Ask You're Worth It WSCC

Toolbox Talk — Instructor Guide for Auto Mechanics

Batteries **Topic Overview**

Every vehicle you work on will have a battery, and it is easy to forget how dangerous they can be. Batteries contain sulphuric acid, which is very corrosive. They also contain oxygen/hydrogen gases, which can be explosive. They produce electrical energy that can quickly make metal tools burning hot if there is shorting between battery terminals. Finally, they are heavy and awkward to lift.

Demonstration and **Discussion Topics**

- ☐ **Ask** if they understand all of the terminology.
- ☐ **Discuss** the risks of handling batteries and the need to use caution at all times.
- ☐ **Show** the students a battery, pointing out these hazards.
- ☐ **Distribute** the student handout.
- ☐ **Use** the student handout as your discussion guide.
- ☐ **Review** and discuss the first page of safety tips.
- ☐ **Inform** the students that they will be learning how to charge a battery safely. Review the second page of safety tips with them.
- ☐ **Demonstrate** how to charge a battery safely, and repeat. Have students practice the technique.
- ☐ **Make it real.** Tell at least two stories of battery-related injuries from your experience, or use the following examples:
    - An auto technician was installing a storage battery when his wristwatch came in contact with the battery terminal. The wristwatch caused the battery to short-circuit and the worker

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suffered severe burns to his hands.

- A worker suffered temporary hearing loss and acid burns to her face and eyes when a battery exploded as she was leaning over it to check the acid levels. The battery was being charged and was still connected to the battery charger. As the worker was checking the acid level, a co-worker turned on the vehicle ignition and it is believed that this triggered the explosion.

- ☐ **Discuss** the attitude that "it won't happen to me". Remind them that an injury can and will happen if they take shortcuts or are careless.
- ☐ **Instruct** the students to identify and report any safety concerns about batteries.
- ☐ Encourage them to **ASK** questions!
- ☐ **Answer** any questions or concerns they might have.
- ☐ **Set a good example** by working safely at all times.

Resources

- ☐ **Hazard Alert: charging batteries**
  www2.worksafebc.com/i/posters/1998/ha9803.html

WSCC Workers' Safety & Compensation Commission
wscc.nt.ca 1.800.661.0792
wscc.nu.ca 1.877.404.4407