# Official Car Talk® Jump-Start Instructions

**Warning:** Jump-starting a car can cause serious injury if you are not careful. If you are unsure of what you are doing at any point, do not attempt to jump-start your car. Call your friendly roadside towing service for help instead.

**STEP 1:** Read your owner's manual. Some manufacturers do not allow jump-starts, and some have fuses that need to be removed before jump-starting, or other steps that need to be taken before you can successfully jump-start the car.

A number of manufacturers place the car battery in a location other than the engine compartment. In this case, your car will have designated jump start terminals under the hood. If you are uncertain what to look for, always check your owner's manual!

**STEP 2**: Make sure the dead car and the good car are not touching. They should be close enough, however, so your jumper cables can reach easily from battery to battery.

**STEP 3**: Turn the ignition key in both cars to the "off" position.

**STEP 4:** Put on eye-protection glasses.

**STEP 5:** Identify battery terminals or jump start terminals, if your battery is not in the engine compartment (*Fig. 1*):

## POSITIVE HAS A PLUS SIGN (+) NEGATIVE HAS A MINUS SIGN (-)

If necessary, use your Car Talk rag to clean off the battery terminals.

**STEP 6:** Lay the jumper cables on the ground, making sure that the red and black clamps aren't touching each other. Be sure to use cables that are SAE approved.

## Warning: Watch out for moving parts in the engine compartment!

**STEP 7:** Connect a red (positive) cable to the dead car's positive battery post or positive jump start terminal. See Fig. 1, Step 1.

**STEP 8:** Connect the other end of the red (positive) cable to the live car's positive battery post. See Fig. 1, Step 2.

**STEP 9:** Connect one end of the black (negative) cable to the live car's negative battery post. Do not connect the other end of the negative cable to the dead car's battery post. See Fig. 1, Step 3.

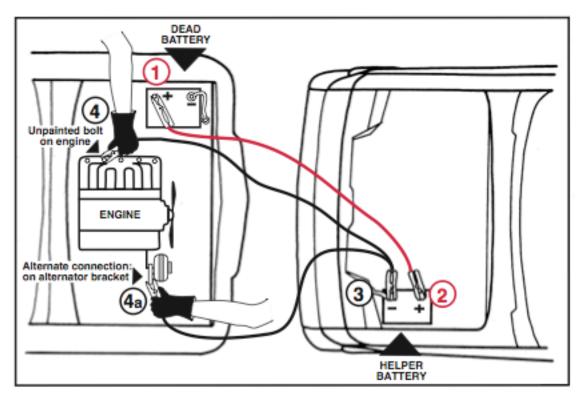


Fig. 1: Proper order for jump-starting car

**STEP 10:** Locate an unpainted metal part of the dead car's engine, away from the battery. The engine manifold is a good location. You can also use the air conditioner compressor bracket or the alternator bracket (the bracket is the piece of metal to which the compressor or alternator is attached), but be careful to avoid moving parts, such as belts. See Fig. 1, Step 4 or 4a.

**STEP 11:** Connect the unused end of the black (negative) cable to this location.

**STEP 12:** Start the good car's engine.

**STEP 13:** Start the dead car's engine. If it doesn't crank, wait for two or three minutes and try again.

**STEP 14:** If it still doesn't crank, you probably have a bad connection somewhere. If the dead car's engine fails to crank, turn off the engine of the good car. Disconnect the negative clamp on the dead car's engine to avoid sparks near the battery, then jiggle the other three clamps to be sure they're making good contact with the battery terminals. Reconnect the fourth clamp.

**STEP 15:** Again, refer to your owner's manual. As soon as the dead car starts, you can disconnect the cables. Generally, you should take jumper cables off in the reverse order that you placed them, as described below, however, some owner's manuals recommend a different procedure. If this is the case with your car, do not follow the instructions below; refer instead to your owner's manual from this point forward.

**STEP 16:** Disconnect the black (negative) cable connected to dead car's engine. Be careful not to drop this end.

**STEP 17:** Disconnect the black (negative) cable from the negative terminal of the good car's battery.

**STEP 18:** Disconnect the red (positive) cable from the positive terminal of the good car's battery.

**STEP 19:** Disconnect the red (positive) cable from the positive terminal of the dead car's battery.

**STEP 20:** Congratulations. Now go home. And—oh yeah, we almost forgot—you can take off those geeky eye-protection glasses now!

#### WARNING

Batteries contain acid and produce explosive gases. These instructions are designed to minimize the explosion hazard. Keep sparks, flames and cigarettes away from batteries at all times. Wear safety glasses and protect the eyes at all times. Do not lean over the batteries during this operation.

#### **CAUTION**

Never attempt to boost a battery with frozen electrolyte. Remove vent caps to check liquid level before jump-starting. If liquid is not visible or appears to be frozen, do not attempt to jump-start.

### **EXPLOSIVE WARNING**



SHIELD EYES: NO
Explosive • Sparks
gases can • Flames
cause blindness
or injury



Sparks ACID can
 Flames cause blindness
 Smoking or severe burns



FLUSH EYES immediately with water, get medical help fast

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