

# 4x4action >



## > PRODUCT RELEASES

Exciting new bull bars for a number of late model vehicles, accessories for Prado 150 Series, the latest Hema Navigator and more

## > GIVEAWAYS

The results of our recovery competition plus new DVDs to be won and heaps more giveaways

## > LATEST NEWS

News from the Dakar Rally and a full report from the 2009 Rainforest Challenge

## > FEATURES

This issue is packed full of feature articles for hours of interesting reading

# 10

## Toyota LandCruiser Prado 150 Series Accessories

Since the release of this vehicle, ARB has been hard at work developing accessories, a number of which are now available including bull bars, roof racks and dual battery systems. You can check out all the details on page 8, as well as finding out what's still to come. And make sure you stay tuned for more products for the Prado 150 Series in upcoming newsletters. >>

# 4x4

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**Graphic design:** Vanzella Graphic Design

**Major photography:** Offroad Images

**Pre-press:** Splitting Image

**Printing:** Offset Alpine

### ARB Snapshot

We've packed plenty of interesting features into this newsletter, including a couple of articles from freelance journalist, Mark Allen. Mark has recently returned from a trip to South America, where he got to spend some time behind the wheel of the new Volkswagen Amarok. VW has built some stunning vehicles over the years, and the prospect of this manufacturer launching a 4x4 ute around the world is causing a frenzy of excitement in the marketplace.

An off road adventure of another kind we have chosen to spotlight is Freya Hoffmeister's epic trip around Australia. Her journey is an incredible story, and we congratulate her on an amazing achievement.

Cheap copies and counterfeit products are issues that plague many industries, and 4x4 accessories is no exception. We've published some information from Safari Automotive, which highlights problems with some dodgy snorkels that are now available. Competition is a healthy thing, but when a company blatantly copies another's product, and then produces it out of sub-standard materials, this has some very serious implications for us all.

Of course, if you deal through an ARB store or authorised distributor, you have absolutely no cause for concern that any product you buy will be anything but the genuine article. Purchasing through our network also gives customers the peace of mind that their vehicle accessories are supported by aftersales support.

ARB has always taken a no compromise view on quality, and expects the same from other suppliers whose products we distribute. It is this approach that gives our customers the ability and confidence to venture into remote areas in the very best prepared vehicles.

Happy 4wheeling!

- **Matt Frost**, Marketing Manager, ARB 4x4 Accessories



# action



## Nissan GU/Y61 Patrol Commercial Bull Bar

Following the release of a new style of ARB commercial bar to suit certain late model vehicles, one has now been introduced for Nissan GU Patrol 3 litre turbo diesels from 2004 onwards. Depending on the particular vehicle, this bar may also be suitable to fit earlier model GU Patrols, so customers should talk directly to ARB staff for more details on this.

Commercial bars are perfect for government and fleet operators, as well as the budget conscious 4WDer. By simplifying or eliminating certain manufacturing processes, it allows a cost-effective bar to be produced that still retains the same protection capabilities as our deluxe bull bars. Strength related features of the commercial bar design for the GU Patrol include 3mm thick multi fold wings, a split pan and strong tubular sections that are mandrel bent to ensure even wall thickness throughout.

For this particular bar, the air bag compatible mounting system has been redesigned to be as economical as possible without compromising on strength or crush characteristics. This simple design makes for straightforward installation and allows adjustment for variations in individual chassis tolerances.

Available to suit both winch and non-winch applications, customers wishing to fit a winch to the bar will be able to select from Warn M8000, XD9000, 9K, 9.5XDC, 9.5XP and M12000 models. Other functional features incorporated into the bar include IPF driving light provision, recessed turn signal and parking lights, twin Hi-Lift jacking points and aerial mounts. To finish off, a durable satin black powder coat ensures it will retain its high quality appearance for years to come.

> Part no: 3417320

# Safari Snorkel Consumer Warning

## WHEN BARGAINS COME AT A PRICE

People place a great deal of trust in a snorkel system, and over the years Safari has built a reputation as the ultimate insurance against engine damage from dust and water.

This is why we believe it is very important to bring to attention a problem that consumers may currently be unaware of. During 2009, a veritable flood of low cost snorkels began appearing on the market. And while these may appear to be exact copies of Safari snorkels, there are a number of issues that must be exposed regarding poor quality copy products manufactured from inferior materials.

## SAFARI SNORKEL SYSTEMS ARE MANUFACTURED FROM AUSTRALIAN PLASTICS WITH SPECIAL ADDITIVES TO ENSURE THE HIGHEST QUALITY:

The base polymer and additives are compounded under precise conditions through exacting chemical reactions to create a homogenous material that has exceptional resistance to the sun's damaging rays, strong physical properties and tough impact resistance.

*Under the microscope, it is clearly evident that there is no graininess. The result is strong bonding down to the molecular level and consistent distribution and performance of all the additives throughout the entire component.*



Safari snorkel material – no graininess and strong bonding down to the molecular level.

## CHEAP COPIES USE POORLY COMPOUNDED AND INFERIOR MATERIALS:

As opposed to Safari snorkels, cheap copies contain a minefield of problems and are a real trap for the unwary consumer who would understandably expect the same level of product performance. Whilst the copy components look very similar to the genuine Safari snorkel and are promoted as using a similar base polyethylene material, the key points of difference are what additives are then mixed with the base material and the manner in which the (correct) additives are mixed or compounded with the base material.

*Under the microscope, the cheap snorkel material displays a distinctly grainy or crystal-like structure where the additives/colouring agents simply coat the base material rather than combining in a homogeneous structure.*



Copy snorkel material – distinctly grainy or crystal-like structure where additives and colouring agents simply coat the base material. Consistency varies markedly throughout.



### **CONSISTENCY OF MATERIALS AND UV RESISTANCE:**

When the material of the copy snorkel was sampled from different areas, it was found that the consistency varies markedly depending on what part of the component is analysed. This has a huge impact upon the level of UV and structural performance of the component, and even if some areas could be considered satisfactory, others are definitely not. What this means is that UV resistance becomes a serious problem, causing these components to degrade under prolonged exposure to the sun.

The physical properties of these copies are markedly different to the genuine Safari components. This is particularly evident in cold, ambient temperatures where a knock from a passing branch can crack the snorkel body, rendering it useless and dangerous at the next water crossing.



*Impact damage – cracked snorkel body from a blow that barely marks the surface of a genuine Safari snorkel.*

### **HARDWARE CORROSION THAT SPREADS TO THE VEHICLE:**

Despite the copies' mounting hardware and brackets looking the same as Safari's, there are huge discrepancies in the material quality. For example: hose clamps that have a stainless steel band are often constructed with a plain steel screw, brackets are

often mild steel that's been painted (or worse, studs in the wrong grade of stainless steel or plated mild steel), while inserts in the snorkel body are often made of aluminium or plated steel.

The list goes on and unfortunately for the consumer, the problems don't appear for some time. And by the time they do, it's too late. The corrosion will most likely have fused components together and caused rust to spread to vehicle panels.

All genuine Safari snorkel fasteners, clamps and brackets are 100% stainless steel, of the correct grade for the job, and the stud inserts formed inside the snorkel body are high quality brass for a lifetime of component serviceability and zero corrosion.

### **BUY A SNORKEL YOU CAN TRUST:**

As 4WD enthusiasts, we rely on our snorkels for total peace of mind to protect the engine against harmful water and dust, which can only be achieved with a snorkel you can trust. Put simply, the inferior manufactured copy product cannot be relied upon to deliver the level of component performance and durability that Safari customers have enjoyed for over three decades. Regardless of cost, there is no peace of mind with inferior products, so always choose the genuine Australian made Safari snorkel system.

ARB distributes an extensive range of Safari snorkels, which are available from ARB outlets. Drop into your local store to find out more about the benefits of this product and the selection available for your vehicle model.



# Freya Hoffmeister's Race Around Australia

**Freya Hoffmeister, a celebrated German kayaker, last year officially became the first woman to circumnavigate Australia in a kayak. Following months of preparation and organisation, it took her 332 days and 13,500km of paddling to achieve this monumental goal. Thule and ARB were proud to support her as she literally travelled around the country.**

Based in Husum in Germany, when Hoffmeister is not on the water, she's more than likely choosing between her van, a tent or a rental car to sleep in... independence is her lifestyle.

A former gymnast, body builder and skydiver, Hoffmeister began kayaking in 1997 with a folding kayak on quiet waters, and quickly became an expert in many fields, teaching all over the world and embarking on numerous expeditions. She is accomplished in several styles of paddling including open water marathon racing, Greenland style rolling and rough water kayaking. In 2007, she circumnavigated Iceland in a record 33 days and three months later, set out to become the first woman to kayak round the treacherous south island of New Zealand, solo and unsupported.

Following this, the adventure-seeking and ambitious Hoffmeister was looking for an even bigger challenge to conquer. Her friend and mentor, Paul Caffyn, is the only other person to have completed the circumnavigation of Australia previously, and he played an integral part in the planning of her trip. By many it is considered to be one of, if not *the* most challenging journeys in the world of sea kayaking. While there have been dozens of attempts, Hoffmeister is the first woman to complete it, and only the second person ever, after Caffyn.



Freya Hoffmeister's Race Around Australia began in Queenscliff, Victoria (the same place Caffyn had started his journey 27 years earlier) on the 18th of January, 2009. As well as being physically and mentally challenging, there were also a myriad of logistical and environmental factors that had to be taken into account beforehand.

Australia has many dangerous (and some more friendly) sea creatures that Hoffmeister had to contend with along the way. She was followed on remote beaches by crocodiles, the stern of her kayak was attacked by a Great White shark, and on several occasions she was pushed up from underneath by other unidentified sea creatures. At one point she found herself surrounded by



a large pod of whales, but at other times, smaller, but no less scary things like sea snakes and poisonous jelly fish were in abundance.

Some areas of Australia's coastline are both unfriendly and unpopulated, making it a challenge just to organise the basics of food and fresh water. There were several stretches of kayaking where Hoffmeister could not land for days at a time, and on some occasions she had no choice but to sleep in her kayak. Although this was not comfortable, it was possible.

For sleeping purposes, she used inflatable floats on both paddle blades and then secured the paddles to her kayak by strapping a Thule tie down strap around the hull. This way she was able to safely sleep in the middle of the ocean without the risk of tipping over. In all, she spent 13 nights out on the water. Other times she simply landed ashore and set up her tent for a well deserved rest, though on some occasions there was the opportunity to enjoy the luxury of a real bed.

The environmental elements were one of Hoffmeister's biggest challenges. From huge surf, crossing the Gulf of Carpentaria and other exposed sections, the risk of tropical cyclones, extreme temperatures and burning sun, there was plenty of action to prevent her from getting too comfortable! But although there were some precarious moments out at sea, for the most part her trip was relatively incident free.

Hoffmeister travelled close to the coastline wherever possible, though at times she had to venture further offshore to cut across bays and avoid large surf. Occasionally there were quite long stints where no land was visible, but with the support of essential electronic gadgetry including GPS, EPIRB and satellite phone, Hoffmeister knew she could reach help in the event of an emergency.

Over the course of the journey she spent 245 days paddling, with an average of 55km per day (about 11 hours). The majority of Hoffmeister's trip was largely

unsupported, and she kept all her supplies tucked into the kayak with her. In total, paddling hours for the entire expedition amounted to a very admirable 2650.

On December 18th, 2009, Hoffmeister arrived back in Queenscliff, completing a successful circumnavigation and becoming the first woman ever to do so, as well as bettering Caffyn's previous record by 28 days. Looking forward to changing out of her swimsuit, she was hungry, drained, but extremely proud of her achievement.

"I'm tired and I'm happy not to be paddling any more, but it was worth it."

Although it has only been a few months since the conclusion of the trip, we're pretty sure that Hoffmeister is already planning her next big adventure. She has plenty to keep her busy while she's on dry land, having built up a chain of seven franchise ice cream cafes, a salad bistro and a Christmas shop. However it's only a matter of time before her wayward nature points her in the direction of a new challenge. From ARB and Thule, we congratulate Freya Hoffmeister on the completion of this inspiring journey.





# Toyota Prado 150 Series Development Update

With the launch of the Toyota LandCruiser Prado 150 Series, we have been getting a lot of enquiries from customers who are eagerly awaiting the release of 4x4 accessories to suit. ARB has been working on a complete range for this vehicle, but at the time of printing, some of these products were still under development. Here's an overview on what's currently available – and for the latest information on these accessories, contact your local ARB store.

## DELUXE BULL BARS

A massive amount of research and design has gone into the development of frontal protection equipment for the Prado. For additional information on the process involved, you can check out the Ask ARB section of this newsletter (page 18). A range of deluxe bars are now available for the Prado 150 Series including a combination bar (equally suited to winch and non-winch applications) as well as deluxe winch and non-winch bars.

The most appropriate ARB bar for your Prado will depend on your specific vehicle model and its additional extras, such as winch provision, the optional centre-grill-located camera, HID lights and anti collision radar. These factors had to be taken into account during engineering, resulting in five different designs for this vehicle. All deluxe bars are available now, with Sahara styles due imminently, and customers need to make certain they speak to sales staff in regards to their particular model and specific needs to ensure that the most applicable bar is specified.

