

Fuel Prices: No Barrier to a Great Holiday!

Rising fuel costs do affect us all. Some pessimists have predicted the demise of the caravan industry as prices at the bowser have increased. It may be topical for the media to talk "gloom & doom" but here are some reasons it won't fundamentally change caravanners behaviour:

The true incremental cost of fuel at \$1.30 litre up from \$1.00 per litre or \$1.50 up from \$1.20 is not excessive when all expenses are considered. Especially when you keep in mind that most of us are not on the move every day.

The cost of alternative holidays are also increasing due to higher oil prices.

Caravanners' know that their leisure experience is well worth paying a few extra dollars for.

A caravan holiday is still the most affordable and best value recreation offering available.

There are some other discretionary spends on a holiday that can be sacrificed to subsidise higher fuel costs. Without jeopardising holiday enjoyment.

Of course that is not to say that we wouldn't like to save a buck on petrol if we can. Here are some driving and touring techniques to help maximise your fuel economy.

Reduce your speed and maintain 85 to 90 kilometres per hour for highway travelling. This is the most critical factor in reducing fuel consumption and will produce a saving of between 10% and 30% compared with 100 kilometres per hour. Your safety margin will also increase at a lower speed because your rig will be more controllable.

Shift down your automatic manually when approaching a crest or long climb rather than waiting for the car to kick down its self. This is to prevent the engine from "labouring" when it will not be at its most efficient.

Know the most efficient Rev Range for your engine. This is the "comfort zone" of your motor vehicle. Consult your vehicle handbook, talk to your service manager or

other owners and look on your dashboard to identify this. Some cars have a highlighted section often between 2000 and 3000 revs on the tachometer. Keeping revs in this range will produce the best economy.

Don't rule out the use of overdrive and cruise control. This would usually only be in ideal conditions when you were "coasting" on a slight decline or with a tail wind.

Become conscious of wind directions and strength in weather forecasts. If there is a howling head wind tomorrow consider staying another day or reducing your travel distance.

When approaching red lights slow down well in advance to give the light plenty of opportunity to change to green, hopefully avoiding a "standing start"

Maintain your car with regular tune-ups for maximum engine efficiency.

Pump up the tyres on your car. For towing we suggest an extra 10% above the manufacturers recommended normal pressure.

Plan your trip to stay in one location longer. Drive to the regional attractions without towing the caravan.

Footnote on wind deflectors:

These roof mounted aerodynamic devices are now a chapter in history. They are virtually impossible to buy, are very difficult to fit to modern motor vehicles, are less relevant to new stream line caravans and in Hardings opinion their benefits were inconclusive anyway!

Diary Dates

- **Caulfield Caravan Show**
17th to 23rd May 2006
- **Get to Know Your Caravan Seminars**
Monday 6th February and Thursday
30th March 6.00pm to 9.00pm
- **Christmas Trading Arrangements:**
Our work shop will close from Friday 23rd
December and reopen on Tuesday 3rd January
2006 when full workshop facilities will be
available. The Showroom will also be open on
Saturday 24th December from 8.00 am to
12.00 pm for last minute requirements.

In This Edition

- Editorial, fuel prices
- Diary Dates
- Christmas Trading
- Get To Know Your Caravan Seminars
- Save \$ on your Undercarriage Service
- Raise your Caravan
- Under Body Spray
- Corner Steadies & Jacking Systems
- Fridge Switch
- Raised Jockey Wheel Clamp
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- Reminders
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- Show Room Goodies
- Undercarriage service: What we do

Important! Save on your Undercarriage Service Before February 2006!

Regrettably our service prices must increase from the 1st February 2006. The cost for a single axle check over, lube, adjust and prepare for a long trip will increase to \$195 with a tandem axle van going to \$230. See page 8 of this newsletter for the detailed list of what the service entails.

If you bring your van in during January we will do the job for you at the old price of \$165 or \$195 respectively. The workshop is closed from December 24th and reopening January 3rd with virtually a full compliment of staff to meet your needs!

Call us and book in now to have your service done before February and avoid the price increase.

Workshop news & Information

A Matter of Height

Modern caravans seem to be built lower and lower to the ground. They look nice and streamlined but is this really practical?

