

ARB

4X4 ACTION



FEATURE ARTICLE ON

NEW INTENSITY LED DRIVING LIGHTS

FEATURES › LATEST HOLDEN COLORADO ACCESSORIES
› RENOWNED RECARO SEATS AND REDARC SOLAR PRODUCTS
› HOW TO DRIVE IN MUDDY TERRAIN

TRAVEL › JOIN PENGUINS, WHALES AND SEALS IN ANTARCTICA
AND TRAVEL THE ICONIC RUBICON TRAIL IN THE US

WIN
TWO ARB
INTENSITY
LED LIGHTS

HIGHLIGHTS

WILD ANTARCTICA	4
ASK ARB	10
INTENSITY LED DRIVING LIGHTS	16
WIN INTENSITY LIGHTS	19
HOLDEN COLORADO ACCESSORIES	22
US JEEP JAMBOREE	30
RECARO SEATS	34
SKYDOME SWAG WINNER	40
SURFING RED BLUFF	48
ARB KIDS	54
REDARC SOLAR EQUIPMENT	60
MIKE ELLEM'S PHOTOGRAPHY TIPS	62
SIMPSON DESERT ADVENTURE	68



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ARB SNAPSHOT

Given the fact that I have been at ARB for almost twenty years, you can probably imagine there are quite a few things I like about the place. Undoubtedly, one of the most enjoyable aspects of my job is that I get to drive so many different 4WDs. I have helped out with vehicle comparisons for magazines, assisted with various 4WD related television shows and, of course, I get to drive a lot of our company owned, fully accessorised vehicles. Over the years there has been a handful of 4WDs that in my mind have really stuck out as being exceptional, the most recent being the HiLux I took across the Simpson Desert, which is featured in this issue of the magazine.

Whilst I have driven numerous HiLuxes, including many that have been fully decked out with accessories, what really struck me about this one was just how carefully thought out all of the modifications were, and generally how well prepared the vehicle was for a trip of this nature. The set up was overseen by our South Australian State Manager, Michael Davis. He's a keen 4WD enthusiast and qualified off road driver training instructor, and his experience was clearly reflected in the manner in which this HiLux was prepared. You can read more about my thoughts on the vehicle later on, but in a nutshell, I constantly kept finding things on this truck that made me think to myself, that's a good idea. It might have been something as simple as switch locations or even the location of the air chuck for the air compressor. Everything just seemed to work, and there was nothing I would have done differently.

I guess the lesson to be learnt here is that when considering the purchase of accessories for your vehicle, it's really worth taking the time to consider your requirements carefully. Of course, we're happy to just take care of everything if required, but equally, we love to work with our customers to make sure they are getting the absolute best results possible from their vehicle fit out.



It really emphasises the value of finding a store and individual that you have total confidence in. There have been many vehicles I have happily returned at the end of the trip, but this was one that I was sorry to hand back.

One accessory we couldn't quite manage to get on in time for the trip was a pair of the new Intensity LED lights shown on the front cover of this magazine. I have always been a big fan of HID driving lights, which were fitted to the HiLux, but these Intensity lights are just on a whole new level. When we did the initial photo shoot for the lights, Michael Ellem took us off onto a very remote Outback station, and we literally drove for hours on very faint tracks to a specific location he had in mind. Trying to navigate our way back in the early hours of the morning would have normally presented a challenge, but with these LEDs literally pouring light out in front of the lead vehicle, we were easily able to retrace our tracks.

Night driving in the Outback is generally not recommended but sometimes inevitable. It is hugely satisfying and indeed reassuring when you flick a switch and punch out an awesome amount of light in front of the vehicle. We've had these lights on a few vehicles now, and they really look the part as well, which can't be a bad thing given the pride and enjoyment so many of us get out of our vehicles.

Finally, those of you who are really observant may have noticed a role change for me at ARB. I would like to take this opportunity to acknowledge and thank the numerous people who have supported me so well in my role as Marketing Manager, and highlight that it is their exceptional talent, and my trust in them, that has allowed me to take on these additional responsibilities.

Matt Frost,
National Sales & Marketing
Manager, ARB 4x4 Accessories



CRUISEY NEW REAR BAR

THE TOYOTA FJ CRUISER REAR BAR GETS AN OVERHAUL FOR AUSTRALIAN CONDITIONS.

The result of extensive collaborative work by a number of ARB engineers, the rear bar for the FJ Cruiser recently underwent a complete redesign to better suit Australian requirements.

Manufactured from durable steel, the ARB rear bar offers considerable protection for the rear and vulnerable lower panels of the FJ Cruiser. Designed from the ground up to fully suit the vehicle, the rear bar incorporates wing mounted brake and indicator lights as well as fog lights. Increasing its

functionality, the rear bar is also engineered to allow fitment of the original parking sensors.

The rear bar is designed with a heavy duty tow point that bolts through the tow bar mount. Designed with an elongated slot to allow the bow of a 3.75t shackle for angled pulls, the tow point can be fitted with or without a Hayman Reese tow bar system.

Incorporating two reinforced Hi-Lift jacking points in the underside of the bar, the rear bar features a centre recess to allow fitment of most 35" tyres and incorporates a

grip tape step pad to provide easy access to the cargo area and roof rack.

Providing optimised departure angles for off road terrain, the bar is finished in a hard wearing powder coat with the added option of colour coding to individual vehicles.

The rear bar joins an extensive range of products for the Toyota FJ Cruiser, including bull bars, Air Lockers, OME suspension, roof racks and rock sliders. Visit your local ARB distributor for more details.

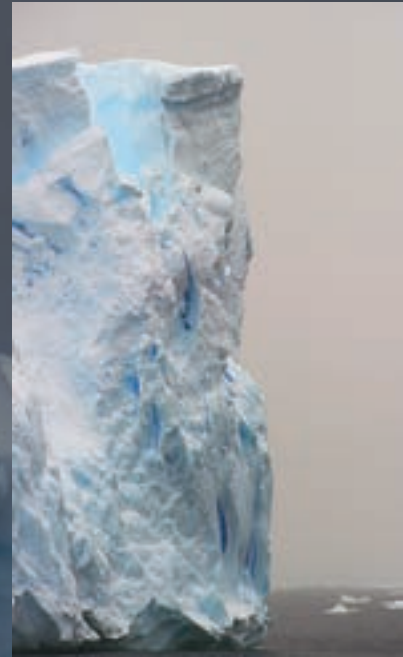
// Part no: 5620020 // Price: \$1258

TRAVEL

ANTARCTICA

WILD SOUTH

Words & photography by Steve Fraser



LANDSCAPE PHOTOGRAPHER STEVE FRASER GETS CLOSE TO THE LOCALS IN ANTARCTICA.

It's 3am and it's perfectly light. The wind is blowing 50 knots and the sea is raging with a 6-8 metre swell. Welcome to the great Southern Ocean en route to Antarctica.

One hundred years ago Douglas Mawson and his team were the first to set foot on Cape Denison in Antarctica. The opportunity to follow in Mawson's footsteps on the 100th anniversary was too much to resist. Cape Denison is the windiest, coldest and most remote location on the planet. It would take us six days at sea to sail there on the Orion (it took Mawson five weeks... thank goodness for progress).

As the only professional photographer aboard the Orion expedition, it was hard to contain my excitement as we headed south from Hobart. The expedition team leader was Don McIntyre, one of Australia's great adventurers and an Antarctic veteran. A large group from the South Australian Museum,

which houses the Mawson collection, joined us. This included marine biologists, historians, wildlife specialists, geologists, the museum director and even Mawson's grandson.

After a four-day introduction to one of the wildest oceans on the planet, the first stop was the breathtaking World Heritage listed Macquarie Island. The first sight of Macca (of course we shorten everything—we're Aussies) was a welcome relief and the landing party swung into action. There aren't any boat ramps so we landed on a sheltered stretch of beach near the base.

The base is a research station and it's home to around thirty people. To give you an idea of the isolation, they get their food supply annually in April each year. To bring this into context, the team at the base were eating nine-month-old eggs (yes, they do get a few that are not very special). Most of the work at the base is animal research, as Macca is home to the best

penguin and seal colonies on the planet.

A small group of us got to visit Mawson's Mast on top of the island. This is a very rare opportunity and gave a great insight into the toughness of Mawson and his team who built the mast. It's a tough climb especially with 25kg of camera gear, but Mawson and his team did it dragging 100kg pieces of timber (toughen up, Steve).

Still off Macca, the next day we dropped anchor a couple of kilometres off Sandy Bay. I headed ashore with the advance landing party in a Zodiac inflatable boat. As the four of us looked for a suitable landing site, the wind started to pick up. By the time we landed and the first mate headed back, the ship was being blown off its anchor.

We watched the ship sail off, as it was too dangerous to stay close to land with the weather closing in. Some people might be worried at



WHO NEEDS DISCOVERY CHANNEL WHEN YOU'RE RIGHT THERE AMONGST IT?

this point, however all I could think was, I am at Sandy Bay and I have it all to myself. I'm in photographic heaven.

Sandy Bay is home to several colonies of penguins including a 30,000-strong King penguin colony and a Royal penguin colony with around 600,000. Add to this elephant seals, fur seals, amazing bird life and scenery and you have the recipe for an awesome photo shoot.

The weather constantly changed over the next seven hours until it calmed enough for the rest of the expedition team to join us. This was seven hours of my life I will never forget. Vivid memories of lying on the beach surrounded by beautiful penguins that have no fear and that want to check out the strange animal in the red jacket are imprinted on my brain.

Getting close enough to touch 1500kg elephant seals and watching the sun hit the cliffs is a photographer's dream. Normally people are limited to around an

hour on Sandy Bay due to the World Heritage status.

When we eventually set sail for Cape Dennison I was exhausted, exhilarated and smiling from ear to ear. Even if I didn't get one more image on the trip, I would have gone home a happy camper.

The Polar Blast is a tradition to ensure good luck in our passage. This involves all 'Antarctic Virgins' meeting on the aft deck for a serious soaking at the exact moment you cross 60 degrees south. So at 4am, yes 4am, I made my way in my t-shirt and boardies to the aft deck. Imagine how cold I was already.

Don McIntyre had that look in his eye and you knew he was going to enjoy hosing us down. Out came the fire hose which pumps high-pressure seawater at two degrees Celsius. Don let us have it. Now, I love early mornings and a bit of adventure but this was ridiculous. Having suffered for good luck, I headed off for a hot shower and a warm bed.

Two days later, small, scattered pieces of ice appeared, then large icebergs. Gradually, the ship was down to a crawl and we were in the thick of navigating the pack ice. The ice brought out the excitement on board. After days at sea the real adventure was about to begin.

The Orion is a specialist, ice strengthened ship and listening to the ice scraping on the side makes you aware that an expedition to the Cape is not without its risks. With a specialist ice pilot on board, you soon get an appreciation of how difficult it is to navigate through pack ice.

The ice is rated by its density from 2/10ths to 10/10ths. 2/10ths is just a bit of floating ice and it's easy to navigate. In 10/10ths ice you are pushing through ice with little clear water. It wasn't long before we were in 10/10ths. Ice stretched out to the horizon and my camera was kept busy as we sailed by the most amazing ice formations.

Penguins stand on icebergs and flap their flippers. Leopard seals



stalk them, so it's a standoff with the penguins at one end being checked out by the Leopard seal at the other. The penguins are safe whilst they stay on the berg.

We headed slowly towards Cape Dennison, weaving in and out of the icebergs, scraping pack ice. One of the downsides of moving so slowly is that the ship's engines don't get very hot. It didn't seem like a big deal until the captain announced that until further notice all showers would be with cold water only. The heat from the engines is used to create the energy required for a number of the ship's secondary systems. Hot water is low on the list of priorities.

A cold shower in the Kimberley or far North Queensland is great and I have had lots of mornings in the bush with a cold shower but this is subzero Antarctica where cold has a whole new meaning. All I can say is the showers were very, very short. It took four days for the warm showers to be back on the menu.



THE ENVIRONMENT IS SO BEAUTIFUL AND HOSTILE THAT YOU HAVE TO TREAT IT WITH THE UTMOST RESPECT



We finally arrived within sight of the Antarctic mainland but Cape Dennison was totally closed in with pack ice and the chance of getting to Mawson's Hut was ruled out. Whilst disappointed, I realise this is part of Antarctic exploration. The environment is so beautiful and hostile that you have to treat it with the utmost respect. A poor decision out here has serious consequences. You can't phone a friend. The big risk was that the 10/10th ice would close in and the ship would be stuck in the ice and stranded.

Early the next morning, a super pod (over fifty) of Orcas joined us. The marine biologists on board were uncontrollable. The chance to get the cameras out and get up close and personal was memorable. Alpha males have a dorsal fin that is 1.5m above the water. You start to feel very small when they cruise straight towards you in numbers. The babies follow mum very closely and when she dives they follow. At one stage the ship was surrounded in every direction by Orcas. Who needs Discovery Channel when you're right there amongst it?

Later that day Humpback whales showed up. One of them was estimated by the scientists to be

nearly 60 feet long and weighing around 45 tonnes.

We reached the edge of the ice pack and the sun made a rare appearance. It was time to break out the Zodiacs. Cruising alongside icebergs in the Zodiac gave a perspective on how breathtaking the colours, shape and size icebergs can be.

Late in the day, we set sail for Enderby Island off the southern tip of New Zealand. As soon as we cleared the ice pack, the sea and wind reminded us how angry the Great Southern Ocean can be. Before long 8m seas and 60 knot winds were raging. I can confirm only a few friends joined me for breakfast for the next couple of days as seasickness took a toll.

The calm waters off Enderby Island were a welcome relief. Enderby is part of the Auckland Islands and home to several New Zealand sea lion colonies and lots of rare bird colonies. A Bondi-style beach greets us, except it was covered in sea lions of all sizes. It was calving time so there were hundreds of very cute two-week-old calves. Then there were the big boys who weigh almost 450kg. The girls only get



to 150kg. The males spend most of the day protecting the harem of potential mates.

We were told that sea lions will charge if you get too close and that the last thing you should do is run. Just stand your ground as they think it's a game. Later that day I crawled along the ground to get next to six of the pups only to hear mum coming behind me.

Remember. Stand up. Don't run. It's just a game.

As she continued to charge at me, I didn't think it was a fun game anymore. Sure enough, she stopped just short and allowed me to slowly back away.

After hiking across the island to view some of the rare bird life, it was back out to sea and two more days of pounding until we reached Bluff on the southern tip of New Zealand.

On reflection, I have learnt that Antarctica is a true wilderness. It's a part of Australia few will ever get to see. Travelling to Antarctica was a true adventure a hundred years ago and it still is. This was an adventure I will never forget.

ABOUT STEVE FRASER



Steve Fraser is one of Australia's leading landscape photographers. He has a spirit of adventure and a desire to share some of the world's most amazing locations with others. His work is collected by private and corporate collectors all over the world and has been published in books, print and electronic media.

Steve grew up in the remote northwest of Australia and developed a love of the Outback at an early age. This led him to begin a lifelong journey to

photograph some of the world's most beautiful locations.

His passion and love for photography has taken him across the globe into every continent and has allowed Steve to experience some magnificent landscapes and to live through some incredible personal moments. His spirit of adventure ensures that he will go to extremes to capture a special moment.

To stay informed of the latest news and special offers, subscribe to his VIP Club at www.stevefraser.co

CONGRATULATIONS TO **JARROD**, WHO IS OUR PORTABLE AIR COMPRESSOR KIT WINNER FOR THIS ISSUE.

EVERYONE ELSE WHO APPEARS ON THESE PAGES WILL RECEIVE AN ARB SPEEDY SEAL PUNCTURE REPAIR KIT TO REWARD THEIR EFFORTS.



OLDER 4WDS

G'day ARB,

I am thinking about purchasing an older model 4WD, something like a 40 Series short wheel base LandCruiser and of course I would want to make it more capable to take on the tracks. I'm talking bar work, lockers and suspension...all the usual kit.

My question is, I notice a lot of ARB's time and efforts go into producing accessories for new or current model 4WDs, but I was wondering what the situation is with older models.

At what point does ARB stop producing accessories they once made—I wouldn't want to go to all the effort of finding a decent truck only to be unable to bolt some ARB gear to it.

Cheers,

- Jarrod

Hi Jarrod,

I'm happy to tell you that my 4x4 is now over 22 years old and that all the ARB gear on it is still very much available.

There is, however, no hard and fast rule on this question.

We do pride ourselves on letting you, the customers, decide on when to retire products. To demonstrate how important we see older vehicles, in the last 10 years, we have released new products for both the 40 Series and 60 Series LandCruiser.

There are certain minimum run sizes that we must make for any product to maintain its price at a reasonable level, and it is only when sales for an item falls well below that minimum run size over, say, a twelve month period, that we take a hard look at them. Even then, there are other factors that we take into account,

such as other products we sell for that vehicle that might be affected if the slower selling item was no longer available.

Older vehicles and their owners are definitely important to us and we think we are one of very few aftermarket companies that can make the claim that we support product for as long as possible.

As a matter of interest while researching my reply for this letter, I wanted to find out what vehicle specific product we currently listed was the oldest. Of the 49,750 items in our computer system, the one with the oldest application is AVM401, which is a set of AVM hubs that suit a 1942 Jeep (we had two sets in stock at the time of writing).

The best advice I can give any potential customer of ours is to always check with your local ARB store before committing to any vehicle purchase. This does not only apply to older vehicles. There are some traps out there you can fall for, especially with some of the more off beat models and versions, and it's easy for our sales staff to give you a price list of all products we do for any of the popular vehicles.

We will never tell you that you purchased the wrong model vehicle (it's not very polite or professional), but you may soon reach that conclusion yourself if you have not done your homework.

**- Greg Milton, Manager
National Products & Services**

PRIZE FOR LETTER OF THE MONTH

This issue, we're giving away another portable air compressor kit, so here's your chance to win one! Simply write to us and ask us anything you'd like to know about ARB and our products. The letter of the month will be published in the next edition of ARB 4x4 Action, along with our reply. The winner will need to pick up the compressor from their nearest ARB store.

