands, about halfway between Darwin and Kakadu. Offering two distinct styles of accommodation, the award-winning lodge has 10 air conditioned habitats and 15 ensuite-equipped safari tents. Featuring a bar, restaurant and swimming pool, the resort has a strong focus on minimising impact to the land and a commitment to conservation.

The restaurant showcases seasonal Australian produce and features Territory-specific menu items such as barramundi, local beef, crocodile and buffalo, paired with Australian indigenous bush ingredients such as lemon myrtle, pepperberry and bush tomatoes.

Whilst staying at the resort, guests have the option of joining a number of activities such as airboat safaris, billabong cruises, culture walks, wetland flights and fishing tours.

We checked into our amazing habitat room and got straight into the shower, bliss! After having an hour or so to chill out and take in the breathtaking scenery, we made our way to the restaurant for dinner. Mike had spent





his downtime taking photos of the scenery and local animals (he just never stops!). Whilst having a drink in the bar before dinner, we met Karl's friends Dorian and Delisa who later joined us for an absolutely delicious dinner.

The next morning, we got up and (very reluctantly) left the beautiful lodge to head back to where it all began, Karl's place. Mike had been up since 5.00am photographing the area. The rest of the crew were already there, still working to wrap up the season. After a cruisy day watching some of Karl's old hunting videos, we ended our adventure with an epic seafood platter on Darwin's waterfront. It was truly an adventure of a lifetime. Karl and his crew are an awesome group who made the whole experience unforgettable. Whether you're into hunting, fishing or just want an outback adventure like no other, Goodhand Outback Experience should be at the top of everyone's bucket list.

s mentioned in the last issue of 4x4 Culture, ARB's engineers have been hard at work developing a new range of protection equipment to suit the recently released Suzuki Jimny and these tough rock sliders are now available through ARB stores around the country.

The Jimny rock sliders feature a 60.3mm steel tube and to complement the new Jimny Summit bull bar, they have the same durable, Integrit, textured black powder-coat finish.

Offering complete protection for the Jimny's sills, the rock sliders can support the full weight of the vehicle along their length thanks to three strong chassis mounting points. The chassis support tubes are made from 47.6mm x 2.6mm steel tube while the chassis brackets

are manufactured from 4mm laser-cut, folded and welded sheet steel. The mounting system is secured around the Jimny's chassis using high tensile M10 fasteners.

With old school 4x4 technology under its skin, including a separate chassis, live axles front and rear, and genuine low-range reduction, there's no doubt many Suzuki Jimnys will be enlisted to perform tough off road duties. These smart-looking ARB rock sliders not only offer vital sill protection but also provide enhanced off road capability thanks to their ability to support the full vehicle weight.

The Jimny rock sliders weigh approximately 18 kilograms per pair. Keep an eye out on arb.com.au for more products designed specifically to suit the new Suzuki Jimny.



Power to the People

Words by Dean Mellor



ARB NOW STOCKS A WIDE RANGE OF HIGH-TECH, LIGHTWEIGHT, ENERGY EFFICIENT LITHIUM IRON PHOSPHATE BATTERIES THAT ARE IDEALLY SUITED FOR USE BY 4WD ADVENTURERS, CAMPERS AND CARAVANNERS.

There was a time when camping meant getting away from it all, from the pressures of everyday life, from work, from chores and from the house. Of course, when loading up the trusty 4x4, we'd joke that we were trying to squeeze in everything but the kitchen sink, but these days that's no longer a joke, with many campers taking a camp kitchen with them on their adventures.

Kitchen sink aside, probably the biggest change to camping over the past 50 years is our need to power electrical equipment. Where our camping menu used to consist largely of non-perishable, dehydrated and tinned foods, these days it consists of fresh foods thanks to portable refrigeration; we used to navigate using a map and compass but now we use GPS-enabled devices; our holiday snaps used to be captured on film but now they're recorded on digital cameras; and our camp lighting used to come from a gas bottle, not from our vehicle's battery.

The problem with carrying so much electrical equipment when we're trying to get away from it all is twofold: firstly, all that gear can be quite heavy and, secondly, it consumes a lot of power. Fortunately, as our power needs increase, so too does the technology to feed those needs.

While dual-battery set-ups and battery management systems have been around for a long time, up until recently they have relied upon lead-acid batteries or more recently absorbent glass mat (AGM) or gel batteries. Depending on their construction, these leadacid batteries could either be purpose-built to start engines (fast discharge starting batteries) or to power 12-volt electrical equipment (deep cycle batteries). While



fast discharge lead-acid batteries are still the optimum battery type for starting engines, a new technology in portable power is better suited to the deep cycle role of powering 12-volt electrical equipment: the lithium iron phosphate (LiFePO4) battery.

Lithium iron phosphate batteries, often referred to simply as lithium batteries, offer many advantages over traditional lead plate batteries. Some of the main benefits include the fact they last up to 10 times longer, are up to 60 per cent lighter, charge much faster, can contain up to 30 per cent more energy in the same size housing, provide up to 99 per cent efficiency, have an almost flat discharge curve and feature built-in battery management.

But wait, there's more! Another big advantage of lithium iron phosphate batteries is packaging that allows them to be used as direct drop-in replacements for traditional lead-acid batteries. They can also be connected in parallel to create a variety of amp hour (Ah) combinations, allowing users to set up a system that perfectly suits their power requirements.

Not to be confused with toxic lithium ion (LiCoO2) batteries as used in small devices, such as mobile phones, lithium iron phosphate batteries (LiFePO4) are non-toxic and have greater chemical and thermal stability, making them a safe choice for 4WDers and caravanners.

ARB now stocks a comprehensive range of lithium iron phosphate batteries to suit 4WD adventurers, campers and caravanners, including the lithium battery line-up from Revolution Power Australia and the Sentry lithium range from Sealed Performance Batteries (SPB).

