

#5 IN A SERIES

# BREAKDOWN

*Roadside emergencies and how you can prevent them.*



**Count on Shell™**



**Each year, close to 3,000 people die in car accidents on the shoulder or median of the road.**

**Sometimes, these fatal scenarios begin with a simple breakdown that forces the vehicle off the roadway. Learning how to prevent breakdowns and how to protect yourself and your passengers if a breakdown occurs can save your life.**

**Q. How do I know something is wrong with my vehicle?**

**A. Watch the instrument panel.**

Your instrument panel gauges indicate engine temperature, fuel and oil levels and other important information. Read your owner's manual to familiarize yourself with all the gauges. Your manual will also indicate what gauge readings are considered "normal" and which signal an emergency situation.

However, your instrument

panel can't tell you everything. For example, if your car suddenly pulls to one side, or if you feel a rumbling or vibration, safely pull off the roadway. You may have a flat or low tire.

**Keep alert.** Your sense of smell, touch, sight or hearing may be the first hint that there's a problem. Pay attention to your car while driving. An odd odor, an unusual vibration, the sight of smoke or an unexpected sound can signal trouble.



**Q. If there's something wrong with my vehicle, should I stop where I am or continue?**



**A.** It really depends on the nature of your problem. As a safe rule of thumb, any change in your vehicle's steering, braking or acceleration should receive immediate attention. Pull safely to the side of the road onto a smooth, flat shoulder as far off the roadway as possible.

On the other hand, with less urgent problems, such as an under-inflated tire, a slight shift in a gauge's reading or a blown fuse, it's usually okay to continue cautiously to the closest service station.

**Q. If I have to pull over, how do I do it safely?**

**A.** Reduce distractions inside your vehicle by turning off the stereo and asking passengers, especially children, to remain still and quiet.

Gradually reduce speed and visually check off-road conditions before choosing where to pull over.

Use your turn signal and not your emergency flashers so other drivers will know you need to get over. When your emergency flashers are on, your blinkers don't work. Check for traffic and, when it's clear, move smoothly one lane at a time from the roadway to the shoulder. Avoid soft shoulders, curbs, uneven areas and curves that will prevent other drivers from seeing you. Don't jerk the wheel or swerve. That could cause your tires to "catch" on the side of the road.

Even though you are off the roadway, remain extra cautious. Vehicles on the shoulder or median are still at risk for collisions. After you've stopped, turn on your emergency flashers.





*A cloth or handkerchief attached to a visible area outside the car shows other drivers this motorist needs help.*

**Q. What if I get a flat tire?**

**A.** Don't panic. Firmly grip the wheel and slowly pull off the road as far as possible. If you're in an unsafe area or on a busy roadway, don't try to change the tire. Drive slowly to a safer place. This may cause damage to your rim, but isn't it better to risk your rim than risk your life?

Before you jack up the car, put it in reverse if it's a manual or park if it's an automatic. Apply the emergency brake and be sure the jack and car are on solid, level ground. Then follow the owner's manual instructions for changing a tire. Here's a helpful hint: loosen

the lug nuts slightly before jacking up your car; the weight of the car will make it easier.

**Q. How do I signal for help?**

**A.** Once you're safely off the road, turn on your emergency flashers. If you don't have a cellular phone or CB radio, place a sign in the window that says "Call Police." If you don't have a "Call Police" sign, carry a marker and piece of paper so you can make your own. Many store-bought sunshades have a "Call Police" sign on one side.

In addition, use a handkerchief or bright piece of clothing to signal

for help. Attach it to the outside of your car where it can be easily seen, like on an antenna or door handle. If this requires you to exit your vehicle, use the door furthest from the road.

**Q. Should I stay in my car while waiting for help?**

**A.** Yes. Unless there is smoke, the threat of an engine or electrical fire or the possibility of ventilation problems, it's best to stay in your car with the windows up and doors locked. Be patient. Help will arrive. And keep your seat belt fastened while waiting, in case you're struck by another vehicle.

