

Planning a long trip?
Will your trailer get your boat there in one piece?
Will your car get you there?

Some tips that may help ensure you get to the event on time and get home again.

I have been travelling across Australia towing boats for 15 years. Being W.A. based I have now crossed the Nullarbor 28 times (14 return Trips) and covered approx 120,000 kms towing across Australia. It's a real bonus when I get to do a fly in series and thanks to Brisbane Catamaran Centre I have been able to balance my road trips and fly in trips to approx half each.

Some of what I have learned was the hard way and may help you with your next trip.

The first section covers tips for trailers and the second some car and motoring tips.

Trailer:

Your wheel bearings are the weakest point. When was the last time you replaced yours? These are an inexpensive part that we always run to failure, but failure may be in the middle of the night in the middle of know where.

Tip #1 Do you have the correct wheel brace to remove the trailer wheels?

Many modern cars come with a custom wheel brace that is made for your car wheel nuts, but in most instances will not be the size you require to remove the trailer wheel nuts. I recently helped a mate to replace his bearings and he was surprised to learn his brace didn't fit his trailer. Luckily this was preventative maintenance, not 1000 kms down the road.

Tip #2 Do you have a jack that will fit your trailer?

Again most modern cars come with a custom jack that is made for your car, but in most instances will not fit your trailer. My "Ford" scissor jack will not raise high enough when placed under the axle of my trailer to lift the trailer wheels off the ground. I travel with a block of wood 4 inches square to put under the car jack to get the extra height.

Tip #3 Do you have a replacement set of bearings and grease?

At every stop I make I walk back to check the trailer bearings. You simply put the back of your hand against the dust cover and feel the temperature. Good bearings and the dust cover will be cool. Bearings about to fail and the dust cover will range from hot to extremely hot.

This has two benefits, your stop is normally in a town, petrol station or truck bay, so you have a suitable place to make repairs. And you have caught the damage before it is serious. A ceased bearing can cause considerable damage, which may involve damage to the boat, at which stage you turn around and drive home.

Tip #4 Do you have the right tools.

You can jack the trailer up and remove the wheel, but can you get the bearing out. You should repack the bearings (fresh grease) at home every couple of years and particularly if the trailer hasn't done a long trip for a while. This will ensure that you can do it. And that you have the right tools.

You will need a pair of pliers to straighten out the retaining split pin.

A hammer to knock the pin out.

A large adjustable wrench to remove the castle nut. Note that this nut is never done up tight. Tighten until just firm and then loosen off until the pin holes line up to insert the split pin. Never tighten to align holes!

We had one occasion where this nut collapsed into several pieces when taking it off. Luckily we had pulled into a "closed" service station late at night to check the trailer and transfer fuel from jerry cans to the car. We pulled in to use their lights as it was in the early hours of the morning.

At the back of the service station was a caravan park, with some disused gear at the very back. It was on the Nullarbor and we borrowed a nut and continued on our way. We had noticed the heat in the dust cover and were changing the bearings at the time, when the nut collapsed. Had we not checked and changed we would have lost a wheel some time latter in the night.

Hammer and large screw driver or bar to knock the bearing outer rings from the hub. The bearings will come out easily, but the outer and inner rings (there is two off these) that sits between the bearing and the hub will jam in, particularly if it is hot.

This must be replaced as its surface will be pitted and will wreck new bearings if not replaced.

Do you have wheel bearing grease?

Tip #5 Carry a pair of disposable gloves.

When repacking the grease wearing a pair of disposable gloves will allow you to get a good covering of grease into the hub, but more importantly the new bearing needs to have the new grease put on. The best method for this is to put a ball of grease in the palm of your hand and roll the new bearing through the grease so that the bearing rollers are rolling around in the grease, thus getting grease around the entire roller.

Then put excess grease all around the new bearing rings and bearings when in place.

A small plastic container of grease with a screw lid ensures no spillage in the boot. These are cheap to buy, get the marine type and use on your beam bolts as well.