As lithium iron phosphate batteries have specific charging requirements, ARB stocks REDARC in-vehicle DC to DC lithium battery chargers, allowing simultaneous charging from solar panels and the vehicle's alternator while driving. In addition, ARB now stocks the BMPRO Battery Charge range of AC battery chargers, which are compatible with lithium iron phosphate as well as traditional leadacid, AGM and gel batteries.





REVOLUTION POWER AUSTRALIA

The lithium battery range from Revolution Power Australia has been designed for use in extreme outback conditions and has been thoroughly tested in some of the toughest and most remote parts of the country by many 4x4 experts including Pat Callinan (Mr 4X4), Allan Whiting (Outback Travel Australia), Carlisle Rogers (4WD Touring Australia) and the All 4 Adventure crew, as well as in-thefield teams from Hema Maps and REDARC Electronics.

With more than 10 years of research and development, Revolution Power Australia lithium batteries, with the latest prismatic cell technology, give outstanding performance, unrivalled reliability and longevity, allowing users to power portable fridge/freezers, LED lighting and other 12-volt equipment, as well as 240-volt AC appliances when teamed with a suitable inverter.

Revolution Power Australia lithium batteries accept the full charge rate (from flat to full) from solar, DC to DC or appropriate 240-volt AC chargers, and they charge much faster than traditional batteries (up to five times, in fact). This faster charge rate is ideal for those who want to enjoy their surroundings for several days at a time, allowing them to power their equipment without the need for a noisy generator by simply going for a short drive or relying on their solar set-up.

Weighing just one-third of traditional sealed lead-acid (SLA) batteries, Revolution Power Australia lithium batteries have less of an impact on a vehicle's payload capacity, allowing users with weight concerns to carry more gear on their trips away. The Revolution Power Australia range of lithium batteries includes 60 amp slim line, 100 amp and 160 amp, and it should be noted that these are all useable amps. All models are housed in a tough polycarbonate case with an IP54 Enclosure Protection rating and an operating temperature range of -40°C to 80°C, and they incorporate a robust battery management system that's designed to equalise and balance the battery's cells, and will turn the battery off if the voltage is too low, too high or if it short-circuits. The low voltage cut-off is enabled at 10 volts and the charge cut-off is activated at 15.6 volts.

The Revolution Power Australia unique 60amp Slim Line Battery is rated at 2C, enabling it to be used with an 850-watt inverter and making it ideally suited to fitment in small areas such as behind the cabin of a ute or in the space between a drawer system and the side wall of a vehicle. Revolution lithium batteries can also be mounted in the front of a vehicle's engine bay, such as in the 200 Series LandCruiser, where there is sufficient airflow and they are not directly subjected to extreme heat sources such as exhaust systems or a turbocharger. Consult your ARB dealer for correct fitment.

The internal battery management system allows all Revolution Power batteries to be continuous for 60 minutes; the 100-amp battery, for example, can run a 1,000-watt inverter or appliance. If a larger inverter is required, batteries can be paralleled to create a larger power bank – for example, two 100-amp batteries can handle a 2,000watt inverter.

If the lithium battery is unable to handle the current draw, the internal battery management system will shut off the power supply to protect the battery.



ARB Lithium Batteries and Chargers



SENTRY LITHIUM

The Sentry lithium range developed by Sealed Performance Batteries is available in capacities ranging from 50 amps to 125 amps, with models ideally suited for replacement of traditional lead-acid batteries (standard N70 size) as well as in a slim line configuration for fitment into small spaces.

ARB also offers Sentry lithium models equipped with Bluetooth connectivity, built into the battery management system (BMS), allowing battery monitoring on Apple or Android mobile devices via a free app. Models with Bluetooth connectivity give users easy access to important battery information including state of charge, battery temperature, current in/out and BMS alarm.

A robust aluminium prismatic cell construction has been designed specifically for maximum energy storage and deep cycle applications, making Sentry lithium batteries ideally suited to powering 12-volt electrical equipment such as fridges and lighting, as well as 240-volt AC equipment when matched to a suitable inverter.

Sentry lithium batteries are manufactured using the proven lithium iron phosphate (LiFePO4) composition, which offers a high-energy density and lifecycle, significant weight savings compared to lead-acid batteries, as well as maximum safety. The BMS protects against overcharging and discharging, over-temperature and short circuiting, and the phosphate used in Sentry lithium batteries is a non-hazardous material. For complete peace of mind, all batteries in the Sentry lithium range come with IEC (International Electrotechnical Commission) certification on the complete assembly, including the BMS and the cells.

The Sentry lithium range offers many benefits compared to equivalent-size sealed leadacid (SLA) batteries. Much greater cycle life means Sentry lithium batteries will last up to eight times longer than an equivalent SLA, resulting in a lower overall cost of ownership, while 60 per cent greater capacity utilisation and a flat discharge curve provide a longer run time than an SLA. Sentry lithium batteries also have a very low self-discharge rate, so they can sit unused for longer periods of time, and they also charge much faster than an equivalent SLA (full charge can be achieved in as little as two hours compared to up to eight hours for an SLA).

Sentry lithium batteries also offer significant weight savings compared to SLA batteries; in fact, they're about half the weight of an equivalent SLA, which can be critical in applications where vehicles and/or trailers are heavily loaded.

Up to four Sentry lithium batteries can be connected in parallel, allowing users to tailor their battery system to suit their needs. Batteries with an "S" suffix in the part number can also be connected in series.

Combining light weight with impressive power output, long cycle life and optional Bluetooth connection, Sentry lithium batteries are ideally suited for use by 4WD adventurers and caravanners.





BMPRO BATTERYCHARGE

Complementing the new range of lithium iron phosphate (LiFePO4) batteries, ARB now stocks intelligent BMPRO BatteryCharge AC battery chargers.

