



## Testing Your Battery I.Q.

Nobody really wants to spend a lot of time under the hood, but part of the regular maintenance program for any car or truck is proper care of the battery. After all, if you can't start the engine, you're grounded! The engineers at Exide Technologies, manufacturer of Exide and Champion® batteries, developed the following quiz to test how much you really know about the black box under the hood.

Answer true or false and check your answers at the end of the quiz.

- **Frigid winter temperatures are hardest on a battery.**
- **When you're buying a new battery, price and warranty are the two most important considerations.**
- **You can dispose of your old battery just by putting it in with your regular curbside trash pickup.**
- **Because today's vehicles have such big engines, the batteries don't need to be as powerful.**
- **Once a maintenance-free battery is installed, you never need to pay attention to it again.**

### Answers:

1. False. Heat is much more damaging to auto batteries than cold. Think about it: because heat speeds up any chemical reaction, extremely high temperatures cause a battery to age prematurely. When you try to start it up in the cold temperatures of winter, the battery doesn't have the power and fails. Batteries such as Exide's Champion® batteries, with a proprietary alloy, withstand extreme temperatures and last up to three times longer than other batteries. This patented alloy helps resist corrosion, reduces gassing and evaporation, and reduces plate shedding, providing a safety margin of extra cranking amps to withstand high heat, deep freezes or rugged outdoor conditions.
2. False. While the warranty is important, warranties don't start cars. Your best warranty is a powerful battery. Automotive batteries are ranked by

two factors: starting power, called “cold cranking amps” (CCAs) and reserve capacity (RC). CCAs indicate the power available to start the engine. RC indicates the number of minutes the battery will operate essential accessories if the alternator fails.

Another factor to consider when choosing a battery is the number of bells and whistles featured in your car. Audio systems, power windows and door locks, window defoggers, electric sunroofs, satellite navigation systems, security systems and heated seats, place huge demands on the battery requiring higher CCAs for optimum efficiency.

Smaller engines are harder to start and also place greater demands on the battery. Buy a battery that is powerful enough to handle the load specific to your vehicle. Ask your dealer for the specifications provided by the BCI (Battery Council International), or check your vehicle owner’s manual, and choose the most powerful battery of those in your group size.

3. False. In all states, it’s illegal to put spent – or used – batteries in landfills. Batteries contain lead, acid and plastic which can be reclaimed and used in new batteries if recycled. At 95 percent, lead-acid batteries are the highest recycled consumer product, recycled more than aluminum cans, glass bottles and newspapers. To protect the environment and to assure that the battery materials are reclaimed, you should turn in your old lead-acid battery when you buy a new one.

Most service stations or automotive parts stores will accept your old battery when you buy a new one. Spent batteries are picked up and delivered to EPA-regulated plants where the lead, acid and plastic are separated and used in the production of new batteries.

Exide Technologies owns and operates battery recycling plants, so you can be assured that lead acid automotive batteries returned to an Exide or Champion\* retailer will be recycled properly.

4. False. Because of the larger engines, batteries must be more powerful for starting and powering the added accessories. The increased engine size increases the heat under the hood which can damage batteries.

Another serious problem with today’s vehicles is vibration. The shakes, rattles and rolls caused by driving on poorly maintained surface streets or off-road trails can cause short circuits and premature battery failure.

Champion®Trailblazer® and Exide NASCAR Select® batteries feature advanced technologies for superior vibration resistance – up to 36 times greater than conventional batteries. The ShockStop™ technology in Champion Trailblazers, for example, literally anchors the lead-pasted grids, inside envelope separators, in a polypropylene material to the

bottom of the battery case, which helps resist the rocking and rolling of bumpy streets and rocky trails.

5. False. As with most things, an ounce of prevention can mean a longer life and higher performance for your automotive battery. To maintain battery efficiency, rub a little petroleum jelly on the posts to keep them bright and free of corrosion. Be sure the cable and terminal connections are tight and secure; also, keep the battery top and posts clean. Keep in mind too, that the term “maintenance-free” applies to normal operating conditions. In extreme high heat, and other conditions, you may need to add water to the battery. Exide batteries are maintenance-free and maintenance-accessible allowing you to check and/or add water, if required.

If some part of your electrical system, such as the alternator, is bad, it could cause your battery to go dead. If you are having battery problems, go to a full service auto center and ask for a battery tester/charger diagnosis to determine if your battery is the source of the problem.

*Champion® is a registered trademark of Cooper Industries.*