Tip #6 Do you have a spare hub?

Again a small cost item to carry as a spare. You can even have a set of bearings all ready greased and put together just ready to pull the old hub, with damaged bearings off and replace the lot. Much quicker and less mess. Just pre grease, assemble and store in a plastic bag ready for use.

A spare hub also comes with wheel nuts. We had occasion to loose a complete wheel on one trip and while we replaced the hub, we didn't have any spare wheel nuts. We recovered the lost wheel in the bush, but it had sheared the studs off, along with the nuts and we were

unable to find these. Again in the middle of nowhere and on a public holiday with no mechanical workshops open.

It was a tandem trailer and we took one nut of each wheel and used on the new hub.



Repairing hub after loosing a wheel.

Tip #7 Will your jack lift the load.

When we hauled the trailer pictured above across Australia our car jack couldn't lift the weight of the trailer. We had to hail down a passing motorist and use two jacks in tandem.

Tip #8 Trailer lights.

Carry a \$7.00 light tester as detecting light faults can be time consuming and frustrating. I recently picked up a trailer in Sydney to tow back to Perth and the previous owner had wired the trailer to suit his car, which wasn't the recommended wiring pattern that is common practice.

The flickers turned on the brakes etc. We rewired the trailer with the test light in no time.

Recently I picked up my trailer in Brisbane and no lights worked. The trailer plug had a corroded wire.

Along with the test plug I also carry a small roll of plastic coated wire and some assorted wire joiners and clips. I have often sorted out wiring problems in the middle of no where. Usually a earth problem, which becomes evident if all lights dim or if all lights come on at once.

On one trip we direct wired the trailer to the car after we had forgot to plug the trailer plug in and travelled half a day before realising. By this time the plug was long gone and all we had was frayed wires.



This trailer had to be completely rewired before towing back home

Tip #9 Securing your load.

You are towing your pride and joy, so you want to make sure it is secure.

I always retighten my ropes at my first stop, which is no more than 2 hours down the road. With vibration the load will settle and work loose.

Check the mast ropes as I find the mast will creep forward under brakes, even with tight tie down ropes. I usually have a retaining rope to prevent both forward and backwards creep.

Also if it rains retention all ropes as they will stretch when wet.

I walk around the trailer at every fuel stop, checking the bearings and literally feeling the tension on every rope. I "ping" each rope.

Watch for wear and tear on the ropes over long distances. I recently returned from Yeppoon to Bunbury and my hull tie down ropes passed under the mast (touching at this point). Aware of the constant vibration I put a second rope over every thing half way into the trip. While passing through Perth I noticed in the rear view mirror that the rope had chaffed right thru and was dragging on the ground. Only the second rope was holding. This was a 5mm rope touching against the mast track running at 90 degrees to the mast.

Tip #10 Carry some spare bits of rope, long and short.

I always carry some assorted lengths of rope where I can easily get to them. Mostly I don't have easy access to my sail box when travelling so I put some spare rope in the boot. Many times I have used an additional bit to stop something moving that I originally didn't think would move. Could be the mast, beach rollers or boat.

I have a selection of old ropes that become tie down ropes when they have outlived their life as sailing ropes that I use. I never use ropes off the boat to tie down unless as an emergency. You don't want to wear through your mainsheet rope or any other rope before getting to the event.

Tip #11 Protect your hulls.

A rope chaffing on your hulls for long periods of time will mark or even wear right thru the gel coat. Initially this can be polished out, but if your gel coat is only thin it will wear right through.

Try to pad between the hulls and the rope. I use masking tape and apply to the hull and ensure the ropes rub on the tape, not the hull.



Back tie down ropes rubbing on the mast.

Tip #12 Check you tow ball

I recently completed a trip where the tow ball nut had come loose. This was tightened before leaving home and had a large spring washer between the nut and ball, but it still vibrated loose. It damaged the thread on the ball beyond repair and had to be thrown away. I had noticed a clunking noise when braking and coming to a complete stop, but didn't think to check the ball. This is now part of my walk around check at each stop. Just see if the hitch moves on the ball by hand.

