

Jump Starting a Vehicle

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Revision List

Rev Number	Date	Comments
0	01/01/2020	Issue for use.



1. Purpose

1.1. This document provides the procedure for safely jump-starting an internal combustion engine (ICE) vehicle.

2. Scope

- **2.1.** This document applies to all Evergy employees and visitors when at any Evergy Generation facility or while performing Generation duties.
- **2.2.** Contractors that do business with Evergy Generation shall comply with the Contractor Safety Requirements (CSR) document.
- **2.3.** If local, state or federal laws and/or regulations pertaining to any given condition are more stringent than the Evergy rule, the more stringent law or regulation shall take precedence.
- **2.4.** Fleet Services recommends against jump starting company vehicles. Contact Fleet Services for assistance with disabled company vehicles.
- **2.5.** Prior to jump-starting any vehicle, consult the manufacturer's recommendations for a jump-start procedure. If one exists, use that instead of this procedure.
- **2.6.** Hybrid and all-electric vehicles shall not be used to jump start an ICE vehicle unless specifically allowed by its owner's manual. In these cases, follow the instructions in the hybrid or all-electric vehicle's manual.
- 2.7. Follow the directions in the vehicle's manual to jump start hybrid and all-electric vehicles.
- **2.8.** If using a portable jump starter, follow the manufacturer's recommendations instead of this procedure.

3. References

3.1. OSHA Laws and Regulations

4. Definitions

4.1. None.

5. Responsibility

5.1. All Evergy employees and visitors shall comply with this document when at any Generation facility or while performing Generation duties.

6. Safety

6.1. Follow all requirements of <u>GEN-SR-6111: Automotive and Industrial Batteries</u> when jump starting a vehicle.



- **6.2.** Approved safety eyewear shall be worn in accordance with <u>GEN-SR-3101: Personal</u> Protective Equipment.
- **6.3.** Gloves may be worn to protect the hands from physical injury.
 - **6.3.1.** Rubber electrical safety gloves are not required.
- **6.4.** Do not allow the positive (red) and negative (black) cable ends to touch each other while connected to either vehicle's battery to prevent sparking and damage to the battery.
- **6.5.** Do not perform a jump-start if either vehicle's battery fluid is frozen.
- **6.6.** Both vehicle's batteries shall be the same voltage.

7. Instructions

- **7.1.** A vehicle with a weak or dead battery can be jump-started using a vehicle with a good battery. If the battery is not the reason the vehicle isn't starting, jump-starting will not help. The following are indications that the battery may be the problem:
 - **7.1.1.** Headlights are very dim.
 - **7.1.2.** Electric door locks, dashboard lights, internal lights, clocks, radio and other accessories will not power on.
 - **7.1.3.** The engine does not crank, cranks slowly or makes only a clicking sound when attempting to start.
- **7.2.** Before attaching cables:
 - **7.2.1.** Put out all cigarettes and flames.
 - **7.2.2.** Ensure the vehicles are not touching.
 - **7.2.3.** Add battery water to both batteries if needed and replace the battery caps.
 - **7.2.3.1.** Do not use tap water.
 - **7.2.3.2.** Note: most newer batteries are "maintenance free" and will not require water to be added.
 - **7.2.4.** Clean both battery's posts with a clean cloth or brush.
 - **7.2.5.** Inspect the jumper cables to ensure they are in good repair with no corrosion, nicks, cuts or scrapes. Ensure the cable ends are not damaged and have strong clamping action.
 - **7.2.5.1.** Note: most jumper cables have one red (or orange) positive cable and one black negative cable. If the set being used does not, treat one cable as the positive cable and the other as the negative cable.



- 7.2.5.2. Jumper cables shall be <= 4 gauge (AWG) and rated >= 500 amps for all cars and light trucks. For larger vehicles, consult the vehicle and jumper cable operating manuals.
- **7.2.6.** Disconnect all plug-in accessories such as cell phone chargers from both vehicles.
- **7.3.** Connect the jumper cables in the following order:
 - **7.3.1.** Clamp one end of the positive (red) cable to the positive (+) pole of the dead battery.
 - **7.3.2.** Clamp the other end of the positive (red) cable to the positive (+) pole of the good battery.
 - **7.3.3.** Clamp one end of the negative (black) cable to the negative (-) pole of the good battery.
 - **7.3.4.** Clamp the other end of the negative (black) cable to the disabled vehicle's engine block. This should be on the side away from the battery, if possible. Ensure the connection point is clean and free of paint.
- **7.4.** Ensure that the cables will not be exposed to the moving parts of either engine.
- **7.5.** Start the car with the good battery.
- **7.6.** Let it idle for a few minutes.
- **7.7.** Rev the engine a little above idle for 60 seconds to charge the dead battery. Do not race the engine.
- **7.8.** Attempt to start the disabled vehicle.
- **7.9.** If the disabled vehicle does not start:
 - **7.9.1.** Disconnect the negative (black) cable from the disabled vehicle's engine block.
 - **7.9.2.** Wiggle each of the other connections a little to try to create a better electrical connection.
 - **7.9.3.** Reconnect the removed cable to the disabled vehicle's engine block. Wiggle it to create a better connection.
 - **7.9.4.** Allow the disabled vehicle to charge for an additional five minutes with the running vehicle held at slightly above idle.
 - **7.9.5.** Attempt to restart the disabled vehicle.
 - **7.9.6.** If it does not start after three tries, it will likely need to be towed or have its battery replaced.
- **7.10.** Disconnect the jumper cables in the following order:



- **7.10.1.** Remove the negative (black) cable from the engine block.
- **7.10.2.** Remove the negative (black) cable from the good battery.
- **7.10.3.** Remove the positive (red) cable from the good battery.
- **7.10.4.** Remove the positive (red) cable from the dead battery.
- **7.11.** Do not turn off the recently-disabled vehicle for at least 20 minutes to allow it time to recharge its battery.

8. Documentation and Recordkeeping

- **8.1.** Generation Safety will maintain this procedure. The original will be stored electronically by Generation Safety and a copy will be available for use on the Safety website. A signed hard copy will be maintained by Generation Safety. There will be no other hard copies produced or maintained. This procedure shall be reviewed periodically by Generation Safety in accordance with department policy. Superseded revisions shall be archived in accordance with corporate policy.
- **8.2.** To request a revision to this procedure, see your supervisor or Safety Coordinator.

9. Attachments

9.1. None.