



AERODYNAMICS & ENERGY EFFICIENCY

KEEP YOUR VEHICLE AERODYNAMIC

Good aerodynamics effect vehicle fuel efficiency by reducing drag, especially at high speeds. Keep windows closed on the motorway. Even keeping a vehicle's exterior clean can make a difference to its aerodynamics.

MASS AND IMPROVING AERODYNAMICS

Drivers can also increase fuel efficiency by minimizing transported mass, i.e. the amount of cargo, tools and equipment carried in the vehicle. Removing common unnecessary accessories such as roof racks, brush guards,

wind deflectors, running boards and unnecessary roof lights will improve fuel efficiency by reducing both weight and aerodynamic drag. On a typical vehicle, every extra 45kg increases fuel consumption by 2%. Removing roof racks and vehicle accessories can decrease fuel consumption by up to 20%.

MINIMIZING ANCILLARY LOSSES

Using air conditioning requires the generation of up to 5 hp (3.7 kW) of extra power to maintain a given speed. A/C systems cycle on and off, or vary their output, as required by the occupants so they rarely run at full power continuously.

Rolling down the windows is often seen as the leading way to prevent this loss of energy. This technique, however, causes increased drag in the form of air resistance and the cost savings is less than is generally anticipated.

Using the passenger heating system slows the rise to operating temperature for the engine. The fuel injection computer in modern vehicles will add more fuel to the fuel-air mixture until normal operating temperature is reached, decreasing fuel efficiency.

STAY COOL

- Use air conditioning and close windows when travelling at speeds greater than 50 km/h.
- Open windows and turn off the air conditioning when driving at less than 50 km/h.

LESS CLUTTER MEANS LESS CO₂

- Clutter in the vehicle is extra weight the engine has to lug around.
- Reduce the load - take unnecessary items out of the vehicle and remove roof racks/boxes/ cycle racks if not using them.