You will also get this small clunking noise if there is not sufficient weight on the ball. The tow hitch will "float" on the ball if you don't have enough weight. While this is easy for you to lift and attach it is not safe. I like to have approx 50-60 kgs of weight on the ball (check your car manual for your car).

Car travel Tips.

These are based on my experience over the years and may assist with making your trip more pleasurable. I have done approx 120,000 km's towing boats to major events around Australia, in addition to regular local journeys within W.A. Having crossed the Nullarbor 28 times, being 14 return trips, all towing boats and trailers.

Remember all my major trips involve Nullarbor crossing's where it's 1200 km's from the last major town to the next major town (Norseman to Ceduna). Repairs out there can cause lengthy and expensive delays to your trip.

Tip #1 Car Preparation.

I avoid getting last minute work done on the car. Have any repairs or services done a month before your trip. This gives time for problems to become apparent before you set off.

I had all the belts replaced and retightened just prior to one trip, only to have the mechanic over tighten the fan belt. This chewed out the bearings on a fan belt pulley. I noticed the noise prior to Norseman late at night and made the decision to carry on, risking total failure and when I pulled into Port Augusta the next day it was screaming for mercy. On another occasion I had a new exhaust fitted which rubbed and burnt the plastic bumper all the way to Sydney and back. It was replaced under warranty when I returned, as it wasn't bent to the correct shape.

Ensure any backflushing of your radiator is done prior to your trip as often this will result in just shifting deposits from your engine block into your radiator. Fords are renown for the excessive amounts of casting sand still in new radiators that causes problems.

Tip #2 Carry Spares.

Every time I have a belt or hose replaced as preventative maintenance I keep the old parts and carry as spares. I have a plastic tub in the boot full of spares and other bits. The only reason I carried on with a suspect fan belt pulley was in the belief that I had spares if required. However see tip #3.

Tip #3 Carry the Correct Tools.

For years I carried a range of spare belts and hose and a very large tool chest. But it wasn't until I had to replace a belt, luckily at home, that I learned that my selection of spanners wouldn't fit.

I knew that I needed a 19mm spanner to take off the fan and I carried a large selection of adjustable wrench's, Ring spanners and sockets. But for this job it had to be an open ended, flat spanner due to the restrictive space, meaning that my collection of tools wouldn't fit. So if you plan on carrying spares make sure you have the correct tools to use them.

Tip #4 Know your Car.

The added stress on your cooling system will show its ugly head when you start towing large distances in the middle of summer.

I have towed in temperatures that have been in the high 40's (48 was the highest I can confirm) and not had a problem. My car has a temperature gauge and my speed during the day time is dictated more by the temp gauge than any thing else. Over the past 15 years I have had to have 3 radiators replaced while on route. Learn to recognise what is normal and what is placing stress on your car before it becomes a major problem. All my radiator replacements were made before any damage was done because I know my cars operating parameters and could recognise that I had a problem. Twice I have replaced at either end of the Nullarbor, because If I carry on any small problems become big problems.

The last two times I had warning signs that some thing was not right. The last one I was driving in Sydney on a hot day, prior to making the return trip with a large trailer and 5 boats when I noticed that the temp gauge would rise while parked at the traffic lights waiting to move off. It was 42 degrees at the time. The next day I almost cooked the motor going up into the Blue Mountains, with high engine temps and limited places to pull off. We nursed that car all the way back to Port Augusta. As it was a Sunday, nothing was open anywhere between Sydney and S.A. that could assist us, despite trying at several places. At this stage we decided to push on at a lower speed, but changed our route to head out through Hay and into S.A. via Mildura because it was a more populated route and help would be closer than to continue on our planned route out through Wilcannia to Broken Hill where it is quite isolated. We had the radiator replaced at Port Augusta before heading across the Nullarbor, which proved to be the correct decision as we punched into a 30-40 knot head breeze most of the way home.