6 Reasons to Raise your caravan.

1. Improved clearance under your rear jacks. Stop them scraping.
2. Less gouging of level ride bars in driveways etc.
3. Increased chassis strength.
4. Easier to get the wheels off to change a tyre.
5. Opportunity for off bitumen travelling.
6. No loss of towability or noticeable change to fuel consumption.

Hardings have become experts at raising caravans to achieve more sensible ground clearance. It is a job we are doing more and more often. Once completed the only noise you hear when you go down the steep driveway leaving our premises is the customers' sigh of relief!

How much can I raise it and what is involved?

Firstly your caravan needs to have a beam axle and spring suspension system. If it has independent suspension our ability to raise will be limited or not possible.

Assuming an axle and spring system we can approach the job two ways.

1. We can release the axle previously mounted on top of the springs and reposition it underneath. This will lift the van by approximately 100mm. See figures A & B



Figure A: Standard Axle Installation



Figure B: Axle under the springs

2. Alternatively by cutting the front and rear spring mount fittings off the chassis, attaching a 50mm or 75mm long steel beam and refitting the springs we will lift the van by exactly the thickness of the beam. See figure C.

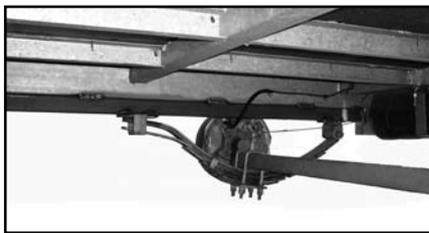


Figure C: This caravan has a 50mm beam installed

What is a suitable amount to raise your van?

We recommend 50mm or 75mm. This gives effective clearance without altering the appearance of your caravan. 100mm usually exposes the top of the tyres in the wheel arch and this can look a bit "odd"

What issues do we need to keep in mind when we raise a van?

- Stepping up higher into the caravan can be physically difficult for some customers.
- Raising more than 50mm can create a problem if you have annexe walls. The draft strip and side wall flap may not reach the ground.
- Lifting the van 100mm could make it difficult for the wind down corner steadies to reach the ground
- The towball height on the car needs to be adjusted up by the amount we lift the van. This is necessary to ensure the van travels level on the road. In cases where a Hayman Reese Weight Distributing Hitch is used this is a simple job done by Hardings when you pick up.
- And the old "Someone lowered the carport roof trick!" Just because there is 50 or 75mm clearance above the roof when the van is parked doesn't mean the same clearance when you are backing it in. Dipping driveways and variable paving can bring you unstuck. Best pin some 50 or 75mm card board onto the lowest point of the roof beam and watch as the van comes in and out.
- Is there already a high centre of gravity which may be further effected by raising?

Pricing of Options:

Options	Method	Cost
Raise Single Axle Caravan 50mm	Insert Beam	\$550
Raise Tandem Axle Caravan 50mm	Insert Beam	\$850
Raise Single Axle Caravan 75mm	Insert Beam	\$550
Raise Tandem Axle Caravan 75mm	Insert Beam	\$850
Raise Single Axle Caravan 100mm	Reverse Axle	\$275
Raise Tandem Axle Caravan 100mm	Reverse Axle	\$500

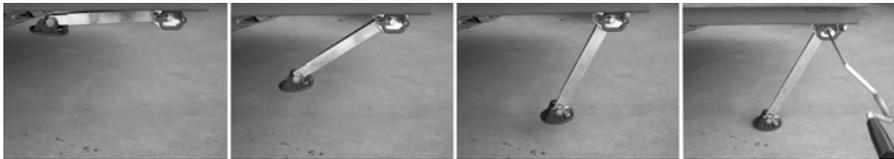
If clearance of your caravan is a concern, ring Hardings today to talk about the options. With the job done, customers' tell us how pleased they are when they are back for their next undercarriage service. We can't ask for anything more than that!

If you have a low carport or a van with independent suspension, Call us anyway. We still have some options for you!

Caravan Corner Steadies and Jacking Systems: Some Options.

Hydraulic Stabilising Systems: The *stabilmate* is the ultimate luxury in caravan corner steadies. With the hand pump mounted at a comfortable height on the A-Frame or bumper bar you can easily control the lowering of the corner legs. Best of all they self adjust to variations in terrain and allow you to level the van for stability and comfort. All without bending your back or putting your knees on the ground. From \$1000 installed, depending upon the length of your van. Call us or drop in for a brochure.