Lithium batteries require a different charging profile to traditional lead-acid, AGM and gel batteries, and the Australian designed and manufactured BMPRO BatteryCharge 15-amp and 25-amp AC chargers meet these needs in a compact and easy-to-use package. Of course, in addition to lithium batteries, the BMPRO chargers are also compatible with all types of 12-volt lead-acid, AGM, gel and calcium batteries. The chargers can also be used to recondition sulphated lead-acid batteries and revive (wake up) drained lithium batteries. In addition, the intelligent chargers can be permanently connected to batteries without any adverse effects.

BMPRO BatteryCharge models provide adjustable output to suit different size

batteries from 5 amps to 25 amps (depending on model) and they feature a seven-stage charging profile for optimum battery performance and life. The charge stages are desulphation, soft charge, bulk charge, absorption, analysis, recondition and float. There's even a power supply mode that provides a constant output of 13.6 volts to power 12-volt DC appliances or tools.

A rugged external case ensures BMPRO BatteryCharge models can handle tough conditions and large clamps allow for easy battery connection. LED indicators clearly display the charge status of the battery while protective circuits prevent sparking and overheating, and a cooling fan ensures thermal protection.

The BMPRO 15-amp AC charger weighs 2.13 kilograms and measures 300 mm x 160mm x 70mm (L x W x H) while the 25-amp AC charger weighs slightly more at 2.42 kilograms but has the same external dimensions. Both models are covered by a two-year warranty.



WHAT ARE LITHIUM IRON PHOSPHATE (LIFEPO4) BATTERIES?

Like lead-acid batteries, lithium batteries have positive plates called cathodes and negative plates called anodes (separated by insulated spacers) and an electrolyte, but unlike flooded lead-acid batteries, there is no free liquid in LiFePO4 batteries.

In a lead-acid battery, the chemical reaction of lead and lead oxide with the electrolyte (sulfuric acid) produces a voltage, changing the components of the battery. In a LiFePO4 battery, the material used for the cathode is lithium iron phosphate and lithium just transfers ions during the charge and discharge process with no change to the components.



Storm Chasing

We were photographing a PXIII Ranger in the forest out behind Orange and a massive storm front swept through the area.

Although the front brought rain and huge winds, we managed to capture a bunch of images of the Ranger with an aggressive lightning-filled sky that I was extremely happy with.

As the storm circled around the tree line, bringing with it a heap of rain, we left the brand new Ranger and jumped into our camera vehicle, "The Mighty 79", dropped over a steep rugged rock face to get access to the lower road and chase the storm. It was something that I didn't want to take the Ranger through in fear of scratching it.

We chased the storm around the corner and managed to shoot this epic image.

In order to shoot lightning like this, it's easiest to open the shutter for an extended period of time so that, hopefully, when the shutter is actually open, the lightning will flash.

The trouble with storms is that they also bring rain and this can make imagery difficult as the rain wets the lens or filter.

With the wind swirling the way it was, the lens needed to be cleaned after every shot.

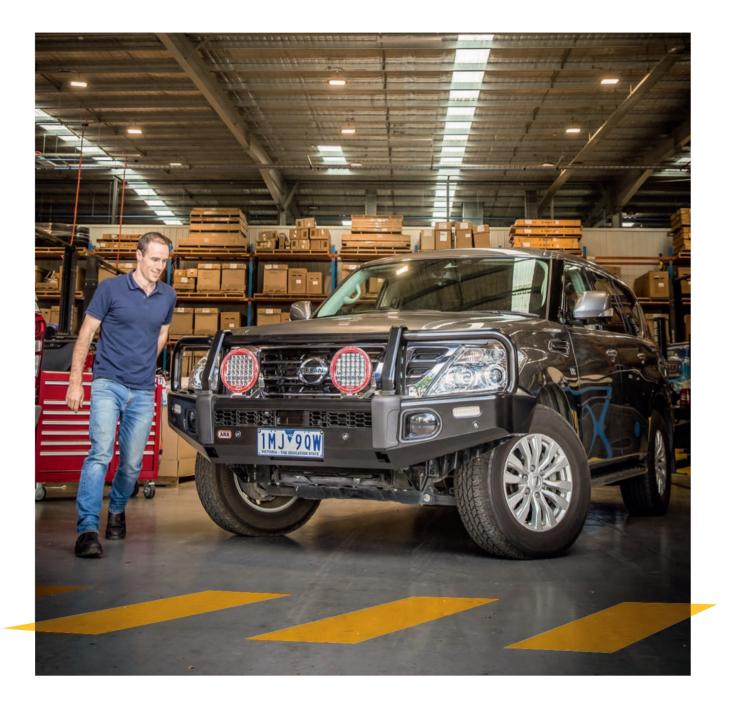
So I set up a LEE neutral density (ND) filter that would reduce the light coming through the lens quite considerably, giving me the ability to increase exposure for over 10 seconds.

During this extended exposure, the lightning bolt hit the ground and the brightness of the bolt exposed the sensor beautifully.

Whilst they bring with them a difficult environment to work in, we love storms and the imagery that can be captured of them.

Michael Ellem Offroad Images

77







The ARB Summit bull bar is now available to suit the Nissan Patrol Y62 Series 4, offering complete winch compatibility with both Ti and Ti-L models.

The new Patrol Y62 Summit bull bar is a full bumper replacement design, with welded steel wings that intersect neatly beneath the Patrol's headlight and front panels. The previous Y62 bar used an infill piece to fill in this section.

To ensure correct winch fitment on Patrol Ti-L models equipped with Intelligent Cruise Control (ICC), the integrated winch control box unit is located slightly higher compared with standard Summit bull bars. In addition, the new Patrol Summit bull bar has provision for fitment of the Ti-L model's headlight washers, and is also compatible with the Patrol's front parking sensors and Around View Monitor cameras.

The steel Summit bull bar features ARB's distinctive multi-fold upswept and tapered wing design with a 30mm radius on the wings and centre section and a press-formed top pan that adds strength and results in a sleek finish to complement the design of

the Patrol Y62. The Summit bull bar also has large diameter 60.3mm tube outer frames, a centre cross-bar and wide 62.6mm pressformed cover straps. Other smart design elements include two-piece buffers, a split pan grill and large fog light surrounds that can be equipped with ARB halogen fog lights or the new ARB LED fog lights.

