

Chapter 4: Survive in a Car

Table of Contents

1. Join an Automobile Club
2. Subscribe to a Security Service
3. Keep Important Papers in Your Car
4. Keep an Extra Set of Keys Attached to the Vehicle
5. Always Have a Car Maintenance Kit in Your Car
6. Don't Get Lost
7. Do Not Rely on Automated Routes
8. Tell People Where You're Going
9. Always Keep a Basic Vehicle Survival Kit
10. Make a 72-Hour Car Emergency Survival Kit
11. Add Conveniences
12. Pack a Car Bug-out Kit
13. Drive Safely
14. Take a Driving Class
15. Don't be Stupid
16. Maintain Your Vehicle
17. Do Not Attempt Roadside Repairs on a Busy Road
18. Watch Out for Wildlife
19. Brake, Don't Swerve
20. React Properly When a Collision Is Unavoidable
21. Swerve for a Moose
22. Do Not Move an Injured Animal
23. Use Caution Around Railroad Tracks
24. Pay Attention to the Weather Reports
25. Don't Drive in Bad Weather
26. Slow Down in Wet Driving Conditions
27. Respond to a Skid

28. Slow Down on Gravel or Dirt
29. Never Drive in Flooded Conditions
30. Get Out if Water is Rising
31. Get Out of the Mud
32. Get a Car Out of Sand
33. Driving in Snowy Areas? Get Snow Tires
34. Prepare a Snow Dig-out Kit
35. Dig Your Vehicle Out of Snow
36. Winch It Out
37. Stay Put or Bug Out?
38. Survive When Stranded in Your Vehicle in Winter
39. Leave a Car Safely
40. Survive When Stranded with Your Vehicle in Hot Conditions

Chapter 4 - Survive in the Car

How much time does the average person spend in a car or other vehicle, commuting to work, dropping off kids, running errands, taking driving trips—or even just going for a drive? For most people, our cars are almost like secondary moving homes. Most of us have been driving since we were teenagers, and we take it for granted that we're safe in our cars. Assuming you drive with a reasonable amount of skill and attention, what could happen? A whole lot! From everyday mishaps like flat tires or broken wiper blades to more dangerous situations—you need to be prepared. You could slide into a ditch when it's raining, get stuck in a multi-car pileup in the winter, get lost and become stranded in the middle of nowhere, run out of gas in a remote area, or hit a deer—and these are just a few not uncommon scenarios that turn a normal day into a life-threatening survival situation. In this chapter, we'll talk about basic survival knowledge in your car and extreme situations you may encounter.

Note that many of the survival tips in this section can apply to any motorized, wheeled vehicle, not just cars and trucks, but off-road vehicles, all-terrain vehicles, and even snowmobiles.

1. Join an Automobile Club

For most drivers, the membership cost to join an automobile club that provides emergency road service is well worth the price. In addition to coming to your aid when the car won't start, the battery is dead, you get a flat tire, or you lock yourself out, many of these organizations also offer trip-planning services, discounts, and other benefits, including unlimited towing. In the United States the AAA and in Canada the CAA are the best known auto clubs, but you can also purchase a similar service plan through your car insurer or other organizations.

2. Subscribe to a Security Service

Car companies often equip their vehicles with a subscriber service that can provide GPS tracking, roadside assistance, vehicle security, navigation help, and more. This can be

extremely useful in an emergency, and is worth considering. For older cars, or if you do not want the manufacturer's model, similar services are offered by many insurance and communications companies, with devices can be installed aftermarket.

3. Keep Important Papers in Your Car

Make sure you have the registration papers and car insurance documents in your car at all times, and your driver's license on your person. The car manual that came with your car should be kept permanently in the glove compartment.

4. Keep an Extra Set of Keys Attached to the Vehicle

It is wise to keep an extra set of emergency keys in a magnet container or wired t underneath your vehicle. (Most newer vehicles require a visit to the dealer to get new computerized keys cut, so if you're locked out on a Sunday or in a rural area, you may have a time consuming and costly adventure.)

