

TECHNOLOGY AND INNOVATION



NHTSA'S FUEL ECONOMY STANDARDS ENCOURAGE MANUFACTURERS TO DEVELOP INNOVATIVE TECHNOLOGIES TO CONTINUALLY IMPROVE THE EFFICIENCY OF VEHICLES IN THE UNITED STATES. THESE INCLUDE A WIDE RANGE OF DEVICES, LIKE, SMARTER AIR CONDITIONING SYSTEMS AND ENGINES THAT SHUT OFF AUTOMATICALLY WHEN YOU DON'T NEED THEM.

VISIT NHTSA.GOV FOR MORE INFORMATION.



THERMAL MANAGEMENT TECHNOLOGIES:

WINDOWS

Our standards encourage manufacturers to install heat reflective or heat absorbing glass in passenger cars which keeps cars cooler in hot weather, and helps to save fuel because you use your A/C less. On cold days, these windows also reduce the amount of heat that escapes the vehicle, keeping the inside of the vehicle warmer when the engine is turned off.

Some new cars are "smart" enough to know when it's getting too hot inside and can automatically lower the windows a small amount to let hot air escape, reducing the amount of air conditioning needed to make the vehicle cooler.

ACTIVE SEAT VENTILATION

Some new cars have technologies that keep seats cool without air conditioning. Less energy directed to temperature control can lead to savings at the pump.

SOLAR REFLECTIVE PAINT

We encourage manufacturers to use paint that reflects sun rays preventing heat buildup and keeping vehicle interiors cooler; less energy is needed to keep the vehicle cool, which helps to save fuel.



HIGH EFFICIENCY EXTERIOR LIGHTS

NHTSA provides incentives for lighting technologies that use less electricity compared to conventional lighting systems. This applies to nearly all the lights on the outside of vehicles. Less power running exterior lights means that less fuel is used.



START-STOP TECHNOLOGIES

Stop-start technology conserves energy by shutting off a vehicle's engine when it is stopped and automatically re-starting when the driver presses the gas pedal. This reduces the amount of time the vehicle spends idling, which leads to less fuel consumption and emissions.



SOLAR PANELS

Some electric, fuel cell electric, hybrid electric and plug-in hybrid electric vehicles can have solar panels fitted in the roof panels of the vehicle. This allows the vehicle to capture the sun's energy and help run the electrical systems which can save fuel.

DID YOU KNOW?

Only about one quarter of the energy from your car's fuel is used to move your car. The rest of the energy is wasted or used to power accessories. NHTSA standards encourage cars to do better.