Standard features on the Summit bull bar include LED indicator and clearance lights, twin ARB Jack or Hi-Lift jack points, two aerial brackets and provision for fitment of ARB Intensity LED driving lights or a range of Bushranger and IPF driving lights.

The Summit bull bar has been designed to accommodate a range of Warn, Magnum, Bushranger and Smittybilt low-mount electric winch models with a capacity of up to 12,000lb. For applications where no winch is to be fitted, the Summit bull bar features a recessed aluminium press-formed winch cover panel that provides an integrated appearance.

All Y62 Patrols are equipped with front parking sensors and Nissan's Around View Monitor, which relies on cameras located around the vehicle, including at the front. The top-spec Patrol Ti-L is also equipped with active safety features including Intelligent Cruise Control (ICC), Forward Collison Warning (FCW) and Lane Departure Warning (LDW). To allow for relocation of the ICC module, the Patrol's front camera is moved 140mm from centre in the split pan grill. Full adjustment of the ICC module is retained, however, and ease of access allows for regular cleaning and maintenance.

The headlight washers on Patrol Ti-L models are fitted in the wings of the Summit bull bar. These are replaced by neat blank plugs for Patrol Ti models not equipped with headlight washers.

The ARB Summit bull bar has a zinc-rich primer for corrosion resistance and it's finished in satin black powder coat or can be optionally colour-coded to suit the vehicle.

Check out the range of ARB accessories to suit the new Patrol Y62 Series 4 at **arb.com.au**.

COMPACT CAMP TABLE



ARB has recently added a new Aluminium Compact Camp Table to its comprehensive range of outdoor equipment. Weighing in at just three kilograms, the new table is super light and compact when packed, yet large enough to accommodate four people when set up.

The tabletop is manufactured from aluminium slats that unfold to form a strong, heatresistant surface ideal for food preparation and cooking. When set up on its sturdy legs, the tabletop sits at a comfortable 700mm off the ground, and it offers a generous size measuring 860mm x 700mm. That's enough space to easily seat four people around the table at meal times.



The legs are manufactured from 22mm square, black anodised aluminium tubes that feature cross-bracing to provide additional support, while unique table pins keep the legs and tabletop locked together, making it easy to move the set-up unit around the campsite.

Despite its light weight, the Compact Camp Table is super tough and it can support loads of up to 30 kilograms when assembled. Assembly is easy – simply remove the table components from the bag, spread out the legs, unfold the tabletop and lock into place.

When folded, the Compact Camp Table is true to its name, measuring 880mm long, 210mm wide and only 125mm high, and it packs away in a tough 600D nylon PVC-backed bag for easy carrying and storage.

The Aluminium Compact Camp Table is available now from your local ARB store for just \$79.00

Part Number: 10500130 RRP: **\$79.00**

CLASS ACT







The Mercedes X-Class was launched in April last year and offers two engine variants: the four cylinder for exceptional performance and capability or for extra grunt, the X-Class C6, which has a three-litre, six-cylinder diesel engine, making it one of the most powerful utes in its class.

ARB Air Locker

Designed and manufactured in Australia, ARB Air Lockers enhance the traction of your 4x4 in just about any terrain, whether it be rock, clay, gravel, sand, snow or mud.

ARB has confirmed both front and rear fitment of their worldrenowned Air Lockers for the Mercedes X-Class ute. The stateof-the-art, two-piece design and forged gears provide the ultimate in strength and durability, and come with an industry-leading five-year warranty.

ARB Ascent Canopy

The flagship ARB Ascent Canopy range continues to expand with the development of the Mercedes X-Class design.

Incorporating a new unique shell and rear door, the canopy is purpose-designed to complement the styling of the Mercedes X-Class tub. A core focus of the ARB Ascent canopy is vehicle integration, security and user function, and the Mercedes X-Class design lives up to this expectation.

The Ascent canopy comes standard with two lift-up tinted side windows and a lift-up glass front window, providing owners with unobscured rearward vision and access for cleaning.

The Mercedes X-Class Ascent canopy is loaded with standard inclusions such as vehicleintegrated central locking, electric push button window release and slam-shut latches.

ARB Outback Solutions Drawer Systems

Whether it be for a quick weekend getaway or a long-haul outback adventure, ARB stocks an extensive range of drawers and barrier systems to make your life so much easier. Mercedes X-Class owners can now take full advantage of ARB's Outback Solutions Drawer Systems range, which keeps items nested safely in the back and also organises cargo equipment neatly and efficiently.

ARB Outback Solutions Drawers feature a sleek design, quality components and the ability to create a fully customised system tailored to your requirements. Also available are the side floors and floor extension kit, providing additional storage under the side floors and a snug fit for your drawer set-up.

Key lockable, push-pull, slamshut latches provide ease of use and maximum security whilst the self-locking, anti-roll back system locks into place at full extension, preventing the drawers from rolling closed, even on inclines. A cross-folded floor ensures maximum support for items placed within each unit and the engineered anti-rattle design makes them perfect for both on and off road touring.

ARB's Outback Solutions Drawer System range is backed by a two-year warranty and is crashtested and compliant to ADR safety requirements.

Bacon & Onion Cheeseburgers



Ingredients:

4 burger patties
8 bacon rashers
2 large onions
Toothpicks
1 bottle of your favourite BBQ sauce
4 burger buns
4 slices smoky American cheese
Pickles (optional)
Burger sauce (optional)
Camp oven with trivet

Method:

Trim the rind off each bacon rasher and set aside. Peel and trim the ends of the onions and slice in half both ways (leaving you with four sets of half onion rings per onion). Wrap the edge of each patty with four onion ring halves. Wrap each burger in bacon as best you can so that the patty is fully enclosed, using toothpicks to hold the bacon in place. Place the patties on a trivet in a camp oven and sit the camp oven on coals outside of the fire with more coals on top.