5. Always Have a Car Maintenance Kit in Your Car

A smart driver keeps basic maintenance equipment in the car, and knows how to use it. There may be times when the roadside assistance program you've sensibly joined is not available, or it's just easier and faster to do it yourself. The checklist below is a good guide:

- high amp jumper cables, at least 12 to 16 feet (3 to 5 m) in length
- tire pressure gauge
- spare tire (in good condition)
- tire jack and tire iron
- if your wheels require a special security key, keep it in the car
- tire inflater and sealer to quickly plug a leak
- emergency tool kit with ratchet set
- fire extinguisher, minimum ABC class
- ice scraper
- washer fluid

- paper towels or rags
- reflectors
- help sign

If you live in a place where snowfall happens, add a dig-out kit. A sturdy bag can hold all of this equipment; secure or latched it into place so it doesn't slide around inside the trunk or vehicle, or become a projectile during an accident.

6. Don't Get Lost

Every year, thousands of folks who rely on GPS technology instead of common sense end up lost or stranded in dangerous places. Do not rely solely on a GPS unit or online map service to direct you correctly, especially in rural and remote areas. Get at least one physical, paper map BEFORE you go, and keep it with you. Check your maps and routes manually both before your trip and en route. Do not trust websites that give you coordinates to a destination.

7. Do Not Rely on Automated Routes

A car or online GPS system will make choices for you based on the address or coordinates you punched in. Assuming those were right to begin with, if there are several ways to get there, the system will usually suggest the fastest way to get there without accounting for the condition of the road and route. If there are maintenance issues, construction, no services or cell phone coverage, you may find yourself delayed or even stranded. Use a paper map to confirm your route, and use the internet to check for local issues that may affect your route.

8. Tell People Where You're Going

Before a driving trip, always tell at least one person where you are going and the route you plan to take. Report your safe arrival.

9. Always Keep a Basic Vehicle Survival Kit

Many folks are tempted to buy a prefabricated vehicle survival kit. While some of the

top-quality ones are good, and certainly better than nothing, my suggestion is to assemble your own, customized version that matches the conditions you're most likely to face. The list below is what I consider the Minimum Car Kit for a single individual going about the regular business of daily life (as opposed to going on a trip, for example.) Multiply as needed for your customary passengers.

- portable first aid kit
- 100% wool blanket
- space blanket (can do double-duty as a sun shade)
- water supply, 3 gallons or 12 liters (per person, if possible)
- energy bars, MREs, or other high-protein, non-perishable snacks
- woolen and fleece clothing, including socks, hat, sweater and long johns
- comfortable shoes
- flashlight or headlamp, extra batteries (choose a high lumen model)
- seat belt cutter
- candles, 12-hour type
- instant heat warmer packs
- road flares and florescent markers
- seat belt
- maps
- duct tape
- mobile device charger
- bandanna or colored cloth to tie to your antenna

10. Make a 72-Hour Car Emergency Survival Kit

Certain circumstances call for stocking your vehicle with a more advanced emergency kit that holds a fuller complement of equipment necessary to sustain you in more challenging circumstances. Examples of when to upgrade your car kit include a driving trip that covers any serious distance; a route that takes you through difficult, unknown, or dangerous terrain; or a risk of serious weather conditions while you're driving. To the list above, add the items below according to the specifics of your trip (for example, if you

may encounter a snowstorm or, alternatively, will be driving through hot and dry territory.)

- bivy sack
- “mummy” style sleeping bag, rated for at least -4 degrees F (-20 degrees C) with a Polarguard or Thinsulate fill
- water purification kit or tools
- snow dig-out kit
- winter boots
- tire traction chains (if you know how to use them)
- battery-powered fan
- extra plastic can of gasoline
- emergency booster inverter charger
- fire-making kit (waterproof matches, butane lighter, fire-starting materials)
- knife or multi-tool; small saw
- whistle
- tarp
- rope or paracord
- pepper spray
- bug-out survival pack (see Tip #188 for a car bug out kit)
- emergency escape hammer tool for breaking windows
- tracking device

11. Add Conveniences

While these items are not strictly life-saving, they can make your situation much less unpleasant:

- toilet paper (take out tubes and squash flat for storage)
- personal hygiene items
- sunscreen/lip balm
- rags or paper towels
- umbrella/sun hat

