

4WD DRIVING TECHNIQUE

MUD DRIVING

The main attractions at off road competition events are usually the mud holes, because people just love seeing competitors deal with bottomless black ooze. It's not so amusing, however, when you come across the same sort of stuff on an off-road trip.



Mud driving used to be part and parcel of off-roading, but mud is rarer stuff now. The reason we encounter less mud these days is that most roads and trails are closed quickly by councils or other authorities in response to wet weather to reduce road damage.

However, one day you're going to encounter a muddy situation, even if it's only the steep bank on the other side of a water crossing, made muddy by water pouring from vehicles as they clamber up the slope.

Another common mud situation is caused by overnight rain, turning yesterday's dusty tracks into strips of mud.

Muddy Tracks

A sudden downpour on a country road or bush track can create a driving hazard, because clay or dirt surfaces turn into a paste that has the friction quality of soap.

You need to drive very carefully in these circumstances, staying up on the 'crown' of the road, to avoid sliding into the table drain.

Engage your traction aids and avoid sudden acceleration or braking. Keep it smooth.

The dark grey soils that are common around rivers, creeks and channels – even dried up ones – are notoriously difficult to handle when wet. The best driving option in black soil country is: don't. Wait a day or so, if you can.

Another possible mud situation is a section of track that runs across low-lying ground and has filled with water. Before driving into it, have a good look for signs of damaging debris, such as bits of tree branch or sheets of iron that other travellers have used to extricate themselves. Clear this tyre-destroying material first, or make sure you can drive around it.



Muddy Climbs

Driving up a muddy slope is similar to driving up a sand hill, because both surfaces cause wheel spin that needs to be controlled.

A short, muddy slope doesn't usually pose much of a hazard, but a long climb can be fraught with danger. Tyre ruts normally serve to keep your vehicle aligned up the slope, but a climb without ruts offers no guidance. It's possible to power slide off such a track, into trees, or over a steep edge.

It's essential that you engage whatever traction aids you have – centre diff lock or across-axle locks – before you attempt the climb. As with sand driving the trick is to maintain momentum in the highest gear that delivers enough power, without going so fast that your vehicle leaps all over the place.

Another common factor between sand and mud driving is the need to lower your tyre pressures. Lower pressure means a larger tyre contact patch that should provide more grip and a more flexible tread area that can mould itself over irregularities in the surface.

Although climbing a muddy slope is similar to conquering a sand hill, coming down a greasy slope is quite different from surfing the other side of a dune. Sand slows a descending vehicle, but mud does not. The momentum you needed for the climb is your enemy on the descent. Many a 4x4 has come down a mud slide too fast and wrapped itself around a tree.

You need to come down a slippery hill with great caution and at the lowest possible speed. Keep your traction aids and hill descent control engaged and avoid heavy braking that could lock wheels and start an uncontrolled slide.



Tyres

For mud driving you'll need tyres with a prominent tread pattern – the lumpier the better.

Purpose-designed mud tyres have separate tread blocks and clear passages between them, to allow mud to escape from the tread area. The best of these have a tread pattern that wraps around the tread edge, onto the sidewalls, so that the tread edges can bite into smooth, slippery mud ruts.

However, mud tyres that have worn below half-original tread depth aren't any better than relatively new A/T tyres. Barely legal tyres that just pass the match-head depth gauge test are best kept for next summer's beach forays.



Recovery Gear and Traction Aids

You should have a shovel or two – long-handled ones are best - and a pair of gloves to go with each shovel. A tow-rope is good insurance.

Electronic traction control is an option worth having for mud driving, because it works instantly to control wheel spin. However, beware the moment when the brake actuator runs out of puff on a long, slippery climb, leaving you without any traction aid.





For serious mud work you can't beat driver-controlled, across-axle differential locks, or self-locking diffs. With the centre diff locked and front and rear axles locked up your 4x4's wheels will rotate at the same speed, regardless of tyre grip.

This ensures forward progress in all but the deepest quagmire and prevents damaging slip and grip wheel spin that can snap axles, diffs or CV joints.

Back in the olden days we used to carry tyre chains, but these are frowned on by track maintenance people, except at The Snow. If you're operating on muddy, private property, with the owner's permission, a set of chains can mean the difference between spending a night in one of the paddocks, or making it back to the homestead.