The mounting system for the Prado 150 bull bars has been fully redesigned from the ground up and extensively tested to ensure it suits the vehicle's crush curve. Mount brackets are independent and adjustable, while a bracing system for the winch mount bracket has been incorporated for full bar stability when winching. Winch compatible bars will accommodate a range of Warn electric models up to 9500lbs and all bars incorporate twin Hi-Lift jacking points in the centre pan for improved ability in recovery situations.

The physical mounting position of the bar, combined with upswept and tapered wings, gives the vehicle an excellent approach angle that is further improved when the Prado is fitted with OME suspension. For maximum strength, the bar utilises an all steel construction, with mandrel bent tubes to ensure even wall thickness throughout these components. The multi fold wing section and split pan design provide the bar with a massive amount of durability, and additional protection is afforded to lower front vehicle components via specific wing panels and a stone tray.





A range of IPF driving lights can be fitted to the bar, while parking and indicator lights are located in recessed, injection moulded housings and also include provision for optional fog lights. Other features include twin aerial brackets which are located on the centre top tube, the retainment of original equipment tow points, and a durable black powder coat finish which can be colour coded to individual tastes.

Combination bar > Part no: 3421470

Deluxe bar > Part no: 3221450

Deluxe winch bar > Part no: 3421450

## DUAL BATTERY SYSTEMS

To allow the Prado to run auxiliary accessories such as fridges and lights without flattening the main battery, a dual battery system is now available for diesel vehicles (models that don't already have one). Due to space limitations within the engine compartment, the size of the auxiliary battery is restricted, and unfortunately in the case of the petrol model Prado, a dual battery system is unable to be accommodated.

With 3mm steel construction that is finished in a durable satin black powder coat, the complete kit contains the Sure Power smart solenoid plus the necessary wiring and hardware, while the tray kit comes with all mounting hardware. The tray fits a range of battery sizes and is easy to install with simple to follow instructions. However, when DIY customers are fitting these, they should be aware that ARB does not recommend wiring the Sure Power solenoid into the vehicle's starting system, as there is some risk of electrical damage to the vehicle's electronics.

Complete kit (not including battery) > Part no: 4321030

Tray only > Part no: 4221030

## OME SUSPENSION

An entirely new suspension system is currently under development for the Prado 150 Series. It comprises of springs to achieve approximately 50mm of lift both front and rear, struts with bushes to match the original equipment width, and rear shock absorbers. Although there are some suspension options currently accessible, ARB recommends that customers hold off on ordering until the full range is available to ensure a suspension system that is fully tailored to suit their specific needs.

## OTHER ACCESSORIES

For maximum traction, front Air Lockers are currently only available for diesel Prados, with rear Air Lockers and models for petrol vehicles under development. Carrying ability can also be vastly improved with ARB's range of roof racks including deluxe, trade and touring styles.

Along with the above, there are more products for this new vehicle still in the pipeline pending release, so please ensure you contact your local ARB store for all of the latest information. Please note that the vehicle pictured is fitted with prototype ARB side rails, details of which will be available soon.

# Drive 4 Life Fundraising Tour 2010



**Following the successful Simpson Desert trip that took place in August last year, Drive 4 Life is gearing up for the 2010 event in October from the 19th-26th.**

You may have read the most recent trip report in the previous newsletter, but for those who missed it, Drive 4 Life is a not-for-profit organisation that has combined the worthwhile experience of Outback travelling with the added benefits of raising much-needed funds for the Northcott Society. With all 4WDers welcome, these trips allow novice participants to head to places they would otherwise not be confident enough to visit, and the more experienced to enjoy the beauty of the Australian Outback while travelling with a group of friendly people.

Although Drive 4 Life has, in the past, run two trips throughout the year, just one major expedition has been set for 2010, beginning and ending in Broken Hill. Participants will be treated to the spectacular views of the Flinders Ranges, as well as traversing the Corner Country of NSW, QLD and SA. Past attendees of Drive 4 Life fundraisers have always returned with glowing reports, telling of the enjoyment they got out of the trip, both from meeting and travelling with new people, and seeing parts of the country they had not yet managed to visit.

More details on the upcoming trip will be forthcoming in the Winter edition of ARB 4x4 Action, and for more information in the meantime, visit the website at [www.drive4life.com.au](http://www.drive4life.com.au)

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## AVM High Performance Hubs



**For more than 50 years, AVM has been developing and producing free wheeling hubs for four wheel drive and sport utility vehicles.**

AVM hubs are mechanical devices that allow owners to manually disconnect the front wheels from the drive train during the time that 4WD is not needed (generally about 95% of the vehicle's life). This results in substantial fuel, parts and tyre savings, since components like axle shafts, differential gears and drive shafts remain absolutely motionless.

As vehicle performance is upgraded and larger tyres and diff locks are fitted, it's not long before the limitations of standard parts start to become evident, and manually locking hubs can often be a weak link. With this in mind, AVM has released a new high performance line of hubs for 4WDers that demand strong driveline components for competition and performance applications. Manufactured from the toughest materials, they incorporate military grade nylon controls, sintered bronze bushings, steel axle hubs and a clutch ring machined from a steel bar.

For more information on whether this range is applicable to your needs, drop into your local ARB store.

# ARB Air Locker Tools

Since 1987 ARB has become one of the world's most recognised manufacturers of performance aftermarket differentials. Over that time, our DIY customers, as well as ARB's own fitters and engineers, have always had to rely on a small handful of ad-hock tools for installation and servicing. These tools were often difficult to find or expensive to buy, and many were simply not ideal for the job at hand.

ARB is now pleased to announce the introduction of Air Locker Tools, a range of specialty automotive differential installation and service tools. Unique additions to the range include Adjuster Nut Pliers, Pre-load Shim Driver, Differential Spreader, Carrier Bearing Puller and Test Gauge, all engineered by ARB to save valuable time and improve the quality of installation and service work.



Correct pre-loading of an adjuster nut type differential is an important part of installation and service. The new Adjuster Nut Pliers have been specially designed to easily and safely accommodate not only the full ARB Air Locker range of adjuster nuts, but also most original equipment adjuster nuts, regardless of size, shape and bearing cap type. With a rubber moulded handle for ease of use and one handed operation ability, this is a premium product that incorporates chromoly tool steel jaws and grade 12.9 fasteners.



For installing and servicing common shim pre-loaded differentials, the Shim Driver is designed to evenly distribute the installation force around the outside edge of

a differential shim as it is tapped into place. This allows thinner shims to be inserted into tighter places than would otherwise be possible. It comprises of six different sized steel profiles to suit most common carrier bearing shim diameters, which are joined together as a set for convenience, featuring a quality, zinc plated finish.



Most common Salsbury style axle assemblies require the use of a differential spreader in order to achieve the required carrier bearing pre-load during set up. The

specialty ARB Differential Spreader has been designed to be quickly and easily used with most shim adjusted automotive differentials. It allows the housing to be stretched in a safe and controllable way, reducing the risk of damage, and comes in a durable carry case with a dedicated powder coated parts tray.



The Bearing Puller Kit offers a unique way of removing a differential carrier bearing, which allows easy removal of the original bearings with less chance of damage. It is able to remove many bearings that standard bearing pullers cannot, and works with most models of ARB Air Locker and original equipment manufacturer differential centres. For added convenience, the Bearing Puller Kit comes in a durable carry case with a powder coated parts tray for easy storage and transport.



Last but not least, the Test Gauge has been designed as an easy and effective way to determine the supply pressure and/or to detect a loss of pressure in the air system of the ARB Air Locker or the ARB air compressor. It works with any model of Air Locker, is quick and easy to use and comes with an accurate European made pressure gauge.

Together, these products will make installing and servicing ARB's renowned range of Air Lockers a less time-consuming and more straightforward task. They can be sourced now from ARB stores around the world.

Bearing Puller Kit > Part no: 0770001

Adjuster Nut Pliers > Part no: 0770002

Differential Spreader > Part no: 0770003

Shim Driver > Part no: 0770004

Test Gauge > Part no: 0770005

# Round Oz on a Shoestring - the Final Chapter

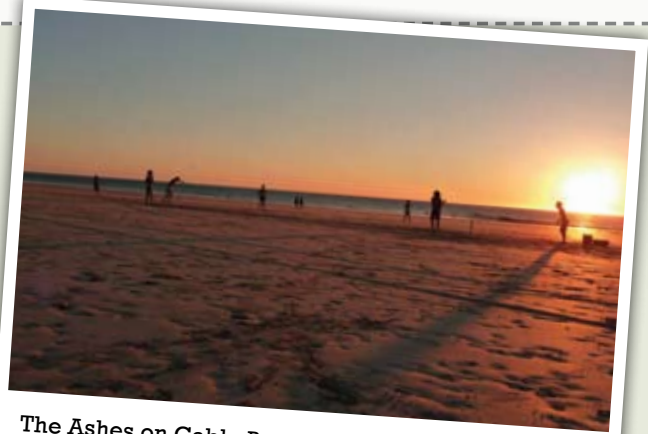
Words & Images by Dylan Wilson

So far, our plan to have no plan was going according to plan. We had well and truly relaxed into travel mode and were happy to just take each day as it came – well, happy while each day was bringing fun and adventure.

Our next destination was Broome. We thought a couple of days would do us there, but, due to our first flat tyre for the trip and a thing they call 'Kimberly Time', we spent another week or so waiting for our new tyre to be flown in.

In hindsight this was quite fortuitous, as it turned out we needed at least this long to enjoy everything Broome had to offer. We spent countless hours on the famous Cable Beach, swimming and relaxing on the sand and listening to music. One particular day we met some lads from the UK and had our own rematch of the Ashes, beach cricket style... this time the Aussies were victorious, of course.

One of our favourite pastimes in Broome was enjoying Sunday afternoon beers and live music at Matso's Brewery. We were also no strangers to the local tavern, thanks to our caravan park being situated just across the road.



The Ashes on Cable Beach, Broome

appeal, but they all have their own subtle differences that make them unique and spectacular. Bell Gorge, Manning Gorge and all of the gorges in and around El Questro probably rate the highest on our favourites list – though there are many more that would come in close seconds. On a hot day, nothing was more enjoyable than jumping off the naturally formed rock ledges into the deep, refreshing pools, especially as often we were the only ones around due to it being a little late in the season.

It was hard to drag ourselves out of the Kimberly, but we decided to try to reach Kununurra in time for the AFL grand final – (having a Geelong supporter on board might have pushed this decision a bit).

While we were in Kununurra, we befriended a young German couple who were staying at the same caravan park and discovered they were looking for a lift to Katherine. Seeing as we were heading that way, and had two vacant seats, we offered to take them. This made the long trip to Katherine seem quicker as we spent the hours getting to know them. Little did we know that they would become our travel companions for quite a while, finding their own car and coming with us from Katherine to Litchfield National Park.

In Darwin we stayed with some family friends and spent four days taking in the history and the sights. We visited the war memorial and learned of the destruction of most of the city by the Japanese in World War II. It was amazing to think the war got that close!

From Darwin we headed east into Kakadu and the scenery here was so different to any we had previously come across. The wetlands stretched into the distance with rocky outcrops popping up everywhere. Ubirr rock was a standout, watching



The Troopy getting ready for its long trip home

The next section of our journey was perhaps the biggest highlight of the trip. Every place we stayed, or even just visited along the Gibb River Road, was awe-inspiring. Some people might think that after visiting so many gorges they could start to lose their

a smoky sunset over the wet plains, the pink sun lighting up the bodies of water. The only downside to Kakadu was that we couldn't swim at any of these beautiful places due to the ever present danger of crocs. It wasn't easy gazing into inviting water holes in 35+ heat, then turning and walking away.

The build up to the Wet was definitely closing in on us, so we turned back towards Katherine to restock and head across the Gulf towards the east coast. Should have known better than to make plans!

While travelling towards Pine Creek, about 150km out along the Kakadu Highway, the Troopy suddenly shut down. The steering and brakes became really heavy but we managed to pull the car up on the side of the road. We tried starting it again... nothing.

After a while a couple of guys pulled over to help us out, poking around under the bonnet before telling us they couldn't see anything wrong and that we should be fine to get going again. We tried starting again and this time did, but about 2km up the road the same thing happened. This was when we knew something was seriously wrong.

Fortunately a ranger came along and towed us to the nearest campground, where luckily there was also a mechanic. He found that the problem was very simple, but very bad for the Troopy and the future of our trip... there was no water in the radiator.

Before you start thinking that we had neglected to check these sorts of things, let me tell you how it happened. Turns out there was a split in the radiator hose so we had obviously lost all of our water fairly quickly. As a result we missed the temperature gauge soar and of course, once there's no water surrounding the thermometer, the gauge doesn't work too well. So, here we were, when the engine cut out, mystified, because according to the gauges everything was normal.

After many phone calls back and forth to Melbourne, we finally arranged for the RACV to send a truck from Katherine to pick the Troopy and us up and take us back to assess the damage.