- plastic garbage bags or cloth tote bags
- entertainment items
- pen and paper

12. Pack a Car Bug-out Kit

Although it is often smarter to stay with your car, there may be situations that call for you to leave the car and go in search of shelter or safety. Keep a reasonably sized backpack (i.e., one that you can carry when full) in the car, packed the following items, transferring as needed from your car emergency kit:

- Cash (small bills)
- Bottled water and nonperishable food for 3 days
- Flashlight/extra batteries or hand-crank flashlight—a high-lumen headlamp will leave your hands free
- Battery-operated radio
- First-aid kit
- Basic toiletries, including wipes
- Lightweight rain poncho or suit
- Mylar/space blanket
- Sleeping bag and bivy sack
- Child care supplies if needed

Survival Story

While driving to work on a wintry day, one motorist got stuck when a truck jack-knifed several cars ahead. Just like that, she was stuck—for six hours. Fortunately, she had wool blankets, protein bars, and water in the car, and a book in her purse. She was able to wait comfortably until emergency services cleared the road.

13. Drive Safely

One of the most important car survival tips is the most obvious—drive safely! You must have solid car control skills, understand the rules of the road, and be able to exercise good judgment behind the wheel before driving yourself or anyone else. To become an excellent driver, take a refresher course. At all times, follow these rules:

- **Wear your seatbelt and put children in car seats.** No exceptions. Be sure your child carseats are properly installed and children are correctly strapped in.
- **Do not follow too closely.** Use the 3-second rule: when the vehicle ahead of you passes an unmoving object (such as a tree or telephone pole), slowly count to three. If you reach the object before getting to “three”, you're following too closely. Double your following distance in rain, snow, or slippery conditions.
- **Always use turn signals.** It is crucial to let other motorists, motorcyclists, bicyclists, and pedestrians know what you are about to do.
- **Stay with the flow of traffic.** Driving too slowly can be as dangerous as going over the speed limit. Align your speed with the flow of traffic. If the car behind you wants to go faster, signal and move aside; it is better to let it pass, no matter what your speed. If you are passing everyone else, slow down and match your speed to that of the other cars.
- **Plan ahead/use your mirrors.** Constantly scan your mirrors and look around you so that you can anticipate the need to brake or make lane changes. Good drivers always maintain "situational awareness," knowing where other cars are in relation to their own, what's coming up ahead, what's happening to either side, and what is going on behind them.
- **Understand the limits of your vehicle.** Each car has its own strengths and weaknesses, and different styles of car perform differently. Know yours and don't push its limits.

14. Take a Defensive Driving Class

Any driver can improve their skills in a defensive driving class, learning to handle a vehicle safely in any situation from challenging weather to potential crashes. If you will be encountering conditions such as snow or difficult terrain, I highly recommend taking

an expert driving class. All drivers should consider taking a winter safe driving course. If you are considering off-roading, there are safe off-roading courses, also. Know your driving conditions and take responsibility for driving in them safely.

15. Don't be Stupid

NEVER drive under the influence of drugs or alcohol.

NEVER drive aggressively or maliciously.

NEVER text or use a telephone handset while driving.

If you become drowsy, pull over and rest, or call for a taxi.

16. Maintain Your Vehicle

Follow these basics:

- Know the correct tire pressures for your car and check them monthly with a good-quality gauge.
- Check tire tread and condition. Don't forget to check the spare.
- Know how to change your tires.
- Check the oil dipstick every two weeks and before any long trip.
- Have the oil and filter changed according to your car manual's recommended schedule.
- Check the coolant level regularly. Top up as needed (but only when the engine is cold.) If you have overheated, wait till the vehicle cools down.
- Check the antifreeze levels twice yearly, and especially before winter weather.
- Replace wiper blades before they wear down, at least annually.
- Check wiper fluid and top up regularly.
- Check all lights regularly, including turn indicators, brake, and fog lights. Keep them clean.
- Get the power steering fluid reservoir checked at regular service stops.
- Top up brake fluid regularly, and use the recommended fluid.
- Fix damaged bodywork before rust sets in.

