

How to Jump Start Your Car

By: Ralph Seekins

Question: I've been told it can be dangerous to jump start my car if I don't do it right. Can you tell me how it can be done safely?

Answer: You were told correctly. It can be dangerous when jump-starting a vehicle. The inside of the typical automotive battery contains lead and sulfuric acid. A battery leak or explosion can cause serious acid burns. Your eyes are particularly vulnerable in case of a battery explosion. That's one of the reasons every automotive repair shop has eye-wash and wash-down stations placed strategically throughout their facility.

Jumper cables are almost standard equipment for Interior Alaska vehicles. We seem to have more than one pair per vehicle at home and I'd bet there are lots of families up here just like us. I've had to jump-start my own vehicles and I've had to help jump-start vehicles for other folks. Here's a procedure I like to follow to safely jump-start a vehicle.

First, check the battery for corrosion, cracks or loose connections whenever you open the hood. Catching problems early can save a lot of time and money.

Make sure neither the battery nor the engine coolant is frozen. Don't ever try to jump-start a vehicle in either case.

Make sure your jumper cables are rust and corrosion free and that there are no exposed wires before using them. Don't use electrical tape or duct tape to cover exposed wires. Replace the cables if the wires are exposed. I recommend you do not buy cables less than 12 feet long.

Wear protective eye-wear. My glasses are safe for automotive repair. However, I always recommend wearing a pair of splash-proof polycarbonate goggles any time you mess with a battery. Certified automotive repair goggles should have a Z-87 label on the frame. Keep a pair in your glove box or in your on-board tool kit.

Never smoke or use anything that may cause a spark when doing anything with your battery. Batteries produce hydrogen and oxygen gas. These two gasses are relatively easy to ignite and you don't want sulfuric acid blown all over you and the whole engine compartment.

Be careful to hook the cable clamps to the proper terminals. The red cable clamp attaches to the positive (+) battery terminal. The black cable clamp attaches to the negative (-) battery terminal on the vehicle being jumped from. The other red clamp attaches to the positive (+) battery terminal and the other black clamp – as the last connection – to a grounded metal piece in the engine compartment (i.e., the radiator support) of the vehicle being jump-started. The final connection can create a spark that could cause the battery to explode.

If the cables get hot, immediately remove the last connected clamp. Don't try again. Something is wrong and you need to get professional help.

Once the jumped vehicle is running, remove the cables in the reverse sequence you used to hook them up – starting with the black clamp you attached to the grounded piece in the engine compartment. Don't let the disconnected ends touch each other while the clamps on the other end of the cable are hooked up to a battery. You'll have a little fireworks if you do.

If your vehicle's battery needs to be replaced, replace it with a battery that is recommended in your vehicle's owner's manual. Most battery manufacturers have a cross-reference list to make sure you get a battery the right size, amperage, etc. And be careful to properly dispose of an old battery.

Finally, Prevent Blindness America offers a battery safety sticker that lists the correct steps for jump-starting a battery. You can call them at 1-800-331-2020 for a free sticker.

Need help? Stop by our Quick Lane and we'll give you a quick, free lesson. Good luck and good motoring.