The *drop and wind steady* being a relatively new product has created real interest. The swing down aspect eliminates excessive winding and the wind out extension aims for a more vertical lift for increased stability. They do need above average ground clearance to work effectively however. If you have at least 450mm from the chassis underside to the ground then these are worth looking into. The steadies are \$75 each plus installation.



The *Trailamate Hydraulic Jack* and *Sidewinder Jack* are both designed to lift the van to change a wheel. They attach to a special jack point which protrudes out behind the wheels of the van. Many caravans are already fitted with the necessary channel jacking points but if not, Hardings will weld them onto your caravan chassis. Remember that you will never get a flat tyre in a straight forward situation. You will be on the side of a sloping, narrow and busy road where safety and ease of use of your jacking system will be paramount.



Trailamate



Sidewinder

Jack Name	Method of Operation	Suitable for what sort of Caravan	Supply Price where jack points already fitted	Supply and fit price where no jack points currently exist
Trailamate	Hydraulic	Tandem Axle	\$350	\$435
Sidewinder	Mechanical	Single Axle	\$185	\$275

Hardings Under Body Spray:

We apply a bituminous sealer and deadener to the underside of your caravan for protection against floor delamination, stone damage and corrosion. The under body spray process is priced between \$350 and \$500 depending upon van size and preparation required.

Firstly we wash the underside and chassis of your caravan with a high pressure spray. After leaving it to dry the applicant is applied by a comprehensive spray process. The Under body compound forms a rubber-like coating, which acts as a paint, a glue and a sealer all in one! It creates a seal underneath your caravan to prevent rotting and delaminating of the floor and rusting of steel and chassis rail. Call us today for more information or drop in and inspect a coating sample.

Some more products or modifications to make your holiday easier!

The Fridge Switch: This canny accessory fits into your caravan behind the fridge and interrupts the 12 volt power wire from the car. It only allows current to flow whilst you are driving along because of its ingenious vibration sensor. This means no more flat batteries in your car because you forgot to turn the switch off or pull the plug out. For around \$100 installed this is a must do item at your next caravan service.

The raised and internal jockey wheel clamp: Is a real help if you get caught out on a low site where you can't fit the jockey wheel in place. Or you may have to strain to fit your levelling bars on. Hardings will fit a raised assembly that increases clearance under the jockey wheel on low sites and because it is on the inside of your A-Frame there is a very simple technique to ease the weight off your weight distribution bars on hitch up or down. Ask for a demo at your next service.

Now Available: More Newsletters by email!

We would love you to receive more frequent newsletters by e-mail.

It is easy to join our distribution list and is absolutely free! Log onto our Website at www.hardingscaravans.com.au Follow the prompts to Free Membership and submit with your email address. The benefits for you are:

- Receipt by email of a bi-monthly short edition newsletter with tips, offers and a regular destination promotion.
- Access to all the back copies of the famous Hardings Long Edition Newsletters
- Regular Driving Technique pointers from Tom Harding
- Ability to promptly receive details of one off bargain opportunities eg a second hand item or a wrong delivery order that must be cleared.

How does it all work? Here are some answers to your Questions.

Does this mean I won't receive my long edition twice-yearly newsletter by post?

Not unless you make this choice. You will still receive your long newsletter in the post or you can receive it by email. In fact you can even receive it both ways. Once in your street letter box and once in your inbox! It is your choice.

How can I unsubscribe if I change my mind?

Simply by logging on to our website, going to Free Membership and clicking on the Unsubscribe box.

Can I receive the short bi-monthly newsletter through Australia Post?

No this is only receivable by email.

What happens if I do nothing?

You will continue to receive the long edition twice yearly newsletter delivered by your postman.

I like the idea but I am reluctant to offer my email address for concern about unauthorised hacking into my computer or email system. How secure is it?

Our customer email database is managed by a professional and reputable internet provider whose security systems are comprehensive and constantly updated. Your details are not available to anyone else and security is the best that is available.

How do I get more information?

Ring Greg Harding on 97298477

Go on, Go to www.hardingscaravans.com.au and do it now!