17. Do Not Attempt Roadside Repairs on a Busy Road

If you experience a flat tire or other mechanical malfunction on a busy highway, do not attempt to fix it yourself. Steer your vehicle well off the road onto the shoulder. Either call your automobile club or a family member for help, or wait for the police to help you out safely.

18. Watch Out for Wildlife

If you are driving on a road with wildlife warning signs, be extra alert. Driving defensively is the best preparation:

- go more slowly, as speed will make it more difficult to brake in time and increase the likelihood of losing control
- be alert to movement along the sides of the roadway
- watch for flickering lights of oncoming traffic that may indicate a crossing animal
- look out for reflections of light off the eyes of wildlife
- honk your horn or flash your lights to scare animals off the road
- if you frequently drive through wildlife-heavy areas, consider investing in an animal warning system, a high-pitched whistle device that attaches to your vehicle and may warn off or scare animals away from the road
- if you see one animal, anticipate more—they often travel in pairs or groups

19. Brake, Don't Swerve

The most common reaction upon seeing an animal or bird on the road in front of you is to swerve to miss it—but this is usually the worst thing you can do! Many fatalities are caused by this reaction every year, as the panicked motorist ends up in a head-on collision with another vehicle or crashes into a ditch, trees, rocks, or water. In most cases, hitting the creature (unless it is a moose) is safer than swerving to miss. Apply the brakes and brace yourself.

20. React Properly When a Collision Is Unavoidable

If it appears impossible to avoid the animal, do your best to avoid a head-on hit by trying these maneuvers:

- Aim for the spot the animal is coming from, not where it is going
- Do not stare or aim at the animal. If you are looking at the animal, that is where the vehicle will likely go
- Brake firmly and quickly, then look at the animals and try to steer your vehicle so as to strike the animal at an angle
- Just before you hit the animal, ease up off the brake, which will cause the front end of your vehicle to rise, somewhat reducing the chances of the animal coming through your windshield

21. Swerve for a Moose

If a moose runs in front of your car, do swerve. A moose can weigh up to 1,200 lbs. (500 kg), which means that hitting one is likely to cause significant injury or even death to motorists and passengers. If a crash with a moose is inevitable, crouch as low as possible in your seat, or get under the dash, as the force of the moose's body can crush the roof of a car completely.

22. Do Not Move an Injured Animal

If you hit an animal, pull off the road and turn on your hazard lights. Call 911 immediately. If you can, illuminate the animal with your lights to help other drivers avoid it. Do NOT approach or touch an injured animal; it can be extremely dangerous. Wait for professionals to arrive and help the animal.

23. Use Caution Around Railroad Tracks

Do not drive (or walk) along railroad tracks. Never ignore rail warnings. Flashing lights and gates mean a train is coming. Trains cannot slow down or stop quickly. Never pass when approaching a rail crossing. Follow these tips:

- Before crossing the tracks, make sure there is room to cross. If there is a car in front of you, be sure it has fully crossed and is out of the way before you begin crossing
- Do not shift gears while crossing the tracks
- If your vehicle stalls or gets stuck on the tracks, GET ALL PASSENGERS OUT

immediately. Do not try to move the car or call for help. Run away on a 45-degree angle toward the direction the train is coming from (so that flying debris from the crash is less likely to hit you)

24. Pay Attention to the Weather Reports

One of the most important tips in this chapter, and in this entire book, is that motorists (and everyone else, for that matter!) should make it a point to be aware of weather forecasts and warnings! If you know what is coming you can make appropriate decisions. There is no excuse for being ignorant of bad weather conditions. You can get reasonably accurate weather reports from multiple sources, including

- weather networks and online sites
- marine radio stations
- government environment and meteorological sites
- airport weather and Doppler radar sites
- NOAA transmitter information
- handheld GPS units

Before you leave on a trip, check satellite and radar maps, preferably with movement, so you can anticipate changes in the weather.

25. Don't Drive in Bad Weather

Tornadic conditions, potential whiteout conditions, and flood warnings mean that you should not drive. Cancel plans, and if you are already en route get off the road as soon as possible until conditions improve. Numerous recent multi-vehicle highway pileups could have and should have been avoided—and lives saved—if this advice was heeded.