Bake for 40 minutes, replacing coals if required. Remove the camp oven lid and cover the burgers with BBQ sauce. Place the lid back on the camp oven and bake for a further five minutes. Remove the camp oven lid and remove all toothpicks (the caramelised BBQ sauce should hold the bacon together). Top each burger with a piece of cheese and replace the lid. While the cheese is melting, cut the burger buns in half and toast the inside half over the campfire.

Remove the burgers from the camp oven and place inside toasted buns with pickles and burger sauce. Enjoy!

Feeds four hungry campers.

Upside Down Pineapple Cake



Ingredients:

1/2 cup of butter 2 cups of brown sugar 1 box of vanilla cake mix Accompanying cake mix ingredients Large can of pineapple slices Cake tin Aluminium foil Camp oven with trivet

Method:

Line a cake tin with two layers of aluminium foil. (We left our cake tin at home on our last 4WDing adventure so we just shaped about six layers of tin foil over a frying pan for a DIY cake pan.)

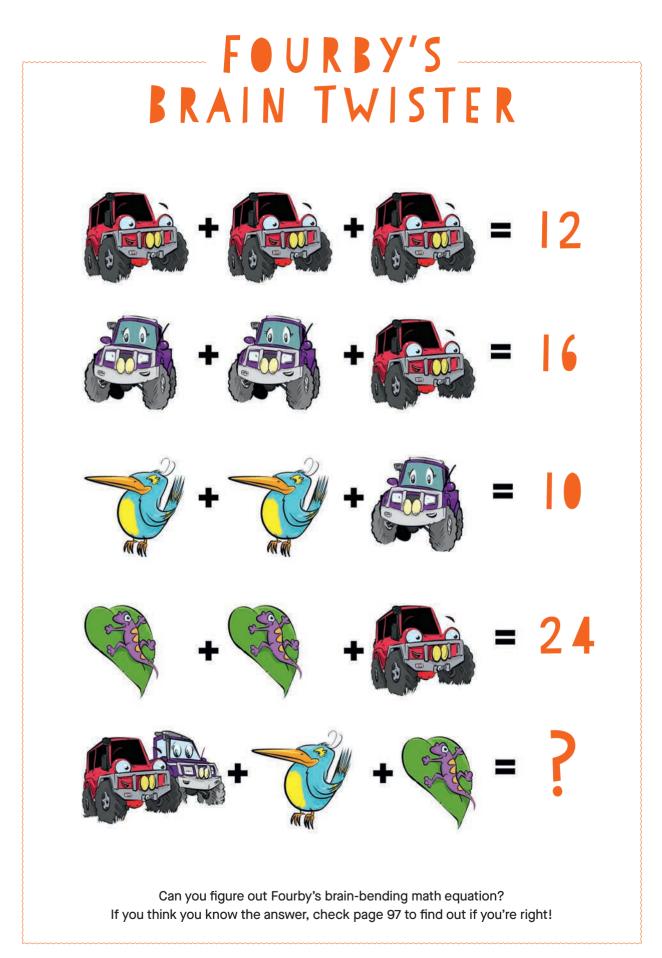
Melt the butter and mix in the brown sugar. Pour into the base of the lined cake tin. Drain the can of pineapple, saving about a quarter of a cup of juice. Place a single layer of pineapple slices over the butter and sugar mixture (we ended up using five slices around the edge with one in the middle). In a separate bowl, prepare the cake mix as per the instructions on the box. Add the quarter of a cup of reserved pineapple juice and mix in well. Pour the cake batter over the pineapple slices and place into a camp oven on a trivet.

Place the camp oven on coals outside of the fire with more coals on top. The cake should bake in around 30 minutes but it will depend on how hot the coals are. Make sure to check the cake regularly for the first 20 minutes to ensure the butter and sugar mixture doesn't burn.

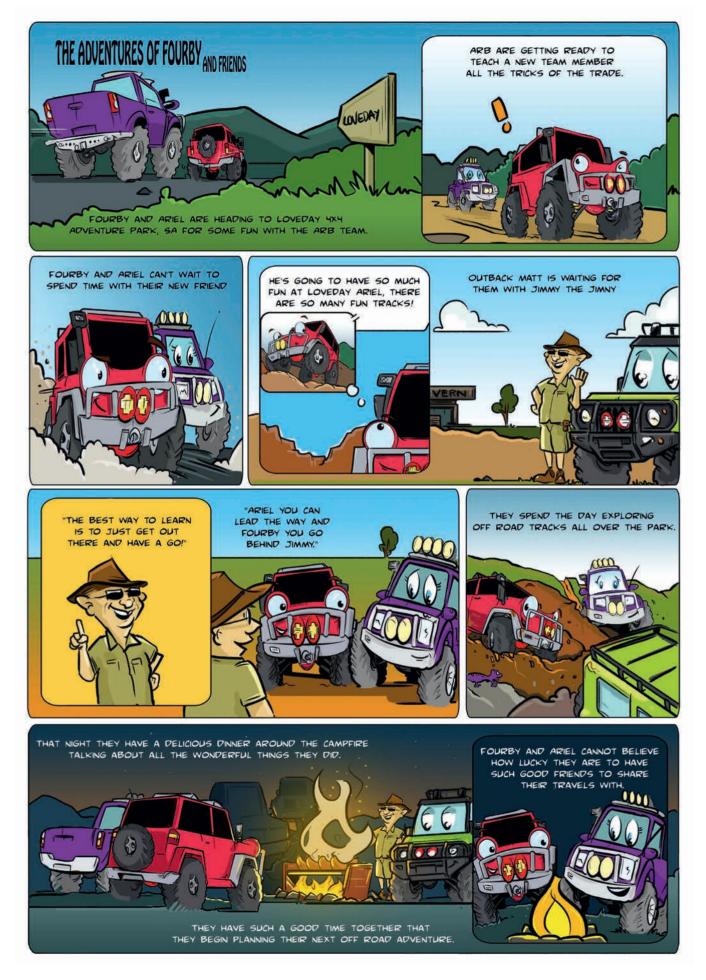
Once the cake is spongey in the middle to the touch and holds it shape when jiggled, remove from the camp oven. Place a chopping board or large plate over the cake and quickly flip in one fluid motion. Carefully remove the foil using a spoon to scrape any crispy sugary bits off the foil as you go.