Reminders

- **Check the caravan wheel nuts for tightness during your morning tea stop on the first day out.**
- **Run your fridge for 48 hours a few weeks before you leave to check all is well.**
- **Check the spare tyre pressure before you leave.**
- **If you have never fitted the spare check it is the right wheel pattern.**
- **Check the side lights for faded lenses. Are they roadworthy?**
- **Paint your tent pegs. It prevents rust and makes them easier to find.**
- **Cover the gas regulator whilst in storage to prevent water getting in.**
- **Review the sum insured on your caravan when the bill comes. Many companies apply an automatic depreciation factor which could leave you under insured.**

Why Hardings?

Recently we asked our most valuable business asset (our staff) why a customer should come to Hardings. Here are their answers:

- We listen to customers
- We provide progress reports and photos if you can't come in and inspect
- We see the customer as someone to work with, not against
- We are mostly caravanners ourselves, we understand
- We have the experience, we have seen it before
- We have made most of the mistakes before and learnt from them
- We provide follow up service to your job
- We know our limitations
- We keep a lot of stock on hand to allow us to do the job

- If a part is available we know how to get it
- We provide extra information beyond the scope of the job
- We warrant our work
- Most of our customers never see one of our best services: If it goes wrong we fix it!
- We don't have any "CUSTOMERS DO NOT ENTER" signs in the workshop
- We are not the cheapest but crikey you get value!
- A Hardings customer can have confidence in a job well done
- We want our customers to be 100% happy
- We refer you to others when that is the best thing to do
- We like to know where you went on your last trip (we might go there ourselves next time)
- We aim to be pleasant to every customer every time



- We provide additional information beyond the scope of your job
- We are encouraged to be innovative
- Our customers are comfortable on the premises
- And Finally: Our customers are never further than a phone call away. The wonderful attitude of our staff gives Fiona and I a confidence that you can share!

Tom's Travelling Notes



During July 2005 a group of intrepid adventurers left the comfort of their homes for the excitement of a semi remote outback tour through North West New South Wales and into Queensland. Our party of 9 caravans ranged from a 10' camper to a 21' caravan. A pre requisite to travelling with my group was no significant outback experience, so that people would learn together. And Boy Did They Learn!

Our itinerary saw us through Mungo, Pooncarie, Menindee, Broken Hill, White Cliff, Milparinka, Tibooburra, Nocundra and Innamincka before dispersing to go our different ways. We were exposed to a range of road conditions including bitumen, gravel, sand, mud and water. Our vehicles were all Four Wheel Drives and our caravans conventional albeit lightly modified for the trip.

We experienced a significant amount of rain and managing the weather conditions became a major focus on our trip. This meant diversions, delays and modifications to our route. A highlight was 3 days stuck at the Milparinka Pub. We were the only tenants and whilst looking forward to getting back on the road, a great time was had by all.

Wet weather necessarily introduced and allowed the practice of new driving skills and techniques such as:

- Selection of suitable travel speed. This became a balance between travelling slow enough to pick the right track whilst maintaining momentum when necessary.
- Developing judgment and confidence about which surface to travel on. For example, wet grass and loose mud is a risk, whilst going through surface water will usually be a better choice. Particular

if there are wheel tracks into (and out of!!) the puddle.

- Effective use of radios to keep in touch with other members of the party and advice on hazards.
- Practice the golden rule of outback adventure: Do Not Travel Alone!
- Ensure that adequate recovery gear is carried amongst the party.

We heard rumours about road conditions ahead and learnt to consider the sources and get a second opinion. For example the road to Milparinka was apparently impassable. In contrast the publican's advice was: "She will be right mate" and it was just that.

Between Tibooburra and Nocundra we came across a "Super Dooper" Off Road Camper and Troopy who had picked the side-track when they should have gone through the surface water. Comprehensively bogged and a little indignant they watched Dad's Army proceed through the hazard without fuss. We extracted them from the mud they suffered further humiliation by being escorted for the next 175 kilometres.

Obviously we all had a wonderful trip and were galvanized as a group by the experience. We learnt that our car and caravans had more capacity than we expected and apart from preparation, driver and navigator confidence was the key factor to success. The fact that we suffered no damage to any vehicle was testament to our success. The objective of these outings is to give people the confidence to prepare and undertake similar trips with their own party. I understand such plans are underway.