Tip #5 Carry Water and Fuel.

I always carry 20 litres of water. I have never had to use it yet, but still wouldn't leave on any trip without it. Worst case is you have drinking water if ever required or may be able to assist some one else.

I carry 60 litres of extra fuel in jerry cans. This is dual purpose as it allows me to cover a greater distance before having to purchase fuel and also allows me to choose where I stop. With some fuel stops on the Nullarbor and in Outback NSW charging 25-30 cents more than others it is desirable to be able to get from "cheap" fuel stop to "cheap" fuel stop without having to stop and pay the greedy operators that extort average motorists who are unable to get to the next stop. I find that carrying this amount of fuel allows me to do this. With up to 200km between some service stations many people towing are often forced into buying fuel almost at every stop.

It also allows me to travel latter into the night, often after most places are shut and also to start early in the morning without worrying about my fuel load.

I always have 10 litres as reserve that I don't put in unless necessary to get me to the next stop. So If I refuel in the middle of no where, I only ever put in 50 litres and hold the 10 in reserve.

I have almost run out on the New England Hwy up around Armadale because this area goes to bed early and little is open after 8pm.

Tip #6 Don't Tow in Overdrive

A mate of mine is a mechanic in far North Queensland and he had been telling me for years to tow in 3rd gear on the Auto gearbox and get out of "Drive". But I didn't listen to him as I was concerned about the extra fuel, higher rev's and pushing the temp gauge up.

It wasn't until I blew the Auto box that I started to listen. Luckily the transmission didn't start slipping and failing until just after returning home from an across Australia trip (two weeks latter). And \$2000 dollars latter and those words of wisdom being repeated by the Transmission expert after he rebuilt my Auto box that I thought there might be something in this.

I had been travelling in "Drive" for many years and use to notice the "Power" light on the dash flicking at me on many occasions. Upon reading the dealer manual this is the Idiot light to warn you the transmission is over heating. It's an idiot light because by the time it comes on the damage is done and also because I continued to ignore it. I had a transmission cooler and most of the time that the light would flicker the water temperature wasn't excessively high. What is happening is that the constant changing up and down by the auto transmission over heats the auto fluid and this in turn shrinks some rubber grommets that keep oil in one section and out of other sections, thus allowing oil to get where it shouldn't. This changing up and down was common at 100 kms/hr with any head wind or hill climbs.

Now I leave home and put it into 3rd gear and when ever the trailer is connected it stays in 3rd gear. Surprisingly you use little extra fuel, the motor runs cooler, thus the transmission runs cooler. You do increase the revs, in my case from 2000 to 2500 at 100kms/hr but I haven't had a flashing "Power" light since.

By the way this car has done 351,000 km, most off this towing.

Also I never run "air conditioning" when towing. I have found for my car this adds additional strain to the cooling system and increases fuel consumption. If it gets hot, wind the window down, When it gets really hot wind it back up again.

Tip #7 Plan your Route

For many of my trips I have been on my own. Before leaving I plan my trip and have a list of the towns that I will pass through and the distance between them, along with a running mileage from home. I print this out and have it in the console along side me.

Prior to each major town I look at the list to see which is the next major town, so that I can watch for signage to make the correct turns. Also I can assess the fuel requirements' and decide if I need to refuel. I have the sheet marked with the known cheaper fuel stops and these also dictate if I am stopping for fuel or just for a meal, or continuing.

I find that a one page sheet is easier than turning pages on a map. I also carry an up to date Australian road directory, but mainly for the Major city pages.

Don't forget your "Woolworths" or other shopper dockets are valid all over Australia. I look up their web pages and identify if they have any sites along my route. I then look up a mapping web site and printout the street map for the area. (Try www.multimap.com or www.travlemate.com.au) As Woolies sites tend to be cheaper than most sites it is at these places I would fill up the jerry cans if required.