The next day the mechanic broke the news that the head and other parts of the engine were probably

seriously damaged. It was going to cost at least \$600 in labour for him just to have a look. When he went on to say that if there was damage to the head the costs were likely to be in excess of \$3,000 (more than all of our funds put together), we knew our adventure had come to an abrupt, and definitely unplanned end. It felt strange that the day before we had been talking about our next couple of months in central Queensland and down the east coast, and now we were heading home.

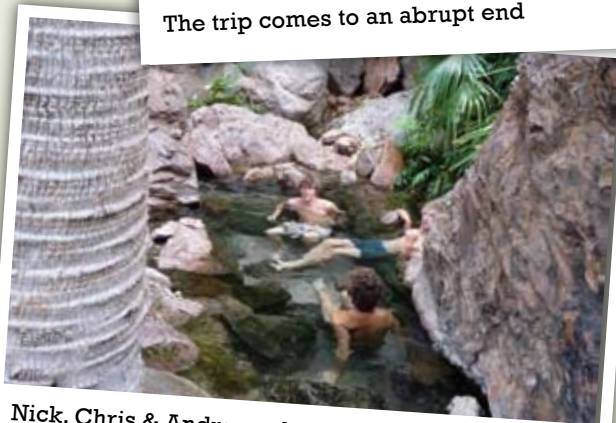
I have to admit that it wasn't easy watching the old Troopy that had carried us to so many great destinations, disappearing into the sunset on the back of a tow truck.

I guess, though, the only thing to do when things don't go according to plan is to head home, reassess and make new plans. When I have some I promise you'll be the first to know.

Thank you all for following our adventure and we hope to share more of them with you in the future.



The trip comes to an abrupt end



Nick, Chris & Andrew relaxing in Zebedee Springs, El Questro



Yellow Water Wetlands, Kakadu



Cable Beach, Broome

**WIN!**



Congratulations to **Chris & Nick**, who are our portable compressor kit winners for this issue. Everyone else who appears on these pages will receive an ARB Speedy Seal puncture repair kit to reward their efforts.

## Win an ARB Portable Compressor

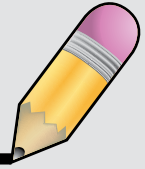
This issue, we're giving away another portable air compressor kit, so here's your chance to win one! Simply write to us and ask us anything you'd like to know about ARB and our products. The letter of the month will be published in the next edition of ARB 4x4 Action, along with our reply. The winner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

- **Post:** ARB 4x4 Accessories Marketing Department PO Box 105 Kilsyth VIC 3137
- **Email:** [marketing@arb.com.au](mailto:marketing@arb.com.au)

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](mailto:sales@arb.com.au). We reserve the right to edit all letters for clarity.

# ASK ARB



Recently, we received some letters reporting on the extraordinary performance of ARB's vehicle mounted air compressor. ARB's on-board compressor was released back in 2007 after a lengthy development period to ensure it was built tough enough to stand up to the heavy duty demands of 4WDing. Designed and built in Australia and manufactured from high quality materials, it was made to last, and evidently can stand up to some pretty rough abuse. During the design process, the compressor underwent extensive testing to ensure it would be able to withstand the worst conditions the Australian Outback could throw at it... but apparently our customers have taken that abusive testing a few steps further. As you'll read below, these are some instances in which any lesser quality product probably would have packed up a long time ago!

**WINNER!**



*I thought you might be interested in this ARB Air Locker compressor. I had it fitted in the engine bay of my 100 Series which had a 5.7L Gen III conversion done to it. The vehicle had a diff breather hose burn through near the exhaust, which caused an engine bay fire.*

*The vehicle was written off as a result and I bought the vehicle back off the insurance company to salvage whatever parts I could. I removed the compressor and, for my own curiosity, hooked it up to a battery... and the compressor still worked!*

*This is certainly a testament to how good these compressors are, as there was a lot of heat around this area.*

*Chris*

Hi guys,

*Thought you might find this interesting.*

*I am both a diesel mechanic by trade and an avid believer and user of ARB products on my own vehicles, so it came as quite a surprise that I was asked to replace a compressor one day that I was told was only about two years old.*

*This didn't quite seem right to me, as I know from experience that they should go for a lot longer than that... until I saw it. The compressor was mounted on the rear frame of an underground concrete truck working 24/7 in a mine near where I live. It had originally been 'protected' by a perspex panel that had been smashed some time ago and it was now out in the elements, which as you can imagine is not the best given the environment it was working in. And work it did! It ran providing air to operate pneumatic valves on the truck right up until it reached a depth where the air intake became smothered with a concrete slurry and it was forced to ingest water and concrete slop!*

*I have little doubt that if the air intake had been in a cleaner environment it would be still running quite successfully.*

*The compressor was replaced with a new item that now resides under the passenger seat as it is only required to run when the operator is not in the cabin. A much cleaner environment I'm sure you'll agree will see it last a long time yet!*

*As I said, I thought these things were bullet proof, and maybe they are. But not concrete proof, not quite anyway!*

*Cheers,  
Nick*



Old compressor

**WINNER!**



New compressor

Hi to everyone at ARB,

I have recently purchased a 2004/5 model Toyota Rav4. I know it's not a 'real' 4WD but I'd like to be able to take it off road wherever possible. Unfortunately, I can't find much information about the smaller AWD in magazines etc.

My question is regarding recovery gear and accessories. Can I buy equipment designed especially for my smaller SUV at my local ARB store? I don't want to embarrass myself by not knowing what is available when I want to make a purchase.

I would appreciate any information you can give me.

Regards,

Barbara Stirling

Hi Barbara

What is it that makes a 4WD 'real'? Is it simply its ability to go 'off road', or does it need to have a transfer case and low range gearing? Something worth noting is that there are very few 'real' 4WDs that can actually drive all four wheels at once! Either way, a Rav4 is a very popular off road SUV for which plenty of accessories and recovery equipment are available. ARB carries a range of items from nudge bars to tow bars, driving lights to roof racks as well as ARB and Bushranger recovery gear, the latter of which produces a 6000kg snatch strap specifically for smaller vehicles. Other recovery items like hand winches, air jacks, compressors and tyre repair kits are all just as essential for smaller vehicles heading off road, as they are for their larger brothers.

Hi,

I've been trying for about two years to convince my wife to let me get a snorkel for my 3.0 diesel HiLux. No matter how hard I nag, she doesn't see the point of getting one. She just tells me to avoid deep water when I go out with my mates.

But apart from river crossings, what are the other benefits that a snorkel can bring? I have been told that a snorkel can produce better airflow to the engine, resulting in improved fuel economy. Is this true? This is the kind of information that would convince her that a snorkel is a good addition to the HiLux. I need all the help I can get! Please!

Cheers,

Josh

Hi Josh,

Like a bull bar or a set of diff locks, a snorkel is another accessory for your fourby that should be thought of as an insurance policy. It's all good and well to avoid deep water, but a weekend trip to the high country or travelling north in the wet season can show you how quickly a downpour can change a shallow creek into a fast flowing torrent. Although driving through deep water can sometimes be avoided, there are times when it may be a necessity to get out of an area after rain.

So what other benefits can a snorkel bring? Better airflow is certainly one. Taking the air intake out from under the inner guard where it's prone to dust intake, or out from the warm airflow of the under-bonnet can be beneficial to fuel economy and power, but it really is specific to the vehicle model. Reputable manufacturers like Safari spend a lot of time perfecting snorkel designs so that any gains that can be achieved from increased airflow are taken advantage of.

Smaller SUVs are becoming more and more popular, and ARB is a proud sponsor of Pat Callinan's 4X4 Adventures, which began airing on Channel 10 in late October 2008. The first season saw Pat travelling around the country in Kia Sorentos, visiting a number of iconic Australian locations, including some that in the eyes of many, are viewed as only reachable with a larger style 4WD. This went a long way in demonstrating just how capable a small SUV can be, and showing that it is possible, with the right equipment and right advice, for just about anyone to get out into the wilderness and explore off road regions of the country.

Pat says, "It was fun watching onlookers see what the mid-sized Kia Sorento could get through with a little help from Old Man Emu suspension! The Kia cruised through a heap of obstacles that had Cruisers and HiLuxs turning back."

So no need to feel embarrassed. Drop into your local ARB store and speak to one of our experts who can give you all the help and advice you need.

Mark 'Lowmount' Lowry

(Manager – Product Development & Evaluation)



But one of the best things about raising the air intake of your vehicle by fitting a snorkel is that you move the intake further from the inner guard and the dust that is produced by the front wheels. Some snorkels also allow the fitment of Donaldson cyclonic pre-filters. Their clear bowl design lets you see the dust they separate from the airflow and they are easily serviced. The result is cleaner air, less clogging of the filter and ultimately lower servicing costs.

So an insurance policy that lowers servicing costs along with possible fuel savings can only be a good thing. Hopefully, you won't have to nag too much longer.

Mark 'Lowmount' Lowry

(Manager – Product Development & Evaluation)

Dear ARB,

*I enjoy receiving your informative mag in the mail each season to catch up on the great destinations our marvellous country has on offer, and to find out which ARB products will best help me get there and back safely. During a recent trip to the Coorong region of SA, a question arose between the travellers in our group and this is what I'm hoping you can answer.*

*Everyone knows how to do a snatch recovery, and everyone knows how to join two snatch straps, and never to use a shackle between them (or at least they should). My question is, can you use a winch extension strap combined with a snatch strap to increase length for recovery? Obviously you would need to ascertain that the straps both have an adequate load rating.*

*Is this an acceptable practice or is the shock loading of a snatch recovery too much for a winch extension strap to safely bear?*

*I'd love to hear what you guys have to say about this. Thanks heaps and I'm looking forward to the next instalment.*

Nick

Hi Nick,

Some of the best recovery techniques are devised and argued around the campfire when travelling with groups. Everyone's experience in a recovery situation can vary greatly, as does the terrain they find themselves stuck in. But before getting too deep into discussion about what gear to use when, the most important thing to consider is the safety of those involved in the recovery, as well as the vehicle's. Manufacturers of recovery straps use different materials and webbing weaves to produce a strap of the correct strength, and an understanding of the differences between a snatch strap and a winch extension strap is important for safety.

Snatch straps are typically manufactured from nylon webbing. The thickness, width and weave all play a part in allowing the strap to stretch and absorb the energy involved in a recovery. What is very important is that by the simple nature of stretching, shock loads on recovery points are reduced, and the stored kinetic energy helps recover the vehicle. Snatch straps are typically designed to stretch by at least 20%. The more they stretch the less shock is placed on the recovery point.



Winch extension straps, however, are usually made from polyester fibre and use a weave that produces minimal amounts of stretch (typically under 5%). When winching, you want little or no stretch for two reasons: a) because any stretch requires the use of more cable before the vehicle begins to move; and b) because in the event of failure of the strap or cable, less elasticity reduces the likelihood of dangerous projectiles injuring people and property. But with little or no stretch, a winch extension strap is more susceptible to damage from shock loads.

So, should we use a winch extension strap in conjunction with a snatch strap? If we put safety first and the recommendations of the manufacturer, then the answer is no. The issue is that the winch extension strap is not designed to handle shock loads. One could argue that the snatch strap would stretch and reduce any shock load on the winch extension, but the thing to keep in mind is that the minimum rated sized snatch strap is typically 8000kg and can be as high as 15,000kg, whereas winch extension straps (such as ARB's) are rated at 4500kg or 8000kg. So there is a good possibility that if the forces are strong enough, the winch extension will be a weak link and may break, with the possibility of causing damage or injury.

So with safety in mind, always use a strap for its intended use only. Blue warning labels with the strap's minimum breaking strength rating and its intended use can be found sewn into the eye at one end of the strap.

Mark 'Lowmount' Lowry

(Manager – Product Development & Evaluation)

Hi,

*I have two questions for you about Air Lockers. I would like to know whether they are fact or fiction.*

*Firstly, I have heard that you shouldn't install Air Lockers in full time 4WDs such as the Prado because it will break the transfer case as only the rear diff is locked and not the front, causing the transfer case to fail.*

*Secondly I have heard rumours that there is an O-ring in the ARB Air Locker that fails, causing the locker not to operate or drop out if already engaged. Other reports say this has been rectified. Could you please tell me if this is a problem that may be experienced or if it has indeed been rectified. I am considering buying a locker for the rear of my Prado but don't want any problems.*

Thanks,  
Darren

Hi Darren,

In regards to your first question, this is really no more the case than to say that putting better quality tyres on your Prado would be bad for your transfer case. The fact is that an ARB Air Locker differential is a traction aid only, and so it is only the increased traction available to your vehicle with a locker engaged that could ever put your transfer case under more strain than it would be exposed to otherwise.

For example, as you drive up a steep hill that is paved and dry you have a very high level of traction, and your transfer case is therefore under more strain than it would be if that hill were covered in loose gravel and the tyres were slipping. This can also be the case if only one axle or one side of the car happens to be on loose gravel. And with each unlocked slipping wheel, a great deal of your vehicle's driving torque is lost, as you stray closer and closer to being stuck. The difference that your ARB Air Locker will make to the vehicle is that it will prevent the vehicle from losing its driving torque



Dear ARB,

I have an ARB standard roof canopy fitted to my 2007 dual cab HiLux, as I wanted to have the option of adding an ARB canopy roof rack in the future.