Send your letters (250 words or less) including your address and daytime phone number to:

› Email: marketing@arb.com.au

› Post: ARB 4x4 Accessories
Marketing Department
PO Box 105
Kilsyth VIC 3137

› Facebook: www.facebook.com/ARB4x4

While we will endeavour to reply to all letters, due to the volume received, it may not always be possible. Please note that all entries for this section are only reviewed on a quarterly basis. Should you have a question that requires a more immediate response, please direct it to sales@arb.com.au. We reserve the right to edit all letters for clarity.



GONE FISHING

Hi there ARB,

Just dropping you a line to say how two of your products really made a big difference on my recent fishing trip to the remote Balbinya Dunes at the western end of the Great Australian Bight.

I must say how impressed I am with the CKMA12 compressor which I installed under my rear passenger side seat of my 2007 HiLux. This compressor not only pumped mine and my friends' tyres without fail for four days, but also proved successful in reseating the bead on two tyres I rolled off whilst running 15PSI and turning hard off a beach.

The other product which saved me, or more so the fish fillets, was the ARB 47L fridge, which due to its voltage cut off told me something was wrong with my dual battery and hence allowed me to rectify the blown fuse.

Regards,

- Greg

Hi Greg,

Great to hear that your ARB compressor and fridge freezer came in so handy.



ARB's philosophy has always been about quality, reliability and practicality above all else, which is why we have forty staff in our engineering departments who undertake extensive research, concept work, prototype development and testing of ARB products.

The ARB Fridge Freezer range was actually designed from scratch. This involved one of the largest investments in design, development, testing and tooling that ARB has ever made to ensure we got the product right and offered users a heap of great features.

Continued from page 11...

Part of that, as you've discovered, is the handy integrated battery protection system, which features an automatic cut out when the voltage drops below a specified level. It also allows users to manually select a minimum operating voltage for the fridge to prevent excessive battery discharge.

The ARB Fridge Freezer has won the last two fridge comparos in 4WD Action magazine. Similarly, the portable version of the on-board air compressor in your HiLux won 4x4 Australia's air compressor comparo in 2008, while its twin motor sibling won the same comparo in 2011.

In developing the air compressor range, ARB's engineers built their own dyno with a computerised test bed in order to graph output and other data. Testing included cooking one prototype in a 160°C oven for hours and continuously running another prototype for 55 hours underwater to discover when the engine wore out. The thorough design and testing process helped to deliver a class leader the world over.

This level of design and development is not exclusive to ARB compressors and fridges. All products undergo a thorough development and production program — if its quality, practicality and reliability can't be assured, you won't find it at an ARB store.

All this is so that 4WDers have the product support to confidently reach remote locations and enjoy their off road adventures.

Here's hoping you caught plenty of fish on your own adventure.

- Kelly Teitzel, Editor



RIDE HEIGHT AND VIBRATION

Hi ARB,

I have a Triton dual cab 4x4 with auto transmission. I want to raise the ride height to give more ground clearance but have been told that you can get a vibration at some speeds due to the drive shaft angle changing. A friend did his and at 90-105 km/h he gets a vibration that makes the ute not nice to drive.

Is this the case in all Triton suspension lifts? How can this be overcome?

I have been told that taking the tail shaft out and turning it half a turn can help with the problem.

Thanks,

- Craig

Hi Craig,

Thanks for your question regarding suspension upgrades for the Mitsubishi Triton and possible driveline vibrations.

Driveline vibrations can occur when you raise a vehicle (not just a Triton), and the raised height changes the relationship of the flanges at the differential and transfer case. Old Man Emu engineers ensure during the development process that the recommended height increase

does not cause driveline vibration or, if it does, that a suitable fit kit is developed to eliminate this vibration. In some cases where a suitable solution is not possible, this becomes the limiting factor to the amount of ride height that can be increased.

It is very important that the correct springs are selected to ensure that the correct ride height is achieved. When a heavier-than-required spring is selected, you generally will receive a greater ride height but could face the issue of a driveline vibration. This is generally the first area that we would check if a vehicle was experiencing driveline vibration.

In vehicles that are sensitive to driveline angle changes, there are some possible solutions to correct driveline vibration such as caster wedges, indexing the driveshaft (turning the driveshaft as you mentioned) or even balancing the driveshaft. These need to be addressed on a vehicle-by-vehicle basis and are not necessarily a 'one solution fits all' approach and are best conducted by an experienced mechanic.

As mentioned, it is worth purchasing an engineered suspension system like Old Man Emu that has been designed to ensure you don't experience these issues.

**- Mark de Prinse, Manager
Old Man Emu**

TRACTION AIDS

Hi ARB,

I picked up the latest edition of ARB 4x4 Action mag when in at my local ARB store. What a great read! Love the pics, advice, tips and info. Keep up the excellent work!

Now, my question.

We have recently got back into four wheel driving after a long work-enforced absence. Cars have certainly advanced since our first fourby, an NG 1990 model Pajero, some 20 odd years ago!

We now own a 2009 NT Mitsubishi Pajero and we were wondering if there is a need for a diff lock (front, rear or both)? The Paj has MATT (Mitsubishi All Terrain Technology), ASC and ATC, which makes her quite capable off road.

Would the diff lock further enhance these standard features and give us some more confidence tackling some good spots?

I had a look at the ARB Air Locker in store. Good display model!

Anyway, I'd value your opinion and advice. Most of our driving is on bush tracks, sandy beaches and National Park trails (gravel, rocks, etc).

Many thanks,

- Sally

Hi Sally,

Your MATT traction system is dependent on your Pajero's braking system to force engine torque into the wheels with grip. It uses the same sensors and computer control that your vehicle employs for ABS braking—it detects when a wheel has locked up and reduces the braking force going to it in order to keep it spinning.

But as an off road traction aid, these sensors use wheel rotation to detect

when a wheel is spinning due to slippage. When the system detects slippage, it uses an onboard pump to apply braking force to that particular wheel. This stops all of your motor's power from escaping through the spinning wheel.

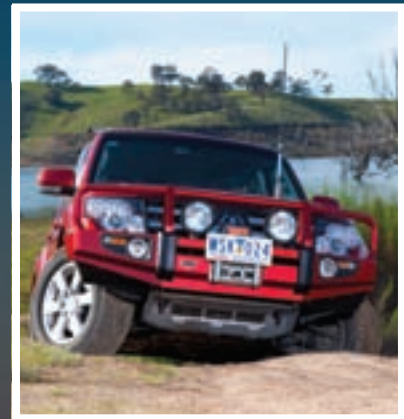
We are increasingly seeing brake-based traction aids available under various names by the different auto makers. These traction systems offer many advantages, but there are a few points to keep in mind when deciding whether to go the extra mile and equip your vehicle with Air Lockers:

1) As these brake-based traction systems use your vehicle's braking system to generate the traction, they are also causing wear and tear to your brakes. The degree of wear and tear is proportional to the amount of assistance you get from the traction control system—so harder trails or more slippery surfaces are going to cause much more wear than street driving.

2) Frequent use of your brakes can also result in a high degree of heat being generated in your brakes. As you are not generally aware of the temperature of your brakes, the auto makers have integrated a temperature sensor, usually one in each wheel. When a dangerously high temperature is detected, your vehicle is programmed to shut off your traction control system until the brakes cool down to a safe level. At this point, you will be temporarily left without any form of traction control to help you.

3) Applying braking force consumes motor power; it's an unfortunate law of physics. So everything you are getting in traction assistance, you are equally sacrificing in motor torque, and when off road you often find that you just don't have any extra motor torque to spare.

This is especially true in loose sand driving where it is generally very important to keep the vehicle moving—however, your traction control system will detect wheel



slippage in alternating wheels and apply your brakes accordingly.

4) It's not generally the obstacles that you expect that get you into trouble... washouts from flash flooding, getting off the groomed trail because of damaged track signage, or extra deep ruts caused by heavy vehicle traffic are all too common examples of the unexpected obstacles that will bite you when you least expect it. There are a lot of things about any car that are not designed to cope with such conditions, but ARB's Air Lockers were designed to cope with the worst that a trail can throw at you, so you'll never need to worry about pushing them too far.

5) Turning on your locking differentials whenever things get a bit rough not only grant you the 100% traction that Air Lockers are known for, but it will also make your wheels rotate at the exact same speed. This therefore tricks your ABS computer into thinking that you are not on a rough surface and will stop applying any unwanted braking force, effectively switching your traction control system off automatically when it is not needed. This saves your brakes and motor power right when you need them the most.

In this way, we feel that Air Lockers and brake-based traction control systems are a perfect match.

- Daniel Bongard, Engineer
ARB Air Lockers



GLORIOUS MUD

DRIVING IN MUD IS ONE OF THE MOST CHALLENGING TERRAINS 4WDERS FACE, SO KEEP THESE TIPS IN MIND NEXT TIME THINGS START TO GET A LITTLE STICKY.

From bog holes and sticky clay to slippery Outback tracks, mud driving can be exhilarating, challenging and a lot of fun. It can also be potentially damaging for both vehicle and ego alike, so it's best to be prepared.

Unlike a lot of other types of 4WDing, successful mud driving often requires us to ignore our instincts and instead follow proven techniques for getting through unscathed.

BEFORE YOU DIVE IN

It should be said that whilst blasting through a bottomless bog hole can be fun, in reality, given the potential for vehicle damage it should be avoided where possible.

Aside from the obvious dangers that come with lack of control, mud has an uncanny ability to make its way into every nook and cranny of your 4WD. Being a mixture of water and dirt, this can cause a range of problems including rust, contamination of driveline lubricants and the blockage of important mechanical and electrical components.

So, before you dive in, make sure you're prepared for a lengthy cleaning session once you're done.

PREPARATION

There are a few things to consider before driving a muddy section of track. How deep is the mud? If the track is rutted, does the vehicle have enough clearance? Are there any obstacles hidden below the surface? If I make it through this section, what's around the corner? What's my backup plan should I need recovery? These are all questions you need to ask yourself before taking the plunge.

Determining the composition of the surface is another important

consideration that will likely impact on your choice of tyre pressure. Sloppy mud with a harder gravel base is best tackled with moderate pressures (22-25PSI) to allow the tyres to dig through to the harder base.

Conversely, if the mud is deep, then lower pressures will allow the vehicle to 'float' more and prevent it from sinking as far into the abyss. At too low a pressure, mud has a tendency to work its way into the bead of the tyre which can cause sealing issues and slow leaks.

It goes without saying that traction aids, including centre and cross axle diff locks, should be engaged before driving down muddy sections of track. Just be mindful that locking your front diff can negatively affect steering response, so if precise wheel placement is required, consider leaving the front unlocked.

DRIVING

Controlled momentum is the key to successful mud driving. With this in mind, low range is the preferred choice and 2nd or 3rd gear will provide a good balance of torque and momentum whilst helping to minimise excessive wheel spin.

If your vehicle has enough clearance, then it's always a good idea to stick to the ruts, which will aid in keeping you on the track and out of harm's way. If you do begin to lose traction on flat or uphill sections of track, then careful but deliberate side to side movement of the steering wheel can assist your tyres in finding traction.

Travelling down a muddy slope can be a heart stopping experience. Try and stick to the high side of the track and, where possible, use the vehicle's engine braking to control your speed

whilst staying off the brakes as much as possible. As good as modern ABS systems are, it's still very easy to lock the brakes and lose control in muddy conditions.

In downhill situations, the back wheels can have a habit of trying to overtake the front, so it's important to be aware of the direction of your front wheels and try to keep them pointing straight forward, rather than using excessive steering input. If you find yourself losing control, then a short stab on the accelerator to bring the vehicle back into line is more effective than applying the brakes, which will only exacerbate the situation.

ADVANCED TECHNIQUES

Whilst traction control in modern vehicles is a fantastic addition to a 4WDer's traction arsenal, it is possible to mimic the system in older vehicles. Gently pulsing the brakes whilst accelerating up a slippery hill can help to minimise wheel spin and increase traction by intermittently braking the spinning wheel/s. In vehicles with electronic traction control, the ABS system (albeit much more effectively) performs a very similar process.

On steep, slippery downhill sections of track, applying too much brake or even being in too low a gear, can cause the wheels to lock up and slide. 'Driving through the brakes' is a very effective technique for countering this. By maintaining a moderate braking pressure and using the accelerator to drive the wheels, it prevents them from locking up and will allow you to maintain greater control.

For the inexperienced, both of these techniques should be practiced under the instruction of a qualified 4WD trainer before attempting them off road.

BRIGHT SPARK

GOOD LOOKS AND PRACTICALITY COME TOGETHER IN THE NEW INTENSITY LED DRIVING LIGHTS BY ARB.

We've all seen the magazine comparisons and the boldly advertised performance characteristics of the big brands in driving lights, all wanting to impress everyone with how powerful and long ranging their beams are and how many candelas they produce. This might impress the boys down at the pub, but really long bright beams are not all that practical.

At ARB, we are our own harshest critics. Because we are all enthusiasts to start with, we want to produce the products that we ourselves want to use. We want lights that are durable enough to last in extreme climates and

survive the constant vibrations from our corrugated roads. We want lights that give great optical performance to help us see better at night and give us the best chance of seeing that approaching kangaroo.

High Intensity Discharge (HID) alternatives to halogen lights have been available for many years, and as the technology is more widely adopted, the price of it has reduced. HID offers some performance improvements over halogen, of course, but it's really just a new light source for the traditional style of lamp and reflector design, and as such it has limitations and disadvantages

especially for road use. Glare from roadside objects and signs is particularly bad with HID, and unless you also have upgraded low beams to match the performance of the driving lights, dipping back to low beam can be like turning all the lights off momentarily. We see people upgrading to even higher wattage HID and wonder why.

Light technology is changing, but keeping up for the sake of it is not ARB's style—using new technology to solve old problems is what we love to do.

Enter LED (Light Emitting Diode) technology. Unlike halogen, which is electricity heating a wire filament inside a quartz tube filled



**32 LEDS WITH
A 50,000+
HOUR LIFESPAN
PRODUCE A WHITE
LIGHT THAT IS
THE CLOSEST
POSSIBLE COLOUR
TO SUNLIGHT,
THUS REDUCING
EYE STRAIN AND
DRIVER FATIGUE**

with halogen gas, and HID, which replaces the filament with an arc struck inside Xenon Gas, LED technology generates photons from the movement of electrons inside a semiconductor. There is much less heat involved in the generation of these photons, and therefore the life expectancy and efficiency is massively increased.

There is heat generation in the LED process, however it emanates from the circuitry required to drive the electronics behind the LEDs, not the light sources themselves.

DEVELOPING THE RANGE

It was early in 2002 when ARB first saw the new generation of high performance LEDs. Several companies in the USA started using these light sources in a horizontal array that are now known as LED light bars. Great for off road racers and rock crawlers, these light bars are expensive and not easy to mount, and single units are illegal in most Australian states. Typically, these lights are flood style beams and put a lot of light out but with a relatively short range.

In 2009, ARB began a program to develop, from scratch, a range of lights that featured this cutting edge technology. The brief was an

LED driving light that integrated well with other products. We wanted to create a pair of round LED driving lights that fit seamlessly with ARB's range of bull bars and other applications. We also wanted to offer the choice of beam style, because someone who drives long distances on highways does need a different beam pattern compared to an off roader who in spends time in the high country.

When the engineering program first launched, there were no round LED driving lights on the market, and so two years were spent developing the light body alone. This involved a number of design challenges, including how to best fit square optics into a round light, attaining the maximum possible number of LEDs (thus ensuring maximum lumen output), and obtaining an optimum weight and aesthetic look of the end product.

Weight in particular presented a challenge. Initially 4kg, the body needed to be reduced in weight to address issues regarding vibration, fatigue and a viable mounting bracket. By reducing surface areas and the amount of aluminium without adversely affecting the light's robustness, the engineers

succeeded in reducing the light's weight by 25%.

Another important aspect of the design was ensuring the lights were truly waterproof. Instead of relying on a standard, off the shelf O-ring, ARB's engineers designed a fully moulded rubber seal specific to the new ARB range. Not only was it stronger and a better fit, the rubber seal helped ensure the lights could be safely submerged to three metres, regardless of whether the lights are on or off at the time.

Military specification testing on a shaker table was undertaken in a Melbourne laboratory to ensure the lights could withstand extended periods of heavy corrugations and extreme conditions. The military spec testing also assessed potential mounting bracket failure and fatiguing in an ARB bull bar's centre pan, where the lights would most likely be fitted. The lights, mounting bracket and bull bar all passed without signs of wear and outlasted the industry benchmark, the IPF 900 Series.

Countless engineering CADs and six physical prototypes were produced during the development stage, including a prototype



MILITARY SPEC VIBRATION TESTING WAS UNDERTAKEN IN A MELBOURNE LABORATORY TO ENSURE THE LIGHTS COULD WITHSTAND EXTENDED PERIODS OF HEAVY CORRUGATIONS

machined from a solid billet of aluminium. The prototypes have since travelled around Australia, performing flawlessly in extreme conditions at locations including the Flinders Ranges and Barrington Tops in NSW.

All this effort, knowledge and know-how has resulted in the release of the new ARB Intensity range of LED driving lights.

INTENSITY LED DRIVING LIGHTS BY ARB

Available as a spot or flood light, the Intensity LED driving range is engineered to deliver outstanding performance in all conditions.

32 LEDs with a 50,000+ hour lifespan produce a white light that is the closest possible colour to sunlight, ensuring the Intensity light reduces eye strain and driver fatigue. Unlike high intensity discharge (HID) lights, the LED range does not require time to warm up, and performs brilliantly on corrugated roads by producing a broad field of light that helps diffuse visible vibration.

The Intensity lights feature an extremely strong, high pressure cast aluminium body with a virtually indestructible polycarbonate lens. A hard coated, clear polycarbonate cover adds further protection and a classy look to the light.

The lights are dust and waterproof to IP68 rating and incorporate a goretex breather, waterproof Deutsch connectors and a custom moulded rubber seal for 100% waterproof sealing.

The light features an ARB engineered heatsink with 15 fins to help prevent heat damage to the LEDs and surrounding components. The heatsink also ensures the LED circuits run cooler and produce an optimum light output while also extending the light's longevity. Also incorporated into the design is integrated thermal management and over and under voltage protection.

