



HAZARD ALERT : SINGLE CUP COFFEE MAKERS

DRIVING ON GRAVEL ROADS

Gravel roads present their own special road safety challenge. The issue is traction. Driving on loose gravel is harder than driving on pavement because your tires don't have the traction needed to give you stable control. Throw speed into the mix and you have a formula for trouble.

Here are some tips to decrease your risk when driving gravel roads:

SLOW DOWN :

Many drivers encounter problems when they leave a paved surface for a gravel one. The first thing to do is to slow down. Your vehicle is going to handle differently when it moves from one surface to another. The gravel may be loose or it may be hard-packed; you want to know how your vehicle handles before you speed up.

AVOID SUDDEN CHANGES IN DIRECTION :

Avoid sudden changes in direction, such as a swerve to avoid an object or animal on the road. They can be particularly dangerous, especially on loose gravel or at excessive speed.

ACCELERATE AND BRAKE SLOWLY :

Accelerate and brake slowly, reduce your speed when approaching intersections, curves and hills. Always drive at a speed that allows you to stop easily for any hazard. Be considerate, too. As you approach other vehicles, slow down and move over to the right so you can pass each other safely. Most gravel roads have soft sloping shoulders that will cause the car to pull and twist to the side of the road. Overcorrecting will cause the driver to lose control of the car.

INCREASED RISK OF ROLL-OVER:

If a vehicle drifts too far to the side and the tires go off the packed surface a roll-over can easily result from driving off the gravel surface.

INCREASE FOLLOWING DISTANCE :

Even if the visibility is good and the road is hard-packed, stay at least six seconds behind other vehicles. Increase this distance when conditions are less than perfect. This reduces the danger from a cloud of dust obscuring vision or flying rocks damaging headlights and windshields. A gravel road has half of the tire grip or friction of a bitumen road. The driver will need double the distance when braking to a stop as compared to the braking distance normally required on bitumen. Increase this distance when conditions are less than perfect and rain or dust reduces your visibility.

BE READY FOR SKIDS :

A vehicle can become difficult to handle in heavy gravel. If the vehicle starts to skid, remove the cause of the skid by releasing your accelerator or brakes. As you release them, look where you want to go, steer the vehicle in this direction. If the tires on one side of the vehicle go off the road edge, do not immediately turn the wheel to try to get back on the road. Let your foot off the gas and steer the car so it follows the edge of the road. Slowly turn the steering wheel to gradually guide the tire back to the road.

CONVOY DRIVING :

A convoy is considered to be at least two vehicles traveling together. It is helpful when driving long distances or into unknown areas. Drivers can stay behind the wheel for longer periods and feel less stressed when they let someone else lead the pack. However everyone should take turns leading. Position changes should occur every 20-30 minutes. Always drive with your headlights and tail lights on. This makes the vehicles look closer together and drivers will automatically slow down and allow more space between vehicles.

Allow at least six seconds of space between each vehicle. If roads are dry and dusty, increase the distance to double or more to allow for poor visibility. Ensure there is a means of communication between all vehicles in the convoy. Each vehicle should have a designated radio operator that is not the driver. Any issues encountered by any vehicle should immediately be communicated to the entire convoy. Noise and music in the vehicle must be kept to a minimum so that the two-way radios can be heard and to prevent the driver from becoming distracted.

APPROACHING A GRADER:

Slow down and stop if necessary to ensure the grader driver knows you are there. Wait until driver signals you before you pass. Be sure that it is safe to enter the oncoming lane before you pass the grader. Be careful crossing the line of gravel that the grader leaves. This gravel is very loose/thick and the center ridge can be very high, high enough for the vehicle to bottom out. Move through the ridge slowly in order to maintain control of the car. Note that the car will pull and slide as you pass through the line to the other side of the road.