If you experience a breakdown in extreme heat, keep your windows cracked and drink plenty of water. Always carry emergency drinking water in hot weather. (See page 5 for a list of emergency items you should carry in your trunk.)

Some repairs may require passengers to exit the vehicle. For example, no one should be in a vehicle when a tire is being changed.

**Q. What if a stranger approaches?**

**A.** Be on guard. Don't open the doors or windows to communicate. If the person behaves suspiciously, tell them the police are on their way.

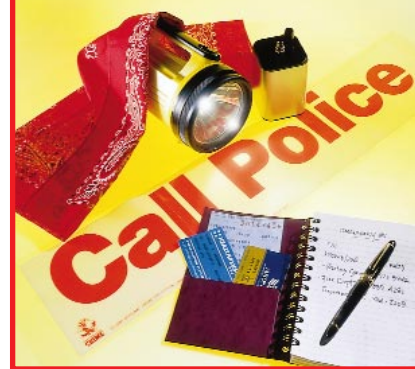
If you're offered the use of a portable phone or CB radio, don't

accept. Instead, write down the number you need to call and show it to the person through the window. (Always keep a message pad and pen in your glove compartment.)

If it's absolutely necessary or you feel confident, lower your window just enough to speak through it. Ask them to call or send for help.

**What should be in my glove compartment in case of a breakdown?**

- *"Call Police" sign (often found on the back of store-bought sunshades)*
- *Bright handkerchief or cloth*
- *Telephone numbers of people to call in an emergency*
- *Pen or marker and message pad*
- *Flashlight and extra batteries (check batteries often to be sure they work)*
- *Automobile registration*
- *Insurance documents*
- *Copy of health insurance card*



**Q. What should I carry in my trunk?**

- A.**
- Fire extinguisher — unexpired and securely stored with the correct charge (make sure it's the right type)
  - Flares or reflective devices (flares burn very hot; use only if you know how to safely light and place them)
  - Jack and lug wrench (practice using at home following your owner's manual)
  - Spare tire properly inflated (check often)
  - Non-perishable, easy-open food items
  - Flashlight with extra batteries
  - First aid kit (see page 6)
  - Bottled drinking water
  - Jumper cables
  - Blankets
  - Empty, approved gas container
  - Umbrella, poncho or raincoat



**Q. What items do I need when traveling in cold weather?**

**A.** Be prepared for a cold weather emergency; stock your vehicle with extra gloves, hats, blankets, a windshield scraper and thermal packs. Also carry sand, salt or calcium chloride and, if you don't have snow tires, tire chains. Practice putting on the tire chains so you know how to use them.

**Q. Are there any repairs I can make to get myself moving again?**

**A.** There's so much technology in today's vehicles, many repairs can only be made by certified technicians with the proper diagnostic equipment and tools. But there are some minor repairs you may be able to make if you have the right tools and materials. For example, you may be able to change a tire, add oil or coolant, replace a fuse or pour water into the radiator. (Remember to let your engine cool before removing the radiator cap. The hot water in your radiator is



under extreme pressure and can cause severe burns. Be patient, it may take more than an hour to cool.)\*

**Q. What can I do to prevent a breakdown?**

**A.** Every time you drive your vehicle, check the following:

- ✓ Tires for proper inflation.
- ✓ Windshield, headlights and tail-lights should be clean.
- ✓ Survey gauges and warning lights after you have started your car.

**As part of routine maintenance you should:**

- ✓ Check oil level once a week; change the oil every 3,000 miles.\*
- ✓ Check for oil leaks.
- ✓ Check tires for cuts, nails, stones and proper inflation.\*
- ✓ Help prevent uneven tire wear; rotate tires every 5,000 to 6,000 miles. Research shows 90% of tire problems occur in the last 10% of a tire's life.
- ✓ Make sure the battery and its terminals are clean and corrosion-free.
- ✓ Check the air filter; replace if it's dirty.\*
- ✓ Check fluid levels for brakes, steering, windshield washer, radiator coolant and automatic transmission.\*
- ✓ Make sure the exhaust system has no visible leaks or cracks and

the tail pipe is not obstructed.