Serve with custard or cream.

Feeds six to eight hungry campers.



ARB Kids



WHAT MAKES THIS REMOTE STUDIO TICK

Words and Photography by Michael Ellem

 or over 25 years, I have been shooting
 in remote locations all around this great country of ours.

A big day's photography brings a lot of added work to the night, wherever you may be. I've been known to stay up all night shooting night shots and downloading data from that day's photography.

This is probably one of the most difficult sides of what we do in the field and it can also be extremely frustrating.

On really big shoots, where you may be working long hours and in cold conditions, camera battery systems don't last as long and sometimes you just can't take enough battery power to keep things running.

Before a photoshoot, everything is charged... all batteries for every system. Lighting, film cameras, stills cameras, drones, etc... it goes without saying.

But what do you do when you finish the day and you have exhausted a heap of these batteries? You either head back to a motel room in town and set up a heap of power boards, placing everything on charge, or you keep shooting those low light hours and charge gear out in the field.





Tips and Techniques



Over the years, I have set up many different systems in my 4WDs and I have to admit modern technology has enabled me to work so much more efficiently than in years prior.

I'll jump back to one of my awesome 4WDs... a Toyota LandCruiser 100 Series running 35s and all the good gear. We had three AGM batteries in that thing but while I was trying to charge batteries, download files and generally work on a laptop, I would always end up running that 4.5-litre generator under the bonnet to try and keep the AGM batteries charged.

Even with the BT50, I was charging and running computer gear at the tailgate until the AGMs would get down to around 50 to 60 per cent capacity. Any lower and I would end up destroying the batteries. So when we set up the Mighty 79, I made sure that the power system was going to be able to service me well, allowing me to provide a better result to my client.

I sat down with one of the REDARC tech guys for around seven hours going over all our current gear and trying to learn more about what I was trying to achieve. Cheers, Stuart... the advice from someone who lives this technology has really paid off.

We are running four Revolution lithium batteries, which combined in parallel provide a whopping 240 amp hours of available power and with each battery are able to provide a draw of between 85 and 120 amps. This system will be able to pretty much do anything I need. We have a 3,000 "THE ADVICE FROM SOMEONE WHO LIVES THIS TECHNOLOGY HAS REALLY PAID OFF."



the weight of AGMs. If I carried AGMs in the back of our 79, it would be 140 kilograms heavier than the same available power in lithium... plus it would take three times as long to charge.

We are an extremely power hungry business and have a lot of gear to charge and run. This system of lithium batteries with the 2C rating and capability of big power when I need it really makes the difference. So if you are considering powering up your gear to keep everything working well and extremely efficiently, don't forget that the investment is well worth the result. For me, the ease of use of this system is that it runs itself. All the smarts ensure that the batteries are always well conditioned and ready to work for me at any time. The RedVision interface graphical display enables me to quickly see what is going on with the system. Plus it gives me historical charge and usage information.

I am loving this system and what I can achieve with it. By the way... did I mention I can run a coffee machine in the back of the 79?

"WE ARE AN EXTREMELY POWER HUNGRY BUSINESS AND HAVE A LOT OF GEAR TO GHARGE AND RUN. "

watt REDARC pure sine wave inverter capable of running nearly anything I need.

The best thing about this system is that through the REDARC Battery Manager 30, it will charge while driving via the alternator, and/or the solar, making sure that all four batteries are always topped up.

Something that is really important to understand is that with Revolution lithium batteries, you can use 100 per cent of the power rating that they have... So if it's a 60AH, it's actually an 85 AH with 60 useable amps. But the time that it takes to charge is three times faster than an AGM battery. So that 300 watts of solar that we have on the roof will charge lithium batteries three times faster than AGM. Although they are expensive, they provide double the power and are a third of





SMART PRADO

Toyota's LandCruiser Prado is a family favourite known for its solid performance both on and off the road and has been at the top of the SUV marketplace for more than a decade. 2017 saw a facelift of the vehicle with some new active safety features added as part of a late-life model update. n response, SmartBar has designed a 2017+ bar specifically for the Prado 150. Designed to suit the GX, GXL, VX and Kakadu models, the SmartBar is engineered to be the lightest and safest Vehicle Frontal Protection System (VFPS) available, offering even more protection and safety for vehicle owners and, importantly, pedestrians.

SmartBar's VFPS is a partial bumper replacement that complements the design and shape of the vehicle, maintains all of the factory accessories and all the while provides unparalleled safety.

Toyota LandCruiser Prado 150 SmartBar





that really compliments the vehicle while maintaining the DNA of previous SmartBars."

The design is also compatible with Toyota Safety Sense+ features including Lane Departure Alert, Pre-Collision Safety System with Pedestrian Detection, Automatic High Beam and Active Cruise Control. The SmartBar itself is manufactured from environmentally friendly and recyclable polyethylene polymer and meets full Australian Standard AS 4876.1-2002 including 3.2 Road User Protection.

The light weight of the SmartBar makes it a popular option for all those Prado owners living life on the road and towing caravans, from young families to grey nomads. The hollow construction makes the SmartBar lighter than a steel bar, which provides improved fuel economy and reduced tyre, suspension and brake wear caused by extra weight when compared to other alternatives.

Another great feature is that it will fit a huge range of aftermarket accessories as there's plenty of space to fit big winches, like the Warn Xeon, and to mount a big spotlight, like the ARB AR32 Intensity. The new bars also feature a five-function insert light and a removable high-lift jack point.