Having not had a canopy on previous vehicles, I love the extra carrying capacity and security a canopy offers. The problem I am currently finding is that although there is ample room for most things inside the canopy, loading larger items into the back is sometimes problematic due to the rear window opening level. Have other canopy owners reported this problem and are there any plans to raise the level of the rear window closer to the roofline to allow easier access for larger items?

Cheers,  
Richard Walker

Dear Richard,

We are pleased to hear that the ARB canopy fitted to your Toyota HiLux dual cab fulfills the three core functions of a canopy:

- Increased storage space
- Improved security
- Protection from the weather

Your question is quite tricky considering you have already purchased your ARB canopy. And unfortunately there is not really any way to improve your access for larger items with the standard roof canopy. Ultimately, product selection comes down to individual preference and balancing your wants versus needs as part of the purchase decision. This question is, however, a great example for ute owners who are considering the purchase of a canopy, so allow me to provide a general response.

ARB has an extensive range of canopies for most dual cab utes, consisting of either a standard roof, which transforms the vehicle into a more wagon-like appearance, or the high roof which allows larger items to be loaded in the canopy. The high roof canopy increases the door opening by approximately 130mm compared with a standard roof. For standard roof canopies the door height is all the same, however the trim or placement

in regards to the canopy roof varies to work in with the individual vehicle design. For example, some recent vehicles have a taller ute side wall and lower canopy shell to balance the overall height.

For customers wanting the option of adding a genuine ARB canopy roof rack, then the standard roof canopy is the only choice; alternatively the high roof canopy can be optioned up with canopy roof bars such as the Thule professional bars, with an extensive selection of accessories.

With either of these ARB options, your canopy will be suitable for carrying an additional 100kg of evenly distributed roof load. Please note that a high roof canopy will raise the overall height of your vehicle and you will also have to reach further to grasp a door in the open position. Dependent upon your overall vehicle set-up, access to underground parking lots or even your own garage may govern your choice of canopy.

For customers who need to carry very tall items occasionally, the complete canopy can be removed and refitted at your convenience, and this simply requires our fitters to configure the weather seal to suit, at the time of installation.

Rob Puts  
(Manager – ARB Canopies)



to every slipping wheel – essentially making gravel behave a lot more like pavement, and that is exactly why you would have one.

And in regards to your second question, although we cannot say that from time to time we have never had an air system failure in an Air Locker differential, what we can say is that this is an extremely rare case, and that it is never the result of simple wear and tear under the conditions of regular use.

The O-ring seals ARB builds into Air Locker differentials actually have a lower wear coefficient than the metal surfaces they run against, and we have seen Air Locker O-rings last in excess of 500,000km and still perform flawlessly. The fact is that when an O-ring fails, you can generally find the culprit very quickly by looking in the direction of particle contamination in the oil from poor maintenance practices, from rust on the sealing surfaces caused by water ingestion due to ineffective axle breathers, or from cumulative damage caused by physical damage done to the sealing surfaces at the time of installation.

So what this means is that we would expect that a properly installed and maintained ARB Air Locker should be able to depend on its original set of seals for the full life of your 4WD.

Daniel Bongard  
(Engineering Supervisor)



Hi ARB,

*I have been lucky enough to be able to purchase a new model Toyota Prado 150 Series. I was wondering what process ARB goes through when a new model of a popular 4WD is about to arrive to ensure that they have compatible accessories in a timely manner?*

*Obviously you guys would spend a considerable amount of time and money in researching this. How early does the liaising with the manufacturer begin and what type of testing is done on the final product?*

*I guess the bottom line is, when will you have a bull bar available for the 150 Series Prado?*

*Thanks for your time,*

*Steve*

Dear Steve,

Thanks very much for your question. Your letter highlights a subject that many people may not understand. It's also one that is the subject of great frustration to us and to our customers.

Australia usually represents a very small percentage of the international market for 4x4 vehicles, therefore our somewhat unique need for accessories is something that usually only concerns the local importer or manufacturer's regional headquarters.

These organisations are, understandably, very guarded about their new models. Even when ARB gets the opportunity to see pre-release information, data or a prototype vehicle (and this only happens when we are the successful bidder for the original equipment manufacturer accessories), we are not permitted to use this information to develop our own products. This is because we are under confidentiality agreements up until the retail release of the vehicle.

As such, this leaves us very much on our own, so we have a variety of means we can employ to get our products to market as quickly as possible. If the model is already on sale in another country, it is not uncommon for us to import one to get a head start. This was not the case with the Prado however, with it being simultaneously released around the world late last year. Thus the best we could do was to place an advance order for the vehicle at our local dealer as soon as we heard there was a new model on the way.

Once these vehicles arrive, our team of development engineers descend on them like hungry beasts and start the evaluation and development process.

We cannot overemphasise the huge amount of development and testing work that goes into every accessory we release for these modern vehicles. With their ever more complex systems and changing structural and safety componentry, each vehicle presents a new set of challenges. For example, to correctly tune the bull bar mounting system, our engineers crush the original equipment componentry ahead of the structure to which the bull bar will be



mounted. This crush is done in our laboratory under controlled circumstances with precise measurements taken of the forces required, and a displacement curve developed. Subsequently, we can then ensure our mounting system is tuned to that curve. Even though we employ sophisticated computer design and modelling to develop componentry, this process can require several prototypes and live testing to perfect, all of which takes time. Once the mounting system is developed, the team of designers adds visual and practical elements to ensure a harmonious appearance on the vehicle. Again this is developed in a CAD environment, but until we can actually see a prototype on the vehicle, it's not possible to perfect the design. Only when that process is complete can we begin on and off road testing and evaluation of the products.

As a side note, with all of this time-consuming and expensive development activity occurring, it is sometimes with a little scepticism that we view other manufacturers' release of their product ahead of ours. Often when this happens we know they have hastily adapted something and cannot have done their development work anywhere near as thoroughly and correctly as would be required.

From a business and customer service perspective, our desire is always to have our accessories on sale as soon as possible. The fact that they are often not available for several months after the vehicle is first seen is testament to the thoroughness we apply to our development process and your assurance that we put product testing and design excellence in front of all other considerations.

Steve, in terms of when the bull bar for the Prado will be available, I'm sure you've already noticed it on the front page of this newsletter, so happy reading!

Greg Milton  
(National Product & Services Manager)

# Bushranger

## Product Update

### Diggar Three Piece Shovel

The new Diggar three piece shovel has been engineered and field tested to ensure it offers strength and reliability for all off road adventures, as well as being a handy tool around the home.

When you're out and about, there are many times when a good shovel is a vital piece of equipment: from vehicle recovery to building campfires, and of course for digging a hole for your Outback toilet. Whether you're camping, off roading, travelling or fishing, a compact and reliable shovel is an extremely versatile and handy item to carry. The Bushranger Diggar offers the sturdiness of a well built solid shovel, in a compact, collapsible design.

With a 2mm heat treated blade and a 36mm multi-cord fibreglass handle with rubber grips, this long handled shovel will break down to a length of 760mm and weighs only 3kg. Coming in a robust carry bag with Bushranger's



1 year no fuss warranty, you'll definitely find a use for this on your next travelling adventure.

> Part no: 73X40

### Caravan Spare Wheel Covers

Bushranger's spare wheel cover range has recently been expanded to include the smaller size tyres found on caravans, horse floats and trailers.

Protecting a spare wheel is quite often overlooked, but in fact it really is something that should be treated as highly important. Weakened by the elements, an unprotected spare can potentially be unable to withstand the impact

of a pot hole or even the weight of a caravan. And when you've just changed your tyre in the middle of nowhere, you don't want to find out that your spare is unsuitable.

There are a number of styles in Bushranger's line up to choose from, and they have been designed to fit tyres from 60-66cm (covering most common 14" and 15" caravan and trailer tyres). With a fleecy backing to allow the cover to breathe, the elastic cord makes for easy fitting, giving a smooth, secure fit. Made with UV stable vinyl, they are designed neither to fade nor become brittle, and will give years of dependable service.

### Dirt Blocka Rear Mats



Dirt Blocka mats are the third generation of mat design in the Bushranger line up. Like the earlier revisions such as the 4x4 Bushmat and the Deep Dish, the Dirt Blocka mats are designed with deep edges to capture all the mess that your shoes and pants bring into the vehicle. From sand and dirt to mud and snow, even water can be contained within the mats.

Due to popular demand, a rear mat is now available in the Dirt Blocka range to match the front mats and protect rear foot wells. Available in a generous size to suit even the largest 4WD, the rear mats are made from solid rubber construction that retains its integrity and shape. With underside ribs to prevent slippage, these are available in black to compliment the interior of most vehicles and come with Bushranger's 5 year, no fuss warranty.

> Part no: 68X10

For further information on the Bushranger product range, visit their website at [www.bushranger.com.au](http://www.bushranger.com.au)



# 2010 Dakar Rally

Words & Images by Mark Allen



**Bound for South America, Mark Allen tackles the 2010 Dakar... and makes it home alive!**

## **BEHIND THE SCENES NUMBERS**

Any event, let alone this mammoth rally of 9023km in 14 stages over 15 days, has a multitude of behind-the-scenes happenings that ensure everything that is planned actually happens. The sheer size of the camp site-come-pit-area (the bivouac) is nothing short of a small town that houses over 2500 people each night.

In total, there were 178 bikes, 136 4WDs and 52 trucks that started – all with high hopes of finishing. In addition, there were over 100 organisational vehicles, 10 control vehicles, 10 medical vehicles, 6 TV vehicles, 6 safety cars & 2 safety trucks, 2 technical assistance trucks, 7 buses, 20 (yep 20) helicopters and 12 planes – simply huge!

And then there was the catering crew that numbered 80 personnel in 10 trucks that dished out 1.5 tonnes



of food and 12,000 bottles of water every single day.

Every person that had anything to do with the event had access to a full range of medical services: a travelling hospital with over 60 staff, 10 vehicles with 2 on-board doctors, up to 4 helicopters with 2 on-board doctors, plus 1 doctor per safety truck.

### THE RALLY

Picture the dizzying heights of the Andes Mountains in South America – up to 4000m above sea level (high enough to make you short of breath along with a bit of nausea and associated altitude sickness), snow covered peaks, cold running streams in the valleys, as well as the rugged rocky terrain.

Now clear that vision and replace it with the Atacama desert – the driest desert in the world, no rain, no dew, not a drop of life saving water (almost) ever hits the dusty, sandy ground that is totally devoid of vegetation... not even a blade of grass grows here! Oh... and it's 40 to 50 degrees all day long!

Next, replace that vision with a beach, pretty ordinary sand (by Australian standards), but nevertheless a

sandy beach with rocky headlands, a bit of dirt and a few scattered trees.

No, this is not your next luxury holiday, it's the real deal of racing in the 2010 Dakar Rally! Some days, we'd cover a couple of different terrains, while other times we spent multiple days in just one type of terrain. Those idyllic dunes you see in the photos are not pure sand as we have here in Australia – rather a mix of sand, dirt and broken rock. And they don't just climb 50 to 100 metres high, rather we drove dunes that towered for 2 to 3 kilometres into what must surely be the sand castle to heaven. Huge, enormous... and daunting.

While I was not competing in the race, and was instead testing the new Volkswagen Amarok ute (see page 38 for my review), I had the relative luxury of being able to stop, ponder my chances of cresting each dune, opting for the chicken run (if there was one) or even taking the (very) long way around... all of which added considerable time to our already long days of driving... but I considered myself lucky compared to the entrants.

## TOUAREG – WHAT MAKES IT A WINNER?



The VW Motorsport Team is an incredibly well-oiled machine – each race Touareg has its own dedicated gang of mechanics that literally ‘pull apart’ the entire vehicle at each day’s end to inspect, replace or repair. We were witness to the interactivity of the team of mechanics in removing major driveline components and reinstalling them within what seemed to be mere eye-blinking moments of time.

The 2.5L 5-cylinder turbo diesel engines feature a 2-stage turbo system with 2 in-line turbos plus an intercooler. While this engine is similar to production versions, the race engines produce 220kW of power and 600Nm of torque – nice to know they can handle these outputs if you should want more out of your road-going VW!

Combined with the ‘small’ diesel engine, a sequential 5-speed, permanent 4WD system with 3 limited slip diffs propel these Touaregs from 0 to 100km/h in just 6.1 seconds, and reach a maximum of 190km/h.

Power assisted rack and pinion steering, double wishbones with twin springs and shocks per wheel (that provide 250mm of suspension travel), along with incredible underbody clearance, allow these vehicles to tackle more terrain than most. More than once, I witnessed the Touareg travelling at high speed along a rocky, dry river bed and not hitting anything underneath. Later, a mighty 100 Series LandCruiser (also competing in the Dakar) was poking along at a much more modest speed of about 30km/h, scraping its diff pumpkins and underbelly almost continuously – those Touaregs are simply amazing off road weapons!