Vastly more efficient than traditional halogen lamps, the Intensity range features a patented circuitry, optics and reflector array design. Utilising the latest

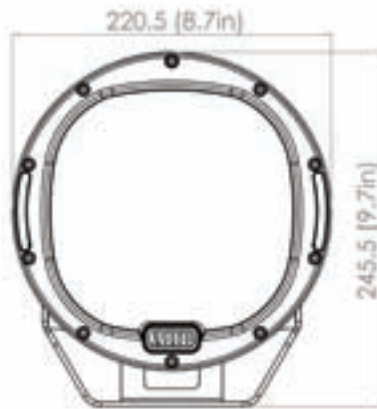
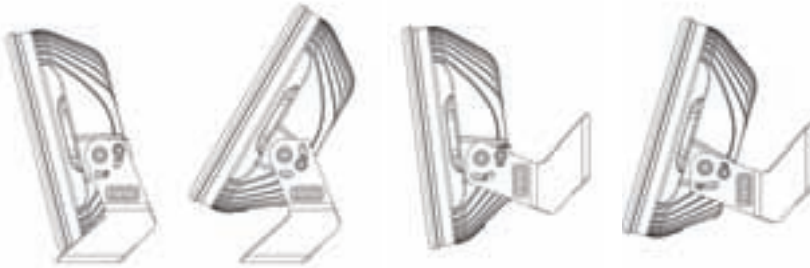
technology, this design results in an impressive 94% efficiency for a very bright, consistent light that requires even less power.

RoHS compliant, meaning the lights meet stringent restrictions for dangerous chemicals such as lead, cadmium and mercury, the ARB lights are also military spec vibration certified and protected against radio frequency (RFI) and electromagnetic (EMC) interference.

Instead of a plastic moulded mount often found on other brands of driving lights, the Intensity LED includes a patented, multi-position stainless steel mounting bracket. Also vibration certified to military specifications, the mounting bracket features a big footprint, versatile horizontal and vertical positioning, and has a clean TIG weld for added strength.

Finished with a UV resistant, two-pack automotive paint, the ARB Intensity LED driving light range is made under stringent quality controls in the US. The range will be available late 2012.

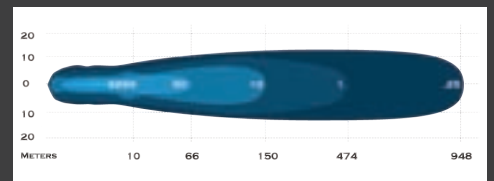
// Contact ARB for part numbers and pricing



SPECIFICATIONS

SPOT

Input	10-36V DC
Power	90W
Current draw	6.25A at 14.4V
Output	8200 raw lumens
Lux at 10m	2250
Spread	10° full width
Operating temperature	-40°C to 63°C (-40°F to 145°F)
Colour temperature	6500
Weight	3.1kg
UV emissions	0



WIN ARB'S INTENSITY LIGHTS

To celebrate the release of the new ARB Intensity LED driving light range, we're giving away two ARB Intensity lights to one lucky reader. To be in the running to win, simply write in and tell us in 100 words or less what brightens up your world. The winner will be selected by the ARB marketing department and will be contacted directly. The prize includes the choice of two spots, two floods, or one of each. Competition closes Monday, 31st December 2012.

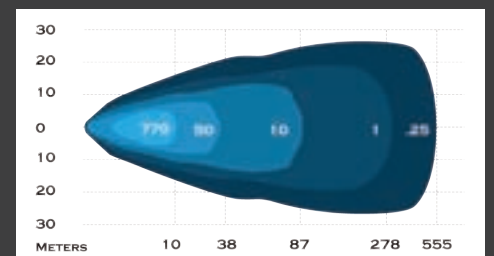
Post: ARB 4x4 Accessories
Marketing Department
PO Box 105, Kilsyth VIC 3137

Email: marketing@arb.com.au
(with 'Intensity LED' in the subject line)

Please include your full name, address and telephone number with your entry. Include an SSAE if you would like your entry returned.

FLOOD

Input	10-36V DC
Power	90W
Current draw	6.25A at 14.4V
Output	8200 raw lumens
Lux at 10m	770
Spread	20° full width
Operating temperature	-40°C to 63°C (-40°F to 145°F)
Colour temperature	6500
Weight	3.1kg
UV emissions	0





NOW OPEN

ARB'S LATEST STORE, LOCATED IN BUNDABERG QLD, IS NOW OPEN FOR BUSINESS.

With forty-four ARB stores and a network of over a hundred stockists across Australia, ARB has never been in a better position to provide 4WDers with all of their off roading needs.

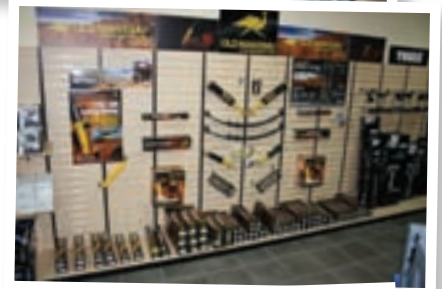
The latest ARB store to open its doors can be found at 106 Takalvan Street in Bundaberg. Bringing even more expertise to the ARB network, ARB Bundaberg offers outstanding service by friendly and experienced staff, many of whom are 4WD enthusiasts.

The store is headed by manager Ron Bennet, a keen 4WDer with years of experience in the industry. Ron and his team are able to supply the right accessories for your vehicle to help you prepare for your next off road adventure.

Stocking the complete ARB range from bull bars and protection equipment to ARB Air Lockers and Old Man Emu suspension, ARB

Bundaberg is also equipped with fitting bays to get your vehicle ready for a weekend getaway or an epic Outback trip.

So if you're in the Bundaberg area, why not drop in and visit Ron and the team at ARB Bundaberg, or call them on (07) 4153 2929.



CALENDAR



WIND UP THE YEAR WITH THESE EVENTS ACROSS THE COUNTRY. FOR THE LATEST UP TO DATE INFORMATION, HEAD TO THE CALENDAR OF EVENTS LINK ON THE ARB WEBSITE.

NOVEMBER

Mud Bulls & Music

November 1-4

LandCruiser Mountain Park, Jimna
www.mudbullsandmusic.com.au

ARB Hobart Open Day

November 3

5-9 Florence Street, Moonah
Ph: (03) 6228 6822

Perth 4WD and Adventure Show

November 9-11

McCallum Park, Victoria Park
www.perth.4wdshow.com.au

ARB Wentworthville Open Day

November 10

355 Great Western Highway,
Wentworthville
Ph: (02) 9631 7889

ARB Burleigh Heads Open Day

November 24

48 Kortum Drive, Burleigh Heads
Ph: (07) 5535 9223

DECEMBER

ARB Kilsyth Open Day

December 1

42-44 Garden Street, Kilsyth
Ph: (03) 9761 6622

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(BLOCK LETTERS ONLY)

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Contact me by: email post

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Model

Year

Vehicle #1 _____

Vehicle #2 _____



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www.facebook.com/ARB4x4



www.twitter.com/ARB4x4



www.youtube.com/ARB4wd



ON A ROLL



THE FIRST ROLLOUT OF ARB ENGINEERED AND MANUFACTURED PRODUCTS FOR THE HOLDEN COLORADO ARE AVAILABLE NOW.

With an engineering department employing 40 staff, ARB is perfectly placed to produce a range of thoroughly researched and designed accessories specifically made for the latest model vehicles.

Following the release of the new Holden Colorado, ARB's engineering and production teams have worked hard to produce new deluxe bull bars, Old Man Emu suspension, canopies and Air Lockers for this model, with more products under development.

For Colorado owners who regularly venture off road or in rural areas, a bull bar is an essential investment. Designed to complement the styling of the new Colorado, the ARB deluxe bull bar offers vital front protection through its durable steel construction and the utilisation of ARB's renowned multi fold and upswept wing design.

The bull bar also utilises ARB's proven split pan for increased airflow and strength, and features air bag compatibility and an optimised approach angle that is invaluable for driving in uneven terrain.



Designed to withstand the extremes associated with four wheel driving, the deluxe bar gives owners the option of having a winch installed and is the perfect platform for electric winches up to 9500lb. Other practical features of the Colorado bar include provision for CB aerials and IPF driving lights, plus two reinforced Hi-Lift jacking points.

A range of smooth and grained exterior ARB canopies are also now available. Featuring a vehicle specific design, the canopy is available in a mid roof version that allows extra headroom and carrying capacity. The Colorado canopy comes with a sliding front window and the option of sliding or lift up side windows to allow easier access to gear.

Old Man Emu's engineers have also invested considerable time and energy developing integrated suspension systems for the Colorado. Delivering noticeable improvements in load

carrying ability, handling, traction and control, OME suspension ensures owners can safely travel in comfort over any terrain. The range of systems for the Colorado include Nitrocharger Sport shock absorbers. Instantaneously adapting to any terrain, Nitrocharger Sport shock absorbers dramatically improve low and high speed control for increased comfort and control over all road surfaces. Combined with OME coil and leaf springs, the shock absorbers provide the improvements in ride, comfort, and handling customers have come to expect from Old Man Emu.

With over 250,000 units in use throughout the world, ARB Air Lockers are the choice replacement differential for 4WDers, off road competitors and commercial users requiring ultra tough and dependable traction on demand. Front and rear Air Lockers are now available for the Colorado, ensuring owners can

enjoy outright improvements in the vehicle's off road capabilities at the flick of a switch.

A pneumatically operated replacement differential, an Air Locker allows a vehicle to be driven in a more controlled manner, thus reducing the likelihood of vehicle damage and environmental impact. Both models incorporate the Air Locker's patented 'timed' locking mechanism for maximum strength and ultra fast disengaging, and a steel reinforced elastomer bonded annular seal designed to handle extreme temperatures.

The deluxe bull bar, Old Man Emu suspension, canopies and Air Lockers are available now, with more products to be released in coming months.

// Contact ARB for part numbers and pricing

FAR AWAY FROM NOWHERE

Words & photography by Mark Allen

POINT PLOMER MAY FEEL REMOTE, BUT WITHIN 15 MINUTES YOU COULD BE BACK IN TOWN PICKING UP FISH AND CHIPS.

Some say the NSW mid north coast (in particular the Port Macquarie region) is God's country... or damn close to it. The area has near perfect all-year-round climate (not too hot, not too cold), magic beaches fit for any level surfer, fisher and plain old relaxationalist, as well as plenty of outdoor activities for the camper and traveller.

Port (may as well call it like the locals do) is nearly halfway between Sydney and Brisbane and offers a few camping places that would have most presuming they are a lot more remote than in reality.

One such not-so-well-known place is Point Plomer, within the boundaries of Limeburners Creek Nature Reserve. Would you believe it's a short 15km north from town centre to camp central? Imagine being able to set up camp right behind the dunes within about an hour of when you left home (for the locals) or the shops (for everyone else) and being able to camp in one of the most pristine beachfront addresses in the country.


Oh, and there are showers (albeit cold ones), flushing toilets and even a small onsite kiosk for those who forgot to bring LPG, fire

wood, bait and ice creams... this is camping in style!

GOAT TRACK OR BOGGY SAND

Heading from Port Macquarie, you've got two options to get to the Point Plomer campground once you've driven off the vehicle ferry which takes you over the Hastings River.

The main track, Point Plomer Road, is not maintained by the councils (or anyone else for that matter) and will vary in its degree of roughness depending on current and recent weather conditions. If it's been



**IF IT'S BEEN BUCKETING
DOWN, THE TRACK WILL
BE FULL OF TINY WATER
CROSSINGS, HUGE PUDDLES
AND WASHAWAYS**

bucketing down, the track will be full of tiny water crossings, huge puddles and washaways, most of which have decent, solid bottoms but do check track conditions as they will vary.

If it's dry, expect all these same hollows and ruts to be present, just without the water. Your speed will be slow due to the few corrugations and potholes, but don't let that deter you—you've only got about 15km of it before you reach the campsite.

The alternate beach run allows for a much smoother and faster drive, providing you play the tidal waiting game right. Otherwise the sand can get soft and boggy up high, and at places be covered in water with extra high tides. 4WD beach access is available up to Queens

Head, where you'll need to exit the beach, get back onto the main track (Point Plomer Road), followed by a short drive into camp.

This run should be much quicker providing you don't get bogged down in the soft sand or stop for a fish, surf or swim along the way. It is pretty inviting and you may as well make the most of it as the campsite really is so close.

From the Crescent Head end, you'll be bumping your way south on the occasionally-graded section of the road before getting into the non-serviced section until you get to camp. 2WDs and 4WDs towing larger vans are best tackling the roads from this end—it's easier but you don't get to travel along the beach proper.

Once you're into camp, there isn't a hell of a lot of 4WDing to do as the beach at this point is only accessible by professional fisherman and for launching boats. The main track up and down the coast is easily passed by 4WD even with camper trailers and caravans in tow. Don't be surprised to see plenty of 2WDs in the campgrounds—they most likely got in from Crescent Head from the north on sealed and easy gravel roads.

Once you've paid your fees, take your pick of the many grassy campsites that run along the coastline, set up camp, sit back and relax... or hit the beach with fishing rod in hand.

While you're whittling away the hours either on the beach or back

YOU'LL NO DOUBT CATCH SIGHT OF GOANNAS AND DINGOES SCROUNGING AROUND FOR FOOD, SO ENSURE YOURS IS ALL LOCKED AWAY SAFELY



at camp, you'll no doubt catch sight of goannas and dingoes scrounging around for food; so ensure yours is all safely locked away. You'll have the opportunity to watch dolphins and whales (depending on the season) as well as plenty of feathered creatures while walking along the surrounding tracks.

Taking a hike up to Big Hill lookout or Queens Head will allow a vista right back south to Port Macquarie and both are walks well worth undertaking. There are even park benches at the top of each walk for those who need to rest weary bones and take their time to enjoy the whole experience. There's

plenty of grassy patches to fall asleep on, so do let others back at camp know that you may be gone a while.

Even though civilisation is not all that far away, you can easily forget and presume you're sitting in a far more remote area. If you're luckless at catching a fish or happen to have forgotten to bring enough food and drinks with you, you could just duck into town for a meal at the club, pub or restaurants, then buy some fresh fish and cook it up the next morning for brekkie—not a bad idea, hey?

That's camping in luxury!

HISTORY

Aboriginal occupation is claimed to have existed some 5000-6000 years prior to white settlement and there is an Aboriginal fish trap at Barries Beach. There are shell middens, burial sites and stone tool production sites scattered throughout the reserve.

The actual name 'Limeburners' is derived from the days of burning oyster shells to produce lime for mortar. Free settlers moved into the area once the local Port Macquarie penal settlement was closed.

Limeburners Nature Reserve was created in 1971 and covers just over 9000 hectares consisting of coastal heathlands and small patches of rainforest. Many signs now depict the area as Limeburners National Park, rather than a Nature Reserve. Either way, it's a top spot.



IN BRIEF

STAYING THERE

Camping at Point Plomer will set you back \$5 per child, \$20 for one or two adults plus \$7 per car (unless you have an annual pass), all of which is per day. All sites are unpowered.

Point Plomer is suitable for all manner of camp setups: car-based, tents, camper trailer and caravans. Flushing toilets and cold showers are available.

Fires are permitted, although you'll have to bring your own wood or purchase it from the onsite manager.

While there is water onsite for washing, it's all bore water so you'll need to bring your own drinking water.

There is an alternate campsite at Melaleuca (north of Point Plomer campground), which is just as

picturesque but doesn't offer the flushing toilets and showers. If you're happy to use pit toilets with the extra 100 campers, this is also a top spot.

More information can be gained from the park office on (02) 6583 8805.

GETTING THERE

Limeburners Creek Nature Reserve is smack bang between Port Macquarie and Crescent Head and can be accessed via the Settlement Point Ferry (for \$3.10) in Port Macquarie (which operates 24/7, except the fourth Wednesday of each month between 9:30am and 3:30pm); turning right as you exit the ferry will take you to the southern end of Point Plomer Road.

Alternatively, turn east off the Pacific Highway at South Kempsey and head towards Crescent Head.

Once almost into the centre of town, turn south onto Baker Drive, which will change its name to Point Plomer Road and is at the northern end of the track.

FUEL AND SUPPLIES

You'll have plenty of opportunity to stock up on fuel, food and supplies in either Port Macquarie or Crescent Head. Once into camp, there are a few basics at the manager's office, but you'd be better off bringing it all with you.

PERMITS

Driving on the beach from the Port Macquarie end of the Point Plomer track necessitates a beach driving permit. Vehicles are restricted to a maximum speed of 50km/h.

Keep in mind pedestrians have right of way over vehicles at all times.



ISUZU UTE AUSTRALIA CLOCKS UP 20,000 SALES

ONE-TONNE LIGHT COMMERCIAL VEHICLE DISTRIBUTOR ISUZU UTE AUSTRALIA (IUA) SELLS ITS 20,000TH D-MAX UTE TO ARB.

Commencing business at the height of the global financial crisis in October 2008, IUA made a modest impression on the market, opening with just 52 sales in their first month. With a reputable product on hand, the Isuzu D-Max soon forged a place in the Australian market and the company has enjoyed an average annual growth of 33 per cent.

To accommodate this rapid growth, IUA's dealer network increased from an original 39 dealers in 2008 to a network of 82 across the country today.

"This is a significant milestone in the history of Isuzu UTE Australia but it's only the beginning," said IUA's managing director Mr Yasuhiro (Yasu) Takeuchi.

"We have made steady progress over the past few years and now, with the introduction of our all-new model, we have set our sights higher and will be aiming to sell 10,000 units per annum in the very near future.

"Our growing dealer network also allows us to provide better after sales service to ensure our customers are always happy – and that's positively reflected in our recent customer satisfaction survey," Mr Takeuchi added.

In a fitting coincidence, the purchaser of Isuzu UTE's 20,000th D-Max was off road accessory specialist ARB.

"Our ARB Moorebank store in Sydney purchased the D-Max and

it will be outfitted with a range of ARB accessories," said ARB national sales and marketing manager Matt Frost.

"We'll use it as a demonstration vehicle to illustrate to customers how they can personalise their D-Max to suit their various needs. The D-Max is an outstanding vehicle for people wishing to travel into remote parts of Australia, and serves as the ideal platform for people wishing to build the ultimate off road tourer," Matt added.

The new acquisition ensures ARB's engineers can get started on a huge range of products for D-Max owners. Further details will be released in an upcoming edition of the magazine and on the ARB website.