Also with Queensland not having a fuel tax it is cheaper once you are in this state. Daily variations means that Tuesday to Thursday is always considerable cheaper than the weekends.

In S.A. there is sites owned by a company called SAFF which are generally cheaper than most others, particularly their remote sites between Ceduna and Norseman.

I record my fuel purchase details in a note book and also record prices at remote stations along the way. These can then be used for the return journey and future trips to ensure that you are only stopping at the cheapest sites.

Also talk to other motorist when making your stops and they will readily advise of petrol prices, road conditions etc.

Tip #8 Night Time Driving

I do a lot of night driving, particularly when crossing the Nullarbor. I find that night time running is easier on the car, with cooler temperatures, less traffic and allows you to get a few more km's behind you. If you restrict yourself to day time driving, you also restrict your distance covered per day. This makes a Perth - Sydney trip 4-5 days instead of 3 days.



Sun going down on the Nullarbor.

We camp out at night in the many truck bays that are available and over the years have found many good sites just off the road to pitch our tent.



Pitching our tents with the trailer as a buffer between the traffic and us.

It's not uncommon to pull into truck bays and find up to a dozen caravans and other campers already settled in for the night. Many states now have 24 hr bays with toilet and other facilities.

A small 12 volt pump to blow the air mattress up and you can be setup and in bed in under 10 minutes.

Tip #9 Animals

In years of low rainfall the kangaroos can be a problem, but they are used to traffic on the Nullarbor with truck and road trains running 24/7. Most will just sit and continue eating and it's not unusual to see groups in excess of 40/50 at a time. However if one moves they all move. If you ask at the service stations you can get an idea of the likely roo numbers, but I find the best guide is the number of dead carcasses I see during the day.

Late winter/early spring a lot of wombats can be seen at night in S.A., any where west of Ceduna. These need to be avoided, dead or alive as they can inflict a lot of damage. They will always just keep on walking across the road and you need to drive around them.

The strangest animal I have seen on the Nullarbor was an echidna walking down the side of the road. And luckily to date the only camels I have seen have been dead already.

You will see many goats out around Wilcannia, but these rarely venture onto the road.

The only place I don't drive at night is East of Wilcannia and Cobar, as the kangaroos in this area are numerous, but unlike the Nullarbor ones they always jump in front of your car.

A good roo bar is essential, as is a good set of spot lights. If buying spot lights always buy the metal backed variety, as the plastic ones will either vibrate to death or melt with the high temperatures from your lights. I carry a small ratchet spanner under the seat that fits the spot lights and will stop and adjust on the first night, as your loaded trailer will throw your standard settings out. I simply stop on the road (no cars around of course) and leaving the spot lights on adjust the height and direction to suit the load.

We have hit several roos over the years, but with no other damage than bent roo bars.

Do not swerve to miss anything, carefully brake and steer, but do not swerve. It's better to hit the animal than end up in the bush or over correct and roll.

Kangaroos also are more active just around sun rise than they are during the night, so be careful getting early starts.

During the day be cautious of Eagles. These big birds, with wing spans wider than your car will often be seen sitting on a dead roo carcass during the day. They often don't take flight until the last second and take long time to lift off the ground. I am always cautious around these magnificent creatures.

Tip #10 Trucks

Most long haul truckies generally do the right thing, but you can assist by observing some small things in return.

Both day and night when they pass you with their long trailers they appreciate assistance knowing when it is safe to pull back over in front of you. Just after the back of their last trailer passes, you flick your lights a couple of times as a signal that it is now safe for them to pull back over. They don't want to be on the wrong side any longer than they have to. Most truckies will then double indicate as a signal of thanks.

If you are travelling a lot slower than them look to pull over and let them through, often this is as simply as driving in one side of a truck bay and out the other side. Don't just pull off into the gravel and keep the same speed if the road is windy. They sit up a lot higher and have a better view of the traffic than us and will only pull out when safe, even if you can't see far enough ahead. If you have indicated for them to pass, as they pull level reduce your speed a bit, after all you called him through.