It was this unavoidable, instant decision making by drivers and navigators that stirred many feats of amazing driving – mostly to avoid becoming stuck. Those poor souls racing against the clock simply kept the foot down all day, every day, trying to gain every second against their competitors. One mistake, and BANG goes your sump, CRACK goes your suspension through the mounts, or worse still, you’re left belly-up

Stopping the Touareg are vented 320mm discs with 6-piston aluminium brake callipers at the front, and 4-piston at the rear. 235/85R16 BFGoodrich All Terrains on 7 x 16” rims are preferred treads.

While these may look like a Touareg on the outside, they are in fact pure race vehicles, with a steel space frame and carbon fibre body that can be removed in seconds.

Inside the cockpit, the co-driver (or navigator) utilises two tripmeters and two GPS’s to ensure they get to each checkpoint as fast as possible. Over-bonnet view has been improved with a lower bonnet line, yes, they do have air conditioning, and are totally protected with in-built race roll bars, 6-point harnesses, along with buttons and gauges for pretty much every conceivable part of the Touareg.



Then there are the drivers and navigators themselves; as this rally took place on the Andes Mountains (up to 4000m high) and amidst severe high temperatures in excess of 50 degrees through the deserts, each member undertook high altitude training to ensure acclimatisation and maximum performance of their bodies.

As well as the race Touaregs, VW utilises 4WD MAN trucks, entered into the race for quick access to the Touaregs if needed, as well as service trucks that set up their own little village each night within the bivouac. It’s at these nightly pit areas that any component of the Touaregs could be repaired or exchanged. There really was no expense spared and the attention to detail, before-race testing and race-time driving by the world class team, claimed positions 1, 2 and 3 for good reason.

hanging in your harness waiting to be rescued... and you’re out of the 2010 Dakar!

Most people who dream of participating in off road rallying have visions of the Dakar Rally... or are they delusions, hallucinations and nightmares of this incredible event: bikes, 4WDs and trucks battling it out for over 9000km of what surely must be some of the most arduous terrain known to man.



The drivers and riders have but one purpose in life during the 15 days of the rally – make it to the finish! If a top 100, 50 or heaven forbid a podium finish is granted, then that's just the icing on the cake.

Each night I wandered the pit area watching battered, bruised and dejected drivers and navigators trying to repair their machines: "We break it, we fix it, we carry on until the finish. Shit happens on the Dakar. You've just got to hang on until the end," is just one example of the many quotes from entrants, all of which were along similar lines, albeit some more colourful in their execution... and not printable here!

Witnessing tears at the finish line was evidence of the sheer triumph they had endured to bring their battered machines and bodies home. Or perhaps it was the bruises, broken bones and terrifying memories that caused the helmet-concealing-sniffles, as well as the knowledge that they had actually made it to the end of the world's most punishing battle of Man vs Mother Nature.

While there were many privateers on low budgets slogging it out for whatever placing they may be granted, this year it was the all-conquering Volkswagen Touareg team that took not just 1st step on the podium, but 2nd and 3rd – yep a clean sweep that will go down in history, and a major triumph for the VW Motorsport Team.

One of those privateers was our very own Bruce Garland and Harry Suzuki, driving The Garland Motorsports Isuzu D-Max which uses the factory 3.0 litre turbo diesel, albeit with a little more poke than standard – 180Kw and 580Nm, not bad from the 4-cylinder.



Last year the Aussies claimed an incredible 11th position outright, with high hopes of improving this year. An unfortunate, freakish incident early in the race saw one of the rear-mounted spare wheels dislodge after their D-Max hit a ditch. The spare wheel hit the radiator (rear mounted to help protect the thing would you believe) causing the engine to overheat, which then put them behind time and ultimately out of the race.

For those that supported and watched the Dakar each evening in its half hour TV time slot; you got to see some amazing racing by some amazing people. The heat of the deserts to the freezing of the Andes, the long, long hours and the exhaustion of drivers and riders really can't be portrayed to its full extent. But take it from us, finishing this rally means you have conquered the most arduous off road rally in the world.

To every single entrant, right from the first place getters to those that crawled in last in the dead of night; you oughta be congratulated – you're all winners!

# Deluxe Bull Bar for Mitsubishi Triton/L200 MN



Since the release of the latest model Triton MN, ARB has been hard at work developing and producing a range of accessories to suit this vehicle. Canopies were released in the last newsletter, and now ARB has a host of other equipment available, the most significant of which is the bull bar.

In line with Mitsubishi's updated Triton, ARB has released a bull bar that has been redesigned to suit the new bumper shape. Manufactured from steel for the ultimate in vehicle protection, the latest Triton bull bar design is comparable in looks and strength to the previous model and incorporates a selection of functional features for a practical and versatile product.

The multi fold wing design provides excellent protection and approach angles, and the split pan maximises strength while improving airflow to the engine. Under wing panels have also been incorporated to provide further protection to these vulnerable areas. As a combination style, the bar can be optioned both with and without an electric winch, and a number of Warn models can be selected from ARB stores either while your bull bar is being fitted or at a later date.

Retaining its original equipment tow point, the bar comes complete with durable urethane buffers, provision for IPF driving lights and CB aerials, and also incorporates twin Hi-Lift jacking points in the centre pan for increased versatility in off road situations. Recessed indicators and turning signals are located in injection moulded housings with provision for optional fog lights (vehicles with flares only), and the bar is finished in a durable powder coat, which can be colour coded to suit individual vehicles.

Along with the products above, a range of other accessories are currently available for the Triton MN including Air Lockers, roof racks, side rails & steps, TowMaster tow bars and Long Ranger fuel tanks. Other accessories, including Sahara bumpers and Old Man Emu suspension, are currently under development, so stay tuned for their release in upcoming editions of 4x4 Action.

Flared models > Part no: 3446220

Non-flared models > Part no: 3446210





# Cargo Gear Cooler Bag

Adding to the range of Cargo Gear, the new ARB cooler bag is perfect for summer BBQs and off road adventures. Large enough to carry full sized wine bottles as well as long neck stubbies, there's room for ice blocks or even a picnic lunch.

The bag's outer shell is made from tough, Oxford weave PU coated fabric and incorporates a reinforced base for durability. Insulated to help keep contents cool, the bag features strong carry straps with a padded handle as well as an external elastic strap for securing additional supplies. With zip and Velcro closing pockets for small items such as keys, wallet and phone, the bag comes complete with a unique style ARB bottle opener/cork screw which is sure to come in handy when you're out and about.

> Part no: 10100370

## Fourby Drink Bottle

ARB's loveable mascot, Fourby, has just released a handy new promotional item. This 500ml premium drink bottle design is the perfect size for kids, and its clip on lid and easy to pull out drinking spout makes it very easy to use. Made from LDPE plastic, the drink bottle is 100% Australian made and is both dishwasher and freezer safe.

It features a clearview strip down one side so you can quickly see how full the drink bottle is, and handy 100ml measurements that allow you to measure out cordial or easily fill it up to a particular point. Incorporating a full colour wrap-around design with Fourby and Ariel hanging out at one of their favourite 4WD spots, this drink bottle looks fantastic and is sure to be popular with both adults and kids.

Available from ARB stores now along with a range of other Fourby merchandise, the new drink bottles come ready to go, however we do recommend they be washed prior to use.



> Part no: 216086

## Compact Recovery Bag Range

To expand ARB's current range of recovery bags and packs, a larger style compact bag has just been released. This addition allows you to carry your recovery strap, along with shackles, and is small enough to fit under or behind a seat, or in the back of a drawer system.



Manufactured from heavy duty 100% cotton canvas with a PU coating for maximum water resistance, and styled in the same way as ARB's other recovery bags and kits, this tough, durable bag is perfect for your next trip away. Incorporating a moulded rubber carry handle, reflective tape trim for night visibility, reinforced webbing seams and 30kg rated 'Sure Grip' buckles, it has been designed for maximum strength and functionality. With room enough to carry any sized strap in ARB's range, webbing loops for bow shackle storage and a separate pocket to house recovery gloves, this bag is perfect to keep in your vehicle all year round. The new bag is available from ARB stores now – other items pictured can also be purchased separately.

> Part no: ARB509

# ARB Recovery Photo Competition Results

In the last issue of 4x4 Action we ran a recovery competition, where readers were invited to send in pictures of themselves bogged, stranded or stuck, when they could have used the help of ARB's new Premium Recovery Kit.

We were absolutely inundated with embarrassing, foolish, woeful and amusing tales of various 4WD adventures from all round Australia and the world, so a big thanks to everyone who sent these in. Unfortunately we only had one recovery kit to give away, but we've also awarded some runner-up prizes, and if you don't win one of these, but your pic is still printed here, you'll be receiving a cap and stubby holder in the mail.

**WINNER!**  
ARB PREMIUM  
RECOVERY KIT



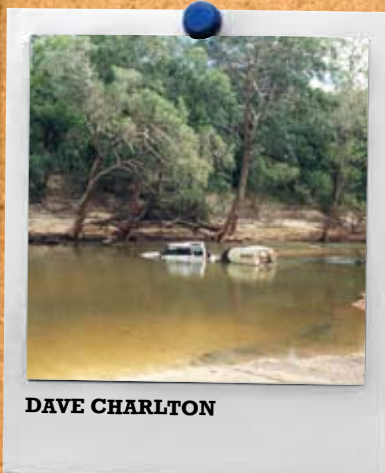
## GLENN FOX, VIC

The tracks in the Kinglake area on this trip proved to be a bit boring until we came across this mud hole. Given I was in a Toyota Prado, no problems, until halfway through and no more forward motion.

A combination of high water and high banks meant an exit via the window. Fortunately the back step was just above the water line. With the tow bar under water, putting on a snatch strap without getting wet proved to be difficult.

Moments before the recovery, the foot wells filled with brown water.

Unfortunately I was recovered by a Nissan Patrol and am still trying to live it down.



DAVE CHARLTON



BRETT WEEKES



BL ROBERTS



**RUNNER UP**  
**ARB COMPACT BAG**  
 (inc snatch strap, shackles & gloves)

**STEPHEN COULEMBIER, VIC**

This pic was taken this summer on the Strezlecki Track, returning from Birdsville. The bull-dust mixed with rain didn't give us any notice! I've got most of the necessary ARB goodies, but I'm still short of a quality recovery kit.



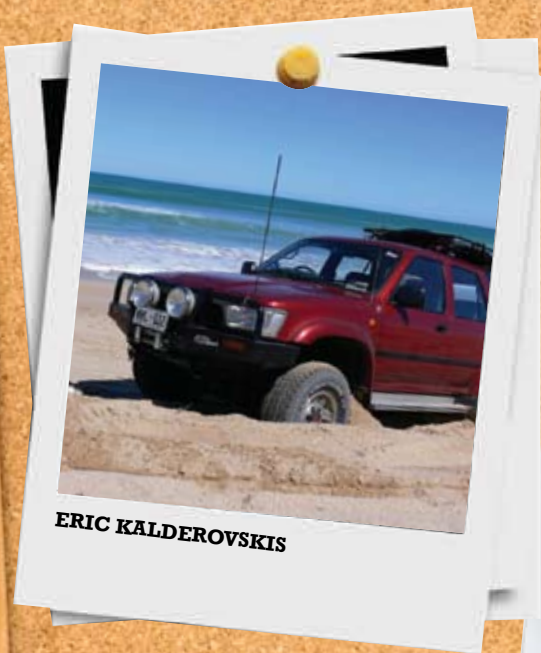
**RUNNER UP**  
**ARB COMPACT BAG**  
 (inc snatch strap, shackles & gloves)

**SIMON BRETT, QLD**

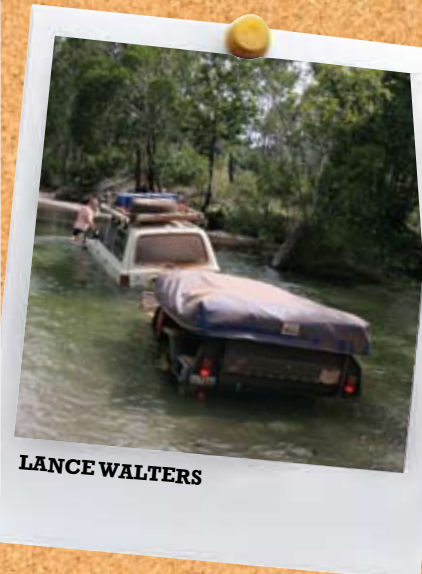
A group of us came across this mud hole up at Glasshouse Mountain, so feeling brave I made the first attempt. I got stuck but managed to back out and decided to give the other side of the mud hole a go... getting myself well and truly bogged.

Because the track was so chewed up, there was no way any of my mates could get to me to tow me out, so I tried using my winch. Turns out there was a lot more mud in the hole than we thought and just as I was about to clear the exit bump... yep you guessed it, the winch packed up. Six hours had passed already at this point, but it was a further two hours of attempts before a Jeep came along (who actually had a snatch strap) and within two minutes I was out and free.