ON THE SIDE

Toyota Prado 150 owners can now enjoy the benefit of side and front guard protection with the release of ARB side rails and steps. Compatible with the Prado's side curtain air bags, the side rails and steps utilise steel tube formed into shape using an internal mandrel bender, ensuring consistency and even wall thickness across all sections. The addition of tread plate steps allow for easy access to the vehicle.

// Contact ARB for part numbers and pricing



NEW BT-50 & RANGER RECOVERY POINT



To add to the huge range of products already available for the latest Ford Ranger and Mazda BT-50, ARB has just released a vehicle specific recovery point. Rated for use with a 4.75t bow shackle and 8000kg snatch strap, the recovery point was engineered from the ground up and underwent significant development and testing to ensure the vehicle's air bag deployment system remains unaffected. Engineered to safely handle the stresses of vehicle recovery, including an angled pull, the recovery point is available now from ARB.

// Contact ARB for part numbers and pricing

GO PACIFIC

Since the introduction of their first roof box back in 1977, Thule has been at the forefront of the industry with continual innovations and improvements to the roof box range. Thule's latest offering, the new Pacific 780 roof box, is no different and features an 'aero-skin' exterior, dual side openings, lowered base to reduce wind resistance and a huge 420L capacity. Available in either silver or black, the Pacific 780 roof box fulfils all the City Crash norms for safety and can be found at your local ARB distributor.

// Contact ARB for part numbers and pricing







THE GRANDDADDY

Words & photography by Chris Collard

THE JEEPERS JAMBOREE ON THE RUBICON TRAIL IS AN ICONIC INTERNATIONAL 4WD EVENT. CHRIS COLLARD EXPLAINS WHY.

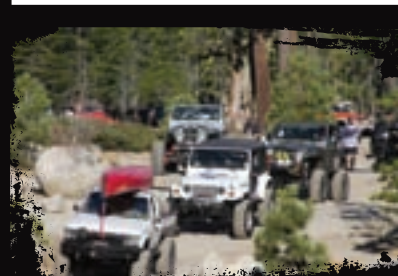
It was a cool summer morning in the foothill town of Georgetown, California. From the wooden rail balcony of the Georgetown Hotel, guests sipped coffee and took in the spectacle below. On the two lane country street, a few dozen Willys Jeeps lined up five abreast, wheels pointed 'upcountry' towards the High Sierra.

Opposite the hotel, members of the Rotary Club and the Georgetown Rifle and Gun Club prepared breakfast for the gathering crowd and handed out bagged lunches of fried chicken. There was excitement in the air and anticipation of a weekend of camping and Jeeping in the Sierra Nevada Mountains.

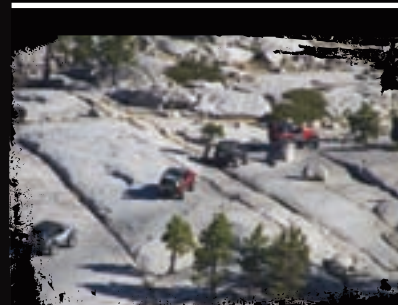
Twelve months earlier, a small group of Rotary members gathered at the home of Mark Smith. The focus of the meeting was to develop

a fundraising event to help the town's struggling economy. Several members had made scouting treks over the Rubicon 'Road' to Wentworth Springs and the Rubicon Valley, and decided a weekend Jeep trip might be the answer to their dilemma. Member Harold Krabbenhoft suggested the soirée be called the Jeepers Jamboree, and Smith was officially named 'Jeepmaster'. The year was 1952.

Sixty years later, on a cool morning in late July, I pulled my rig onto that same two-lane street and parked in front of the old Georgetown Hotel. Across the street, eager four wheelers lined up in front of the Jamboree office. Six decades had passed since the inaugural event but excitement levels were still high, with everyone anticipating the next four days of driving the Rubicon Trail.



While the Jamboree is predominately Jeep, most four wheel drive vehicles are welcome. There is always a peppering of Land Rovers, Toyota pickups and FJ40s.



After you make it through the Gatekeeper, the trail opens up into what is known as the Devil's Playground.



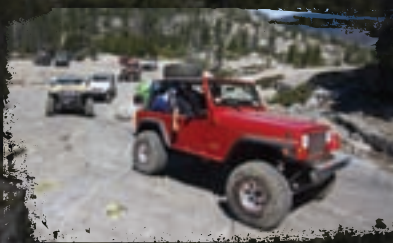
Departing Loon Lake, the Granite Bowl spreads out like an ocean. It is the product of the last Ice Age. Its surface is smoothly finished as if polished by a giant buffer.



This area is known as Soup Can, apparently because one of the early vehicles rolled over and left a Campbell's soup can in the middle of the trail.



Vehicles lined up near Spider Lake.



These two photographs, the black and white being fifty years old, were taken from the same spot near the Little Sluice and Spider Lake.

There are few off road events that have stood the test of time, shifting economic cycles and environmental extremism, yet the Jeepers Jamboree has thrived. Since 1953, Jeepers Jamboree guides have led more than 35,000 vehicles and 102,000 guests to

SINCE 1953, JEEPERS JAMBOREE GUIDES HAVE LED MORE THAN 35,000 VEHICLES AND 102,000 GUESTS TO THE RUSTIC 19TH CENTURY RESORT AT RUBICON SPRINGS

the rustic 19th century resort at Rubicon Springs. Over the years, hundreds of magazine articles, TV shows, and documentaries (in more than a dozen languages and 100 countries), have rendered the Rubicon an international icon of 4WD trails. As for the Jeepers Jamboree, it has earned a reputation as the 'Granddaddy' of 4WD events.

Growing up less than two hours drive from the trail, I hadn't grasped the extent of the Rubicon's true notoriety until travelling in Africa, Europe, Australia and South America. When I would mention I was from California, and everyone would ask, "Have you been to the Rubicon? If I come to America, I want to drive the Rubicon Trail." The word Rubicon has become synonymous with Jeeping and 4WD sports.

ON THE TRAIL

Although the Jamboree originally departed from Wentworth Springs, today's participants stage and collect their lunches at Loon Lake on the edge of the Granite Bowl. Lunches, provided by the VFW (Veterans of Foreign Wars), are still a bag of fried chicken and fixins. The community tradition of Jamboree is still strong, as this is the VFW's largest fundraiser of the year. The same applies to the Placerville American Legion, who manages the Jamboree kitchen and saloon in Rubicon Springs.

The view from Loon Lake is a spectacular example of Mother Nature at her finest. Ancient pine and fir trees rise from small fissures in solid granite, lining the approach to the first obstacle. The Gatekeeper, appropriately named

due to its difficulty and location at the beginning of the trail, filters out all but the most capable vehicles. The Granite Bowl dipped to the north, hosting a parade of Jeeps, Toyotas, Land Rovers, and vintage Broncos (the Jamboree allows all makes of 4WDs). Each section

of the trail seems to have been labelled: the Big Sluice, the Little Sluice, and the Soup Can. Then there are those tough spots named after Jamboree pioneers, such as Walker Hill and Arnold's Rock.

Though only 16 miles in length, it would take the entire day to reach the cool waters of Rubicon Springs. By late afternoon we arrived at Buck Island Lake, where the mechanic crew was busy fixing broken vehicles. The Jamboree helicopter swept overhead on a low pass and landed on a granite helipad. One of the mechanics ran off to collect parts for one of the damaged Jeeps.

"Jeepers Jamboree has a motto," said Jamboree President Dan DeWolf. "We'll get you in, and we'll get you out."

If your vehicle needs repair, there is no charge for the labour or helicopter, just the replacement parts.

Beyond Buck Island lay Rockbound Lake and the Desolation Wilderness area. The last section before arriving in Jamboree main camp in Rubicon Springs is a boulder-strewn descent known as Big Sluice. Crossing an Erector Set-type bridge over the Rubicon River places you firmly in Rubicon Valley.

RUBICON SPRINGS

Jamboree offers three, four and five-day trips. The first day is spent on the trail, with the following days relaxing by the river, enjoying the main camp and being pampered with home-cooked meals from the Jamboree kitchen. Evenings are usually around the campfire, bellying up to the bar

at Amos' Place for a cold libation and enjoying the live band. To celebrate the 60th Jamboree, they gave away a fully-equipped Jeep Wrangler to one lucky participant.

For many, the Jamboree has become a generational family tradition. I talked to folks who experienced the Jamboree as teenagers bouncing around in the back of their father's CJ5, and whose grandfathers attended the Jamboree back in the 1950s in an old Willys flat fender.

Saturday afternoon, while 57-year Jamboree veteran Steve Morris gave a historical talk on the area, I sat with Mark Smith at the Rubicon Springs Ice Cream Parlor and listened to his recollections of the event.

Smith, now 85 years of age, is a legend in the four wheel drive world. As one of the founding fathers of the Jeepers Jamboree and Jeep Jamboree USA, he has led Jeep trips around the world. He, along with hundreds of other Jamboree staff, has been instrumental in the development and success of the event. Smith said, "It is hard to realise that 60 years ago we started something like this. I had no idea that I would even be here for a 60th Jeepers Jamboree. It is a great pleasure to be here today, to meet old friends, see faces again."

While Mark stopped to sign an autograph and take a photo with a fan, I asked Dan DeWolf about the next 60 years. He smiled and said, "Now that the Rubicon is an official county road, we have a very good chance to keep the trail open for future generations of 4WD enthusiasts. As for a 120th or 100th Jamboree, I probably won't be here, but I sure hope the Jeepers Jamboree is, and I hope people are still enjoying this amazing place."

RESOURCES:

Jeepers Jamboree:
www.jeepersjamboree.com

Rubicon Trail Foundation:
www.rubicontrail.org

Rubicon Historical Group:
www.rubiconHG.com



After skirting around the Little Sluice, the Rubicon passes a number of small lakes as it winds towards the Slabs and Buck Island Reservoir.



The view as the trail descends the Granite Slabs to Buck Island reservoir is worth the price of admission.



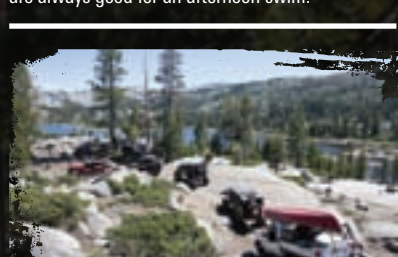
An old Willys flat fender traverses the Granite Slabs near Rubicon Valley.



Though most of the Rubicon sits at over 6000ft elevation, July temperatures are usually warm, and the crystal clear waters of Buck Island Reservoir are always good for an afternoon swim.



This pair of Jeep JKs came all the way from the state of Texas (1,500 miles) to participate in the 60th Jeepers Jamboree.



Passing Buck Island Lake en route to the Big Sluice.



Though thousands of vehicles traverse the Rubicon each season, the majority of the trail has changed little. Walk 100ft to either side and one would never know the road existed.



Jamboree rock rollers are your lifeline to getting to camp. They wear the traditional green jumpsuits and are great for spotting participants through difficult areas; such as this one on the Big Sluice.



There were dozens of vintage flat fenders on hand for the Willys Jeep show and contest in Rubicon Springs.



The author's 30 year old Toyota is one of the few non-Jeep vehicles on the Jamboree.



The Jamboree maintains two mechanic shops with the parts, tools and knowhow to fix just about anything.



This area of the Rubicon River is just a stone's throw from camp and offers one of the most picturesque sights in the Sierras.



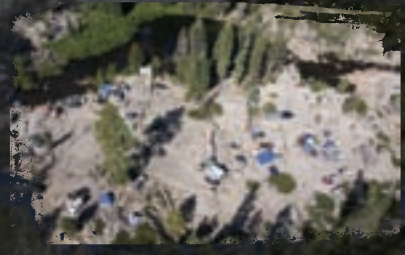
The Rubicon Trail Foundation has played a major role in preserving future use of the trail. Through numerous fundraisers, grants and generous private donations, the foundation has been able to position fulltime staff at key locations on the trail to educate users, hand out sanitation equipment and monitor usage.



The Saturday party in Rubicon Springs is all about whacky costumes and creative humour. Ray Avarado rigged up a 'pest sprayer' to dispense his special Bachi Ball drink to the crowd.



Camping near the Rubicon River.



From the air, the Rubicon River is lined with Jamboree campers.



Jeeping reunion. Author and adventure journalist Chris Collard (right) was reunited with Brian Franzia, his Jeeping partner from a 1998 trek across South America. The CJ7 behind them was one of the original vehicles from Mark Smith's 1978 Expedition de las Americas through the Darien Gap.



Serenading dinner guests, a two-piece duo strummed out sweet melodies while the sun set over the Sierra Nevada Mountains.



Amos' Place in the Rubicon Springs main camp has been a traditional Jamboree watering hole since 1957. With three generations working, the Heuser and Springer families are as Jamboree as they come.



This year's 60th Jamboree hosted more than 500 vehicles and 1,500 participants, and the cook crew served over 10,000 meals.



The book Rubicon Springs and Rubicon Trail History by Rick Morris is an excellent source of information on the area.



If you do the four day trip, you have the luxury of spending two full days just hanging out on the River. It is the perfect venue for water loving, sunbathing four wheelers.



Jamboree gives off road manufacturers a chance to show off their gear in the real world. With hundreds of participants walking the aisles, it has a carnival atmosphere.



Evenings are spent around the campfire and bellying up to the bar at Amos' Place for a cold libation.



Jeeper are practical jokers. Greg Smith, son of Jamboree founder Mark Smith, spent years scaring participants in a gorilla suit.



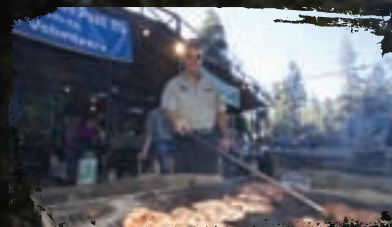
The first vehicle to Rubicon Springs arrived in 1908. It was a Mitchell Touring car owned by A.E. Hunter.



Volunteer Janelle Johnson dressed up and hustled cards for the Jamboree Poker Run. Winning hands received up to US\$500.



The original Rubicon Springs Hotel remained standing through the 1950s and 60s but eventually yielded to the heavy snow of Sierra Nevada winters.



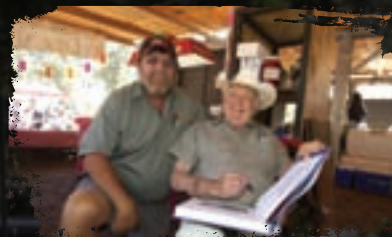
The Jamboree does a great job of keeping everyone fed. Thirty-two members of the American Legion Post 119 work 24/7 to feed Jamboree participants, and they have a blast doing it. As one of the first community service groups to work with the Jamboree, 2012 marked the Legion's 57th year of flipping steaks.



Jamboree has a helicopter onsite for flying in VIPs, transporting parts to broken vehicles, and scenic flights.



Early Jeeps line up on the way to the Rubicon Trail.



Jamboree founder Mark Smith (right) and current Jamboree President Dan DeWolf.



The steel-framed bridge, new in 1939, replaced the original log bridge over the Rubicon River.



The not-so-old flat fenders that traversed the Rubicon at the inaugural Jamboree in 1952 were mostly surplus military vehicles from WWII. Little did their drivers know that they were taking part in what would become known as the Granddaddy of all four-wheel drive events.



To celebrate the 60th Jamboree they gave away a fully equipped 1999 Jeep TJ Wrangler. Bob Sweeney handed the keys to Jeff Saari from Reno, Nevada, a first time participant.



Though they no longer take place, a long-standing Jamboree tradition was the trailer races. The original military Jeep trailers were designed to float while carrying a load. Remove the wheels and they make great...boats.

The image shows the interior of a vehicle, likely a truck or heavy-duty car, with two light blue Recaro seats. The seats have a quilted pattern and the 'RECARO' logo is visible on the lower backrest. A wooden steering wheel is positioned in front of the seats. The interior is framed by a dark, possibly metal, structure with some rust or wear visible. The overall lighting is dramatic, highlighting the seats and the steering wheel.

IN THE DRIVER'S SEAT

THE EPITOME OF SPORTINESS, SAFETY AND STYLE, THE RECARO RANGE OF SEATS HAVE LANDED AT YOUR LOCAL ARB STORE.

RECARO CREATED THE FIRST AUTOMOTIVE SEAT THAT DID NOT RESEMBLE A LIVING ROOM COUCH



Any 4WDer with a taste for comfort, quality and style has heard of the Recaro brand of aftermarket seats. They're the seats you settle into like your favourite pair of R.M. Williams boots, keeping you supported, relaxed and non-fatigued even after a long day off road.

What sets Recaro apart is their history as innovators in design and ergonomics. The first to introduce a seat with an integrated seatbelt, they were also the first to create pneumatic lumbar support and the first to release a seat with asymmetrical adjustment to meet individual body requirements. An intrinsic part of the automotive industry, Recaro even created the first automotive seat that did not resemble a living room couch.

The Recaro pedigree is phenomenal, and these days their seats are mainstays for luxury cars, motorsport vehicles, child seats and infant carriers, and even stadium seating for elite athletes. Recaro has not neglected 4WDers either, with a range of aftermarket seats specifically designed for off road vehicles.

ERGONOMICS

As anyone who has been stuck behind the wheel for hours on end can attest, the human body was not designed to sit down

for extended periods, and that's why ergonomics and comfort are paramount to Recaro.

Backed by decades of extensive collaboration with researchers from medicine, ergonomics and biomechanics, Recaro has a unique understanding of correct body support and how people should sit.

Individual lumbar support, high backrest and a closed, backbone-compatible and contoured backrest structure are integral for Recaro seats, giving long term seating comfort, ideal security and non-fatigue driving. The contour of the backrest cushion allows effective release for the muscles of the backbone whilst also delivering back support. Features such as adjustable lumbar support and side bolsters as well as an adjustable seat cushion element that lets the seat be moved to suit the length of the user's thighs all combine to ensure Recaro seats are fine-tuned to the user.

SAFETY

Car seats play a important role in driving—the better you sit, the better your reactions and control of the vehicle. Recaro's seats help you drive more safely and with greater concentration.

Stringent statutory and safety requirements are consistently

exceeded by Recaro, with the company also undertaking regular crash testing to improve both the quality of their seats and safety standards.