I am planning another adventure for 2006. There is scope for a small group of friends to join me for around fourteen days as I

travel through Balranald, Mungo National Park, Menindee, White Cliffs, Milparinka, Tibooburra, Innamincka and the Coongie Wetlands. From there you can choose your own route home or on to other destinations. If you are interested in keeping me company drop a line to PO Box 482 Torquay.

This is not an official tour as such. There is no charge to come along and all parties' travel entirely at their own risk.

Regards, Tom Harding

For more information about the modifications required to your van for outback travel refer to the technical article section of Hardings Website or pick up a copy from The Nook.

Get to Know Your Caravan Seminars

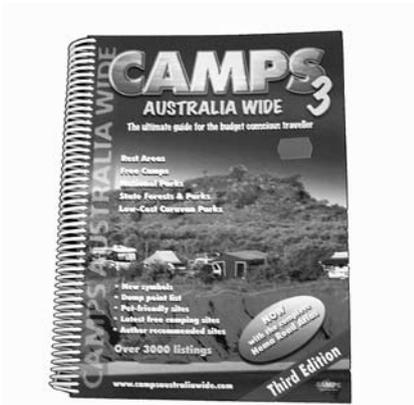
Hosted by Tom, these three hour sessions are ideal for new or intending caravanners. In an interactive small group format we discuss and demonstrate the things you need to know to have a safe and enjoyable holiday. Topics include: Electric Brakes, Towbars & Levelling, Car & Caravan Combinations, Important Accessories, Batteries, Solar, Maintenance, Loading, Critical purchase Decisions, Awnings Handling & Maintenance and much more! For a modest \$25 per head you can find out what you don't know and take all the worry out of buying a caravan and getting it on the road. Refer the diary dates for scheduled sessions, then call us right away for an application or download it from our website.

Showroom Goodies



Couple Mate backing guide:

It is still the best product to help you hitch up without destroying your bumper or your marriage. \$55.00



Camps Australia:

The latest edition with 400 pages of free camps, lunch stops and rest areas. \$49.95



Vanguard Polish:

A bottle of polish and a bit of elbow grease. Hey Presto! A New Caravan. \$15.00



Water Level Indicator:

Simple to install it gives a read out on the amount of precious water in your tank. \$75.00



Trailer Ballmounts:

Hardings stock a huge range of ballmounts, different heights, lengths and designs. From \$80.00



Coupling Lock:

Prevent others from hooking onto your caravan or trailer. \$32.50 (excludes padlock)



Hitch Pin Lock:

Lock you ball mount into the towbar or someone else may want it more than you do! \$26.00



Annexe Matting:

Tough as nails, lightweight, compact and endorsed by caravan parks it is a must have! 2.5 metres wide @ \$40.00 per metre.



Ora Mirror Support Arm:

Prevent the Ora Extension Mirror crashing back onto you car window when a truck goes by. \$49.50



Caravan Covers:

Breathable and well designed with straps and zipped access to you caravan door. From \$350.00

Air Conditioners

Hardings are very experienced when it comes to helping you select the best air conditioner for your caravan. Because of the range available now you need to carefully consider

- The capacity
- The type ie: roof top, split system, ducted or sealed unit
- Where can it be installed
- What unexpected outcomes can arise
- The price

We can help discuss these points and more. Below is our quick reference table for the most popular units. More detailed information is available on our website under Repairs and Improvements, or drop into The Nook and talk to us direct.

Air Conditioner - Quick Reference Table

Manufacture	Model	Type	Cooling Capacity (Kw)	Heating Capacity (Kw)	Weight	Supply Only	Supplied & Fitted from:
Air Command	Heron 2.2	Internal	2.2	1.5	34Kg	\$1630	\$2800
Air Command	Heron 3.0	Internal	3.0	1.5	40Kg	\$1870	\$3000
Dometic	Climaster	Internal	2.2	1.9	32Kg	\$1630 + Ducting pipe	\$2500
Air Command	Wren	Roof Top Mount	3.0	3.0	44Kg	\$1710 + "H" Frame	\$2300
Dometic	B19005	Pop-Top Roof Mount	1.9	1.2	32Kg	\$1849	\$2500
Dometic	B3300	Roof Top Mount	3.2	1.6	44Kg	\$1499 + "H" Frame	\$2000
Dometic	CAL136	Roof Top Mount	3.0	1.6	50Kg	\$1849 + "H" Frame	\$2300
Air Command	KINGFISHER	Internal	2.5	2.5	52Kg	\$1830	\$2000

Don't forget to consider the **Turbo Vent** as a climate control device. This 14" hatch has a large 12" reversible fan blade which sucks the hot air out of your van or draws in the cool air. Complete with thermostatic control and variable fan speed they are a genuine alternative to an air conditioner at less than half the price. Greg has one in his caravan, drop in to the workshop and have a look.

