

# 2

## Getting started

### 2.1 Tread lightly

No matter whether you drive a 4WD for work or pleasure, it is vitally important that the environment is considered during your exploits. The environment is a finite resource. If it is abused it will change and at times these changes can have drastic effects on users of the land and its ecology.

Having some simple knowledge of what is right and what is wrong is all it can take to make the difference for the wellbeing of the environment. Treating other land users with respect is an issue that we all need to consider as well. All too often, when we find ourselves deep in the mountains or way outback, common sense can be left at home. Think about your actions and their impact on others and the environment. Take responsibility and pride in everything you do.

Here are simple rules for anyone using a 4WD:

- Always stay on formed trails – do not make new tracks across any fragile land.
- Do not drive over vegetated sand dunes; keep to existing tracks.
- Clear trees from trails rather than making new tracks around them.
- Do not use tracks or roads that are closed due to wet weather.
- Drive in a track-friendly manner: no wheel spinning, use 4WD and avoid deep mud holes where possible.
- Avoid using trails that are excessively muddy even if they are not closed.

- Allow excess water to drain from your vehicle when crossing a river rather than carrying it up the bank.
- Carry out all of your rubbish.
- Bury human waste and, if fire danger is low, burn toilet paper.
- Pick up the rubbish left by other thoughtless travellers, keep the scene clean.
- Always leave station gates as you find them (either open or shut).
- Seek permission from local landowners when travelling over their property.
- Do not camp near stock watering holes.
- Do not use soap or detergents in watercourses.
- Observe fire bans and keep cigarettes inside your vehicle.
- Don't camp close to other campers if there is plenty of camping space available.
- Respect other campers' peace and solitude by not playing loud music in camp sites.
- Do not impose yourself on station owners.
- Carry the appropriate recovery gear in your vehicle; do not expect others to carry equipment that you should have.
- Use the recovery gear correctly; do not ringbark trees with winch cables.



Follow the advice given on all signage when it comes to accessing areas.

- Do not use firearms carelessly or without permission.
- Do not harass station stock.

## 2.2 Trip planning

This section deals with the need to prepare for the journey ahead of you, whether that journey be for pleasure (perhaps your annual holidays) or as part of your work role involving the use of a 4WD vehicle and driving it in off-road terrain.

There are various things that might affect the journey you will be undertaking: these include various rules and regulations that you must abide by and the weather and environmental factors that will impact on your journey.

### 2.2.1 Rules and regulations

Everything we do in life is governed by rules and regulations. The things that might need to be considered in the use of a 4WD include:

- road rules
- local council regulations
- national park acts and regulations



Changing conditions will affect your trip planning.



It is your responsibility to abide by road signs and regulations.

- crown land and state or federal government regulations
- private land owners' rights and requirements
- Native Title and requirements for travel on their land
- workplace guidelines and rules
- the operations manual of the 4WD vehicle
- emergency evacuation areas
- site induction policies
- emergency management response and guidelines.

It is your responsibility to make yourself aware of the rules and regulations that affect where you will be travelling.

### 2.2.2 Environmental issues

Journeys can be impacted by nature and you need to be prepared for changes in the environment and aware of how they can affect your journey. Things to be considered in this respect are:

- **weather conditions** – ascertained from the Bureau of Meteorology, apps such as Weatherzone and Willi Weather and numerous others, radio and television broadcasts, local input via social media or direct phone contact



Take note of impending bad weather and how it might affect your plans.

- **road conditions** – state-based computer apps such as Live Traffic, council websites, government road condition reports, national park websites listing current road closures, seasonal road closures, wet weather road closures
- **emergency management** – computer apps updated by the various government and emergency response personnel (e.g. Vic Emergency for fire-flood-storm-wind-avalanche in Victoria, SES Facebook sites, Fires Near Me app for New South Wales and other similar government emergency response social media sites).

### 2.2.3 Planning a journey

Planning involves the following:

- accessing the information in Section 2.2.2
- planning food and water needs for the journey and all involved
- contingency plans for food and water if delayed
- considering individual food/water needs (special dietary requirements, medical issues – current and unplanned)

- carrying adequate communications equipment for the journey, such as satellite phones, tracking devices, personal locating beacons, UHF or other band radio, mobile phone coverage, established contact protocol (when and by whom and what to do if it fails)
- emergency recovery or repair and who to contact
- local police numbers or local hotel, general store or caravan park contact numbers
- interpretive maps, including map contours and latitude and longitude calculations.

## 2.3 Pre-departure check

Prior to any travel in your 4WD, especially if departing on a long-awaited holiday, you should perform a pre-departure check on your vehicle and equipment. The same applies in the work place: it's too late if you are already out on the track and you discover an essential piece of equipment is missing or the radiator has a leak in it.

