

# 4X4 MANUAL -2017-



**CAMPER ICELAND**  
Explore your Iceland!

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Defensive driving means  
“always expect the  
unexpected.”

The first step in driving  
defensively is to wear your

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CAUTION

Assume that other road users (pedestrians, bicyclists, and other drivers) are going to be careless and make mistakes. Anticipate what they might do and be ready :

- Allow enough following distance between you and the driver in front of you.
- Focus on the task of driving.

Driver distraction can cause collisions resulting in injury or possible death.

These simple defensive driving techniques could save your life.

Please read these driving instructions carefully. Keep in mind that a 4x4 Camper is very heavy and a lot larger than common SUV 's. The vehicle may be equipped with a camper. The camper is installed on the truck bed strapped down with chains. Always make sure the chains are tightened correctly (never loose but never too tight). Although we have excellent experience with it you should drive extra carefully.

The movements of the vehicle are different without the installed camper.

Read the rental agreement very carefully. Driving off road and in any kind of water will not be covered by your insurance. Camper Iceland will not take responsibility for your driving or any other action.

Our services have been appreciated for many years. It's considered to be one of the most relaxing method to travel around Iceland.

You can stay almost wherever you want and change your route whenever you like.



Have a nice stay in Iceland !  
Your Camper Iceland Team

Sources: Manufacturer manuals



# GETTING FAMILIAR WITH OFF-ROAD DRIVING

It is a good idea to practice in an area that is safe and close to home before you go into the wilderness. Off-road driving does require some new and different skills. Here is what we mean. Tune your senses to different kinds of signals. Your eyes, for example, need to constantly sweep the terrain for unexpected obstacles. Your ears need to listen for unusual tire or engine sounds. With your arms, hands, feet, and body, you will need to respond to vibrations and vehicle bounce. Controlling your vehicle is the key to successful off-road driving. One of the best ways to control your vehicle is to control your speed.

- Please keep the following in mind when driving at higher speeds:
- You approach things faster and you have less time to scan the terrain for obstacles.
  - You have less time to react.
  - You have more vehicle bounce when you drive over obstacles.
  - You will need more distance for braking especially since you are on an unpaved surface.

## CAUTION

When you are driving off-road, bouncing and quick changes in direction can easily throw you out of position. So, where ever you are driving on or off the roads, you and your passengers must wear safety belts (this is Icelandic law).

## SCANNING THE TERRAIN

Off-road driving can take you over many different kinds of terrain. You need to be familiar with the terrain and its many different features. Here are some things to consider. Surface conditions: Off-roading can take you over hard-packed dirt, gravel, rocks, grass, sand, mud, snow, or ice. Each of these surfaces



affects the steering, acceleration, and braking of your vehicle in different ways. Depending upon the kind of surface you are on, you may experience slipping, sliding, wheel spinning, delayed acceleration, poor traction, and longer braking distances.

Surface obstacles: Unseen or hidden obstacles can be hazardous. A rock, log, hole, rut, or bump can startle you if you are not prepared for them. Often these obstacles are hidden by grass, bushes, snow, or even the rise and fall of the terrain itself.

Here are some things to consider:

- Is the path ahead clear?
- Will the surface texture change abruptly up ahead?
- Does the travel take you uphill or downhill? More about that later.
- Will you have to stop suddenly or change direction quickly?

When you drive over obstacles or rough terrain, keep a firm grip on the steering wheel. Ruts, troughs, or other surface features can jerk the wheel out of your hands if you are not prepared. When you drive over bumps, rocks, or other obstacles, the wheels can leave the ground. If this happens, even with one or two wheels, you cannot control the vehicle as well or at all. Because you will be on an unpaved surface, it is especially important to avoid sudden acceleration, sudden

turns, or sudden braking. In a way, off-road driving requires a different kind of alertness from driving on paved roads and highways. There are no road signs, posted speed limits, or signal lights. You have to use your own good judgment about what is safe and what is not. Drinking and driving can be very dangerous on any road. And this is certainly true for off-road driving. At the very time you need special alertness and driving skills, your reflexes, perceptions, and judgment

can be affected by even a small amount of alcohol. You could have a serious — or even fatal — accident if you drink and drive or ride with a driver who has been drinking.