Remember that trucks take a bit of time to get up to speed and they also need more space to reduce speed than us. So if you are on a poor section of road with no where to pull off, then just maintain your speed until you or he has an opportunity to get around, he will not appreciate you panicking and slowing down just because he intimidates you. I find that entering towns is a good chance to slow and let them through.

Also if you travel at 100kms or less it is poor judgement to pass a truck that has just pulled out on to the road, as once he gets up to speed he will be looking to pass you again.

At night time dip your lights early. Truckies sit up a lot higher than us and can see our lights long before we can see their's. And trust me you don't want a full set of truck spot lights glaring at you.

However if a truckie or car hasn't dipped when he should have, take a little extra care around him, as he may be preoccupied or over tired.

Look after your car and you will have a pleasant trip. I carry spare oil, transmission fluid, brake fluid and a roll of paper towel to check levels and wipe hands.

At every long stop I try to find shade to park in and always pop the bonnet and leave it up while parked, this lets heat out from the engine bay quicker.

At every fuel stop clean the windscreen, as you will be looking through it again for the next 4-6 hours before stopping at a service station again. Particularly at night time.

Change drivers every 200 kms if you have another driver. Many of my trips have been as the lone driver and often involve covering 1,300+ kms a day.

Try to mimic your normal sleep pattern. If you are a night person then drive at night, but if you aren't then don't.

I rarely change my clock when changing time zones until I arrive. This helps keep my body clock in tune until I arrive, but be aware of local times as this impacts on available hours for service stations, motels, etc. Driving from Perth To Brisbane I go thru 5 time zones. Did you know there is a $\frac{3}{4}$ hour difference on the Nullarbor in W.A. An intermediate time zone for that area or that Broken Hill in NSW's operates on S.A. time.

Hope these tips help you with your next trip. They are my personal experiences and you should seek professional advice regarding your particle vehicle and trailer operations.

Regards "Goose"



Summary of Major Events

Year	Venue	Transport	Distance
1990:	Perth - WA National Titles	Drive	400 kms
1991:	Hervey Bay - Qld Nationals & 1 st World Titles	Fly	
1992:	Forster - NSW National Titles	Drive	9,000 kms
1992:	Long Beach - California USA USA Nationals & 2 nd World Titles	Fly	
1992:	Ceduna - SA to pick up new boat	Drive	4,200 kms
1993:	Portland - Vic Nationals Titles	Drive	7,000 kms
1994	Glenelg - SA National Titles	Drive	5,400 kms
1995	Belmont - NSW National Tiles & 3 rd World Titles	Drive	9,000 kms
1995	Mission Beach - Qld Nth Qld Titles	Fly	
1996	Lauderdale - Tas National Titles	Fly	
1996	Brisbane - Qld State Titles	Fly	
2000	Yeppoon - Qld National Titles & 4 th World Titles	Train/Drive	12,000 kms
2002	Sydney - NSW (via Brisbane to pick up new Boat) National Titles	Drive	11,000 kms
2003	Adelaide - SA National Titles	Drive	5,400 kms
2004	LCYC - QLD National Titles	Drive	11,000 kms
2004	Foster - NSW F18 Nationals	Fly	
2005	Sydney - NSW Nationals	Drive	9,000 kms
2005	Airlie Beach - Qld F18 Nationals	Fly	
2005	Victor Harbour - SA Pick up Cherub For son	Drive	6,000 kms
2006	Victor Harbour - SA Nationals	Drive	6,000 kms

2006	Humpty Bong - Qld State Titles	Fly	
2007	Sydney, via Brisbane to deliver F18	Drive	11,000kms
2007	Brisbane - Qld Nationals	Fly	
2007	Yeppoon - Qld F18 Worlds	Drive	11,500kms
<hr/>			
Total	Drive		117,900 kms