

A guide to hybrid cars

Hybrid cars have two power sources: a battery-powered electric motor and a gasoline-powered internal combustion engine. They achieve better fuel economy and pollute less than standard vehicles. With two power sources, a hybrid costs more to buy than a comparable gas-powered car. However, better gas mileage reduces overall operating costs.

Maintenance costs for hybrid cars are similar to that for gasoline-powered cars, except for the more costly battery in a hybrid. However, most states require a warranty of eight to 10 years on the battery.

Electric cars are quieter and accelerate quickly from a complete stop,

but all-electric cars cannot go long distances without being recharged.

Hybrid electric vehicles can operate in a variety of ways. Parallel design hybrids run on gas power, electric power or both. The electric motor and the gasoline engine both connect to the transmission.

In series design hybrids, the electric motor drives the car and the gasoline motor recharges the battery. Power-split hybrids use series design operation at lower speeds and parallel design at higher speeds.

A full, or strong, hybrid runs on the gasoline engine, the electric battery or a combination of both. It operates

on electric power at low speeds and uses the gasoline engine at higher speeds.

A mild hybrid has some fuel-saving electrical features, but does not run solely on electrical power. An example is the start-stop feature that turns the engine off when the car is coasting or stopped and restarts it quickly to begin acceleration. Plug-in hybrids have a battery that recharges from an electric socket. They operate on battery power for short trips of 10-35 miles, using the gasoline engine for longer drives.

To select the best design for you, consider mileage, fuel savings, availability of charging stations and budget.

Study habits help reduce student stress

If you want to reduce the stress of being a student and increase the likelihood that you will do better in your classes, try incorporating these study habits into your routine:

Don't wait until the last minute to cram for a test. Consistent, shorter study periods accomplish more than all-night sessions before an exam.

Set a routine. Sit down to study at the same time each day. You are more mentally ready for the task when you've made study time a habit.

Find a quiet place where you won't be distracted by television, background music, machinery or conversation. Some people do better with soft background noise instead of total quiet. Know what environment is right for you.

Don't procrastinate, even when the subject is difficult or uninteresting. Delaying studying will not make it easier or more enjoyable. Last-minute pressure leads to mistakes and makes learning more difficult.

Tackle the difficult subject first, when you are fresh.

Take good notes in class and review your notes before starting an assignment to reinforce what you learned in class.

Outline and rewrite notes. Restating ideas in your own words helps you remember. Rewrite borrowed notes or a study guide in your own words to improve comprehension.

Choose good study partners. Study with those who are motivated to work, committed to good study habits and willing to do their part to help the group learn.

Take breaks. A few minutes spent stretching, walking outdoors, closing your eyes and allowing your mind and body to rest can leave you refreshed and ready to return to your studies.



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