

Safety & Care

Boosting Car Batteries

Northern winters can bring extreme cold, which often means lead-acid car batteries need charging, and sometimes a boost.

When a battery is charging, dangerous explosive mixtures of hydrogen and oxygen can form. If ventilation is poor, the hydrogen produced by the charging battery can create an explosive atmosphere around the battery.

You can minimize the risk of explosion when boosting a car battery by following the safe work practices listed below.

General Precautions:

- Refer to the battery owner/operator's manual.
- Ensure that both batteries are of the same voltage.
- Conduct a hazard assessment: Look for signs of acid leaks, do not use metal tools or other conductors that could cause electrical shock, ensure the cables are in good condition, and be aware of traffic.
- Implement necessary controls: Place traffic triangles or cones, wear personal protective equipment (PPE) such as gloves, eye protection, and high visibility clothing.
- Ensure the two vehicles are not touching, as this "grounds" the two vehicles together.
- Apply the emergency brakes in both vehicles.

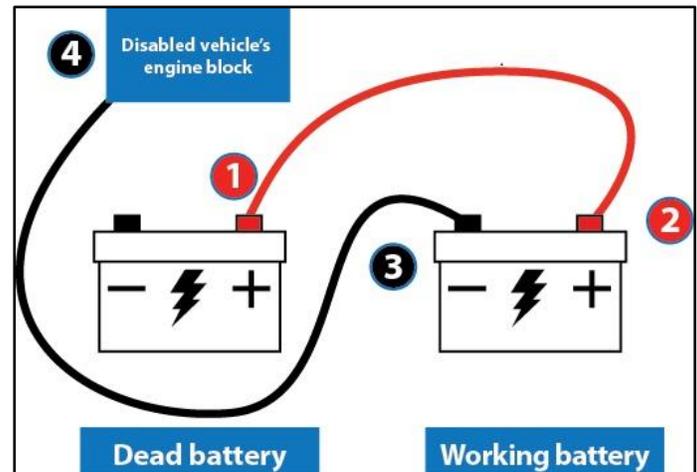
Boosting a Car Battery (12v to 12v):

- Turn off both vehicles. If the booster vehicle is on, it could cause an electrical short.

- Identify the positive (**red**) terminal on both the dead and the good battery (they may also have a "+", "P", or "POS" written on the battery case, post, or clamp).

Steps:

- 1 Connect one positive (**red**) booster cable clamp to the positive (**red**) terminal on the dead battery.
- 2 Connect the other positive (**red**) clamp to the positive (**red**) terminal on the good battery.
- 3 Connect one negative (**black**) booster cable clamp to the negative (**black**) terminal on the good battery.
- 4 Connect the other (**black**) clamp to a clean, grease-free, rust-free, paint-free, metal surface in the engine of the dead car, at least one foot away from the battery.



CAUTION: Never clamp the last negative (**black**) cable to the negative (**black**) terminal on the dead battery. This can create sparks and ignite the hydrogen gas produced by the charging battery.

