

Emergency driving and its procedures

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How to Avoid Vehicle Malfunction

Although some vehicle malfunctions may not be avoidable, routine maintenance helps keep the vehicle functioning at its best. Get oil changes every three months or after every 3,000 miles of driving. Also have your mechanic check brake fluid levels and power steering fluid levels. Pay attention to gauges while driving. If the oil light or "check engine" light turn on, drive slowly, stay away from heavy traffic and get your vehicle to a mechanic promptly. If you are like most drivers, you may not have the chance to practice how you would react in an emergency situation before it happens. But, knowing what to do in unexpected driving situations can make a difference. Taking the wrong action or no action when something goes wrong can increase your chances of crashing your vehicle.

Emergency Scenarios

Tire Failure

Tire failure most commonly occurs when a tire blows or becomes otherwise detached. Focus on steering to keep the car on the road and avoid traffic obstruction. Do not slam the brakes. Steer the car and tap gently on the brakes, as not to create and sudden jolts that could throw the car off balance. Continue to slow down and tap the brakes until you have regained full control of the car and are able to safely pull off to the side of the road.

Sometimes thumping noises start before a tire blows out, but you usually will not know ahead of time when a tire will blow. You should protect against blowouts by keeping your tires in good condition and properly inflated. When a front tire blows out, your steering wheel may vibrate, and you may feel the vehicle suddenly pull to one side. When a rear tire blows out, one corner of the vehicle may drop suddenly, and you may feel the rear of the vehicle wobble back and forth. If one of your tires blows out, do the following:

- Ø Hold the steering wheel tightly.
- Ø Stay off of your brake! Braking after a blowout may cause you to skid and lose control of your vehicle.
- Ø Slowly take your foot off the gas pedal.
- Ø Steer where you want to go, but steer smoothly - do not make large or jerky steering actions.

If you have to use your brakes, press them gently. If possible, let the vehicle slow to a stop. Make sure it is off the road and you are far enough from traffic lanes to safely change the tire.

Brake Failure

When brakes fail, pump the brake pedal as hard and rapidly as possible. This will most times build up enough brake pressure to bring the car to a stop. Try to get the car off to the side of the road to prevent accidents from traffic moving behind you. The goal is to bring the car to a stop. Shift the car into a low gear, which will ease acceleration and slow the car, and also pull the emergency brake if necessary. Hold

onto the release button of the emergency brake handle, as you may need to release the brake if the rear wheels lock, causing the car to skid.

In newer vehicles, a split braking system reduces the possibility of total brake failure. If your brake system warning light comes on, you may still have braking in two of the four wheels, probably one front wheel and one rear wheel. This will allow you to pull over to the side of the road or into the next service station. You may feel the brake pedal go down farther than usual before the vehicle begins to slow, and you may need to push harder on the pedal. Your stopping distance may be increased, so be aware of where your vehicle is headed. If your brakes fail:

- Ø Shift to low gear, and look for a place to slow to a stop.
- Ø Pump the brake pedal quickly several times. This may build up enough brake pressure to stop the vehicle.
- Ø If pumping the brake pedal does not work, slowly apply the parking (emergency) brake. If the rear wheels lock and you begin to skid, let off the parking brake slowly until you no longer feel the vehicle skidding.
- Ø Keep your eyes focused on where you are going, and look for a safe place to pull off of the road. Look for an open place to steer into, or steer into an uphill road.
- Ø If the vehicle still will not stop and you are in danger of crashing, turn your ignition “OFF” as a last resort. Do not turn it to the “LOCK” position because this will also lock your steering.

After you have stopped your vehicle, call for help. Do not try to drive.

Engine Fire

If the car engine begins to smoke or catch fire, pull off the road to a safe location promptly, turn off the engine, get out of the car, and move away from the vehicle. Engine fires can be very serious, as the car is fueled by flammable gasoline and can cause explosion. Stay as far away from the car as possible and allow emergency services to handle the fire.

Jammed Accelerator

If the accelerator becomes jammed, focus on steering and slam the accelerator pedal hard with your foot. Many times this will un-jam the accelerator, but if it does not work, shifts the car into neutral. This will most likely cause engine damage, but when facing the alternative of a high speed car crash, engine damage is the better alternative. Brake the car to come to a complete stop.

