

GUIDE TO DRIVING IN THE OUTBACK

Before the trip

The outback is a remote wilderness, where travellers tend to feel more like adventurers and explorers. But there are certain hazards you need to be aware of when travelling through the outback and various precautions should be taken before setting out. We've answered your most frequent questions to help you get the most out of your outback trip.

When should I travel?

It's important to plan ahead to ensure a safe and enjoyable trip. Weather is an important factor when planning outback travel. From central Australia, north to Katherine, there is no 'wet' season. But in summer, daytime temperatures can rise to more than 40°C. During winter, days are warm and there are sharp drops in temperature at night. Light rainfall can occur any time.

Further north you'll find distinct wet and dry seasons. The dry season usually lasts from April to November, with very little rain. During the wet season - December to March - many of the roads become channels of mud and the days are unbearably hot and humid, with thunderstorms and downpours. You need to be well-prepared to tackle the remote far north of Australia in the wet season.

What should I pack?

- Take sunscreen and insect repellent. In warmer parts of Australia mosquitos can carry diseases such as the Ross River fever and Australian encephalitis
- Clothing that covers all weather possibilities: wet-weather gear, clothing that will protect you from the sun, and don't forget jumpers and jackets for the cold nights
- Fire extinguisher - keep it where it can be reached easily and quickly. Fires can occur from electrical faults or when long, dry grasses come in contact with a hot exhaust
- Comprehensive first aid kit
- Disaster recovery items including long-range fuel tank, winch, tree trunk protector, basic recovery gear - snap straps, shackles, shovel, airbag jack (useful if your vehicle is bogged or immobilised), jumper leads
- Tool kit: hacksaw, hammer, cold chisel, rubber mallet, pliers, file, set of spanners, socket spanner set, set of screwdrivers, a voltmeter, trouble light, wire brush, soldering iron, resin core solder, electrical tools, allen keys
- 12V compressor to re-inflate tyres
- Engine oil, automatic transmission fluid, gearbox/differential oil, correct size spanners to fit drain plugs
- Radiator coolant
- Spare radiator hoses, fan belts and tools to replace them
- Your own pressure gauge
- Spare set of keys.
- Campers' packing checklist

How should I prepare my vehicle?

Make sure your car is in top condition before a driving trip; have it checked by the NRMA Motoring & Services' Vehicle Inspectors or by a competent mechanic.

How can I pack my car to reduce the strain of the load?

- Overloading can cause suspension problems, so don't over-pack
- Keep the centre of gravity low
- Stow heavy items in the cabin, boot, or trailer and put lightweight goods on the roof rack
- If you are carrying equipment inside a hatchback or other car where the boot is behind the back seat, install a cargo barrier.

How to pack your 4WD

Do I need to fit the vehicle with any special equipment?

- There's a range of equipment you can fit to your vehicle.
- Towing hooks - attach them to both the front and back of your vehicle
- Bull-bar
- Good set of driving lights
- If you have a fridge on board, power it with an extra battery. This will save the car battery for car functions. You can also opt for a gas fridge or a unit that runs on 240-volt mains power for when you're hooked up to the mains at a camp site.

Do I need special tyres to travel in the outback?

- You don't need special tyres but they should be new or nearly new and if you're in a 4WD the tyres should have a 6-ply or equivalent rating.
- Always carry two complete spare wheels and remove the hubcaps if you don't want to lose them while travelling over rough terrain.

What equipment/precautions should I take so I don't get lost?

Up-to-date, comprehensive maps are a must and are available from NRMA Motoring & Services, tourist centres and motoring organisations in other states. Check the accuracy of the maps along the way with reliable local authorities and ask about any roads that may not be marked.

Check out NRMA's maps

GPS (global positioning system): a GPS will give you a position and determine the latitude and longitude of any point by picking up signals from satellites.

High-frequency radio: use a high-frequency radio if you plan to travel to remote, sparsely populated areas. A high-frequency radio can be used to contact the Royal Flying Doctor Service. The Australian National 4WD Radio Network www.vks737.on.net provides safety oriented HF radio communications for travellers in remote areas.

Keep a road log: for some of the tougher, more remote roads, keep a written log and record times and odometer readings at all intersections, signposts, grids, etc. This will be useful if you get lost and need to backtrack.

Leave your itinerary with someone: one of the rules of the outback is to leave your itinerary with family or friends, or the authorities and to check in regularly while on your journey.

On the road

Now you're finally on the road, you need to ensure your trip is as safe and enjoyable as possible.