# DRIVING UPHILL

Once you decide you can safely drive up the hill, you need to take some special steps.

- Use a low gear and get a firm grip on the steering wheel.
- Get a smooth start up the hill and try to maintain your speed. Do not use more power than you need, because you do not want the wheels to start spinning or sliding.

## CAUTION

Turning or driving across steep hills can be dangerous. You could lose traction, slide sideways, and possibly roll over. You could be seriously injured or killed. When driving up hills, always try to go straight.

- Try to drive straight up the hill if at all possible. If the path twists and turns, you might want to find another route.
- Ease up on your speed as you approach the top of the hill.
- Attach a flag to the vehicle to make you more visible to approaching traffic on trails or hills.
- Sound the horn as you approach the top of the hill to let opposing traffic know you are there.
- Use your headlamps even during the day. (Icelandic traffic law) They make your vehicle more visible to oncoming traffic.

## CAUTION

Driving to the top (crest) of a hill at full speed can cause an accident. There could be a drop-off, embankment, cliff or even another vehicle. You could be



seriously injured or killed. As you approach the top of a hill, slow down and stay alert.

There are some things you should do if the vehicle stalls, or is about to stall, and you cannot make it up the hill:

- Push the brake pedal to stop the vehicle and keep it from rolling backwards. Also, apply the parking brake.
  - If the engine is still running, shift the transmission to REVERSE (R), release the parking brake, and slowly back down the hill in REVERSE (R).
  - If the engine has stopped running, you will need to restart it. With the brake pedal pressed and the parking brake still applied, shift the transmission to PARK (P) and restart the engine. Then, shift to REVERSE (R), release the parking brake, and slowly back down the hill as straight as possible in REVERSE (R).
  - As you are backing down the hill, put your left hand on the steering wheel at the 12 o'clock position. This way, you will be able to tell if the wheels are straight and maneuver as you back down. It is best that you back down the hill with the wheels straight rather than in the left or right direction. Turning the wheel too far to the left or right will increase the possibility of a rollover.
- There are also some things you must not do if you stall, or are about to stall, when going up a hill:
- Never attempt to prevent a stall by shifting into NEUTRAL (N) to rev-up the engine and regain forward momentum. This will not work. Your vehicle will roll backwards very quickly and you could go out of control. Instead, apply the regular brake to stop the vehicle. Then apply the parking brake. Shift to REVERSE (R), release the parking brake, and slowly back straight down.
  - Never attempt to turn around if you are about to stall when going up a hill. If the hill is steep enough to stall your vehicle, it is steep enough to cause you to roll over if you turn around. If you cannot make it up the hill, you must back straight down the hill. If, after stalling, you try to back down the hill and decide you just cannot do it, set the parking brake, put the transmission in PARK (P) and turn off the engine. Leave the vehicle and go get some help. Exit on the uphill side and stay clear of the path the vehicle would take if it rolled downhill. Do not shift the transfer case to NEUTRAL when you leave the vehicle. Leave it in some gear.



## CAUTION

Shifting the transfer case to NEUTRAL can cause your vehicle to roll even if the transmission is in PARK (P). This is because the NEUTRAL position on the transfer case overrides the transmission. You or someone else could be injured. If you are going to leave your vehicle, set the parking break and shift the transmission to PARK (P). But do not shift the transfer case to NEUTRAL. Leave the transfer case in the Two-Wheel-High, Four-Wheel High or Four-Wheel Low position.

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## DRIVING DOWNHILL

When off-roading takes you downhill, you will want to consider a number of things:

- How steep is the downhill? Will I be able to maintain vehicle control?
- What is the surface like? Smooth? Rough? Slippery? Hard-packed dirt? Gravel?
- Are there hidden surface obstacles? Ruts? Logs? Boulders?
- What is at the bottom of the hill? Is there a hidden creek bank or even a river bottom with large rocks? If you decide you can go down a hill safely, then try to keep your vehicle headed straight down, and use a low gear. This way, engine drag can help the brakes and they will not have to do all the work. Descend slowly, keeping your vehicle under control at all times.