Mark Reina has been an Industrial Designer with SmartBar Australia since September 2017. Mark is responsible for the design, development and testing of new and existing products. "I was given the choice to design the Prado bar from scratch... I started off with some pretty unique concepts but I think we've come up with a great looking SmartBar



Toyota LandCruiser Prado 150 SmartBar Specs

Application: Toyota LandCruiser Prado 10/17 – GX, GXL, VX, Kakadu

Models fitting: Minimum four hours (non-winch), minimum five hours (winch)

Fitted weight: 37kg for nonwinch, 44kg for winch

SmartBar continues to design and develop innovative products in response to a growing market need for more effective VFPS and, at the same time, proudly continues to defy trends by manufacturing in South Australia. **IPF Driving Lights**



IPF Super Rally 950

PF Lighting is a renowned manufacturer of driving lights, producing a wide range of lights for the 4WD industry. Clocking up millions of kilometres over many years, IPF customers see the proof that their driving lights can handle the most rugged of environments.

The new IPF Super Rally 950 Series lights use a unique mix of LED reflector technology and a projection system to create a crisp white light that provides wide and long-range light in one system. The Optical Hybrid Projection System (OHPS) uses a high accuracy, hard-coated, polycarbonate spotlight beam projector lens to shoot the light down the road. This, in partnership with the unique optical designed driving light beam, provides the best of both worlds in one light.

Features:

- · Compact body
- High-powered LEDs deliver ultra highintensity white light
- Lumens: 2,000 lumens/2 watts
- LED colour temperature: 6,000K
- Lifespan: 30,000 hours
- Internal mount LED driver with radio noise-reduction circuit fitted with waterproof Deutsch DT-6 connector
- 12 volts to 24 volts useable (optional 24 volt relay available)

- Super tough die cast alloy body incorporating finned heatsink
- Integrated projector lens and reflector in extremely tough, UV-stabilised, hardcoated, polycarbonate resin
- Corresponds to various vehicle
 mounting conditions
- Multi-directional mounting base and M10 heavy-duty mounting stud enables upright, hanging and back side four ways mounting options
- Submersible "Sealed for Life" design using highly advanced, heatproof resin reflector, incorporating water- and dustresistant membrane breather
- Water and dustproof (IP68)
- Shock and vibration resistant



Bushranger's Night Hawk Single Row LED Light Bars have been developed from the ground up by Bushranger's team of engineers to offer a compact and low-profile design that takes performance, looks and useability to a whole new level.

The clean, modern aesthetic incorporates quality materials and construction, and provides a unique and versatile mounting system that makes installation a breeze. The Advanced Temperature Control System takes advantage of the quality aluminium heatsink to run the LEDs at their maximum potential by monitoring and adjusting the output according to the environment.

Because these lights are so bright, Bushranger have also incorporated a brightness control function that allows complete control of the light intensity in adverse conditions, where too much light can be detrimental to clear vision. The brightness is controlled by their pioneering relay-free VLI series wiring system, which is the first of its kind, and leads the way with simpler wiring, easier installation, more user control and greater reliability over traditional systems.

Each light is supplied with a full set of protective spot beam covers plus a full set

of protective flood beam covers, which allow quick and easy customisation of the beam pattern to suit any requirement. With the spot protective covers fitted, the light projects a clean and focused spot beam pattern that reaches extreme distance, great for highway driving. Clip on the flood protective covers and the light changes significantly to a wide flood beam pattern that illuminates all the surroundings for excellent short and medium distance vision. Run any combination of each cover to tailor the perfect combo beam pattern for the environment.

Bushranger Night Hawk lights are engineered tough to withstand the rugged outdoor terrain and harsh climate experienced down under. They are backed by a five-year warranty and 40-plus-year history of supplying quality engineered 4x4 products to the Australian market.

DURABLE EXTERIOR: UV-stable polyester powder coat and polycarbonate lens and covers ensure long-term durability to handle even the toughest Australian conditions.

BUILT TOUGH: Extruded 6061 aluminium housing and cast alloy mounting feet offer long-term strength and durability.

HIGH OUTPUT: Genuine high-output OSRAM LEDs for unmatched performance.

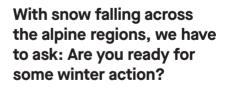
MODERN ELECTRONICS DESIGN: Built-in transistor switching simplifies wiring installation by removing the need for traditional 12-volt relays. PWM dimming capability for brightness control at the turn of a dial. (Wiring system sold separately.)

ACTIVE TEMPERATURE CONTROL SYSTEM: Intelligent onboard monitoring of the LED temperatures combined with a superior cooling design allows for maximum output in all conditions.

VERSATILE INSTALLATION: Lightweight and low-profile design with highly adjustable sliding mounting feet allows for fitting to a diverse range of vehicles.

CHANGEABLE BEAM PATTERN: Full set of clip-on/clip-off spot beam and flood beam protective covers allows complete customisation of beam pattern. Note: NHT055VLI comes with flood and diffused cover, remove covers for a spot beam.

WINTER AGTION



I'III

Bring your snow gear with Thule, the recommended brand by ARB for winter sports.

Gear up for a great season with the Thule roof racks, roof boxes and bags designed to get your equipment up to the mountains safely and easily.

Thule Roof Racks

For winter adventures, summer excursions and every other weekend in between, Thule roof racks are best in class and designed to transport your gear safely, easily and in style. Thule's "perfect fit" philosophy ensures the racks integrate flawlessly with the vehicle.

Thule RoundTrip Ski/ Snowboard Bag

Load your board and gear in a robust and practical bag designed to organise and protect your favourite gear.

\$169.00 RRP





Thule RoundTrip Boot Backpack

Keep your feet dry, your goggles safe and your gear organised. Change in and out of boots in any location and use the flipdown back panel door as a standing mat.

\$169.00 RRP

Thule SnowPack Extender

An aerodynamic rack that extends out so that you can easily load and unload your skis and snowboards without the need to reach over your car roof.