Suggested Hitch-Up Check List

Inside Van

- Close - hatches, windows
- Secure - curtains, blinds, folding door, stove lid.
- Switch Off - 12v lights and pump
- Fridge to 12v (not gas)
- Fridge door locked
- Loose items secured
- Secure roof (pop-tops)

Outside Van

- Push step in
- Door locked, keys removed
- Hook in position
- Gas off at bottle
- Stoneshield locked
- 240 power lead removed and stowed
- Jacks up
- Jockey wheel off
- Tyres checked visually

- TV fittings secured/removed
- Caravan handbrake off

Car

- Levelling bars on
- Safety chain attached
- Mirrors on
- 7 pin plug in socket
- Lights tested to van
- Tyres checked visually

Heavy Loose Extras

- Annexe, etc stowed in van forward of axle
- Drive 20 metres off site. Stop, return and see what you have missed. Walk around both car and caravan and visually check that all is okay. Final mirror adjustment. Don't forget to return the park keys and get refund, if applicable.

**WWW.
hardingscaravans.com.au**

Here's what is on our Website:

- Towbars**
- Electric Brakes**
- Auxiliary Wires**
- Weight Distributing Hitches**
- Friction Sway Controls**
- Accessories**
- Access Doors**
- Camec Doors**
- Battery Installations**
- Front Stone Matting**
- Roll Out Awnings**
- Reseal Your Caravan**
- Raise Your Caravan**
- Air Conditioning**
- Servicing**
- Seminars**
- Caravan Fridges**
- Equipment Checklist**
- Reversing Techniques**
- Out Back Preparation**
- Hitch Up Checklist**
- Links**
- And coming early 2006,
Bike Rack Mounting Options**

Mailing Address Errors:

We did have some database dramas during our last mail out in April 2005. We are well aware that some people received multiple copies of the newsletter or had it sent to an address that had been notified as redundant. We apologise for this error and hope it has now been rectified. But it does seem that the computer can have a mind of its own! Bear with us, Greg & Fiona Harding.



Caravan Undercarriage Service

Name: _____ Van: _____

Job Number: _____ Reg: _____ Mechanic: _____

Item	Check	Strip	Lube	Replace	Comments
Tyre Condition	*				
Tyre Pressure	*				
Spare Tyre Pressure	*				
Bearings	*	*	*		
Grease Seals				*	
Drums	*	*			
Magnets	*	*			
Brake Linings	*	*			
A' Frame and Chassis					
Hand Brake Adjustments	*				
Jacks			*		
Jockey Wheel	*		*		
Jockey Wheel Clamp	*		*		
Springs	*				
U-Bolts Tight	*				
Shackle Bolts/Bushes	*				
Shackle Plates	*				
Spring Hangers	*				
Chassis Welds	*				
Water Tank Mounts/Hoses	*				
Safety Chains	*				
Gas Bottle Mountings	*				
Spare Wheel Mount	*				
Plumbing Protection	*				
Paint A-Frame	*				
Electric – 12 Volt Only					
Electric Brake Wiring	*				
Stop Lights	*				
Clearance Lights	*				
Indicators	*				
Lenses	*				
12 Volt Plug	*				
12 Volt Lead	*				
Breakaway Unit	*				

***Mechanical service recommended every 10,000 km**

Hardings provide you with all the necessary products and services for your caravan.

- Accessories and spare parts
- Towbars, level rides and sway controls
- Electric brake controls
- Caravan repairs
- Trailer Parts
- Camper trailer windup service and repairs
- Resealing
- Lift up Beds
- Caravanners education programs
- Brakes and undercarriage servicing
- Chassis upgrades and repairs
- Aerolite chassis strengthening
- Sway problems corrected
- Improved Lighting
- Bumper Bars
- Outback Preparation
- Caravanners advice
- Insurance repairs
- Solar equipment & installations
- Jacking systems
- Raise your Van
- New pop top vinyls



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