If the accelerator (gas pedal) sticks, your vehicle may keep going faster and faster. If this happens:

- Ø Keep your eyes on the road. You can tap the pedal a few times to see if it will spring back to normal, or you may be able to lift it with your toe, but do not reach down to try to free the pedal with your hand.
- Ø If the pedal remains stuck, shift to neutral immediately and use the brakes. This will cause your engine to race, but the power will be removed from your wheels.
- Ø Concentrate on steering and pull off the road when you have slowed down to a safe speed. Stop, turn off the engine, and put on your emergency brake and emergency flashers.

NOTE: As a last resort, turn your ignition to “OFF,” if you need to slow or stop quickly. Do not turn it to “LOCK” because you will lose steering ability. Then, apply your brakes. It will require more effort to steer and brake with your ignition off.

Running Off Pavement

When your car runs off the pavement, hold the steering wheel tightly to keep the car straight and steady. Slowly tap the brake, and ease back onto the road when it is safe. Do not slam the brake, as this may lose control of the car.

Steering Out Of an Emergency

When you have a choice of either braking or steering to avoid a crash, it is usually better if you can steer to avoid the hazard than to brake, particularly at speeds above 25 mph. This is because your reaction time to swerve is faster than your reaction time to brake. But, you must have good steering skills to keep control of your vehicle in an emergency. As a general rule, you should be holding the steering wheel with both hands. This is especially important in emergencies because evasive steering often requires you to turn the steering wheel quickly at least one-half turn in one direction, and then turn the wheel back almost a full circle in the opposite direction, once you clear the object. You then return to center steering to continue moving in your original direction of travel. At higher speeds, less steering input is needed to move your vehicle to the left or right. If you think of the steering wheel as a clock face, your hands should hold the wheel at either the 9 and 3 o'clock position or the 8 and 4 o'clock position, whichever is the most comfortable. Keep your thumbs along the face of the steering wheel instead of gripping the inside of the rim. By keeping your hands in this position on the wheel:

- Ø You will be less likely to overcorrect during an emergency steering maneuver, which could cause you to spin out of control or run off the road.
- Ø It is less likely the air bag will throw your arms and hands back into your face if you are involved in a crash.
- Ø Your arms will be more comfortable and less fatigued during long drives. A 10 and 2 o'clock hand position is acceptable; however, if your air bag deploys, you are at risk of injury.

Braking Suddenly

If you need to hit your brakes in a hurry, your safety depends on knowing whether your vehicle has conventional or anti-lock brakes (ABS), and how to use them. You should check your owner's manual to

determine what kind of braking system your vehicle has. Do these before you get into an emergency situation? Knowing how to apply your brakes in an emergency situation may save your life.

- Ø Without ABS, press and release the brakes repeatedly. Pumping the brakes will slow your vehicle and keep it under control. Slamming on the brakes can lock your wheels, causing your vehicle to skid.
- Ø With ABS, maintain firm and continuous pressure on the brake. Do not pump the brake pedal. Do not be alarmed by mechanical noises and/or slight pulsations.

After the Malfunction

After you have safely stopped the car, turn on your emergency flashers and determine the next step. If you are a member of a roadside assistance service like AAA, call the hotline to have a tow truck or mechanic dispatched to your location. If you do not have your membership card on hand, call the toll-free number (800) AAA-HELP. Staff can look up your membership number by name and address, and you can also use this service if you are riding in a car that does not belong to you. This is especially helpful when you are riding with a friend that does not have membership to one of these services.

If you do not have these services, and your vehicle is still in a dangerous location, call 911 for immediate assistance. If the car is parked in a safe location, call your mechanic or local tow truck company, and have the vehicle towed to a repair location.

Do not try to flag down other traffic. Put the hood up on your vehicle and tie a white shirt or cloth to your car antenna or window. If your car is safely removed from oncoming traffic, remain in the car with doors locked. If the car is still unsafe, move away from traffic and stand to the side of the car.

Bibliography

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