- ✓ Carry only securely stored, non-flammable liquids in the trunk — never gasoline.
- ✓ Before trips check fluid levels, belts, hoses and clamps. Refill or replace if necessary.

**\*All procedures should be done in accordance with your owner's manual.**

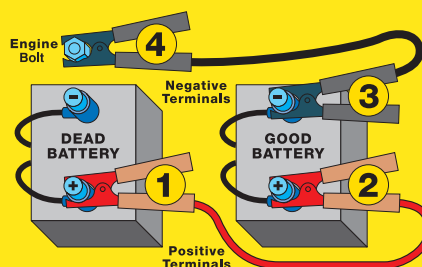
**The American Red Cross recommends the following items for a first aid kit.**

- Sterile adhesive bandages
- 2" and 4" sterile gauze pads
- Hypoallergenic adhesive tape
- Hypoallergenic surgical gloves
- Triangular bandages
- 2" and 3" sterile bandages
- Scissors
- Tweezers
- Mouth barrier
- Antiseptic
- Thermometer
- Tongue depressor
- Petroleum jelly
- Safety pins
- Hand cleansing agent
- Sunscreen
- Aspirin and non-aspirin pain reliever
- Cold pack
- Blanket
- Plastic bags
- Flashlight, flares and reflectors
- Activated charcoal
- Syrup of Ipecac

**Q. How can I jumpstart a battery safely?**

To ensure a safe jump, follow these guidelines and review your owner's manual.

- A. Position vehicles so jumper cables can reach, but vehicles **ARE NOT TOUCHING**.
- B. **WHEN HOLDING JUMPER CABLES MAKE SURE THE ENDS NEVER TOUCH.** Connect one end of the RED cable to the POSITIVE terminal of the dead battery (1). Connect the other end of the RED cable to the POSITIVE terminal of the good battery (2).
- C. Connect one end of the BLACK cable to the negative terminal of the good battery (3). Connect the other end of the BLACK cable to an engine bolt head or other piece of non-moving metal (4). **(WARNING: ATTACHING THE BLACK CABLE TO THE NEGATIVE TERMINAL OF THE DEAD BATTERY INSTEAD OF AN ENGINE BOLT MAY RESULT IN AN EXPLOSION.)**
- D. Make sure the jumper cables are away from moving engine parts.
- E. Start the engine with the good battery.



- F. Run it at moderate speed.
  - F. Start the engine of the vehicle with the dead battery according to your owner's manual. Once it starts, reduce engine speed to idle.
  - G. Remove the jumper cables in reverse order. First remove the BLACK cable from the engine bolt head or metal connection on the car you jumpstarted.
  - H. The engine needs to run for at least 30 minutes to start recharging the battery. This can include driving time.
- Once the car has been jumpstarted, you should have a certified technician test the battery and charging system.

This booklet has been written in cooperation with the American Red Cross, the Federal Highway Administration, the National Crime Prevention Council and the National Institute for Automotive Service Excellence. It contains general recommendations that we believe may be helpful in the event of a breakdown. Because every situation is different, the individual driver must decide what to do in each particular scenario. For further information about first aid, contact your local Red Cross office or the American Red Cross at 1-800-HELP-NOW, or visit their website at [www.redcross.org](http://www.redcross.org). For more information on highway safety, visit the website for the Federal Highway Administration at [www.fhwa.dot.gov](http://www.fhwa.dot.gov). For additional information on crime prevention, call the National Crime Prevention Council at (202) 466-6272 or visit their website at [www.weprevent.org](http://www.weprevent.org). To contact the National Institute for Automotive Service Excellence, call (703) 713-3800 or visit their website at [www.asecert.org](http://www.asecert.org).

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