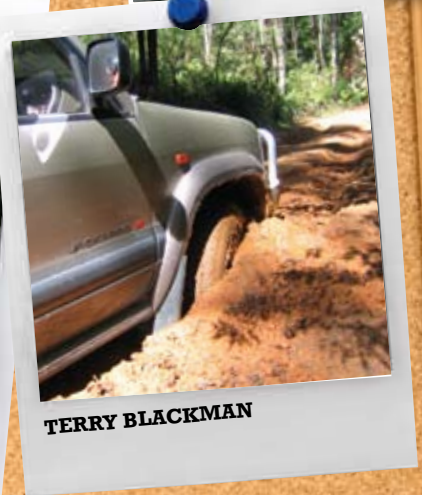
I hope you enjoy my story as much as I did living it.



**ERIC KALDEROVSKIS**

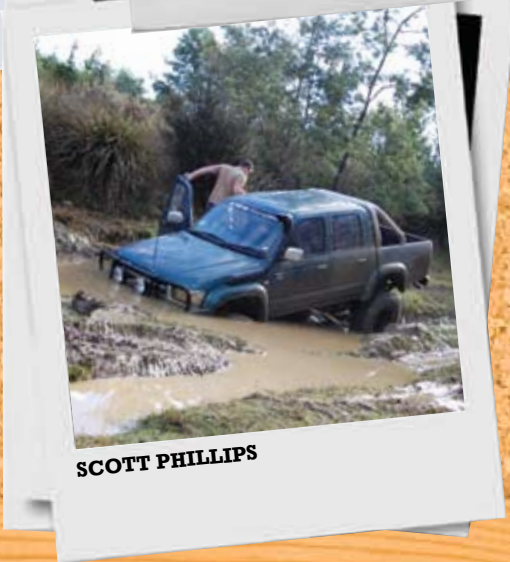
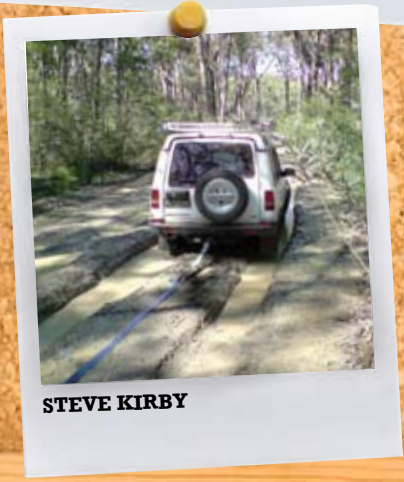
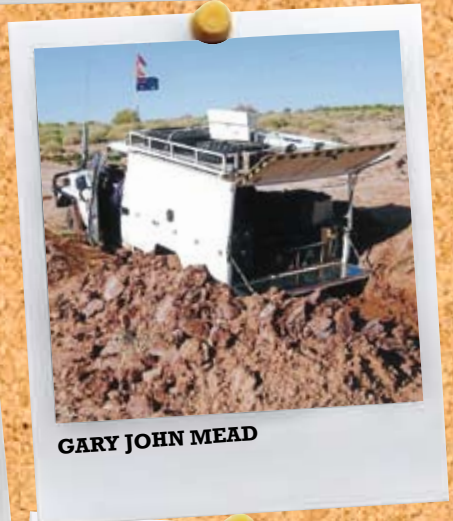
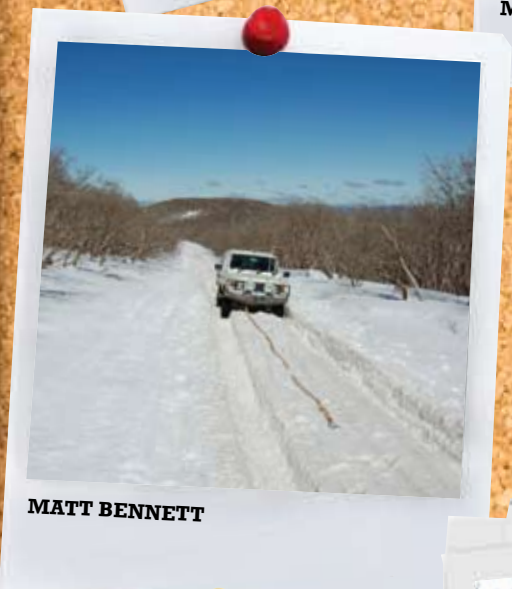
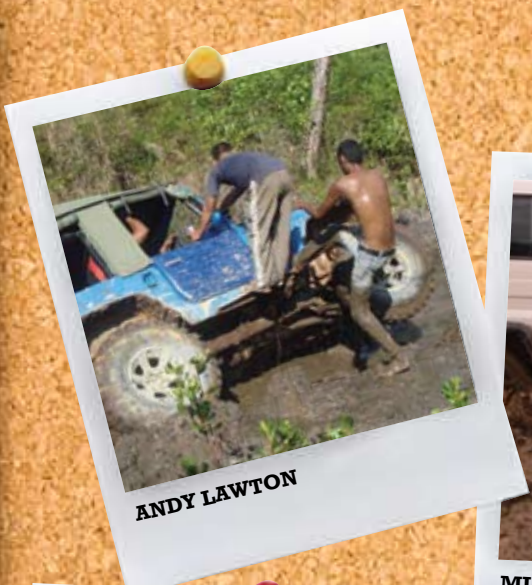


**LANCE WALTERS**



**TERRY BLACKMAN**

# ARB Recovery Photo Competition Results Cont.





**STEVE MOORE**



**RAY HARPER**



**KISHAN ABEYESEKERA**



**STEVE TREDREA**



**DAVID CAMLIN**



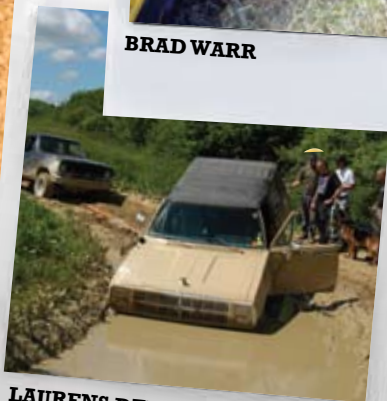
**BOB FIMMEL**



**BRAD WARR**



**GRAEME CHANDLER**



**LAURENS DEURHOF**



**ADRIAN ELSNER**

# Suzuki Grand Vitara Deluxe Bull Bar



**The development of bull bars to suit the latest model Grand Vitara has recently been completed with the release of two products, one to suit pre August 08 models and one to suit post August 08 models. Although these bars are cosmetically identical, their mounting systems had to be individually designed to suit the differing assemblies of their respective vehicles, but unfortunately neither will suit the prestige model Grand Vitara with headlamp washers.**

Manufactured from steel for maximum durability, these bars will provide a huge amount of protection for the front of your Grand Vitara, and additional wing panels and a stone tray further protect lower front vehicle components. The multi fold, upswept wings add strength to the design while improving approach angles for off road use.

Reinforced mounts ensure the bull bars are properly attached to the vehicle and also make certain there is no movement or damage to the structure of the vehicle under full winch loads. As combination style bars, they are suitable for winching and non-winching applications, with Warn 6000 or 8000lb models able to be selected.

All customers will be able to utilise the twin Hi-Lift jacking points if they find themselves in trouble out on the tracks, as well as other handy features such as IPF light provision, aerial brackets and optional fog lights that are located in injection moulded housings. Finished in a durable powder coat with the option of colour coding, both of these bars for the Grand Vitara are now available from ARB stores around the world.

Grand Vitara 06-08 deluxe bar > Part no: 3426040

Grand Vitara 08 on deluxe bar > Part no: 3426050

# NEW Apparel Additions



**To add to ARB's ever expanding range of apparel, two tops and a jacket-style fleece have just been introduced to cater for a range of different climates.**

Made from 100% polyester, the zip through Explorer fleece is a comfortable and cosy item suitable to wear both during the colder months of the year or at night in the warmer. All zippers, including the two pockets, use the YKK brand for the ultimate in durability and quality, and rubber tabs on the sleeves, and pulls around the bottom of the garment allow you to shape the jacket to your body while ensuring cold air doesn't creep in. This stylish jacket will suit both sexes and comes in sizes XS to 3XL.

The next generation polo shirt is the Trek polo, perfect for any occasion whether it be a day in the bush or a

night out for dinner. Made from 100% cotton, this polo features a stiff collar to avoid it rolling up, while ARB branded buttons adorn the front. Sourced from a supplier to some of the world's top fashion names, you can rest assured that this garment is of the highest quality.

The new Old Man Emu Intensity tee brings its own unique sense of style to the apparel range. The top features a 'grunge' graphic across the front of the chest, with the vehicle designed to sit up on the shoulder for a new look. Also made from 100% cotton, this tee is ultra soft, making for a casual yet comfortable fit. Available in sizes S-3XL, this new product is a perfect match for the existing OME Evolution cap.

So to keep yourself looking good both on the road and out in the bush, drop into your local ARB store and check out all the latest in clothing.

## ARB Bull Bar Bottle Opener

**Just when you thought you had every ARB accessory for your 4WD, along comes an innovative new use for an old idea.**

Never again will you have to wander aimlessly around camp searching for your bottle opener, because it'll be right there attached to your vehicle! This product can be mounted directly

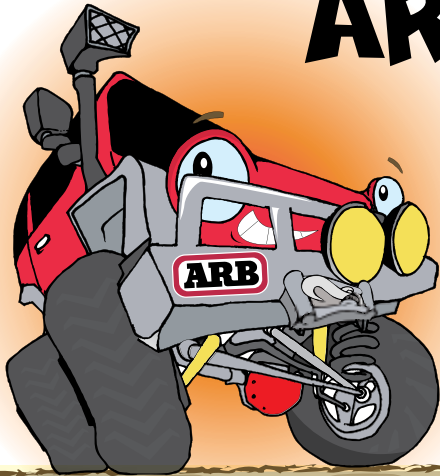
below the antenna mounts on an ARB bull bar where the driving lights do not obscure access.

The bottle opener is zinc plated for years of corrosion free use and will open both twist top and lift top bottles easily and quickly.

> Part no: 3500420



# ARB KIDS



Hey, kids, Fourby here!

I hope everyone had fun over Easter with a few days off school out in the great outdoors. Over the last few months I've received so many awesome drawings from you guys that I've had to expand my section. Check 'em all out on these pages, and keep 'em coming! You could win awesome prizes and kids packs!



**WINNER!**



This issue's winner is 14 year old Callum from Bunyip in Victoria, whose drawings caught the attention of a few people in our office. Congratulations on winning the Toys R Us gift voucher, Callum, and we hope you buy some cool new toys with it!



\* Here is a photo of me with one of the 42 carp that Dad and I caught at the Wyangala Dam Kids Carp Competition on the weekend. We drove our Triton into the backwaters of Wyangala Dam and stayed the night. We had heaps of fun.

Duncan (age 7)



\* Ten year old Jonathon sent in two drawings, a competition truck and a Nissan Patrol.



\* Seven year old Thomas from Banksia Park in South Australia sent us this very colourful drawing of a ute complete with 4x4 accessories.



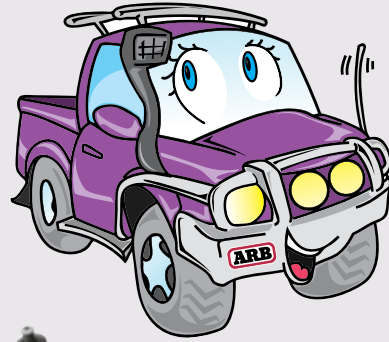
\* G'day ARB, I am 14 and 4WD crazy, I am currently saving up for a Holden Rodeo and will be decking it out with an ARB bull bar, rear bar, canopy, roof rack, rooftop tent, IPF's, OME suspension, and the list goes on! Thanks for the awesome screen saver and Colorado wallpapers!

James





# You could WIN an awesome ARB Kids' Pack



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

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.*



\* Dear ARB,

Thank you so much for the vouchers you sent to me (Billy) and my sister (Charlotte). Mum and Dad finally took us down to Melbourne to the Toys R Us shop as we don't have one here in Bendigo. I've attached a photo of me and my sister with the toys we got. Love from Billy and Charlotte



\* Hi 4x4 Action!

My name is Georgia and I am 11 years old. My family and I are going around Australia and love to 4WD. This is a photo of our caravan and our F250 ute that we are staying in. Since our caravan can't go off road, whenever we go on 4WD tracks we take our tent. We have been on various 4WD tracks, including sandy, boggy areas, muddy, wet areas, very deep creek/river crossings and lots more.

From Georgia



\* Dear ARB,  
Here is a drawing of my truck.  
From Josh  
(age 7)



\* Hi my name is Jamie. I am six years old and my dad has a 2004 model dual cab HiLux. We live in Victoria and we love 4WDing and camping in the Victorian High Country.



\* Hi, my name is Adam and I am 9 years old. My mum, dad, Meg my sister (7) and I have just got back from our Outback trek. We went from Newman to Alice Springs via Gary Junction road and came back on the Great Central and Gunbarrel Highways (4800km). We hit a camel on our second day which was really scary but the camel got up and walked away. We had a great family adventure.