Many Recaro seats also feature a fully padded headrest for protection, belt guide for a 4, 5 or 6 point belt for ideal security and an anti-submerging seat cushion in case of a frontal crash.

QUALITY AND DESIGN

Recaro seats are made in Germany from premium quality components and utilise lightweight, design-orientated construction.

Firm contours, optimum streamlining, individual styling and exclusive good looks are combined with easy installation and baseframes that are precisely adapted to the characteristics of the vehicle.

Every production employee is responsible for the assembly of one complete seat and stands by the product quality with his own individual name.

Over 100 years of innovation and industry-changing design stand behind the Recaro brand so that you can sit comfy and supported even when travelling down the roughest track.

// Contact ARB for part numbers and pricing

CROSS SPEED

Great for long distance travelling and rough terrain, the Cross Speed range has a sporty look and offers backrest support from the shoulders down to the hip area. The backrest is adjustable by dual handwheels, reclines flat and includes dual tilt forward for 2-door vehicles.



CROSS SPEED S

- Designed for small framed, short, petite people
- One piece seat cushion with a flat angle for a firmer seat
- 460mm seat cushion length
- Flat side bolsters without internal steel bars for easy entry and exit from the vehicle
- Pirelli Mat Suspension system
- Optional extras include adjustable air lumbar and armrests



CROSS SPEED M

- Suitable for people who frequently get in and out of the vehicle, and for vehicles with a high point of entry
- One piece seat cushion with a flat angle for a firmer seat
- 500mm seat cushion length with 50mm leg extension
- Flat side bolsters without internal steel bars for easy entry and exit from the vehicle
- Pirelli Mat Suspension system
- Optional extras include adjustable air lumbar and armrests



CROSS SPEED L

- Ideal for travelling long distances
- Three piece seat cushion with a slight back slope angle for a softer seat
- 480mm seat cushion length with 50mm leg extension
- High side bolsters for greater support
- Pirelli Mat Suspension system
- Optional extras include adjustable air lumbar and armrests
- Replaceable side foams

EXPERT

Concentrating support around the ribs, the Expert range has been designed with adjustable side bolsters to allow flexibility in the amount of support provided. Like the Cross Speed range, the Expert backrest is adjustable by dual handwheels, reclines flat and includes dual tilt forward for 2-door vehicles. The Expert range also comes with an adjustable headrest.



EXPERT S

- Designed for small framed, short, petite people
- One piece seat cushion with a flat angle for a firmer seat
- 460mm seat cushion length
- Flat side bolsters without internal steel bars for easy entry and exit from the vehicle
- Pirelli Mat Suspension system
- Optional extras include adjustable air lumbar and armrests



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- Three piece seat cushion with a slight back slope angle for a softer seat
- 480mm seat cushion length with 50mm leg extension
- High side bolsters for greater support
- Pirelli Mat Suspension system
- Optional extras include adjustable air lumbar and armrests
- Replaceable side foams

SPECIALIST

The Specialist backrest offers the smallest side bolsters of the Recaro range, giving subtle support to the body, mostly to the waist area. The backrest is adjustable by dual handwheels, reclines flat and includes dual tilt forward for 2-door vehicles, and also comes with a headrest that is adjustable in height and angle.



SPECIALIST S

- Designed for small framed, short, petite people
- One piece seat cushion with a flat angle for a firmer seat
- 460mm seat cushion length
- Flat side bolsters without internal steel bars for easy entry and exit from the vehicle
- Pirelli Mat Suspension system
- Optional extras include adjustable air lumbar and armrests



SPECIALIST M

- Suitable for people who frequently get in and out of the vehicle, and for vehicles with a high point of entry
- One piece seat cushion with a flat angle for a firmer seat
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- 480mm seat cushion length with 50mm leg extension
- High side bolsters for greater support
- Pirelli Mat Suspension system
- Optional extras include adjustable air lumbar and armrests
- Replaceable side foams

ERGOMED

Offering small side bolsters similar to the Specialist range, the Ergomed seats concentrate subtle support to the waist area. The range features an adjustable headrest and backrest, and medium sized side bolsters on the seat cushion for greater thigh support. A Pirelli Mat Suspension system, 50mm leg extension and a three piece seat cushion with a slight back slope for a softer seat come standard.



ERGOMED E

- Electric height adjustment to 60mm
- Electric dual air lumbar
- Three position manual tilt adjustment
- 500mm seat cushion length with 50mm leg extension
- Optional electric heating and vent system
- Optional side air bags



ERGOMED ES

- Electric inflatable side bolsters on the backrest and seat cushion
- Electric height adjustment to 60mm
- Electric dual air lumbar
- Electric backrest adjustment
- 500mm seat cushion length with 50mm leg extension
- Optional electric heating and vent system
- Optional side air bags



COMPETITION

WINNER

SKYDOME SWAG COMPETITION WINNER

LAST EDITION WE CELEBRATED THE RELEASE OF THE NEW SKYDOME SWAGS BY GIVING READERS THE CHANCE TO WIN A DOUBLE SWAG. CONGRATULATIONS GO TO **STEVEN MERRIFIELD** FOR HIS PHOTO OF HIS FAVOURITE CAMPSITE WITHIN THE BOGONG HIGH PLAINS IN THE VICTORIAN HIGH COUNTRY.

WINNER!



STEVEN MERRIFIELD, VIC



ALLAN KNEESHAW, WA



BRIAN GRANT



GLENN WHYTE, SA



JASON MILLS, QLD



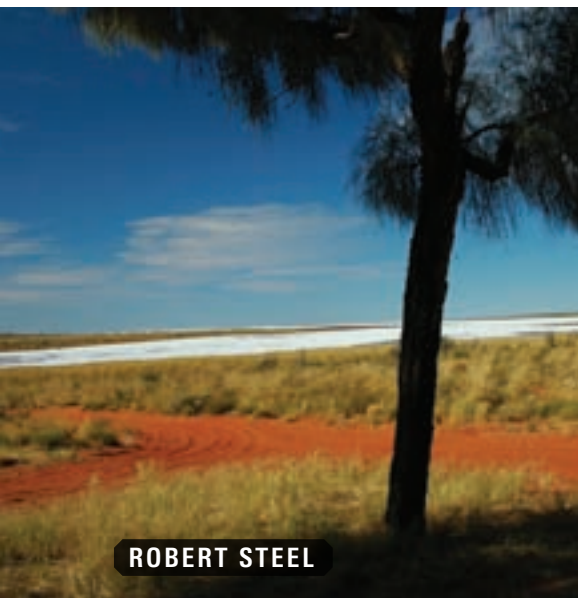
MICHAEL DE VRIES, NSW



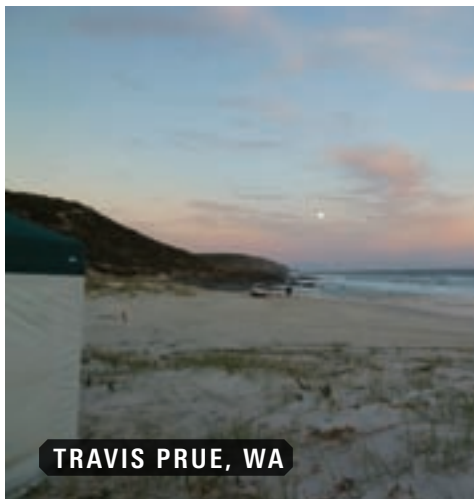
JEN REITSMA, NSW



JO QUINN, NSW



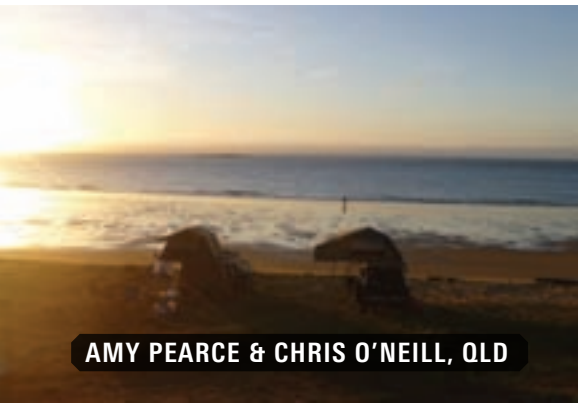
ROBERT STEEL



TRAVIS PRUE, WA



MELISSA COTTERELL, NT



AMY PEARCE & CHRIS O'NEILL, QLD



SUZANNE LEFOY, WA



GLEN BOYD, TAS



MARK CHOICE, QLD



JODIE COWARD, TAS



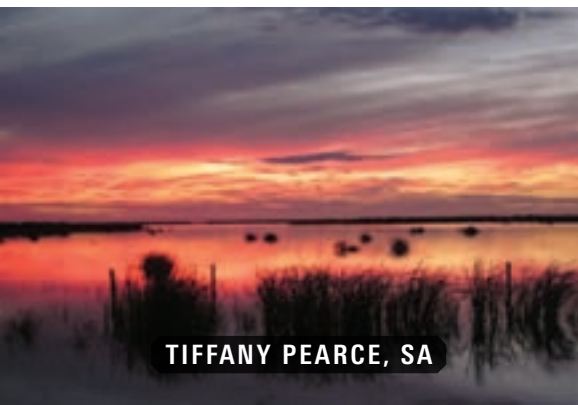
KERRY PEARSONS, SA



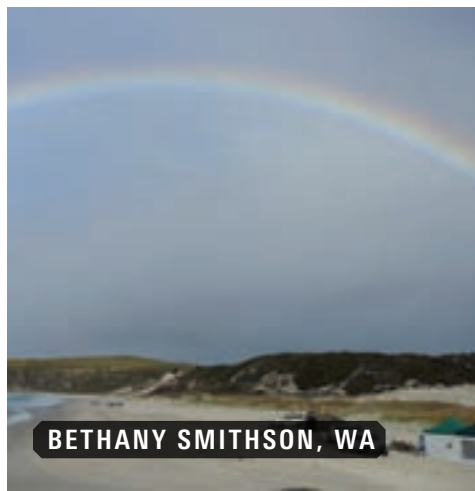
CASEY PRUE, WA



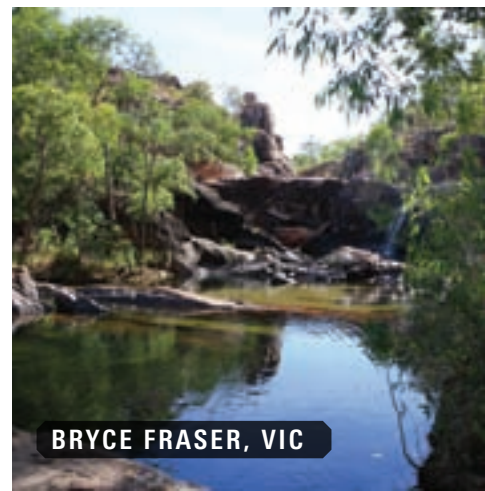
JOSH BRADMAN, TAS



TIFFANY PEARCE, SA



BETHANY SMITHSON, WA



BRYCE FRASER, VIC



PETER JAMES WAITE, TAS



BRYCE KILIAN, VIC



ANDREW 'DREW' LAU, VIC



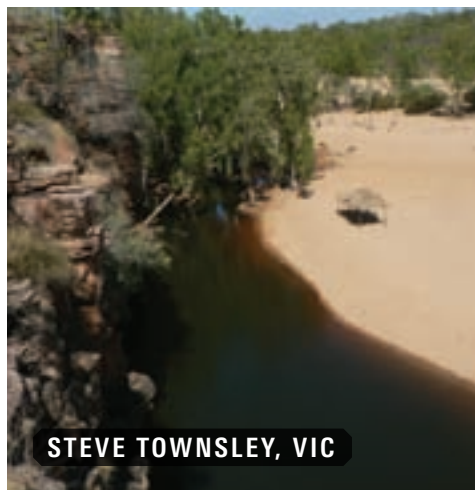
NICK HAMANN, VIC



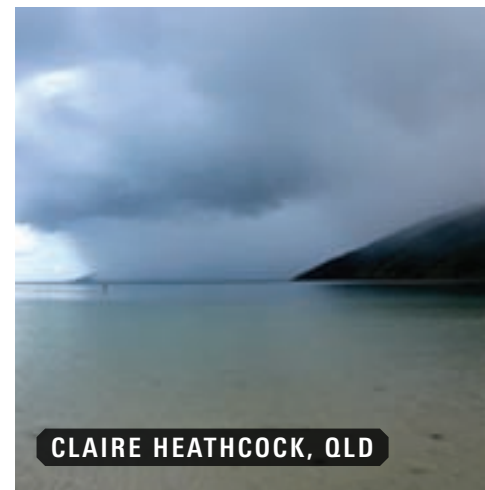
STEVEN HEVERA, SA



KENNY MACLEOD, VIC



STEVE TOWNSLEY, VIC



CLAIRE HEATHCOCK, QLD



COMMERCIAL QUALITY

THE NEW COMMERCIAL BAR FOR THE FACELIFT TOYOTA LANDCRUISER 200 SERIES OFFERS EXCEPTIONAL PROTECTION AT AN AFFORDABLE PRICE.

Giving LandCruiser 200 Series owners an alternative frontal protection option, the new ARB commercial bull bar is the result of extensive research and design by the ARB engineering team.

Using durable steel construction, the commercial bar for the Toyota LandCruiser 200 Series features a vehicle specific design to maximise protection, functionality and style.

Foregoing some aesthetic features found in ARB's deluxe bull bars, such as weld grinding and urethane

buffers, the new commercial bar nonetheless incorporates many strength related features, including ARB's renowned five fold, upswept and tapered wing design. Engineered with an optimum approach angle, the bar has a split pan for maximum strength and airflow and continuous uprights through the bumper section of the bar for further strengthening of the outer frame.

The commercial bull bar is equally suited to winch and non-winch applications and will accommodate Warn low mount winches up to 12,000lb. Designed

to handle the stresses experienced during vehicle winch recovery, a superbly engineered, air bag compatible mounting system is secured to the chassis via high tensile bolts.

Functional features include reinforced twin Hi-Lift jacking points and provision for IPF lights and aerials. The commercial bar retains the original tow points and incorporates recessed indicators.

Finished in a hard wearing powder coat, the new commercial bar for the 200 Series is available now.

// Part no: 3415160 // Price: \$2084

A RANGE OF LED LIGHT BARS HAVE JUST BEEN MADE AVAILABLE THROUGH BUSHRANGER.



Intended for the demands of automotive, off road and industrial markets, the new range of LED light bars through Bushranger have been tested to take the abuse handed down in real world environments.

The Bushranger line up incorporates eleven light bars varying in length between 5" and 50", each offering different lumen outputs to suit the needs of users.

Rated to IP67 for dust and moisture resistance, the LED light bars feature stainless steel

hardware and an aluminium side cap. A polycarbonate primary lens and secondary lens cover protect the light from damage, while the housing incorporates aircraft quality aluminium for durability.

Rated for 10V to 30V operation, the light bars feature thermally protected electronics to eliminate overheating. With an operating temperature between -40°C to 62°C, the light bars are available in flood, spot and combination beam patterns.

The light bars feature an aluminium mounting bracket, while a range of

pod lights, mounting brackets and accessories are also available.

The new light bar range joins a host of other products available through Bushranger, including power tanks, tyre repair kits, Kingsley side steps, cargo mats, compact tools and compressors.

Visit the Bushranger website or your local ARB store for more details.

// Contact ARB for part numbers and pricing







LIFE IN A MACRO WORLD

Sometimes things can get really interesting when you take a closer look.

We were up in Cape York on a major photo shoot and had just completed capturing Twin Falls. When we arrived back at the car park, one of the crew noticed a tiny green spider around the size of a grain of rice jumping on the bonnet of a vehicle, probably looking for a feed.

I dragged out a lens which is ideal for this purpose. The Canon Macro MP-E65mm f/2.8 1-5X enables you to photograph a subject at up to 5x its life-size. It is a manual focus macro lens, which is difficult to use at the best of times because it is extremely hard to work out where you are in relation to the subject.

This tiny Green Jumping Spider bounced around the bonnet like it had hot feet, and I must have looked like a strange individual draped across the bonnet trying to keep up with its motion. Then suddenly it noticed its reflection in the lens and started jumping on the lens, each time returning to the bonnet before jumping at its reflection again.

This was quite funny for everyone else watching but it was interesting to actually capture—and how cool are the markings on this beautiful spider?

I think that the result was worth the effort and the strange comments from those around me.

- Michael Ellem

PHOTOGRAPH SPECIFICATIONS

Camera: Canon 1Ds MkII
Lens: Macro MP-E65mm
f/2.8 1-5X
Shutter speed: 1/25th
Aperture: f2.8
ISO: 100

CAMP OF THE MOON

Words and photography by Carlisle Rogers. Courtesy of *4WD Touring Australia* magazine

THERE ARE TWO THINGS WE LOVE HERE IN AUSTRALIA: 4WDING AND SURFING. RED BLUFF COMBINES BOTH, OFFERING TRAVELLERS A QUIET BEACH RETREAT AND SURFERS AN UNSPOILED STRIP OF PRISTINE COASTLINE.

The rocky path that leads from the camp to the end of the bluff cuts through keyholes of deep orange limestone. The ground is worn down in this basilica of surfing lore.

I watch my feet carefully over the edges of these serrated cliffs and am reminded of the way human feet have worn down the stone steps of cathedrals throughout Europe. I have always been amazed at the way mere footsteps can wear away something as substantial as stone. And here, where hundreds of pilgrim surfers have come to find one of the greatest left-handers in the world, I am making my way down a finger of stone that separates me from the shark-filled water on one side, and the red dirt and spinifex of the bluff on the other.

The full moon is setting behind the red hump of a hill, and I wonder

at the perfect luck that has landed me here. A fresh swell comes barreling from down south to the place surfers have called 'Camp of the Moon' since they first started coming here in the early 70s (a bit of subterfuge to keep the true geography of this place under wraps for as long as possible).

To this day, it is taboo to ask anyone about the place. 'If you don't know, mate, I'm not going to tell you. Why don't you just stick to Noosa, mate,' is the kind of response you are likely to get.

Our campsite is right down on the beach, with just enough bollards to make turning around a little bit tricky with a camper trailer but not so many to make it feel like a national park.