## CAUTION

Heavy braking when going down a hill can cause your brakes to overheat and fade. This could cause loss of control and a serious accident. Apply the brakes lightly when descending a hill and use a low gear to keep vehicle speed under control.



# DRIVING ACROSS AN INCLINE

Sooner or later, an off-road trail will probably go across the incline of a hill. If this happens, you have to decide whether to try to drive across the incline. Here are some things to consider:

## CAUTION

Driving across an incline that is too steep will make your vehicle roll over. You could be seriously injured or killed. If you have any doubt about the steepness of the incline, do not drive across it. Find another route instead.

- A hill that can be driven straight up or down may be too steep to drive across. When you go straight up or down a hill, the length of the wheel base—the distance from the front wheels to the rear wheels—reduces the vehicle and prevents the side slipping. However, a much better way to prevent this is to get out and “walk the course” so you know where the vehicle might tumble. But when you drive across an incline, the much more narrow track width—the distance between the left and right wheels—may not prevent the vehicle from tilting and rolling over.

Very important and not to ignore when driving down a hill in order not to lose control or not to have a serious accident:

- When driving downhill, avoid turns that take you across the incline of the hill. A hill that is not too steep to drive down may be too steep to drive across. You could roll over if you do not drive straight down.
- Never go downhill with the transmission in NEUTRAL (N). This is called “free-wheeling.” The brakes will have to do all the work and could overheat and fade. Your vehicle is much more likely to stall when going uphill.
- But if it happens when going downhill:
  1. Stop your vehicle by applying the regular brakes. Apply the parking brake.
  2. Shift to PARK (P) and, while still braking, restart the engine.
  3. Shift back to a low gear, release the parking brake, and drive straight down.



Also, driving across an incline puts more weight on the downhill wheels. This could cause a downhill slide or a rollover.

- Surface conditions can be a problem when you drive across a hill. Loose gravel, muddy spots, or even wet grass can cause the tires to slip sideways, downhill. If the vehicle slips sideways, it can hit something that will trip it—a rock, a rut, etc.—and roll over.
- Hidden obstacles can make the steepness of the incline even worse. If you drive across a rock with the uphill wheels, or if the downhill wheels drop into a rut or a pit, your vehicle can tilt even more. For reasons like these, you need to decide carefully whether to try to drive across an incline. Just because the trail goes across the incline does not mean you have to drive it. The last vehicle to try it might have rolled. When driving across an incline that is not too steep, the vehicle can hit some loose gravel and start to slide downhill. If you feel your vehicle starting to slide sideways, turn downhill.

CAUTION

If your vehicle stalls when you are crossing an incline, be sure you, and any passengers, get out on the uphill side, even if the door there is harder to open. If you get out on the downhill side and the vehicle starts to roll over, you will be right in its path. If you have to walk down the slope, stay out of the path the vehicle will take if it does roll over.

## DRIVING IN MUD, SAND, SNOW, OR ICE

When you drive in mud, snow, or sand, the wheels will not get good traction. You cannot accelerate as quickly, turning is more difficult, and you will need longer braking distances. It is best to use a low gear when you are in mud — the deeper the mud, the lower the gear. In really deep mud, the idea is to keep



into the sand. This has an effect on steering, accelerating, and braking. Drive at a reduced speed and avoid sharp turns or abrupt maneuvers. Hard packed snow and ice offer the worst tire traction. On these surfaces, it is very easy to lose control. On wet ice, for example, the traction is so poor that you will have difficulty accelerating. And if you do get moving, poor steering and difficult braking can cause you to slide out of control.