# Fourby's Cartoon

## THE ADVENTURES OF FOURBY AND FRIENDS

LAST ISSUE, WE LEFT FOURBY AND ARIEL CAMPING IN A STORM AFTER THEY WENT THE WRONG DIRECTION ON THEIR 4WD ADVENTURE...

DESPITE THE COLD, THE DARK AND THE RAIN, FOURBY AND ARIEL HAVE COME ON THIS ADVENTURE WELL PREPARED SO THEY HAVE ENOUGH FOOD AND SUPPLIES FOR THE NIGHT.

WHEN IT STOPS RAINING THEY LIGHT A FIRE AND Huddle AROUND, TOASTING MARSHMALLOWS AND TELLING SCARY STORIES.



THE NEXT MORNING IT'S BRIGHT AND SUNNY AGAIN!



AFTER CHECKING THE MAP FOURBY AND ARIEL HEAD FOR HOME.



HOWEVER THEY HAVE TO CROSS BACK OVER A RIVER, AND ITS WATER HAS RISEN FROM ALL THE RAIN...



FOURBY GOES FIRST AND MAKES IT OVER SAFELY, BUT ARIEL GETS STUCK HALF WAY. THE WATER IS RUSHING PAST AND SHE'S SCARED!



QUICK AS LIGHTNING, FOURBY TURNS AROUND AND CONNECTS HIS WARN ELECTRIC WINCH TO ARIEL.



HE WINCHES HER TO SAFETY!



THEY ALWAYS TRAVEL TOGETHER SO THEY CAN HELP EACH OTHER OUT IF ONE OF THEM GETS STUCK!

FOURBY AND ARIEL CONTINUE ON TOWARDS HOME AND FINALLY THEY MAKE IT BACK ONTO THE HIGHWAY.



FOURBY DROPS ARIEL OFF AT HER HOUSE BEFORE HEADING HOME.



FOURBY KNOWS HE SHOULD UNPACK BEFORE HE GOES TO BED BUT HE'S SOOOO TIRED...



# Fourby Visits ARB

Hey, kids, Fourby here!

As you would have read, my last 4x4 adventure was very exciting, however everything did not go to plan! So after I got back, I thought it would be a good idea to go and get my accessories checked out at my local ARB store. After the water crossings and the winching to recover Ariel, I wanted to make sure everything was in working order for my next trip.

I headed along to Kilsyth in Melbourne where ARB's head office is based, and spent some time in the workshop getting my parts tested and cleaned. But the most exciting bit was that afterwards, I got to have a tour of ARB's huge factory. It was so much fun! I got to see all sorts of things - metal being cut up to make bull bars and roof racks, compressors and Air Lockers being assembled, bull bars being powder coated and heaps more. I was amazed by how much work goes into putting a bull bar together.

I also got to hang out with the cool people who work at ARB. Everyone wanted to say hi and get photos with me which was totally unreal.

I am planning on doing some more travelling over the next few months, so if you are heading along to any 4x4 shows, look out for me, because I just might drop in for a visit to say hello to all the young 4WDers!



Candice from marketing was kind enough to guide me around the factory



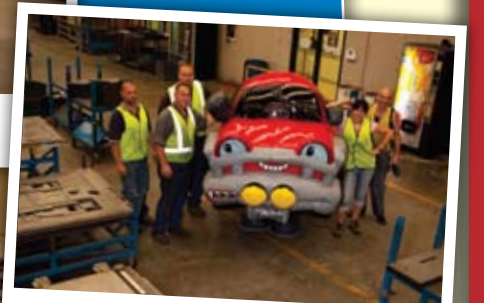
Here I am with my new friends, (L-R) Scott Watkins, Tim Townsend, Candice Wright & David Green, where ARB's bull bars are powder coated



I got to see everything as it was being made!



Everyone was excited when I turned up at ARB's factory



This is the part of the factory where they laser cut all the sheet metal. You can see me pictured with (L-R) Bardon Griffiths, Russell Davies, Andrew Thompson, Pam Taylor & Glen Smith

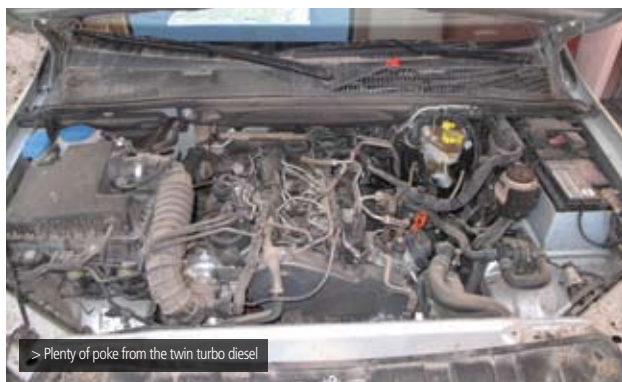


# Amarok Action

Vehicle: VW Amarok

With the impending release of the Volkswagen Amarok, the ARB community is very excited that such a prestigious vehicle manufacturer is bringing out a dual cab ute. It promises to introduce some new features not previously seen in this kind of vehicle, and will no doubt provide some healthy competition in the market. At ARB, we're very much looking forward to getting our hands on one so we can start on the development of a range of accessories. As an introduction to this vehicle, we thought our readers would be interested in hearing from regular contributor, Mark Allen, who recently had the chance to test one while at the Dakar Rally.

## Mark Allen Tests the Highly Anticipated VW Amarok Ute in the South American Dakar



> Plenty of poke from the twin turbo diesel

Having put some 5000km on the soon-to-be-released Amarok four-door ute, I can say that all other makes of work and recreational utes available in Australia had better step up their safety and performance inclusions if they are to stay competitive in this crowded 4WD segment.

Although there were a number of different spec'd vehicles on the Dakar, the vehicle we unwittingly procured was the most likely and closest version we will get in Australia. The 4-cylinder 2.0 litre common rail twin turbo, six speed manual gearbox, high and

low range transfer case (complete with rear diff lock), electronic traction control (ETC), anti slip regulation (ASR) and off road mode switchable ABS (which lessens the effect of the ABS while off road), will make the Amarok a fair dinkum contender as one of the best recreational off road utes available in Australia.

This diesel engine is expected to produce 120kW of power and 400Nm of torque, and conforms to Euro 5 emissions standards. A fuel tank of approximately 80 litres, combined with dashboard computer readouts of as low as 8.0 L/100km will see it be a great long distance hauler.

The 6-speeder slotted into all gears easily and directly. The centre, unsprung position is in line with third and fourth slots, while a light push against spring-loaded tension allows access to first and second on one side, and fifth and sixth on the other. A vertical depress and push left-and-forward accesses reverse gear – again easily and positively.

Clutch feel combined with accelerator throw is all very car-like; it's light, easy to use and well endeared to long hauls as well as peak-hour rat races. Front brakes are disc, while rears are drums.

The Amarok has a separate ladder-frame chassis with solid rear sprung-over axle, and leaf springs combined with front independent Macpherson strut suspension. Steering was direct, well proportioned at all speeds and provided the confidence to drive through all terrain – slow or fast.

Body and suspension feels very tight and stiff, which equates to excellent on road steering and suspension manners. Driver and passenger air bags will be available, but most likely not curtain or knee variants. 17 inch alloys will be standard fare on this higher spec'd ute, while there is a possibility that 16 inch steelies will be fitted to base models.

Load-wise, the Amarok is expected to be a one-tonner and be able to tow 2800kg (with electric trailer brakes), making a great all-rounder for the tradie and tourer alike. We carried two spare wheels in the ute tub, plus a small compliment of recovery gear and luggage for the three occupants; certainly not a full load, but enough to settle the rear leaves.



Four-door bodies, diesel engines and manual boxes are the initial variants bound for Australia, although single cabs will get a look-in soon after. Here's hoping we get an extra cab version as they represent an excellent two-up working and touring option, and same goes for an auto (with tip-tronic-style selector) gearbox option.

There is seating for five, with front and outer rear retractable seat belts, but at this stage the centre rear belt set-up is unsure – hopefully a full retractable lap-sash belt.

Pricing has not been finalised (neither are exact specs), but let's hope the dollar conversions (it's built in Buenos Aires, South America), market appeal and willingness to sell combine for a well-priced 4WD.

### CUSTOMISATION

While the Amaroks we drove handled the terrain with total ease, they did have a few modifications – mainly for our safety and to satisfy race officials given the potential for mishaps. Some inclusions were to its detriment, but most offered far improved off road and touring safety and ability.

Larger diameter tyres (245/75R17 BF Goodrich All Terrain pattern) were fitted to the standard alloy 17 inch rims, along with twin shock absorbers with remote reservoirs on each corner. While the front Macpherson struts were obviously a complete replacement, along with an extra forward, outer-mounted parallel shock, what wasn't overly apparent was whether the rear (sprung over) leaf spring pack was stock or an aftermarket version. Limiting straps



were added to the rear suspension to ensure no over-extension of the shocks should the Amaroks become airborne during off road antics.

The twin rear shocks were mounted fore and aft of the rear solid axle. It appeared that the forward leaning shocks on each side were connected to factory mounts in the chassis bracing at the top, and the axle housing at the rear, while the rearward leaning two shocks were connected to aftermarket fittings at the chassis and axle housing.

The front strut design sees the lower end of the strut mounted to the lower wishbone 'straddling' the CV (or front drive shaft) instead of being mounted either in front or to the rear. This Clevis (mounting) joint on the lower end of the shock has the benefit of a much larger surface area on its pin and bush within the lower wishbone, providing far less wear and tear, plus being proportionally stronger than an eye (or single bolt) attachment point.

The main downside I experienced with the front suspension in combination with the larger diameter tyres was the abysmal turning circle. To ensure nothing hit on suspension components or tyres, the steering rack was modified to restrict lock-to-lock movement of the steering wheel.

These utes had the interior head lining and carpet removed to make way for a full, race-compliant internal roll bar. The retractable seat belts had been replaced with 6-point race harnesses, plus there was seating for only three in our vehicles – two single piece race seats in the front and one mounted on the right hand side in the rear. Our Amarok was installed with a GPS tripmeter, plus an electronic device that monitored our every movement, ensuring that if we did get geographically challenged, someone, somewhere would know of our plight.

The factory-standard push-button, centre-console mounted diff lock was tried several times. Full marks to VW for providing a locker and traction control, although time will tell as to whether the traction control is cancelled when the locker is activated. The Triton ute does this and in many cases was found to be better with traction control left on (as it's working on all four wheels) instead of flicking on the rear locker.

Aside from these mods, all other features of this highly-anticipated ute were, in short, excellent. The engine performance, the gearing, and on and off road handling in high and low range were all good enough to take on the major players here in Australia.

Words & Images by Mark Allen



> Omo Valley, Ethiopia



> One of the 17th century castles in Gondar, Ethiopia



> Our guide Biruk with Arebore people

## Aussies in Africa – Part 9

This part of the journey started while we were waiting at the Ethiopian border and met a bloke called Biruk – what a character! He guides people through the Omo Valley, and I'm not sure if we found him or he found us. Whatever the case, he turned out to be exceptional value. We had our immigration paperwork completed first, then our police check. Last thing to be done was the customs where we had heard they go right through your vehicle. Well, all they did was check Ron's VIN and engine numbers and didn't even bother with mine! Once we were free to go, Ron and I practically ran out of the office, colliding in the doorway in our haste.



> The road here was very treacherous

With our guide on board we headed north, trying to remember to stay on the right hand side of the road. We turned off the main road that goes to Addis Ababa at the town of Yabelo and headed west to the town of Konso where Ron was nearly booked for going the wrong way around a roundabout. Biruk to the rescue, he managed to get Ron off the hook. We were fast realising that he had the gift of the gab, and it seemed everybody knew him. "The peoples love me because I am genius," he said with a grin. We went to the hotel where the owner greeted Biruk like a long lost brother and gave us drinks on the house.

Past Konso the road was under construction, some of which was excellent, but the detours were rough, including the river crossings, as the bridges had yet

to be built. The amount of people, donkeys, goats, sheep and camels on the road was also slowing us down. We reached the top of the mountain range that is the eastern border of the Lower Omo Valley just as the sun was setting. What a view! The Lower Omo Valley is considered unique in that so many different people inhabit such a small area. It was in this valley about 195,000 years ago that homo sapiens (modern humans) evolved.

During the next four days, with Biruk's help we visited quite a few different tribes (or 'tribers', as Biruk called them in his unique African-English), all of them colourful and living traditional lives. All the herdsmen we came across wore traditional garb but also carried AK47s and bandoliers.

While we were at the Turmi Camp, Biruk organised for us to see a traditional mating dance at a nearby Hammere village. This all happened as the sun was going down and was a wonderful experience, made even better by Biruk's energetic participation in the event. At one stage we purchased a live goat (a very old live goat that had been running around the paddock for many, many moons). Biruk slaughtered it and cooked it Ethiopian style. They cut the meat into fairly large portions and thrust sharpened sticks through them and stood them upright around the fire. I didn't think it would cook very well but it did, although that didn't stop it from being tough as old boots. We didn't eat much, but the old villagers helping us made short work of the rest, and I mean the rest, bone marrow and all.