\$499.00 RRP

Thule Roof Boxes

Free up space in your car with Thule's roof boxes available in a range of sizes, models and colours. Organise your wet gear and carry up to five snowboards or seven pairs of skis (depending on the roof box model). Your gear is safe and secured thanks to Thule's three-point locking system.

König Tyre Chains

Snow chains made easy. One of Europe's leading brands in snow and tyre chains, the König range of products are now available at ARB 4x4 Accessories stores.

When choosing chains for your vehicle, the fitting system makes all the difference. The built-in self-tensioning system makes König tyre chains quick and easy to install with no need to stop and retension the wheel chain.



König tyre chains such as the T2 Magic are built to meet Australian conditions with 16mm thickness. These heavy-duty chains are ready to handle the most inaccessible snowy roads.

With chain solutions available for almost any wheel size and vehicle model, König offers the widest range of tyre chains from comfort chains to heavy-duty models suitable for SUVs, utes and 4WDs.

Competition Winners



Damian Chan

eturning to Sydney along the M5 Motorway from a day trip down the south coast (hot January day in the high thirties), I was travelling at 110 kilometres per hour on the outside lane when the driver's side rear tyre blew out (I think I almost blew out from my backside after it happened). Luckily, I still had full control of the Cruiser so I was able to reduce speed and change lanes and then park in the breakdown lane but not before the tyre delaminated severely, causing damage to the wheel arch and knocking off the wheel arch flare.

I am just glad it wasn't one of the front tyres, especially at that speed, as I had the whole family in the vehicle. I have since invested in a TPMS to try to avoid another blowout.



We asked for your biggest tyre "blowout" and found that nearly everyone has experienced a tyre malfunction on the tracks. Check out this edition's winners and make sure you enter our next photo comp. These winners all receive an ARB E-Z Digital Tyre Deflator and ARB Speedy Seal Puncture Repair Kit valued at \$128.00!



Casper Galjaardt



Shane Mason



Dean Goggins





Phil Edwards

his tyre blowout scared the life out of my folks while heading for Albany. At 100 kilometres per hour, the righthand rear tyre separated with the loudest noise you can imagine.

The damage was staggering! It ripped off both sections of the flares, the mud flap, smashed the tail light, tore the bumper, bent the running board and even scratched the rear door handle.

A passing good Samaritan stopped and helped them put the car back together with 100mph tape and some red tape to remake the stop light lens. They took it to a repair shop after getting the two rear tyres replaced and the guy said he had never seen anything like it!

Just lucky it was a back tyre or it could have been a total disaster!



Henry Pereira



Dave Charlton



Want to win one of five Navigator organiser solutions packs worth over \$500? Check out page 26 to find out how.



Fourby's Brain Twister answer: 22

ARB STORES

VICTORIA				QUE
Bairnsdale	(03)	5152	1226	Bigg
Ballarat	(03)	5336	4605	Bunc
Bendigo	(03)	5445	7100	Burle
Brighton	(03)	9557	1888	Cabo
Dandenong	(03)	9793	0002	Сара
Echuca	(03)	5480	2600	Cairn
Geelong	(03)	5272	2611	Calor
Hoppers Crossing	(03)	9749	5905	Coop
Keilor Park	(03)	9331	7333	Jinda
Kilsyth	(03)	9761	6622	North
Pakenham	(03)	5940	5500	Nunc
Shepparton	(03)	5822	1877	Macl
Somerton	(03)	9460	9988	Marc
Traralgon	(03)	5174	9190	Rock
Warragul	(03)	5623	5599	Sprin
				Тоои
SOUTH AUSTRAL	.IA			Towr
Elizabeth	(08)	8252	1599	
Morphett Vale	(08)	8186	6101	TASN
Regency Park	(08)	8244	5001	Burni Hoba

(02) 6280 7475

ACT

Fyshwick

QUEENSLAND	
Biggera Waters	(07) 5537 8800
Bundaberg	(07) 4153 2929
Burleigh Heads	(07) 5535 9223
Caboolture	(07) 5499 1955
Capalaba	(07) 3823 5900
Cairns	(07) 4035 3350
Caloundra	(07) 5491 4500
Coopers Plains	(07) 3277 2020
Jindalee	(07) 3715 6400
North Lakes	(07) 3491 9600
Nundah	(07) 3266 3255
Mackay	(07) 4998 6888
Maroochydore	(07) 5475 4011
Rockhampton	(07) 4922 7788
Springwood	(07) 3493 3030
Toowoomba	(07) 4632 1122
Townsville	(07) 4728 0900

TASMANIA

Burnie	(03) 6431 4494
Hobart	(03) 6232 2333
Launceston	(03) 6331 4190

NORTHERN TERRITORY				
Alice Springs	(08) 8953 0572			
Darwin	(08) 8947 2262			
NEW SOUTH WALES				
Albury	(02) 6021 2477			
Artarmon	(02) 9438 4484			
Broken Hill	(08) 8087 9250			
Brookvale	(02) 8507 3073			
Dubbo	(02) 6885 5777			
Moorebank	(02) 9821 3633			
Narellan	(02) 4648 1900			
Newcastle	(02) 4953 9555			
Orange	(02) 6369 0700			
Penrith	(02) 4731 1266			
Port Macquarie	(02) 6581 2500			
St Peters	(02) 9565 2455			
Tamworth	(02) 6767 9700			

(02) 9980 8855

(02) 6925 8777

(02) 4225 2050

Wentworthville (02) 9631 7889

WESTERN AUSTRALIA

Bunbury	(08) 9721 2099
Canning Vale	(08) 9455 4366
Geraldton	(08) 9921 8077
Mandurah	(08) 9583 3200
Osborne Park	(08) 9244 3553
South Hedland	(08) 9160 4900
Wangara	(08) 9409 5764
Welshpool	(08) 9358 3688

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Thornleigh

Wagga Wagga

Wollongong

