

Student Handout

Batteries

Car and truck batteries are frequently worked on by auto mechanics, so it is easy to forget how dangerous they can be. Lead-acid batteries contain hydrogen-oxygen gases and sulphuric acid.

Examples of hazards

- chemical burns from sulphuric acid
- explosion from hydrogen-oxygen gases
- electrical shocks and burns
- lifting injuries

Safety tips

- Always shield your eyes and face from batteries.
- Sulphuric acid is very corrosive. When working on a battery, wear CSA approved safety glasses or goggles and a face shield to protect your face and eyes, plastic gloves to protect your hands and a plastic apron to protect your body.
- Remove rings and other metal jewelry such as a wristwatch or ID bracelet which can cause the battery to short-circuit.
- Make sure the work area is well-ventilated.
- Never lean over a battery while boosting, testing or charging it.
- Flames or sparks could cause a battery to explode. Keep all ignition sources away from the battery.
- Batteries are heavy—use good lifting technique when moving them.
- Use insulated tools to avoid burns and shocks.
- Keep vent caps tight and level.



Continued on page 2



Batteries - page 2

- Do not charge or use booster cables or adjust post connections without proper instructions and training.
- Work on batteries only if there is an eyewash station readily accessible.
- To start charging a battery, connect the leads first, and then turn the charger on.
- To finish charging a battery, turn the charger off, and then disconnect the leads.
- While charging a battery, monitor the temperature; stop charging if the battery gets really hot.
- Always disconnect the ground cable first.
- Never attempt to charge or jump start a frozen battery.
- Never attempt to charge or jump start a maintenance-free battery if the charge indicator shows low electrolyte (clear or yellow).
- If you come in contact with battery acid, flush the affected area with water and call a physician immediately.

