

# Driving in the Highland

## Preparing the car

A mayor factor if you want to cross a river is your car (surprise!). The wading ability of your car is limited by some factors:

Most important: Which height is the air intake? Your car pulls the air it needs for burning the fuel through the air intake into the engine. The pistons are compressing air and fuel inside the cylinders. If water enters the air intake two things happen:

- 1.: Engines do not run on water yet.
- 2.: Water can not be compressed like air, your engine will get water locked and suffer a terminal mechanical defect.



It does not always have to be perfect



A good improvised solution can save the day

Your air intake should be as far up and as well protected as possible!

Which effect will water have to other parts of your car? Will the alternator, the starter, the turbo be coping well? Are there any electronic control-units which might get wet? Will water be entering into the cabin and which consequences will this have? In most cars, which have not specifically been designed to go off-road, those parts are not meant to work under water - even less consecutively.

The good news: as long as no water is entering the air-intake most cars will tolerate the occasional dip. Even most of the notorious yellow warning lights, which go on when a sensor registers something out of his digital frame, will go off, as soon as everything has dried off.

The bad news: yes, going through water can severely damage your car. It gets even worse, when your car is getting stuck in a river. Axles, differentials and gearboxes have little valves to allow pressure release, when the oil and air inside is expanding when it is getting warmer. In the cold Icelandic water, everything is cooling down and the resulting under-pressure might suck water through those valves. In some cars you can raise these valves by fitting plastic-tubes.