After another few nights of falling asleep to the rhythmic crashing of waves on sand, the moon is

growing smaller and rising later. After the sun sets, you can watch the moon glow over the hills behind our camp for an hour before the pale plate breaks the horizon.

This isn't a swimming beach. The sand curves around a bit more further down the beach, but any swell coming in rears up and smashes down with such ferocity that I'm more scared of it here than I am out on the reef with the sharks.

Just up the road from the Quobba Station homestead, and technically still part of the station, Red Bluff is the kind of place that draws a special kind of person in the first place, and once they are there, if they are the right kind of people, it infects them for life.

The road in leads further north to Gnaraloo Station, but there it ends, and many travellers are loathe to

TO THIS DAY, IT IS TABOO TO ASK ANYONE ABOUT THE PLACE. 'IF YOU DON'T KNOW, MATE, I'M NOT GOING TO TELL YOU.'



make the journey north on a dirt road just to have to turn around and come all the way back south before heading north again on the highway. Which suits everyone up here just fine. This natural barrier, of sorts, has kept Red Bluff in pretty much the same condition as it was 'back in the day', except for a few new sawdust toilets and fishing shanties.

One bloke who was actually there back in the day is Phil Ogden. Phil came here when there was nothing except the land, a few sheep, and that left-hander. He describes it as a crazy time but the place was a mess.

"Weed, waves and women!" I say to him, nodding my head.

He doesn't answer me, as such, but his eyes glaze over and he looks up at the ceiling, off in that perfect, polished world of nostalgia. "No toilets, mate. No trash collection and a lot of surfers blowing in and blowing out. It wasn't pretty on the ground, but it was definitely crazy."

So Phil decided to stay on and sort the place out. That was in '86. I

met him in one of the little fishing shanties that line the steep sand dunes that run all the way up to the ring of red hills around the bay.

We talked about the special magic that hangs in the air here like the spray from the sea. We talked about the changing fads that have swept across the surfing world over the years, and about how little really changes out at Red Bluff. The clothes and the cars and the accents have changed, and the boards are so much faster now. I can't even imagine trying to get out of the barrel on the old single fin sliders they used to ride. And maybe they didn't. Surfing was a lot different when you got into the barrel knowing full well you weren't coming back out until the wave had thoroughly chewed you up first. The green room has a wholly different aura when you attach the stigma of sacrifice to it.

The Bluff still takes its sacrifice from you, whether you are willing or not. If you want to paddle out into this wave, you're going to pay one price or another, in knuckle skin, sea urchin spines or just a good old two wave holddown. But

when you duck into one of these perfect left barrels, and all of that water is spinning around over your head, the sacrifice doesn't seem so expensive.

And so you let yourself go deeper and you pay your dues. And that is why no matter what shape boards we're riding, no matter how many fins or how old we are or how deep we go into the barrel or any of that stuff, one thing will never change out here at the Camp of the Moon: you have to pay the price.

These palm-frond thatched shacks look like something out of a Robinson Crusoe set. The fronds are 20 years old, a miracle of arid weather and constant wind. Thatched windows are propped open with huge slabs of notched wood, and everything relentlessly whistles or sways with the ceaseless wind. The breeze here either pushes a thick cloud of spray up into the campsites or holds the wave face up and blows curving arcs of spray behind the line-up in effervescent rainbows.

Built by fishing families who would come up for months at a time



THE 'HILTON' HAD NO PARTICULARLY REDEEMING CHARACTERISTICS SAVE THE MILLION DOLLAR VIEWS AND **ONE OF THE BEST (AND MOST INTROSPECTIVE) GRAFFITI COLLECTIONS I'VE EVER HAD THE BENEFIT OF READING BY CANDLELIGHT**

to live and fish, the rules around these shacks are simple. You can stay in them with the blessing of the caretakers at Red Bluff, unless their real owners come knocking, at which time you must move on to another camp. Several of the huts are quite popular, including the 'Green room', a simple shack with bunks, sited at the base of the dunes almost level with the barrelling shorebreak.

The locals all talk about how people come here and 'just feel at home,' or that after a few days spent lounging around in the lee of the huge red hills that line this strange valley of waves, the place 'just feels right'. Never mind the reef that takes a toll from most surfers who paddle out (they call it Red Bluff tattoos), or the utter remoteness of the place, or the litany of deaths that come from rock fishermen who get caught by king waves and are washed away forever. For many people, this is the home they never

knew they missed, and as I dig my elbows into the sand and watch the moon set over the bluff while the sun rises behind me, I'm beginning to feel homesick already for this place.

Punch drunk with our infatuation with Red Bluff, we move further north to the southern end of Gnaraloo Station, known as Three Mile. At Gnaraloo Bay, north of the homestead, big boats can be launched, and there is a very sport-fishing feel to the place. In other words, bring your ego and pack it a lunch.

At Three Mile, things are a little more relaxed. The camping is fairly basic here, and you get a strange mixture of road warrior surfer types: guys who are here to explore the rocky, deadly-looking coastline between Red Bluff and the Gnaraloo homestead.

There are breaks along this ragged coastline that have never been



surfing. Places like Turtles have been explored, but there are dozens more that are still virgin—meaning nobody has achieved that perfect blend of booze and courage that opens up new waves.

Our accommodation at Three Mile was dubbed 'The Hilton' and, yet again, the west's affinity for shanties is glaringly apparent.

I don't mind a good shack, don't get me wrong. I grew up camping in shacks with open fires and dirt floors. The second shack we built on some land back home was nothing more than a three-sided log cabin with a roof and a bit of tin that hung inside one of the windows as a chimney. I think we burned that hut down eventually, but that was more a failure in responsible serving of alcohol than the whole concept of shacks, shanties and humpies. In short, I have a healthy respect for hovels.

The Hilton had no particularly redeeming characteristics save two: it had million dollar views out over the Indian Ocean and it has one of the best (and most introspective) graffiti collections I've ever had the benefit of reading by candlelight.

I don't know if it is the surf, or this part of the coast, or just the singularly edifying experience of sleeping in or near a structure consisting at least partly of corrugated iron, but something has induced particularly thoughtful and ponderous scribbling on every available flat surface of The Hilton's interior.

I read poems by Dutch kids, epithets about happiness and vague sexual innuendos, but one line kept repeating itself in the back of my head—from another fan of shacks, lean-tos and shanties, Henry David Thoreau: "Simplify, simplify."

4WD Touring Australia is Australia's newest monthly 4WD magazine for the discerning off road traveller and is available from newsagents nationwide. The TV series kicked off in September on Aurora, Foxtel's Channel 183, at 9pm. The second season will air in February 2013.



IN BRIEF

Red Bluff is 1025km north of Perth
Tel: (08) 9948 5001 www.quobba.com.au

Camping at Red Bluff costs \$15 per adult and \$5 per child. Sites are unpowered but fire pits and toilets are provided.

Gnaraloo Station is located 150km north of Carnarvon
Tel: (08) 9315 4809 www.gnaraloo.com

Camping at Gnaraloo in The Hilton costs \$72 for three adults, \$12 per child. Unpowered camping costs \$20 per adult and \$10 per child.



THE IPF 900XS SPOT AND DRIVING LIGHTS RECEIVE AN UPGRADE WITH 100W GLOBES FOR OUTSTANDING BRIGHTNESS.

The IPF 900XS has always combined a state of the art lens and reflector design with the very latest in globe technology. The H9 globe incorporated in the 900XS offers the highest luminance value of any light source in its class, and IPF have now set a new benchmark by developing a 100W version of the bulb.

With a colour temperature of 3200K and 2550 lumen output,

the 100W H9 bulb is unsurpassed in its class and offers exceptional whiteness and brightness, critical for driving rural roads at night.

Submersible to 300mm for up to two minutes, the 900XS lights feature a tough, heavy gauge steel body, hardened glass lens and advanced heatproof resin reflector with a water and dust resistant breather—all invaluable for extreme conditions.

The new 900XS with 100W H9 bulbs are available in a kit containing two lights (spot or driving), complete snap together wiring loom and relay, mouse style LED switch and protective covers.

Visit your local ARB distributor for the new 900XS with 100W H9 bulbs.

// Contact ARB for part numbers and pricing

GVM UPGRADE FOR NEW LANDCRUISER 200 SERIES

Old Man Emu has recently released a 3580kg GVM upgrade for the new Toyota LandCruiser 200 Series GX. Engineered in line with Australian Design Rules (ADR) requirements and the result of detailed tests carried out by OME engineers, the upgrade allows owners to legally increase their gross vehicle mass without voiding their insurance or making their vehicle unsafe.

The OME GVM upgrade is based on the combined front and rear axle loadings as published by Toyota. This follows sound engineering principals by staying within the tested and proven capabilities that the vehicle manufacturer has established for the axles, thereby maintaining the LandCruiser's reliability.

// Contact ARB for part numbers and pricing



NEW BUSHRANGER X-BAR

The user-friendly X-Bar from Bushranger has recently had an update to suit Australian federal and state requirements for license plate visibility, including National Transport Commission requirements for federally registered trucks.

Manufactured from polished, anodised aluminium alloy tube, the X-Bar can be easily mounted onto your vehicle via existing license plate mounts. Versatile and air bag compatible, the X-Bar offers 4WDers a sturdy platform to mount Bushranger's Night Hawk lights and an aerial to their vehicle.

// Contact ARB for part numbers and pricing



FOURBY & ARIEL CAPS



Fans of Fourby, ARB's kids' mascot, and his friend Ariel can now get their hands on two great caps featuring the popular cartoon characters. Manufactured from 100% cotton, the bright red cap features a contrast front panel with a vibrant print of Fourby, while the purple cap features a happy, colourful print of Ariel. An adjustable, metal back clip helps ensure a perfect fit for busy kids. These caps join a huge range of ARB kids' merchandise, including t-shirts, hoodies and the popular Fourby plush toy. Both caps will be available from ARB in November 2012.

Fourby cap // Part no: 217435 // Price: \$15.95

Ariel cap // Part no: 217434 // Price: \$15.95

TOP HAT

With summer just around the corner, it's the perfect time to get your hands on the new ARB Trail cap. Manufactured from 100% cotton, the cap features a specialised oil wash to give it a vintage look. Subtle ARB logos on the front and adjustable metal clip finish the cap. The cap joins an extensive range of apparel, including the ARB Trek polo, OME Intensity t-shirt and the essential ARB Socks-In-A-Can (fondly known as the Outback Survival Kit). Get your cap today from your local ARB distributor.

// Part no: 217433 // Price: \$15.95



HEY, KIDS, FOURBY HERE



Ariel and I have just come back from an awesome fishing trip! Now that summer is approaching, we'll be out on the tracks even more—maybe we'll see you out there! Keep sending in the fantastic drawings and photos, too, and well done to everyone on these pages.



* 3 year old **Clare** sent in this great drawing of a field complete with bright flowers and a sunny sky.



* I'm 9 and my name is **George**. This is a car that I would like to drive in the bush.



* 11 year old **Sonny** sent in these great drawings of his stepdad's old F150 and LandCruisers. Nice work Sonny!



* Hi Fourby. My name is **Nicholas** and I'm 8 years old. This is my dad and me in our 4WD.



* My name is **Ben**. I am 8 years old. This is our new Prado. It's going to tow our camper trailer around Australia.



* Check out this happy camping scene drawn by **Lauren**, age 7.

WINNER!



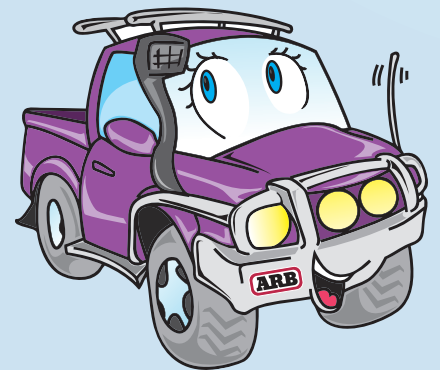
8 year old Molly sent us this fantastic drawing of her dad's ute. Great job, Molly, there's a Toys R Us voucher and other goodies coming your way!

► This is my dad having fun out near Tilpa in his Nissan Patrol ute 'Grityl'. *Molly*



★ Hi Fourby. My name is Ashton. This is my cool 5th birthday cake my mum made for me because I LOVE Fourby and Ariel! When I grow up I'm going to have a 4x4, a monster truck, a campervan and a dune buggy, so I can go camping anywhere, anytime!

You could WIN an awesome ARB Kids' Pack



Every issue we'll give our favourite entry a Toys R Us voucher and Speedy Seal Tyre Repair Kit, and all other entries that are printed will receive an ARB Kids' Pack.

Please include your details on the back, or attached to your drawing or letter, as sometimes the envelopes go missing! If you want your letter or drawing returned, please enclose a stamped, self addressed envelope.

Send your letters, drawings and photos, including name, age, address, telephone number and t-shirt size to:

Post: ARB 4x4 Accessories
Marketing Department
PO Box 105, Kilsyth
VIC 3137

Email: fourby@arb.com.au



★ Stella (age 8) and Parker (age 6) have sent in these great drawings. They love camping and cooking marshmallows on the campfire.



★ This is a picture of our blue Land Rover we took to our block in Marysville after the fires and saw the trees getting green again. (*Jason, age 10*).



FOURBY AND AREL ARE EXCITED TO SEE THE SUN SHINING AND TO BE OUTSIDE.



THEY'VE PACKED THEIR SWAGS AND ARE HEADING TO A GREAT FISHING SPOT THEY HEARD ABOUT.



WHEN THEY ARRIVE, THEY SPEND THE DAY FISHING AND TALKING ABOUT THEIR SUMMER PLANS.



ARRIVING AT CAMP AFTER DARK, THEY SET UP THEIR SWAGS AND COOK UP THEIR CATCH FOR THE DAY.



FOURBY AND AREL ARE VERY TIRED SO DECIDE TO ROLL INTO BED AND THEY WILL CLEAN UP IN THE MORNING.



IN THE MORNING THEY WAKE TO FIND A TERRIBLE MESS! AN ANIMAL HAS COME THROUGH IN THE NIGHT.



REALISING THEY SHOULD HAVE TIED UP LAST NIGHT, FOURBY AND AREL HAVE TO CLEAN UP BEFORE THEY CAN HEAD HOME.



© WATSON 16

DRAW FOURBY WINNERS



* Haylee (age 5)



* Nathaniel (age 8)

Earlier in the year, we ran a competition in which kids could draw Fourby for the chance to win a Fourby plush toy. Congratulations go to **LUKE SPRING** for his great drawing – he wins a Toys R Us voucher. But we didn't want to pick just one winner, so everyone on this page has also won a Fourby plush toy. Congratulations, everyone!



* Annette (age 6)



* Adam (age 6)



* Cruz (age 4)

Cruz, please get in contact with us. You didn't give an address to send Fourby to!



* Joeshym

COLOUR IN FOURBY

WINNER!



GEORGIA

Wow, we had so many great entries to this competition! First place goes to **GEORGIA**, aged 10, who added 3D ladybugs and butterflies to her entry—great work, Georgia! She wins a Toys R Us voucher. Everyone who came second place will get their hands on a Fourby plush toy or ARB teddy bear. Everyone else who has their entry printed will receive a Fourby and Ariel water bottle!

2ND



THOMAS

2ND



LILY

2ND



RYAN

2ND



LATOYA

2ND



BILLY

2ND



PEARL

2ND



STEVEN

2ND



BOB

2ND



CAITLYN

2ND



ABBEY



SOLAR ECLIPSE

SOAK UP THE SUN WITH THE RANGE OF SOLAR SYSTEMS FROM REDARC.



The ever increasing range of 12V appliances and accessories available nowadays has made camping and touring more comfortable, but the drain on our batteries has never been greater. Vehicle alternators provide a great source of charge when driving to and from your destination, but for extended stays in the one location, an alternate source of power is usually required.

Solar panels provide an environmentally friendly, quiet and simple way to harness free energy from the sun, and modern

technology provides more flexibility than ever when it comes to solar setups.

The power conversion specialists, RedArc has over 30 years experience in the research, design and manufacture of an impressive array of inverters, power supplies, battery chargers, electronic voltage converters and other products. And now they are applying their expertise to a range of solar systems.

The RedArc range includes flat and folding panel kits, thin film rollable

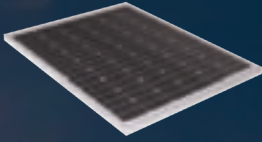
and folding panels, standalone regulators and an in-vehicle battery charger and management system.

Not simply a collection of separate products, RedArc's solar range provides complete, flexible systems designed to ensure users get the maximum possible power from the sun for use any time of the day or night.

Visit your local ARB distributor for full details on the range, or visit www.arb.com.au

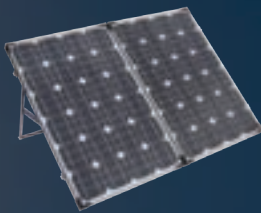
// Contact ARB for part numbers and pricing

MONOCRYSTALLINE PANELS



Delivering superior performance in a variety of light conditions compared to other solar types, RedArc's monocrystalline panels are perfect for the roof of your caravan, camper trailer or motor home and are designed to survive in the harshest conditions. Available in four popular sizes, the panels feature a rugged aluminium frame with no visible fixings and are specifically designed for camping and caravanning with a 12V output.

FOLDING MONOCRYSTALLINE PANEL KITS



The simplest way to get started with solar power and offering all of the benefits of the regular monocrystalline panels, the folding kits are mounted on a sturdy aluminium frame with fold out legs for versatile panel placement.

The kit includes all of your solar charging needs in one bag with your choice of 90, 120 or 150 watt solar panels, regulator and a LCD display monitor that gives real time monitoring of your solar panel performance. The standalone regulator allows you to locate the regulator close to your battery, minimising voltage drop and ensuring your auxiliary battery receives maximum charge. Generous length cables allow the panel to bask in the sun while you stay cool in the shade. The RedArc kit also comes with the choice of alligator clips for a portable setup or Anderson plugs for permanent installation.

SOLAR BLANKETS



RedArc offers high efficiency monocrystalline and amorphous blankets to provide ultra compact and lightweight solar power solutions. Able to be draped over your windshield, awning or just spread out on the ground, the solar blankets are designed tough.

The monocrystalline solar panels are encapsulated inside a durable PVC sleeve and are half the weight of comparable sized folding solar panel kits.

Folded away as easily as a blanket, the monocrystalline panels have the highest efficiency of all solar panel types.