26. Slow Down in Wet Driving Conditions

In rainy conditions, the first rule is to slow down and leave extra room between you and the vehicle ahead of you. Slowing down reduces the chance of hydroplaning, which is when the tires stop making contact with the road, instead rising onto the surface of the water. Make sure your lights are on, and your cruise control is off.

27. Respond to a Skid

If you feel the car sliding into a skid, follow these steps:

- Look and steer in the direction you want the car to go—DO NOT turn into the skid
- Let up off the gas
- Gently and firmly press down on the brakes rather than slamming on the brake pedal or pumping it

Most new cars have anti-lock braking systems (ABS) which help to keep the wheels from locking up during a skid, so the steering continues to work. If the ABS system is working, you will feel a shuddering or pulsing.

28. Slow Down on Gravel or Dirt

Gravel or dirt roads require slower speeds to help maintain traction, see through dust, avoid flying stones, and prevent skids.

29. Never Drive in Flooded Conditions

If there is a flood watch or warning, do not drive into the area. If you see water running across a road DO NOT drive into it. Turn around immediately and choose a different route. Tires can lose traction in just a few inches of water; a car can begin to float in a mere foot (30 cm) of water.

30. Get Out if Water is Rising

If waters begin to rise around a car you are in, get all occupants out and move to higher ground. Do not sit in the vehicle as it fills with water. If the water is higher than the bottom of the door, do not open the car door. Roll down the windows and get out. If you cannot safely get to higher ground, climb onto the roof of the car. Call 911.

31. Get Out of the Mud

Muddy conditions require slower speeds, and ideally, 4WD. Do not deliberately drive into muddy roadways. If you get stuck in mud, follow these steps:

- Do not hit the gas. If your tires are spinning, you are creating deeper ruts
- Keep wheels pointing straight, and gently accelerate
- If the car begins to drift, stop
- Fill the ruts with gravel, sand, or kitty litter
- Add traction: place cardboard, boards, or even the car mats under the tires and try again

32. Get a Car Out of Sand

- Dig out the tires
- Create traction with floor mats or other materials under the tires
- Consider letting some air out of the tires, if you can do so safely
- If you have helpers, ask them to push
- Go heavy on the gas, as you will need some speed to get out of sand
- Once you are safely on the road, stop and re-inflate the tires or carefully get to a gas station and have them restore the tire pressure

33. Driving in Snowy Areas? Get Snow Tires

If you drive in snowy places, make sure to get snow tires, which dramatically improve your vehicle's braking performance in icy and snowy conditions.

34. Prepare a Snow Dig-out Kit

If there is any risk of snow, you will need to keep a snow dig-out kit in your car.

- sturdy shovel
- sand or kitty litter (10 to 20 lb/4.5 to 9kg bag)
- ice-melt or road salt (10 to 20 lb/4.5 to 9kg bag)
- mats, rugs, pieces of carpet (cardboard will do in a pinch)
- warm work gloves

35. Dig Your Vehicle Out of Snow

While snow tires, all-wheel and four-wheel drive, and tire chains can prevent a vehicle

becoming stuck in deep snow, sometimes those who drive in snow country get stuck. If help is not forthcoming, what do you do? To dig out, you'll need to shovel out the snow from the front, sides, and backs of all the tires. Pour salt or sand underneath and in front and back of the tires, then place mats or cardboard underneath and in front of the tires. Leave the sand and salt to work its way through the ice and snow for 10 to 15 minutes before attempting to free the vehicle. Then apply the gas slowly to grab the mats and traction, and to avoid digging a further rut.

36. Winch It Out

Many automotive shops and hardware stores sell manual and electronic winches. However, if you regularly drive in conditions that could cause you to get stuck I recommend an electronic winching system. You need to securely tie the winch cable and clip around an object that will support your vehicle's weight, such as a large tree trunk, very heavy rock, or another vehicle with a trailer hitch. Warning: when using a winch system, stand far away from the cable when in use, since it could snap or give way and harm you seriously. A heavy blanket draped over the center point of the winch cables may prevent a broken cable from snapping out and causing an injury.

