

# Sand Driving Information

Techniques used when driving over sand are generally the same that as those used when crossing other types of terrain. The idea is to float over the sand. The correct combination of engine speed and gearing is essential for successful sand driving. Always use 4WD when driving on sand. Select a suitable gear that keeps you moving at a steady pace without over revving the engine and don't drive too fast. Gear changes are usually done at a higher rev range than normal.

## TYRES

Tyres and tyre pressures are more trial and error. Basically, wider, non-aggressive tyres are better than narrow, aggressive tyres. Lower tyre pressures do help, start at about 2/3 normal road pressure and lower as necessary. Sand lets you sink in a bit, or a lot as the case may be and this builds up a little sand hill in front of each tyre, you are always driving uphill. The purpose of lowering tyre pressures is to reduce the size of the hill, as well as giving your tyres a bigger footprint. Don't be too worried about tyre damage or rolling a tyre off the rim, if you drive slowly, carefully and don't make any sudden manoeuvres you should have no problems.

## BEACH DRIVING

When beach driving, the sand closest to the water edge is usually harder than drier sand closer to the dunes. If you are worried about rust, there is as much salt near the top of the dunes as there is near the water. The beach is usually smoother and creek crossing are shallower near the water's edge. It's a good habit to always back up a meter or so when you stop in soft sand. This compacts the sand and gives you a firmer surface to start on. Don't stop in hollows, creeks or where the waves can reach you, as water quickly erodes the sand from around your tyres and you are bogged.

Avoid hard braking as this can dig a vehicle into soft sand and make it hard to get mobile again.

## SAND DUNES

When driving on sand dunes always drive straight up or down the dune face, not at an angle across it, as the vehicle usually slides sideways.

Don't drive so fast as to become airborne at the top, a heavy landing follows with the possibility of damage or injury.

## SOFT SAND

If you need to traverse a soft section, it's sometimes advisable to fill in any deep holes before driving this section of track. If at first you don't succeed back up before you are stuck and try again. Each time you drive over the sand you compact it and at each try you will get further. Sometime it is easier to follow other wheel tracks, but not if they are too deep and you belly out.

If for any reason you stop forward or backward motion, stop, as all you are doing, is digging deeper holes for yourself. Try going in the opposite direction first.

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## RECOVERY

When you become bogged, you need to have a plan on how to free your vehicle. It might be as simple as unloading the passengers and giving the vehicle a push or dropping the tyre pressure. If this doesn't work you might have to dig sand away from around the tyres.

If the vehicle has bellied out, you will have to remove sand from under the vehicle, so that all four wheels have traction. This might mean that you have to jack up the vehicle up and reach under the vehicle to where the problem is. A long-handled shovel will make this job easier. To jack up the vehicle you will need to place a wide board under the jack to stop it sinking into the sand. A bull bag is good for jacking up vehicles in soft sand.

Once you have jacked up the vehicle you will have to decide whether just filling in the holes is going to be enough. A traction mat could be laid out on the sand to get you going again. Traction mats can be pieces of newspaper, cardboard, floor mats or specially made plates. A trick with traction mats is to tie them with a length of rope to the vehicle, so when you are free and can stop on firm ground, you won't have a long walk back.

## EQUIPMENT

The following equipment should be carried on beach trips:



A long-handled shovel for reaching under a vehicle



A large board to place under the jack



Tyre gauge and pump



Snatch strap for recovery



A sand anchor if you have a winch

## GENERAL RULES

Don't travel by yourself, drive within 3 hours of low tide and avoid traveling at night. Don't forget that the beach is a public road, normal road rules apply, including drink driving, wearing seat belts and passing oncoming vehicles on the left. Keep all parts of your body inside the vehicle and no riding on bull bars or roof racks.

Vehicles need to be in good condition, carry suitable spares and the engine water proofed against freak waves or water crossings.

Continuous driving in soft sand can cause the engine and auto transmission temperatures to rise, keep an eye on the gauge and if it starts to climb too high, find a firm spot to stop and let the engine and transmission cool.

Dragging the underbody through sand, can flick sand up into all sorts of places, some of which can cause problems now or in the future.

Wash your vehicle when you get home, make sure you flush out all the chassis and cross rails and up under the guards.