Alternatively, the amorphous solar blankets are a third of the weight of comparable folding solar panel kits and have no glass. Laminated onto a durable canvas backing, the amorphous blankets produce energy even in low light or partial shade.

Both solar blankets can be folded up and safely stored in the boot of your vehicle.

REGULATORS AND MONITORS



Solar regulators ensure that the power supplied by your solar panels is at the optimum voltage to charge your batteries, while remote monitors ensure all vital information is readily available.

RedArc's regulators are ideal for permanent installation in motor homes, caravans and camper trailers, and safely charge single and dual battery systems. Providing three-stage charging for various battery types, the RedArc solar regulators also protect your battery from overcharging.

The RedArc remote monitor allows users to keep track of how their solar panels and batteries are performing. The large, backlit LCD display monitors solar panel voltage and current, with a real time battery voltage display.

The impressive RedArc solar range also incorporates a range of mounting accessories and hardware for permanently fixed solar panels, plus a multitude of cables and connectors to cater for a vast array of individual power setups.

CREATING OR FREEZING MOTION

Words & photography by Mike Ellem, Offroad Images

RENOWNED OFF ROAD PHOTOGRAPHER MIKE ELLEM SHARES HIS KNOWLEDGE ON SHUTTER SPEEDS.



In the last edition of ARB 4x4 Action, we talked in depth about apertures and how selecting an aperture will affect the image capture. Well in this issue,

we will talk about how shutter speed selection can affect the image in so many ways also.

Something that separates photography from video is how photography can make a moving object look like it is going much faster than it really is, but then the same moving object can also be captured so that it can seem frozen in time.

In video, you might see the vehicle travel around a dusty corner, and it might look great as it pushes through the scene with a dust trail billowing behind it. Now you could run the same scene in slow motion and it will provide a sense of a great deal more happening.

As the photographer, you get to choose what the viewer sees in the image by making a decision as to whether you are going to freeze that moment in time or allow the vehicle to flow in motion against a wash of background colour. This is not something that you do afterwards on the computer... you need to decide when you capture the image.

I was at a race event recently, where I was required to capture a variety of images to suit the client. During the warm up lap, I ran some extremely slow shutter speeds to capture an image which looked like the vehicles were travelling at full noise. So then



when the vehicles came around for the fast laps, I could concentrate on freezing the motion of the vehicle with some high shutter speeds. This gave me the best of both worlds and images which would suit a greater variety of usage.

So how exactly do you capture that look? For this exercise, we will look towards creating two images which are extremely different and you can work out other options in between for yourself.

We will base this on the movement of vehicle action, but you could use this on anything from your child riding his bike to your dog chasing a ball.

PANNING IN PHOTOGRAPHY

Panning in photography is an art form achievable by anyone who follows this guide. The final

result is dependent on how much effort you make in practicing, as a good pan creates an extremely rewarding result.

SET A SHUTTER SPEED OF AROUND 1/2000TH OF A SECOND ON A BRIGHT DAY AND TRY FREEZING THE ACTION OF A VEHICLE DRIVING THROUGH A RIVER CROSSING OR YOUR DOG CHASING A BALL AT THE BEACH

If you are specifically looking to create the illusion of speed in the image capture, set the program mode to speed priority. This program mode will allow you to control the time the shutter is open on your camera.

Basically, you want the background to be blurred and the vehicle or subject to be sharp. This will create a degree of separation between

the subject and its background. From a stationary position, the photographer will focus on a given part of the vehicle and follow that

vehicle as it moves through the scene. It's important to understand what's happening here as this will affect the final result.

You need to be focused and lined up with a part of the vehicle (i.e. the front guard), keeping it lined up exactly on the subject as it travels through the scene. If you lift up, down or follow it faster or slower than what it is travelling,

IT PROBABLY LOOKS LIKE I AM DOING A LITTLE DANCE, BUT THE IDEA IS TO ENSURE THAT I AM RELAXED AND FOCUSED

it will be blurred and not sharp. I would recommend a speed of around 1/125th of a second to start with, but once you get the hang of it, start slowing the shutter speed down and discover the awesome results that can be achieved. See for yourself the difference between 1/125th and 1/60th of a second—it's quite amazing.

As these shutter speeds are slow and you are moving the camera and lens, you will need to keep your body motion fluid. Here is how I do it:

Just before the vehicle arrives into the location which I will be shooting, I lift my camera, shoulders and elbows a few times in order to loosen up my core muscles. It probably looks like I am doing a little dance, but the idea is to ensure that I am relaxed and focused.

With my boots locked into the ground, my legs are firmly in one location. My arms and shoulders have created triangles around the camera and lens to keep the lens absolutely steady.

So the fluid motion required to follow the subject will come from your core. Loosen it up and keep

it smooth in rotation... I'm starting to sound like a PT at the gym!

Try this with a family member riding a bike to start with. You might find that they will get tired of riding backwards and forwards, but you will love the results.

A tip to making this work more effectively: have the subject perform the movement as an arc around you, therefore keeping the distance nearly the same during the time that the shutter remains open.

FREEZING MOTION IN PHOTOGRAPHY

Now this is very different to panning. What we want here is to capture the action so that any rock, dust ball, water droplet, etc, has been frozen at the time of the capture. We require really fast shutter speeds for this to take place. If we ran shutter speeds like that in panning photography, the dust and rocks would be a blur, and it's likely that the vehicle bouncing through the obstacle would also be blurred.

Again, setting your camera on Tv or speed priority, set a shutter speed of around 1/2000th of a second on a bright day and try freezing the action of a vehicle driving through a

river crossing or your dog chasing a ball at the beach.

This process is a great deal easier, but you will still need to follow the subject carefully in order to maintain a good quality focus.

Try different shutter speeds to familiarise yourself with the differences that they will make to your image. Here's a tip for assisting exposure problems when freezing motion:

When photographing in areas where there is changing sunlight (i.e. clouds moving in and out over the shot's location, therefore constantly changing your exposure), switch the camera from Tv (speed priority) to Av (aperture priority) and choose a large aperture (smaller number i.e. f4). The camera will then match the fastest shutter speed available to suit the lighting, but when a cloud floats over and brings with it a reduction in light, the camera will choose a slower shutter speed to suit that aperture. Otherwise, the image may be under-exposed, as the lens may have already been wide open and cannot let any more light in to assist in the exposure.

This way, you will never miss a shot.



Here the shutter was slowed down to 1/15th of a second and the image capture was created on the exit of a corner. The benefit of using the slower shutter speed here is also to remove the crowd and industrial fencing in the background.



This image was captured at 1/40th of a second, assisting in making sure that the rider is the most important feature. A fast shutter speed would have brought out all the scrub and shadows, detracting from the rider.



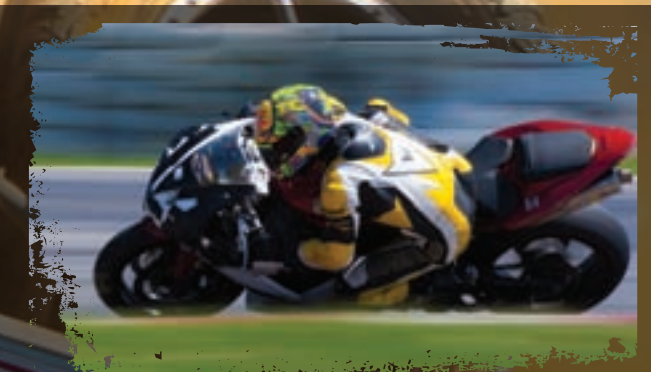
Another chopper pan. Here the vehicle is approaching speeds of 200 km/h and a shutter speed of 1/80th of a second worked well.



This image was captured with the intention of freezing motion as the vehicle busted through the bull dust. With the shutter closing in 1/1250th of a second, the bull dust almost looks like some form of animal.



It can be more difficult when you are shooting with bigger lenses, but practice will get you results like these. 1/40th of a second on a 400 f2.8 lens at f22 really makes the rider stand out.



The shutter closed in at 1/500th of a second for this image, freezing the motion of the bull dust perfectly.



Freezing motion as a vehicle breaks through a desert dune, 1/2000th of a second has performed well to capture this action.



GETTING SOCIAL

GET THE LATEST NEWS, ENTRY TO GREAT COMPETITIONS, INSIDE ACCESS TO PRODUCTS UNDER DEVELOPMENT AND MUCH MORE.

It's been a busy few months for social media at ARB since the last edition of ARB 4x4 Action. ARB's social media pages have reached a collective 20,000 followers and a total video viewing time of 16 years. And, better still, ARB now has the ability to answer your questions on the spot.

With weekly sneak peeks and behind the scenes shots of new and under development products, you can get an up-close look at our latest accessories before their release.

Since January, ARB has also given away over \$12,000 in prizes, including smaller items like hats

and stubby holders, and grand prizes like iPads, GoPro cameras, bull bars, Air Lockers and two huge touring packs.

So jump online and get social with ARB.




JOIN THE CONVERSATION

Get online and involved on facebook, twitter, Instagram and YouTube.

 www.facebook.com/ARB4x4

 www.twitter.com/ARB4x4

 www.youtube.com/ARB4wd

 @arb4x4



FRASER ISLAND FAN

THIS ISSUE WE MEET IAN BAKER, A KEEN 4WDER WITH A TASTE FOR ALL THINGS ARB.

YOU'VE BEEN AN ARB FAN FOR A LONG TIME.

I had my first ARB bull bar fitted to my Toyota LandCruiser 60 Series Sahara back in 1984, and I've had an ARB bar on every 4WD I've owned ever since, including an FJ40 and a 100 Series. I currently have a LandCruiser 200 Series with an ARB deluxe bull bar, Warn winch, front and rear Air Lockers, Old Man Emu suspension, ARB rear bar with rear wheel carrier and jerry can holder, ARB air compressor, ARB roof rack and awning, ARB auxiliary battery and ARB recovery kit, plus lights, drawers, GME radio, Yaesu HF/VHF/UHF amateur radio and antennas, and Mickey Thompson MTZ tyres.

FAVOURITE ARB PRODUCT?

It's a tossup between the Air Lockers and OME suspension—the lockers give me peace of mind when I head into tough areas, as I know I'll be able to get back out again. Old Man Emu completely changes the vehicle's ride and handling for the better. But I think the Air Lockers win out.

YOU RECENTLY WENT TO FRASER ISLAND.

My wife, Madeleine, and I had visited Fraser Island four years ago without a 4WD. During our short stay, we took a 4WD bus tour and saw enough to want to go back with our own vehicle. We really wanted take our time and soak it all in. So we took over the 200 Series and our Ultimate off road camper trailer and stayed for ten days—both were very new and this was essentially their maiden off road trip. I have to say that the Ultimate camper has a very well-thought-out design; it is very light and will go anywhere with the 4WD.

FAVOURITE SPOT?

This would have to be Sandy Cape. It's the northernmost point of the island and has spectacular 360° views. It's also wonderfully remote and you don't see any day trippers after Orchid Beach, particularly since getting past Nkgala Rocks can be a bit of a challenge. We actually only saw one other vehicle, and it was the park ranger's.



But there are other highlights to Fraser Island. Lake McKenzie and the Waddy Point campsite are great. There weren't many people at the campsite as you have to tackle Indian Head to reach it. The sand at Indian Head can be soft and is the perfect place to get bogged. We recovered some French tourists there who had gotten bogged in their Prado—they'd done all the wrong things by not having recovery gear and not letting their tyres down enough. I pulled them out backwards using the snatch strap and helped them on their way.

AND WHAT'S ON FOR THE FUTURE?

Next year we're hitting the Gibb River Road and the Kimberley. Hence the reason why we got the Ultimate camper. It will be our first big Outback tour in thirty years. We've previously travelled the Oodnadatta Track and have been to all of the iconic places in the Victorian High Country—I've been visiting the High Country since 1969 and it never gets dull.

DESERTED HORIZONS

ARB'S MATT FROST TEAMS UP WITH A TELEVISION CREW AND OTHER 4X4 INDUSTRY FOLK ON A TRIP THROUGH THE SIMPSON DESERT.







Despite the human race making incredible discoveries and advancements over the past several hundred years, certain mysteries remain unsolved. Are we alone in the universe? Is there life after death? How come you can get a better steak at a pub in the middle of absolutely nowhere compared to most flash city restaurants?

Personally, I haven't given too much consideration to the first two, but this last one fascinates me. Time and time again I have experienced this, most recently at the Mt Dare Hotel, the last bit of civilisation you come across before embarking on a trip across the Simpson Desert.

The Simpson Desert is one of those classic 4x4 trips that I reckon most of us aspire to doing at some stage. Ever since the Simpson was first crossed by 4WD fifty years ago by Reg Sprigg and his family, travellers have been venturing across the desert in their thousands each year. Of course, not all of these have been in 4WDs. Just a few weeks before our trip, a young Birdsville woman, Jenna Brook, trekked across the desert on foot, raising over \$25,000 for the Royal Flying Doctor Service in the process.

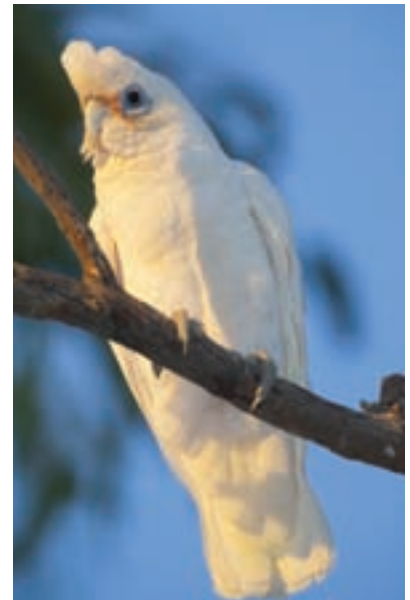
Our mission, however, was to film a series of episodes for Your 4x4, a Foxtel-based television show dedicated to 4x4 adventure travel from around the world. Our party

was made up of a film crew of five, plus a little over a dozen key people from the 4WD accessories industry.

Our route to the Simpson would take us through the Flinders Ranges to Marree and then up the Oodnadatta Track to William Creek, onto Oodnadatta and finally Mt Dare. This in itself is a great trip to do, with the area rich in history and full of some fascinating places to visit.

Unfortunately, things got off to a bad start with a major mechanical failure on one of the camera vehicles on day two of our trip. Some bush mechanical work got the vehicle mobile again, but certainly not in a fit state to undertake a desert trip. Events such as these clearly illustrate just how important thorough preparation is. You can never guarantee a problem-free trip, but a lot can be done to minimise the likelihood of something bad happening.

Once our stranded film car was patched up and sent home we headed north to Mt Dare, which serves as the gateway to the Simpson Desert on the western side. As well as great hospitality, travellers can enjoy hot showers, grab supplies and fuel up before heading into the desert. And, boy, these folks really know how to put on a great welcome and feed. Despite rolling into the pub very late in the day, we got a fabulous



meal and were also able to get some invaluable local knowledge on the conditions ahead.

The next morning saw the second incident of the trip, with one of our group cracking an alloy rim on the road out to Dalhousie Springs. The road was in a pretty terrible state, and a combination of this, speed, vehicle weight and generally not driving to suit the conditions caused the fatality. This same vehicle cracked a second rim on the trip a week later, which illustrates perfectly why it is so highly recommended to carry two spare wheels in the Outback.

After a slight delay we arrived at Dalhousie, a series of springs fed by the Great Artesian Basin. Some 41% of water outflow from the basin flows into the Dalhousie complex, giving the area a real oasis feel about it. With a water temperature range of 38-43°C, it wasn't long before most of us were having a swim in the main spring.

Another significant attraction in this area is the Dalhousie ruins, just a few kilometres from the springs. This Outback station was

abandoned in 1925 but the ruins of several buildings remain, along with one hundred year old date palms.

Dalhousie Springs has a general camping area, but our group was keen to experience a desert camp, and it didn't take long to work out why. Within an hour of leaving Dalhousie we were crossing the first of some thousand plus sand dunes, in between which lay large flat expanses on either side of the track, perfect for camping.

Our route across the Simpson for the next few days would be along the French Line. This track got its name from the French Petroleum Company which created the track during its search for oil. It is generally the favoured option amongst four wheelers due to it being more challenging than the alternatives. I've met a few people over the years who have boasted about their achievement of tackling the French Line in short periods of time, but why anyone would want to do this baffles me. The Simpson Desert is one of the world's great wilderness areas,

and the more time you can spend out of the vehicle experiencing it the better. I would suggest three to four days as a bare minimum for Dalhousie to Birdsville.

Our first night in the Simpson was magical. Cool, still, quiet, millions of stars... all of the things that make up the perfect desert camp. A fire kept us warm and toasty for the evening as we exchanged the usual campfire banter.

The following morning we continued on to our next destination, Purnie Bore. Another leftover from the days of the French Petroleum Company, the bore was put down in 1963 as an oil exploration well. Once it was evident that only water, not oil was present, the bore was abandoned and left flowing at 1.5 million litres per day. This was until 1987 when the flow was regulated for environmental reasons. Despite leaving the bore head at close to boiling point, the water cools quickly, creating an artificial wetland and a haven for wildlife.





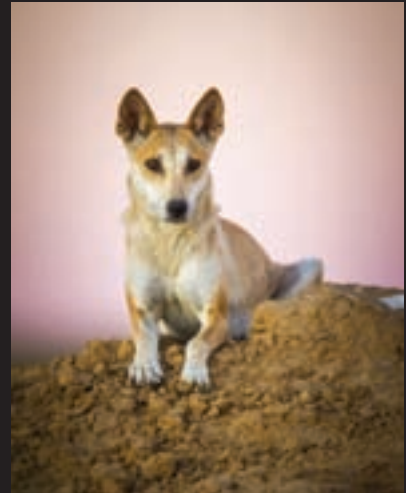
This wasn't the only place we found an abundance of wildlife, though. Heavy rainfall across large areas of Queensland over the past few years has seen the desert transformed. Much of the area has been completely inaccessible in recent times, and while most of the tracks have now dried out, an incredible amount of vegetation has been left. The rains have effectively revived the food chain in the desert, creating a huge boost for wildlife in the region. Over the next few days



we would see lizards, snakes, camels, dingoes, small marsupials, eagles, kites, budgies... the list was endless. The cleansing effect of the rains has also enhanced the appearance of the numerous salt lakes in the desert, causing them to turn a brilliant white.