PASSING HAUL TRUCKS/FARMING EQUIPMENT:

Slow down and approach large semi haul trucks or farming equipment slowly. Look for a safe "pull-out" and wait for the truck/equipment to pass. If they stop and allow you to pass do so slowly. Farming equipment can be big enough to cover most of the road surface leaving only a small amount of room to pass. Slow down when passing haul trucks. If they notice you are not slowing down they will not move over and will force you to come to a stop. If the trucks are moving too fast and try to move to the shoulder they can lose control, jackknife or roll over. These trucks can also generate enough dust to cause zero visibility. Slow down and continue only when the dust has settled and you are sure that it is clear. Often you will not be able to see if another vehicle is following the truck in the distance and more importantly they will not be able to see your vehicle coming from the other direction.

WASHBOARDING OR CORRUGATION OF ROADS.

It is a series of ripples or ridges that run perpendicular to the roadway. The ridges resemble the texture of a washboard and are specifically found in areas just before sharp turns and at locations where vehicles would accelerate (approaching or on a hill) or decelerate (before a stop sign or crossroad). At high speeds washboard can cause a driver to lose control because they create a form of hydroplaning even when the road surface is dry. For safe driving on washboard surfaces:

- Travel slowly to prevent hydroplaning. Traveling slowly can also accentuate the vibrations caused by a washboard and will make for a very short bumpy ride.
- Since traveling "with" the washboard causes a bumpy ride, traveling "against" it is typically smoother. That means traveling on the opposite side of the road. Do this only if you can clearly see ahead to avoid oncoming traffic.
- Often the washboard portion of the road exhibits itself as two parallel tracks. It can sometimes be avoided by traveling in between the washboard tracks or on the shoulder of the road.
- Note: if you are traveling too fast when you encounter a section of road or a turn with washboarding, you can lose traction with the road surface and slide into the side or off the road entirely.

HOW MUCH DISTANCE IS NEEDED TO STOP AT DIFFERENT SPEEDS?

Examples below are for driving on pavement. Stopping distances on gravel will be at least double that of pavement.

SPEED	THINKING DISTANCE	BREAKING DISTANCE	STOPPING DISTANCE
30 Km/h (20mph)	9 m (30ft)	13 m (43ft)	22 m (72ft)
50 Km/h (30mph)	13.5 m (44ft)	29.5 m (97ft)	43 m (141ft)
60 Km/h (40mph)	18 m (59ft)	53 m (173ft)	71 m (232ft)
80 Km/h (50mph)	22.5 m (74ft)	66 m (217ft)	89 m (291ft)

LOSING CONTROL AND MAKING AN EMERGENCY STOP :

Even the safe and focused driver may find him in the position where he has to make a sudden stop in an emergency while driving on gravel. What would the best advice be in an emergency?

- It is most important to remain calm and keep both hands on the wheel so you are in control of the vehicle –do not fight the vehicle!
- If your vehicle does begin to skid, don't hit the brakes. Take your foot off the accelerator, stay calm, look where you want to go, gently steer in that direction and keep driving at a lower speed.
- Try not to make the mistake that causes a lot of accidents on gravel roads: over-correction.
- Accidents occur when the driver tries to correct the movement of the car, losing control and eventually crashing not on the side of the road they were originally headed towards.
- To straighten up your vehicle when it is sliding sideways, steer out of the slide. This means steer in the direction of the forward side of the vehicle.
- Don't be afraid to use the entire width of the road (unless there are other cars around), it's easier to slide gently over to the wrong side of the road than it is to try and wrestle the car into line on the correct half of the road.
- While you try to steer out of the slide, ease off on the accelerator and maybe gently apply the brakes.
- Remember, you don't want to do anything too suddenly.

WHAT IF I CANNOT AVOID THE CRASH?

- If you cannot avoid the crash you should try to crash in a way that will minimize damage to yourself and other passengers. You don't want to be brought to a sudden stop. This will hurt you the most.
- If given the choice between a single large tree or a fence, 20 meters of loose scrub and then a ditch, choose the latter. It will stop you slower.
- If you must hit something, hit it with the front of the car. The front of a car is designed to cop the brunt of a serious collision.
- Once you have stopped, it would be wise to get out of the car if you can, as with all that fuel and heat around, there is a chance of a deadly fire.
- Be careful if you have to pull other people out of the car, you may be worsening possible spine injuries.