



Getting A Head Start This Winter

When winter is on the way, it means more than just cold weather for your battery.

A dead battery in extreme cold can strand motorists and in some cases cause life-threatening situations. The best defense—and safety measure—is checking the battery and keeping it sufficiently charged during winter, according to the experts at Exide Technologies, a global leader in lead acid batteries for automotive and marine applications, battery-powered vehicles, and computer & telecommunications networks.

"People can make their lives a lot easier in the winter by making sure their car's battery is fully charged and by keeping the engine in good shape," says Mike Dever, Vice President, of Exide. "When you drive in cold weather, make certain you drive the car long enough to recharge the battery, particularly after frequent stops and starts over a short period of time."

Another factor is how well batteries are maintained during hot weather -- summer heat can cause extensive damage to batteries. When the weather turns cold, a weakened battery can't deliver enough power to start a cold engine.

To illustrate, Battery Council International statistics indicate:

- *When the outside temperature is 80°F, a fully-charged battery has 100 percent of its power available to start the car.*
- *When the temperature drops to 32°F, a fully-charged battery has two-thirds of its power available.*
- *At 0°F, that same fully-charged battery has only 40 percent of its power available to start the vehicle.*

This clearly underscores the need for the motorist to keep the battery fully charged.

To efficiently recharge a battery while driving, motorists should minimize "parasitic" electrical loads, such as windshield and rear window defrosters, radio, extra lights and electric windows.

If the car is difficult to start, get a load check on the battery, and if the power is marginal, it's probably time to get a new battery. This type of test can be performed quickly by most automotive service centers.

When buying a battery, the principal consideration should be power. Automotive batteries are ranked by two factors, starting power, called "cold cranking amps" (CCAs), which indicate the power available to start the engine, and reserve capacity (RC), the

number of minutes the battery will operate essential accessories if the alternator fails.

The more electrical devices in the car, such as electronic fuel injection systems, electric windows, sun roofs and audio systems, the more power the battery should have. If the car will be exposed to extreme weather, either heat or cold, the best guarantee against failure is a battery with a high level of cold cranking amps, at least 550, depending on the type of engine in your vehicle.

Several tips for good auto and battery maintenance to prepare for cold weather:

- *Keep the car engine in good condition. Tune up and change the oil regularly. In cold weather, use multi-viscosity winter-grade oil.*
- *Watch for terminal corrosion on the battery and make sure the battery cables are tight.*
- *Ideally, park the car in a garage at night, providing some insulation against low temperatures, ice and snow.*