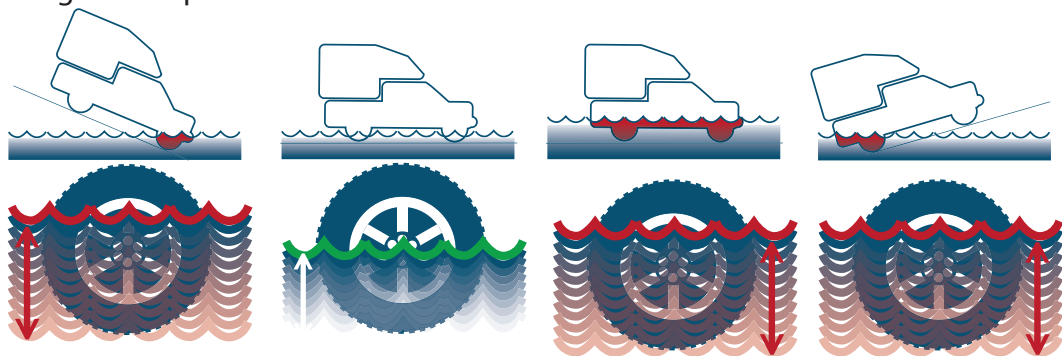
If you let your vehicle's tires spin at high speed, they can explode, and you and others could be injured. The vehicle can overheat, causing an engine compartment fire or other damage. Spin the wheels as little as possible and avoid going above 35mph (55km/h) as shown on the speedometer. If Your Vehicle is Stuck in Sand, Mud, Ice, or Snow. Slowly and cautiously spin the wheels to free your vehicle when stuck in sand, mud, ice, or snow . Rocking your vehicle could damage it or the camper. If your vehicle has a traction system, it can often help to free a stuck vehicle. Refer to your vehicle's traction system in the Index. If the stuck condition is too severe for the traction system to free the vehicle, turn the traction system off and use the rocking method.

Driving on frozen lakes, ponds, or rivers can be dangerous. Underwater springs or sudden thaws can weaken the ice. Your vehicle could fall through the ice and you and your passengers could drown. Drive your vehicle on safe surfaces only.

Heavy rain can mean flash flooding, and flood waters demand extreme caution. Find out how deep the water is before you drive through it. If it is



deep enough to cover the wheel hubs, axles, or exhaust pipe, do not try it — you probably will not get through. Also, water that deep can damage the axle and other vehicle parts. If the water is not too deep, drive slowly through it. At faster speeds, water splashes on the ignition system and your vehicle can stall. Stalling can also occur if you get the tailpipe under water. And, as long as the tailpipe is under water, you will never be able to start the engine. When you go through water, remember that when the brakes get wet, it may take you longer to stop.



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## STEERING TIPS

It is important to take curves at a reasonable speed. A lot of the “driver lost control” accidents mentioned on the news happen on curves. Here is why: Experienced driver or beginner, each of us is subject to the same laws of physics when driving on curves. The traction of the tires against the road surface makes it possible for the vehicle to change its path when you turn the front wheels. If there is no traction, inertia will keep the vehicle going in the same direction. If you have ever tried to steer a vehicle on wet ice, you will understand this. Traction in a curve depends on the condition of the tires and the road surface, the angle at which the curve is banked, and your speed. While in a curve, speed is the one factor you can control.



# AFTER OFF-ROAD DRIVING

Remove any brush or debris that has collected on the underbody, chassis, or under the hood. These accumulations can be a fire hazard. After operation in mud or sand, have the brake linings cleaned and checked. These substances can cause glazing and uneven braking. Check the body structure, steering, suspension, wheels, tires, and exhaust system for damage. Also, check the fuel lines and cooling system for any leakage. Your vehicle will require more frequent service due to off-road use.

All cost resulting from off road driving must be paid by the lessee.