Below is a typical pre-departure check list:

- engine oil level
- coolant level
- brake fluid level
- power steering fluid level
- washer bottle level
- battery fluid level or battery condition indicator
- battery terminals and battery mounting brackets all tight
- radiator hoses and clamps tight and no splits or cracks or signs of leakage
- fan and air conditioner belts are tight
- air filter clean
- location where the air filter draws its air from
- any obvious oil leaks or fuel leaks in the engine bay
- under vehicle check for oil leaks, fluid leaks or tree debris caught up under the vehicle
- damage to the underside of the vehicle
- air pressure in all road tyres and in the spare tyre
- all tyres including the spare are in serviceable condition with no sidewall or tread damage and sufficient tread depth for the journey ahead

- vehicle jack and jack handle and wheel brace are in working order
- appropriate wheel nut lock keys are available where fitted
- supplied tools for the vehicle are available and in working order
- supplied recovery equipment is in working order and good condition and is correctly rated for the task
- vehicle has approved recovery points at front and rear
- where an electric winch is fitted to the vehicle it is in working order, you have the hand control unit and the free spool clutch release is operational
- heavy equipment is stored behind an approved cargo barrier or in the rear tray
- all loads are correctly secured to the vehicle
- heavy loads are kept low in the vehicle
- identify and understand how to select 4WD
- know what special features your vehicle has, such as traction control, hill descent control, locking centre differential, front and rear differential locks, limited slip differential, anti-brake skid, high and low range
- identify special features in the automatic transmission such as second gear hold for slippery surfaces



An under-bonnet check is important before each journey.

- be aware of the height of your radiator fan for river crossings
- be familiar with the location of electrical components such as alternator, fuse box and the vehicle's computer box location
- depending on trip length, consider spares such as fuses, belts, hoses, tyre repair kits, working compressor, fluids, and so on.

## 2.4 Seating position

Forward visibility is paramount when driving on- and off-road. This is because you need to be able to see any obstacles on the road to assist you in avoiding them or changing your driving method to tackle the obstacle ahead. Obstacles can be in the form of bull dust holes, pooled water, sandy sections, loose gravel or washouts often encountered on unsealed roads. While on 4WD tracks, obstacles can include washouts, wheel ruts, rocks, tree roots, fallen branches, mud, loose gravel, leaf litter and so on. The purpose of identifying these obstacles is to ensure that your wheel placement will avoid surfaces that will cause loss of traction: this applies to good unsealed roads or a rough 4WD tracks (or even on a sealed road where tyre debris, a pot hole or other debris is often seen).



Don't wrap your thumbs around the steering wheel.

- When sitting in your 4WD you will notice that you are unable to see the road or track immediately in front of the vehicle. This lack of vision can extend up to 6 m in front of the 4WD. If you can't see the track ahead, it is impossible to know where you should place the vehicle's tyres to avoid obstacles and maintain traction. To remedy this you need a good sitting position.
- A good sitting position is important for your health. If you have the back rest reclined too far you will find that you are leaning forwards as you drive in order to see the track ahead. This will result in severe muscle fatigue in your neck, shoulders and back. However, even with the seat correctly adjusted for maximum forward visibility you will still have a blind spot of 4–5 m in front of the vehicle. A good test to establish if you have the correct seating position is to take note if there is a gap between your back and the back rest of the driver's seat when you have your best forward vision. The correct thing to do is move the seat squab forwards slightly and the back rest to a near upright position. Also raise your seat if possible to the highest comfortable position that provides the best visibility forward. This will provide support to your back, shoulders and neck while at the same time allowing the maximum vision over the bonnet without having to lean or strain forward. There should then be no gap between your back and the seat's back rest.
- Now that you have adjusted the seat correctly, you should always wear your seat belt. I see far too many drivers not wearing their seat belt when they go four-wheel driving. Excuses such as 'they are too restrictive' or 'I am only going slowly' just do not save you from injury or death if the vehicle slides backwards off a steep hill and rolls over. People are killed by being thrown out of 4WDs. So make sure that your seat belt is always securely fastened whenever the vehicle is moving. It is also the law to wear your seat belt whenever in control of the motor vehicle.
- Also make sure all other passengers in the vehicle wear their seat belts, including the children.
- The correct seating position allows your hands to reach the steering wheel with a slight bend at the elbow.
- Always hold the steering wheel tightly with both hands where possible but do not wrap your fingers and thumb fully around the steering wheel as any back lash through the steering wheel can injure your fingers/thumb.



Seating position when travelling off-road.

- If changing gear or starting the engine or any action that requires one hand to leave the steering wheel, always hold the steering wheel firmly with the other hand: never let go of the steering wheel completely, especially when stationary in steep terrain. A steering wheel that is not controlled by the driver can spin sharply as a front tyre reaches uneven ground, a rock or tree root.
- Adjust your wing mirrors so you can see clearly down each side of the vehicle: ideally you should be able to see the track edge beside the vehicle and behind the vehicle.