Here we give you some guidance on what to take, including communications devices, in case you get into trouble as well as help you cope with hazards you just don't see in the city.

Caring for the vehicle's tyres and wheels while on the road

Check your tyre pressure each morning before you set off with your own pressure gauge.

Don't let air out of tyres as heat and pressure increase.

You need to deflate tyres when crossing sand hills or tackling sandy tracks.

Worn or faulty wheel bearings are often the culprits causing major damage to vehicles, so listen for any unusual sounds and have them checked every 10,000 km or so.

Should I carry extra fuel?

- Most 4WDs have a fuel tank capacity of around 90 litres. Sedans will carry less fuel. To work out how far a tank will take you calculate how many litres you use over 100 km during the course of a normal week - then apply this to your tank capacity. Work out distances between destinations and this should tell you when to carry extra fuel.
- Because you can have fuel pipe problems on rough terrain, take an extra 20 litre metal jerry can or two with you, plus a funnel for filling the tank, especially if you're visiting a remote area.

Two-way radios and other communication tools

Two-way radios have a range of up to several thousand kilometres depending on climatic conditions and time of day.

You need to know which frequencies work in the area where you are travelling. They should not to be confused with Citizen's Band (CB) radios that cannot communicate with the Royal Flying Doctor Service or Telstra bases.

Radios are important in the outback because they enable regular contact with destinations, points en-route or home through a radiotelephone (radphone) service operated by Telstra.

From your vehicle you can make a telephone call and receive a reply over the radio establishing your credit arrangements with Telstra. These have been superseded to an extent by satellite phones, which offer widespread communication throughout Australia in much the same way as a normal phone.

Royal Flying Doctor Service bases are located at strategic points around Australia . Contact the RFDS base in Broken Hill on (08) 8080 1777. Their website also has details of each base's call sign and frequency.

Where can I get more advice on radios and satellite phones?

There are several organisations that offer information. Call Telstra Mobile Satellite and Radio Services on 1800 632 995 and Codan on 1800 801 573.

Are there any special driving techniques I should learn?

Outback roads are generally unsealed with surfaces of gravel, earth or sand. Many have stretches of deep talc-fine bulldust and driving through this is similar to driving through drifts of sand.

Potholes and ridges: roads that carry heavy trucks often have ruts and corrugations, loose rocks and nasty potholes. Try to maintain a straight course rather than dodge every pothole and if the road is corrugated, choose a speed that gives you maximum comfort by 'riding' the ridges.

Sandy roads: driving in sandy regions is hazardous at the best of times, so you should learn how to negotiate sand. Reduce your tyre pressure to 15psi to cope with the soft surface and remember to inflate them ASAP once you hit harder ground. Carrying a 12v compressor for this job is a must.

What's the best way to overtake a vehicle in the outback?

Overtaking is a major hazard on country and outback - visibility is often poor and the chances of getting a stone through your windscreen are high. On gravel or earth roads, the dust thrown up from vehicles in front makes it almost impossible to see. Wait until the dust has settled. Don't consider overtaking a vehicle until you reach a dust-free stretch and you have a clear view of the road ahead.

Beware of large vehicles. By the nature of their sheer size, large vehicles such as trucks, horse floats, caravans and road trains can be potentially dangerous on narrow, gravel, or remote roads. Some road trains are up to 50m long, 2.5m wide and travel at around 90km/h. Overtaking a road train is a tricky and risky business. From the time you start to overtake you will probably travel about a kilometre before you are completely past.

River crossings and unsealed roads

Determine how many unsealed roads and river crossings are on your route. This knowledge will give you an idea of how many potentially difficult crossings you'll have to make in rainy weather.

To reduce your risk of being bogged, and crossing swollen rivers, avoid the rainy season and delay your trip until drier weather. Local tourist centres offer a wealth of up-to-date information so take advantage of them.

What's the safest way to cross a creek?

Always check the depth and force of water at creek crossings and see if there are any obstructions that might damage the vehicle. This usually means that you'll have to get out and walk across first.

If you're travelling in northern regions, you should keep an eye out for crocodiles and only walk across if you're sure that they're not about.

if the water is deep cover the radiator grille with a sheet of canvas or small tarpaulin to help keep the engine dry.

Once satisfied that your vehicle can get through:

- put it in low gear
- proceed slowly but steadily
- keep the revs up
- stay in the centre of the road where the surface is likely to be hardest
- select a speed that will maintain a bow wave and effectively reduce the depth of water around the vehicle.
- keep your feet off the clutch and brake.