Soon after, we stopped at the Bekele Molla Hotel Camp just outside of the mountain town of Arbominch. The view was magnificent, overlooking two massive lakes (Lake Abayo and Lake Thamo). Helen and I hadn't eaten much for a few days (due to upset stomachs, perhaps from eating old goat), but decided to try a meal of fish and fresh veggies at the hotel dining room – a lovely meal. We had had a hard day



> Typical chaotic street in Ethiopia



> A tribesman from the Hammere tribe of the Omo Valley



> Coffee ceremony in Awasa



> Young Arebore tribesperson, Omo Valley

getting to this place and Biruk assured us we would be on good tar tomorrow. On the strength of that we reinflated our tyres to highway pressures. Biruk was 50% right about the tar, the other 50% was potholes.

Biruk could sense my frustration and said, "Ah, Mr Neil, this road is very shit rat." Biruk had heard me say something was rat shit a few days before, and had asked for an explanation, after which he used it on a few occasions, always the wrong way round. The trouble is, ever since then, I say it the wrong way round, too!

Biruk took us up into the mountains to visit his parents. Talk about the prodigal son returning, I think the whole village turned out to greet him. We arrived back at the town of Shashemene, and seeing it had been raining heavily for hours (the wet season had started), we stopped the night at a hotel (\$10 AUD a double room).

We travelled down to Awasa for a day, mainly to see Lake Awasa before returning to Shashemene where it was time to say goodbye to Biruk. He had led us for a busy, fascinating week through the Omo Valley, and kept us amused along the way. It was a sad farewell and he was a bit emotional. Ron had come down with a tummy upset so Viv had to take on the challenge of the drive into Addis Ababa.

Addis Ababa is the capital of Ethiopia, and with a population the size of Melbourne, it is a big city. We had made the choice to enter the city on a Sunday – wise move. Although the city was busy it was nothing like a weekday. We made our way to the Baro Hotel (\$12 AUD/night). It sure wasn't the Hilton, but it was comfortable and the people were friendly and helpful. With Ron having the stomach upset it was a good place for him to be, but not so good for Viv. You walked into that room and – boy oh boy!

It was a very busy week in Addis, what with having to catch up on vehicle maintenance, sightseeing and organising our Egyptian and Sudanese visas. Leaving Addis, we climbed to well over 3000m until we dropped down nearly 1700m in 14km to the Blue Nile, which is the largest tributary of the Nile. The drive down was mostly in first gear. The first bit being in thick fog made driving very hard, especially when kids loom out of the



> One of the many islands of Lake Tana

fog at you wanting money, and you are not going fast enough to outrun them. It is even more worrying when you know there is a couple of thousand feet drop just off to your left. Eventually we dropped out of the fog to see an amazing view. On the way down into the valley, we saw at least half a dozen broken down semis and two that had rolled over. It looked like a warzone.

The road to Bahir Dar, on the shores of Lake Tana, was probably the best we travelled on in Ethiopia, except that it seemed like a quarter of the country's 77 million people and a fair proportion of their animals use the road as a footpath, making for pretty slow going. We stayed a couple of days in a hotel on the shores of Lake Tana, which is the source of the Blue Nile, and took a boat ride to see some of the 37 islands that dot the lake.

Gondar is called Ethiopia's Camelot because of the castles and churches dating back to the 17th century, and is the largest town in northern Ethiopia (pop. 500,000). People we had met travelling from the north had warned us about Ethiopia – it's a beautiful place but the people are in your face all the time, especially the young ones, and that was particularly the case in Gondar. Even so it was very interesting, and we managed to see most of what it had to offer in the couple of days we had there.

It was time to head for Sudan, the largest country in Africa, and one which we were, to be honest, a little apprehensive about – as were our families and friends.

Next time...

Adventures in Sudan and Egypt – a few surprises, some pleasant, some not so...

Words & Images by Neil Cocks



# Rainforest Challenge 2009 – Unfinished Business Accomplished!

**The 2009 Rainforest Challenge was taken out by the Malaysian team of Loo Fu Siong and Edward Benggon, with second place also going to Malaysia and third to Sri Lanka. Additional places were awarded to vehicles in different classes, along with special awards such as Teamspirit, Most Unique 4x4 and the Jungleman. However, as is the case for this perilous event, everyone who competes and makes it through can call themselves a winner.**

***“After being defeated by the monsoon twice in a row, the completion of the route is of paramount importance to us. Even if the event has moved southwards to the state of Johor, our mission is the same.” Luis J.A. Wee, RFC founder***

Following the ‘Great Escape’ of 2007 and the ‘Unfinished Business’ of 2008, the challenge for 2009 was to complete the unfinished business from previous years and come out victorious, hand in hand with Mother Nature, rather than beaten back by her.

A monumental amount of work went into preparing the area of Johor for the challenge. Excavators and diggers were in abundance, along with experienced manpower, many of whom stayed on hand for the duration of the competition. With so many tributaries



and streams, a total of 43 log bridges were constructed to ensure that transport and logistical plans could be accommodated and campsites were secured and reachable under any conditions.

Heavy rain in the weeks leading up to the event caused flooding in many nearby states, leaving event organisers facing a myriad of uncertainties. Would the Pahang River in Johor flood, and the 40+ pre-constructed log bridges of all shapes and sizes hold? Was everyone involved prepared for the hard work ahead, and could they keep their high spirits throughout the course of the event?

The opening on the 5th of December saw over 150 4x4s, accompanied by big bikes, with over 400 participants from all categories representing 21 countries from Europe to Asia. The guest of honour was the Raja Muda (Prince) of the state of Johor.



In conjunction with the prologue special stages, an attempt was made to gather the largest number of 4x4s in one venue. The target was 500, but by noon the number had swollen to 600. Although a heavy downpour halted proceedings for a time, when the sun came out again, a new Malaysian record had been achieved with a total of 721 4x4s.

Even though it was only day one, there were already some casualties, with only 33 of the original 38 teams heading into the jungle. The field was extremely varied with representatives from Russia, Thailand, Indonesia, Singapore, Phillipines, Sri Lanka, Australia, New Zealand, Austria, Denmark, USA, Germany and Malaysia on-board, and all were gearing up for an exciting event.



The full action started on the 7th of December – into the jungle, up, down, over, through, around, between, across and among various terrains and conditions. Some stages were technical in nature, with engine power alone not determining the strongest competitor, while others incorporated things like manual winching, the use of Hi-Lift jacks and other non-motorised exercises such as tyre changing and axle lifting.

The trip into the Twilight Zone was undertaken with some trepidation, as in past years this has been the most treacherous and challenging part of the entire event. On many occasions, competitors were unable to even begin this section due to the wrath of Mother Nature's fury. However it seemed that this time Mother Nature decided to give the exhausted competitors a break. Despite hot, steamy weather, the going was relatively easy in comparison, however surprises still lay in wait! After moving through a section of majestic trees, suddenly there were no more log bridges over the various gullies and streams, putting all teams into overdrive and overtime. Out



came the winches, the shouts in various languages and the teamwork of various nationalities. A long night followed into the wee hours of the morning, with the last vehicle not ascending the river bank of Sg Selai until 3am.

The 12th of December was a designated rest day, designed to allow competitor teams to make repairs and prepare for the final six special stages. Resupplies and fuel could be sourced an easy half hour away, and for those not competing, it was a chance to relax and explore the beautiful jungle region with its picturesque river and waterfalls.

The final day of competition saw the fiercest fighting amongst teams in a combination of uphill, downhill, undulating terrain, gullies and water obstacles. For those in contention for the lead, it was a mix of strategy and skill to retain positions and attempt to move up towards the top spot.

Upon completion, the magnificent escort return trip and closing ceremony night added the finishing touches of what had been a successful and exciting event. The closing ceremony was a fitting finale with a blast of pomp, razzamatazz and glory – the best awards night so far in the history of RFC.

Luis J. A. Wee summed up:

"It is mission accomplished. Mother Nature has been kind. But even without the rain, there was a touch of everything this year. The route, the adventure, the challenge, the drama, the enjoyment of the Rivers of Babylon campsites, the efficient use of manpower and machinery, the razzamatazz of the opening and closing and the camaraderie. In all, a great beginning and ending to RFC 2009. I would like to express a thank you to everyone involved, especially the organising committee and my officials."





## Vehicle Profile

Here at ARB, many of our staff members are regular 4WDers who take their own kitted-out rigs off road for their weekends and days' off. You might be surprised to find out that the person who's been selling you 4WD accessories during the week in a nice, clean shirt, is the same guy you come across out on the tracks performing a vehicle recovery, coated head to toe in mud.

This issue we're profiling one of our ARB staff-owned vehicles, to help give you more of an idea of the kinds of things our employees do in their spare time, and the passion that drives them to get out and enjoy the great outdoors. However, we don't need to limit this section to just ARB staff, so if you've got a vehicle and you're pretty proud of its accessories and the places it's been, send us in a couple of pics and some info, and you could be featured in the next issue of ARB 4x4 Action.



Readers, send us in your own vehicle profiles, and you could be featured in an upcoming newsletter.

Email: [marketing@arb.com.au](mailto:marketing@arb.com.au)

**VEHICLE OWNER: ARB PENRITH  
STORE OWNER, NICK MANNELL**

**Vehicle make:** Toyota LandCruiser

**Vehicle model:** 200 Series Sahara

**Vehicle year:** 2009

**Engine:** V8 twin turbo diesel

**Accessories fitted:**

ARB deluxe winch bar, Warn XD9000 winch, IPF fog lights, IPF HID spot/driving lights, HID high beam upgrade, Safari snorkel, Steinbauer power module, Humex exhaust, third battery system, GME UHF radio TX3340, GME phone aerial AE4018K1, ARB high output compressor, ARB front and rear Air Lockers, ARB rear bar with wheel carrier, Black Widow drawers, fridge slide and cargo barrier, ARB Fridge Freezer, ARB camp light, Old Man Emu Nitrochargers, Coil Rite rear air bags, electric brakes, Anderson plug, inverter, Cooper ST tyres, Long Ranger combo 122 litre fuel & 55 litre water tank.

**Favourite ARB accessory:**

This is a hard one to answer! It's hard to leave home without an ARB Fridge Freezer, Old Man Emu suspension and twin lockers! Once you have had these three accessories, it's hard to go back.

**My favourite 4WD spot:**

In the centre of the desert or Outback where there is total isolation.

**Why I love 4WDing:**

The escape, the freedom and the adventure that it offers. 4WDing for me is my life. It is work, it is play and it is sport – I totally live it!

**Memorable 4WDing moment:**

Camping in the isolation of the Simpson Desert with my family.

**Advice for 4WDers:**

Don't be afraid to get out there and experience what this great country has to offer, but be prepared for anything. You can never have too much water, food and fuel.

## > INSIDE ARB

Victoria  
AUSTRALIA

# Dennis Horton

> For this issue we have chosen to focus on ARB employee, Dennis Horton, our Manufacturing Manager.



Long time employee, Dennis, has been working at ARB for over 14 years. His association with the company began in 1997 as a storeman in the warehouse, working for John Blakeney (who is still here today). Gradually, Dennis moved through the various roles in the warehouse until he became John's right hand man. Following this, he moved into the production side of the company, as Powder Coat Supervisor, then Production Supervisor, and has now been in his current role as Manufacturing Manager for three years.

In a nutshell, this role sees him overseeing and running all aspects of the 10,600m<sup>2</sup> Melbourne factory (including the polyurethane component) – producing the right goods at the right time, ensuring ARB's high quality standards are consistently met, and maintaining a happy workforce of 300+, addressing their needs and concerns. With the factory running three shifts on rotation from Sunday to Saturday each week, he definitely has his work cut out for him. As well as being responsible for the Melbourne factory, Dennis also provides support and assistance to ARB's Thailand factory where necessary.

Originally from Tasmania, Dennis moved to Victoria when he was 17 and worked for 4WD Hire and Mt Buller Freight in Mansfield, performing various jobs

from fitting accessories and working on vehicles, to driving trucks and running the depot. During this time he got to do some 4WDing and became friends with co-worker, Paul Anderson, who eventually left to work for ARB (and is currently Victorian Sales Manager). Looking for a new challenge, Dennis followed shortly after and the rest, as they say, is history.

Dennis has definitely got many more positives than negatives to say about his time at ARB, and his current job in particular. Like any occupation, it comes with its challenges, but for Dennis, there's not much he doesn't like about it, and he's happy to consider himself one of the lucky ones who really loves his job.

"Everyone here is so great to work with. The passion that the directors and other employees have for ARB products is one of the best things, and that makes a huge difference. I wouldn't like to work for a company that didn't have this same passion."

Living in the picturesque Dandenong Ranges nearby with a young family, Dennis regards his work/life balance as extremely important. And although he doesn't get to do much 4WDing in his Pajero at the moment, he still enjoys spending time outdoors with his two boys.



### 4X4 ACCESSORIES

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