Survival Story

While filming for a survival reality show, a vehicle became stuck, and we didn't have a winch. I recommended to call the automobile club for a tow but some of the inexperienced members of the group, impatient to get home at the end of the day, decided to use some rope and strapping to improvise a winch, tied to another vehicle. The rope snapped, and almost took a few heads off. We decided to wait out the inconvenience of a tow truck's arrival.

37. Stay Put or Bug Out?

Many people worry about making the decision to remain with the vehicle and wait for help, or bug out. This is actually not usually a difficult decision: In most cases, it is safer to wait for help. Staying put conserves your energy, provides some shelter from elements,

and makes it easier for rescuers to find you. Before you decide to walk away from the car, ask yourself the following questions: Can you get an emergency call out via your cell phone or tracking device? If so, stay put. Will leaving the car endanger other people, cause an accident, or hinder emergency services? Do not leave unless you can see an accessible house or shelter nearby that you are certain to be able to reach. Do you have the necessary navigational and survival skills? The exception is if you are in a very remote area, and help is unlikely to be able to reach you. Only then may it be prudent to get out and build a fire and a shelter if possible.

38. Survive When Stranded in Your Vehicle In Winter

Stay calm and remember that your goal is to survive until you are rescued. You will not be comfortable, but you will be alive. Utilize your car survival kit. What to do:

- Tie the colored bandanna or rag to your antenna like a flag
- Use your blankets and extra clothing to stay warm. Move around but do not get sweaty. If you have passengers, you can snuggle together for warmth
- Do not run the engine unnecessarily. If you must have the engine on for short periods, ensure your vehicle's exhaust pipe is completely clear. Leave a window slightly open to avoid carbon monoxide poisoning
- Try not to run the engine for more than 10 minutes an hour, if possible
- Use your cell phone to call 911, even if there is no service
- Eat your snacks, stay hydrated, and keep spirits up by talking, reading, singing, or telling stories

Survival Story

As part of a local television station's survival coverage, we advised a reporter who was going to spend a night in her car during a snowstorm with temperatures well below freezing. We gave the reporter layers of woolen and microfleece clothing, and a mummy-style sleeping bag (rated for sub-zero temperatures), with wool blankets. We had a backup vehicle parked nearby, just in case, but she complained during several checks over the course of the experiment that she was hot!

39. Leave a Car Safely

It's almost always better to stay with your car, but if you must leave, follow these steps:

- Steer the vehicle as far off the road as you safely can.
- Turn on your emergency flashers/hazard lights, and leave them on to warn other vehicles and prevent accidents.
- Put out reflectors or flares, if you can safely do so.
- Leave a note with your contact information atop the dashboard.
- Take extremely valuable items with you, and remove personal information that could endanger you, your family, or your home.
- Set the emergency brake and lock all the doors.
- Know where you left the car. Be prepared for it to get towed.

Survival Story

For years, I wondered about recommendations for having emergency candles to provide warmth in a cold vehicle. We did some simulations, and found that the candle warmed the car interior by no more than a degree or two. In other words, it didn't come close to having a warm sub-zero rated sleeping bag and wool blankets. More helpfully, the candle provides light, warms your spirit, and might give you hope.

40. Survive When Stranded with Your Vehicle in Hot Conditions

A metal box in the sun is a heat sink, heating up like an oven, so don't stay in your car if you are stranded in hot weather conditions—but remember that you are still safer with your car than walking away from it. Raise your hood to indicate distress. Call 911 even if you don't have service. Your survival kit contains water and food; you will need to hydrate yourself by drinking regularly, but try to conserve based on your time estimate of being found. You will need to insulate yourself from the heat. Follow these steps:

- keep your clothes on—loose layers are protective and cooling
- do not sit directly on the ground, which may be extremely hot; if you can remove the seats from your vehicle, do so and use those to sit on. Otherwise, try to

improvise something to raise yourself off the ground

- do not move around unnecessarily; keep your energy expenditure low by moving slowly
- protect yourself from the sun. Create shade: use your space blanket or tarp to improvise a shade shelter
- drink water slowly, rationing it but remaining hydrated (if your urine is dark, drink more frequently)
- signal for help

“Reality shows always have backup medics and survival crews on site. Real victims don't!”