Getting out of trouble

So you've made it finally into the outback, you're all set to have the time of your life and disaster strikes.

Your car breaks down, runs out of petrol or you're running low on food and water. What should you do?

What do I do if I get lost or my vehicle breaks down and I can't fix it?

- **Don't panic:** think calmly about your predicament. Try to get a small campfire going because station hands or local landholders will usually investigate any sign of smoke.
- **Stay with your vehicle:** if your vehicle has broken down stay with it, even on a little-used track, as a car is easier to spot than a single person. Your vehicle will also provide shelter, increasing your chances of survival.
- **Set up a signal:** carry some materials, preferably white fabric (for example an old sheet), that you can use to form a signal that can be easily seen from an aircraft if things get tough. A ground signal for motorists needing help is simple and the following two codes should be used:
 - SOS, which means that a motorist has a survival problem, and
 - An 'X' means the motorist is unable to proceed. Use your rear vision mirror to signal to passing planes by flashing it into the sun. Occasional flashes from any nearby high outcrop could also attract attention.

What are some 'quick-fixes' if I break down?

Here's some emergency repair measures if you are stuck in the middle of no-where - they must only be used if it's an absolute emergency and, with these 'quick fixes' in place, you should only drive your vehicle as far as is needed to find help.

Broken fan belt

- Always carry a spare fan belt or two.
- If you have an older vehicle, you should fit new belts before you leave and carry the old ones as spares.
- In an emergency, use a nylon stocking, cord or rope to give some traction over water pump and fan belt pulleys. Keep engine revs low until you can replace the temporary belt with a proper one.

Broken brake lines

- Fractures in hydraulic brake lines should be repaired by cutting or breaking the line at the fracture and sealing it by flattening the end of the brake line, folding it back and then flattening it again. Both ends should be treated in this manner.
- If the break occurs in the line leading to the wheel and the line is sealed off, the system will only suffer the loss of one wheel brake and the remainder will still work, although they'll have a tendency to pull violently in one direction.
- Be careful to keep your speed down. Hydraulic fluid lost from the system must be replaced. If you don't have any spare hydraulic fluid then castor oil, methylated spirits or water will suffice, but do not use engine oil as this will destroy rubber components very quickly. Do not repair hydraulic brake lines with plastic hose.

Broken fuel lines

- Fractures or breaks in fuel lines can easily be repaired with plastic hose. Slip the end of the hose over the end of the broken fuel line and secure its position with wire.

Damaged fuel tank

- The easiest and most effective way to repair a broken fuel tank is to use a two-pack epoxy resin and proprietary brands of two-pack putties.
- Failing this, you could try using a wooden plug slightly larger than the hole in the tank and spreading silicone sealant or chewing gum around the bung.
- If the tank can't be repaired, a plastic hose from a fuel container connected to the intake side of the fuel pump could be used.
- If plastic hose is not available, the existing fuel line from the tank to the pump can be disconnected at the tank and redirected into a fuel container.

Fuel pump failure

- If your vehicle's engine is not fuel-injected, you can effect a gravity-feed system by connecting a container of fuel to the carburettor by means of plastic tubing. If you're carrying a sufficient amount of spare fuel line, the roof rack is good place to locate the fuel container. Make sure that the fuel you are using is clean and strain it if necessary. Carrying fuel on your roof rack is dangerous, so only do this if it's an absolute emergency.

Leaking radiator

- Add the contents of one bottle of Stop Leak to the radiator and block the hole with proprietary brands of two-pack putties. Note: Remove the cap on pressurised systems with this type of repair.
- Core damage can be fixed in the same way as brake lines; you can cut the tubes, flatten the ends, fold them back and flatten them again.
- Frequently check water levels following any temporary radiator repairs and make proper repairs as soon as you can.

What do I do if I get bogged?

- Turn off the engine immediately - this stops water getting into the engine.
- Use a snatch strap and another vehicle to tow you out.
- If there are no other cars present, you'll need a shovel, an axe and an air compressor. A winch and tree trunk protector could also come in handy.
- Try deflating the tyres to about half the normal pressure. This allows tyres to gain added traction.
- If these methods fail, jack up the vehicle and put some form of hard material under the wheels such as branches, stones, leaves, grass or twigs. Keep the wheels as straight as possible to give them traction.
- An inflatable exhaust jack will save a lot of time and can gain a few metres at a time if it is used to drive off, but beware of damaging the bag with sharp metal parts underneath the car.
- Keep up momentum until you are well clear of the bog and once out, remember to inflate your tyres with a portable 12-volt compressor.