Suppose you are steering through a sharp curve. Then you suddenly accelerate. Both control systems—steering and acceleration—have to do their work where the tires meet the road. Adding the sudden acceleration can demand too much of those places. You can lose control. What should you do if this ever happens? Ease up on the accelerator pedal, steer the vehicle the way you want it to go, and slow down. Speed limit signs near curves warn that you should adjust your speed. Of course, the posted speeds are based on good weather and road conditions. Under less favorable conditions you will want to go slower. If you need to reduce speed when approaching a curve, do it before you enter the curve, while the front wheels are straight ahead. Try to adjust the speed so you can drive through the curve. Maintain a reasonable, steady speed. Wait to accelerate until you are out of the curve, and then accelerate gently into the straightaway.

# STEERING IN EMERGENCIES

There are times when steering can be more effective than braking. For example, if you come over a hill and find a truck stopped in your lane, or a car suddenly pulls out from nowhere, or a child darts out from between parked cars and stops right in front of you. You can avoid these problems by braking—if you can stop in time. But sometimes you cannot. That is the time for evasive action—steering around the problem. Your vehicle can perform very well in emergencies like these.

First apply the brakes. It is better to remove as much speed as you can from



a possible collision. Then steer around the problem, to the left or right depending on the space available. An emergency like this requires close attention and a quick decision. If you are holding the steering wheel at the recommended 9 and 3 o'clock positions, you can turn it a full 180 degrees very quickly without removing either hand. But you have to act fast, steer quickly, and just as quickly straighten the wheel once you have avoided the object. The fact that such emergency situations are always possible is a good reason to practice defensive driving at all times and wear safety belts properly.

## OFF-ROAD RECOVERY

Your right wheels can drop off the edge of a road onto the shoulder while driving. If the level of the shoulder is only slightly below the pavement, recovery should be fairly easy. Ease off the accelerator and then, if there is nothing in the way, steer so that your vehicle straddles the edge of the pavement. Turn the steering wheel up to one-quarter turn until the right front tire contacts the pavement edge. Then turn the steering wheel to go straight down the roadway.

## PASSING

Passing another vehicle on a two-lane road can be dangerous. To reduce the risk of danger while passing:

- Look down the road, to the sides, and to crossroads for situations that might affect a successful pass. If in doubt, wait.
- Watch for traffic signs, pavement markings, and lines that could indicate a turn or an intersection. Never cross a solid or double-solid line on your side of the lane.
- Do not get too close to the vehicle you want to pass. Doing so can reduce your visibility.
- Wait your turn to pass a slow vehicle.



- When you are being passed, ease to the right.

## LOSS OF CONTROL

Let us review what driving experts say about what happens when the three control systems — brakes, steering, and acceleration — do not have enough friction where the tires meet the road to do what the driver has asked. In any emergency, do not give up. Keep trying to steer and constantly seek an escape route or area of less danger.

## SKIDDING

In a skid, a driver can lose control of the vehicle. Defensive drivers avoid most skids by taking reasonable care suited to existing conditions, and by not overdriving those conditions. But skids are always possible. The three types of skids correspond to your vehicle's three control systems. In the braking skid, the wheels are not rolling. In the steering or cornering skid, too much speed or steering in a curve causes tires to slip and lose cornering force. And in the acceleration skid, too much throttle causes the driving wheels to spin.

A cornering skid is best handled by easing your foot off the accelerator pedal. If your vehicle starts to slide, ease your foot off the accelerator pedal and quickly steer the way you want the vehicle to go. If you start steering quickly enough, your vehicle may straighten out. Always be ready for a second skid if it occurs. Of course, traction is reduced when water, snow, ice, gravel, or other material is on the road. For safety, you want to slow down and adjust your driving to these conditions. It is important to slow down on slippery surfaces because stopping distance is longer and vehicle control more limited. While driving on a surface with reduced traction, try your best to avoid sudden steering, acceleration, or braking, including reducing vehicle speed by shifting to a lower gear. Any sudden changes could cause the tires to slide. You might not realize the surface is slippery until your vehicle is skidding. Learn to recognize warning clues — such as enough water, ice, or packed snow on the road to make a mirrored surface — and slow down when you have any doubt. Remember: Any Antilock Brake System (ABS) helps avoid only the braking skid.