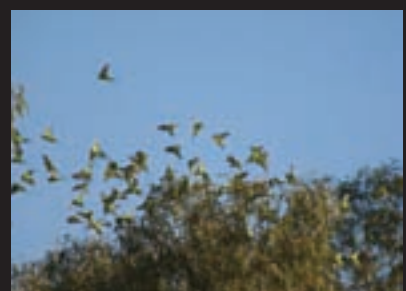
The conditions in the Simpson really allowed us to experience the desert at its absolute best. Mild, sunny days and cool nights. Just when we got to the top of one dune to start filming, our forward scout vehicle would radio back to say that the view from the next dune was even more stunning. ARB's official photographer, Michael Ellem, lists the Simpson as his favourite place in Australia to work, and having just done this trip, I can really see why.

All too quickly, we reached the end of the French Line, arriving at Poeppel Corner. This is where the borders of South Australia, Queensland and the Northern Territory meet and is a spot worthy of a photo opportunity. Just north of here, we joined the QAA line, where the dunes, although generally larger, are further apart and allow for a faster travel time. At this point it felt like our desert trip was coming to an end, but the Simpson had one last spectacle for us... Big Red. Whilst this dune is an impressive sight from below, it's not until you're on top that the sheer magnitude of the landscape is revealed. Looking back to the



west, a sea of red dunes roll out to the horizon. Yet immediately to the east lies a vast expanse of water running parallel with the dunes as far as the eye can see. This immense body of water, created by the floods of the previous years, was alive with all manner of birdlife and presented a splendid vista as our Simpson Desert trip drew to a close.

After Big Red, the landscape flattens out and we quickly arrived into Birdsville. A certain sense of sadness at having left the desert was quickly replaced with excitement as we started planning for the next few days. We still had a lot of country to cover before heading home. The Strzelecki Desert, Innamincka, Cooper Creek and Cameron Corner all sat between us and our final destination, Broken Hill.





THE PERFECT TOURER

International celebrity off road driver, Scott Brady, describes the HiLux as a vehicle everybody loves. At the start of the trip I wouldn't have placed myself in this camp, but at the end, I most certainly was. My usual mode of transport is a Land Rover Discovery 3, and stepping into a HiLux is a very different experience.

I chose the HiLux for this trip for several reasons. Firstly, it is always great to sample different vehicles, and secondly, a dual cab ute is brilliantly suited to carrying the loads required for a trip of this nature. We were basically carrying two weeks' worth of food and water, plus additional supplies for seven days. This may sound a little overboard, but I have lost count of the amount of friends and customers I have spoken to who have been stranded in the Outback in the past couple of years due to heavy rain. A final deciding factor was that the prospect of cleaning the vinyl interior in the HiLux was far less daunting than the plush carpet and cream leather featured in the Land Rover.

This was no ordinary HiLux, however. The vehicle had recently been purchased by one of our Adelaide stores and outfitted to perfection. A full list is on the next page but for me the top five highlights were:

OLD MAN EMU SUSPENSION

Old Man Emu engineers spend hundreds of hours developing suspension kits for each vehicle model, delivering improvements in ride and handling you'll appreciate every time you drive the vehicle. In the case of the HiLux, they have absolutely nailed this kit to the point that the ride is not comparable with a standard vehicle. Even heavily laden, this truck rode impeccably well on the dunes and corrugations. There were other utes on this trip with standard suspension that the



occupants were climbing out of at the end of each day with green faces due to car sickness.

RECARO SEATS

The last couple of long Outback trips I have done have caused me some lower back grief (age, I'm guessing), which I was keen to avoid on this occasion. One of my colleagues suggested I try a Recaro seat in the car, as he had experienced similar problems with standard seats. It's important to understand that standard car seats are generally built to a price, with emphasis placed on comfort. The problem is that many give very poor back support, which sends your muscles into overdrive trying to support your spine. Recaro seats are engineered to provide superb support and a high degree of adjustability. The good folks at Recaro were kind enough to lend me a seat and the results were absolutely astounding. I sat in this seat hour after hour, day after day without even the slightest sign of back discomfort. To say I was blown away with this product is a huge understatement.

STORAGE

Rather than a single item, here we had a situation where numerous accessories were working together to provide an outstanding storage solution. The vehicle was fitted with an ARB canopy with lift up windows all around providing great access. On the inside was an Outback Solutions drawer system with fridge slide and 60 litre fridge.

There was also an integrated water tank positioned behind the drawers complete with electric water pump. We camped in a different spot each night, and this gear facilitated a very speedy set up and pack up each day.

ARB UNDER VEHICLE PROTECTION

This was such a comfortable vehicle to be driving, there was a tendency to relax a little too much. During most late afternoons, just as the light was turning everything into that golden colour photographers love, I'd have one hand on the steering wheel and the other out of the window thinking... what a magnificent place. This moment would be interrupted by a large washout in the middle of the track and a bang. With brilliantly engineered protective steel panels running from the bull bar to the back of the transfer case, this didn't present a problem!

ARB BULL BAR

I probably wouldn't have added this to my list had it not been for an incident that happened on the last day. We were travelling down the Silver City Highway into Broken Hill when an emu ran out from dense vegetation directly into the path of the vehicle in front of me. There was absolutely no way of avoiding the impact, and had it not been for the bull bar, it would have undoubtedly immobilised the vehicle. These unfortunate events are all too frequent, and reinforce the mandatory requirement for a well designed steel bar in the Outback.

IN BRIEF

VEHICLE: Toyota HiLux Dual Cab SR

YEAR: 2012

ENGINE: 3.0L turbo diesel

TRANSMISSION: Automatic

ACCESSORIES FITTED:

- ARB Sahara bar
- Warn 9.5XDC winch
- IPF 900XS HID lights
- ARB side protection steps
- ARB under vehicle protection
- ARB rear step protection bar

- ARB recovery point
- ARB body flares
- Safari snorkel
- Old Man Emu suspension
- ARB canopy with twin lift up side windows
- ARB Outback Solutions drawers with fridge slide
- ARB 60L Fridge Freezer
- Tray-mounted 50L water tank & electric pump
- 50L bladder water tank mounted behind back seat
- ARB auxiliary battery system
- Hot wires/plugs positioned throughout vehicle for 12V accessories
- RedArc inverter for 240V
- ARB Simpson 3 rooftop tent
- ARB awning
- ARB canopy roof bar system
- ARB cab rack
- ARB rack mounted twin jerry can holder
- Long Ranger 140L fuel tank
- Front & rear ARB Air Lockers
- ARB twin motor air compressor with 4L air tank
- GME TX3340 UHF radio and AE4702 antenna
- Recaro Ergomed E seats
- BF Goodrich All Terrain tyres

BEHIND THE CAMERA

The purpose of this trip was to film several episodes for the Foxtel-based television show, Your 4x4. Currently in its seventh season, Your 4x4 is dedicated to showcasing the astonishing array of destinations that can be reached in a well prepared 4WD.

The show was created by Simon and Miranda Christie who also produce 4WDTV & 4WD Pro Tips.

What started out years ago as a bit of fun has grown to a highly successful media organisation that reaches in excess of one million viewers per week across the three shows.

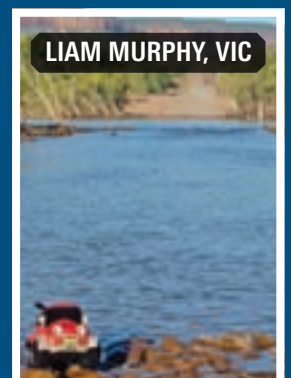
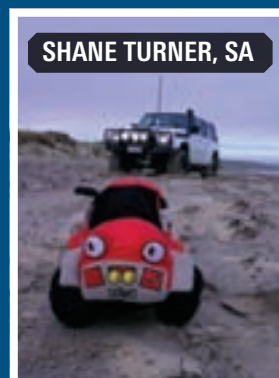
In addition to Foxtel, Your 4x4 can be seen on numerous community and regional channels, and can also be viewed online. For further details visit your4x4.com.au. Series 8 starts screening in February 2013, and our Simpson trip will feature extensively throughout the series.



FOURBY PLUSH COMPETITION

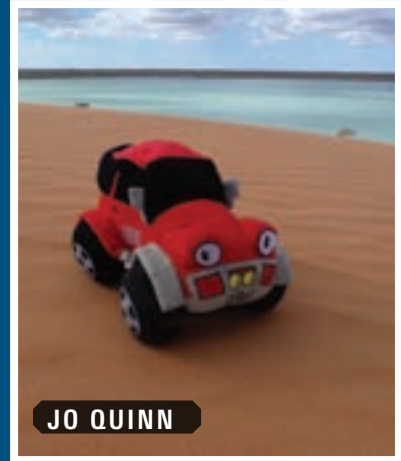


A while ago we ran a competition in which readers could send in a photo of Fourby out in the world for the chance to win a 60L ARB Fridge Freezer. We were swamped with many great entries, but the winning photo comes from **Lisa Oliver**. Congratulations, Lisa!





STEPHEN WILSON, QLD



JO QUINN



EMILY YOUNG, NSW



JEN PARTL, VIC



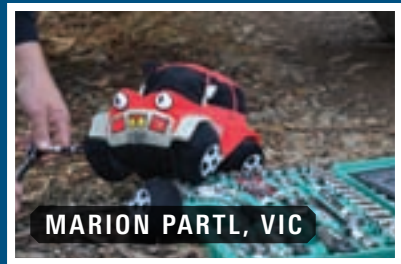
THERESA LONERGAN, NSW



KASEY CARTER



ANDREW YOUNG, NSW



MARION PARTL, VIC



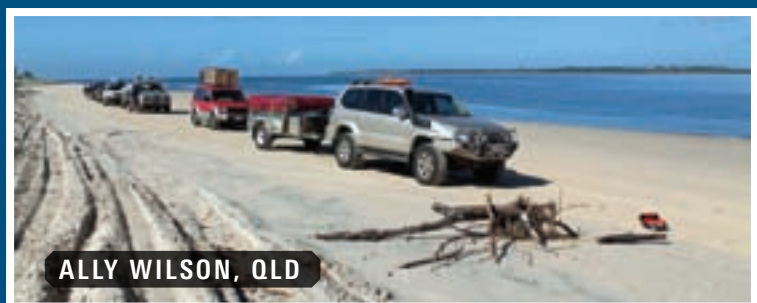
JULIE SHARP, VIC



SHARON MURPHY, VIC



SINEAD & MOLLY-LEIGH MURPHY, VIC



ALLY WILSON, QLD

WINNER!



BRAGGING RIGHTS - YOUR 4X4

READER VEHICLE OWNER:

Melissa Evans, Tasmania

VEHICLE MAKE: Toyota

VEHICLE MODEL:

HiLux Workmate Dual Cab 4x4

VEHICLE YEAR: 2011 facelift

ENGINE: 3L turbo diesel

ACCESSORIES FITTED: ARB deluxe winch bar, Warn winch, IPF 800SC driving lights, ARB rear step tow bar, Safari snorkel, ARB side rails and steps, GME UHF radio, SPT chip, 3" sterling exhaust, 32" Mickey Thompson BAJA MTZ tyres with CSA monster 7" rims, Old Man Emu suspension.

FAVOURITE ARB ACCESSORY:

The ARB deluxe winch bar.

FAVOURITE 4WD SPOT:

Central Australia (the scenery is just magnificent) and the west coast of Tasmania, which has the best 4WDing in Tasmania!

WHY I LOVE 4WDING:

It's great to get out there with the kids and my husband and explore the wonders of Australia.

MEMORABLE 4WDING

MOMENT: Driving the Diamantina Track to Birdsville just after it had rained. All of the rivers were in flood and the roads had turned to slop. We were towing a camper trailer behind my husband's new Toyota LandCruiser 100 Series, which didn't stay nice and new for long.

ADVICE FOR 4WDERS:

Get out there and explore Australia. Don't just think about it—do it!

OFF ROAD WITH REDARC

VEHICLE DRIVER: Tim Chivers, RedArc Area Sales Manager for Victoria

VEHICLE MAKE: Toyota

VEHICLE MODEL: HiLux SR5 4x4

VEHICLE YEAR: 2012

ENGINE: D4D turbo diesel

ACCESSORIES FITTED: ARB roof rack, ARB deluxe bull bar, rear step bar, ARB canopy, drawers, awning, snorkel, 47L fridge, roof console, Old Man Emu suspension, GME UHF, ARB reversing camera and monitor system.

FAVOURITE ARB ACCESSORY:

ARB reversing camera and monitor system. It makes parking

much easier and safer. With the microphone, it adds another safety dimension, too.

FAVOURITE 4WD SPOT: Near Bright in Victoria's northeast.

WHY I LOVE 4WDING: I get access to some unique spots to camp and enjoy. With such scenic diversity in our country, it's wonderful to have the extra flexibility.

MEMORABLE 4WDING

MOMENT: Following a recent

freak dump of snow not far from Melbourne, a track up the side of a mountain brought the delight of virgin snow and fantastic views of the nearby snow-capped mountains.

ADVICE FOR 4WDERS: A good air compressor is money well spent. With a good flow rating, you will be more likely to adjust the pressures, knowing you can reinflate in a matter of minutes.



Readers, send us in your own vehicle profiles and you could be featured in an upcoming magazine and win an ARB Adventure Light. Email: marketing@arb.com.au



ANDREW BELLAMY

THIS EDITION, WE CATCH UP WITH ANDREW BELLAMY, LONG-TIME ARB EMPLOYEE AND PRODUCT MANAGER OF THE OUTBACK SOLUTIONS DRAWERS RANGE.

SO HOW LONG HAVE YOU BEEN AT ARB?

It's been around eight years now. I started as a salesperson at ARB Kilsyth and later became the store's team leader. In 2010 I moved across to ARB's head office and became the product manager of the Outback Solutions drawers range. I also manage ARB's range of Hayman Reese and RedArc solar products.

WHAT OUTBACK SOLUTIONS PRODUCTS ARE YOU CURRENTLY WORKING ON?

Right now we're getting ready to release vehicle specific drawers for the new Holden Colorado and Isuzu D-Max. We're also busy with developing Land Rover Defender drawer systems and some other products I can't talk about yet. One of the big challenges is meeting customer demand—there is never a quiet moment.

YOU'VE HAD A COLOURFUL WORK HISTORY PRIOR TO ARB.

My first job was as a trout farmer while I studied for a Bachelor of

Social Science. Then I moved on to the Department of Human Services and was involved in programming and care for disabled people. After that, I worked as an excavator and during that time got my first 4WD. It was a natural progression to then join ARB.

HOW DID YOU GET INTO 4WDING?

I've always been involved in hiking and camping, and many of my friends had 4WDs. The first 4WD I owned was a Nissan Patrol MQ ute that I initially bought for work as an excavator—but once I unhitched the trailer, I found that I had a lot of fun driving over all sorts of terrain. I had the ute for three years, then moved on to a Patrol MQ short wheel base. I now have a GQ Patrol.

WHAT KIND OF 4WDING DO YOU GET UP TO?

Mostly, I head up to the Victorian High Country and go camping with family and friends. I've done a bit of touring around Broken Hill and competed in the Outback Challenge, which was a heap of fun. Unfortunately, I haven't managed a lengthy touring trip yet.

YOUR LAST OFF ROAD TRIP?

It was actually for a bucks party into the Vic High Country. We hit the Howqua area before lobbing into Mansfield for chicken parmas and a few quiet ones at the pub... at least that's my story and I'm sticking to it!

FAVOURITE 4WDING LOCATION?

I'd have to say Butchers Track in the Victorian High Country—not because of the track itself, but because it played hard to get. My first attempt to cross it was cancelled because of bushfires that closed the track. The following year, flooding took out the bridges and I had to wait another year. I succeeded in the third year, and all that waiting made driving it really memorable.

ANY ADVICE FOR 4WDRS?

It's pretty simple—just get out there and have fun.



4X4 ACCESSORIES

ARB STORES

VICTORIA

Kilsyth (03) 9761 6622
Brighton (03) 9557 1888
Dandenong (03) 9793 0002
Keilor Park (03) 9331 7333
Thomastown (03) 9460 9988
Bairnsdale (03) 5152 1226
Ballarat (03) 5331 7078
Bendigo (03) 5445 7100
Geelong (03) 5229 3910

SOUTH AUSTRALIA

Regency Park (08) 8244 5001
Morphett Vale (08) 8186 6101
Elizabeth (08) 8252 1599

TASMANIA

Launceston (03) 6331 4190
Hobart (03) 6228 6822

NEW SOUTH WALES

Moorebank (02) 9821 3633
Artarmon (02) 9438 4484
St Peters (02) 9565 2455
Wentworthville (02) 9631 7889
Albury (02) 6021 2477
Dubbo (02) 6885 5777
Newcastle (02) 4953 9555
Orange (02) 6369 0700
Penrith (02) 4731 1266
Port Macquarie (02) 6581 2500
Tamworth (02) 6762 0541
Wollongong (02) 4227 1900

WESTERN AUSTRALIA

Canning Vale (08) 6254 2367
Mandurah (08) 9583 3200
Osborne Park (08) 9244 3553
Welshpool (08) 9358 3688

QUEENSLAND

Nundah (07) 3266 3255
Capalaba (07) 3823 5900
Coopers Plains (07) 3277 2020
Bundaberg (07) 4153 2929
Burleigh Heads (07) 5535 9223
Caboolture (07) 5499 1955
Cairns (07) 4035 3350
Mackay (07) 4998 6888
Maroochydore (07) 5475 4011
Rockhampton (07) 4922 7788
Toowoomba (07) 4632 1122
Townsville (07) 4728 0900

NORTHERN TERRITORY

Winnellie (08) 8947 2262

ACT

Fyshwick (02) 6280 7475

HEAD OFFICE: ARB 4X4 ACCESSORIES

42-44 Garden Street, Kilsyth, Victoria 3137 Australia

Tel: (03) 9761 6622 Fax: (03) 9761 6807 Email: sales@arb.com.au Web: www.arb.com.au

All ARB 4x4 accessories are available from these ARB stores, and stockists in most major regional towns.

Please contact the ARB office in your state for details of the one nearest you.



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www.youtube.com/ARB4wd



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