

**SPECIAL SUPPLEMENT**



# CAR CARE GUIDE

Maintaining Your Vehicle for Safety, Dependability and Value

**CARING FOR YOUR CAR:  
Fuel Economy &  
Environmental Awareness**



For more vehicle maintenance tips, visit

**[www.carcarecanada.ca](http://www.carcarecanada.ca)**



## Fuel Consumption

Fuel consumption is measured as the number of litres of fuel your car uses to travel 100 kilometers and this can vary widely depending on how you maintain and drive your vehicle. Low tire pressure, dirty engine oil, worn or fouled spark plugs can all lead to increased fuel consumption. Aggressive driving can increase fuel consumption by as much as 37%. Unnecessary idling, driving over the speed limit on the highway and using the car's air conditioning (A/C) system also increase fuel consumption. Reducing fuel consumption means saving money and more importantly helping the environment.



### WHY DO I NEED THIS SERVICE?

A properly maintained vehicle can improve its performance, reliability, safety and save you money. Things to consider:

- Tires can lose up to 2 psi air pressure per month and this wastes fuel and prevents your vehicle from getting maximum performance.
- Neglecting to replace engine oil can result in poor engine performance, higher fuel consumption and possibly severe engine damage.
- Worn or fouled spark plugs can cause the engine to lose power or misfire, waste fuel and increase harmful exhaust emissions that cause smog.
- Proper care and maintenance for your car is one way to make your vehicle last longer and helps to make it more enjoyable to drive.

### TYPICAL SERVICE

- The best way to keep your vehicle operating efficiently is to follow the maintenance instructions in the owner's manual. There, key maintenance requirements will be provided -- along with the correct service intervals. Maintenance can vary widely from one vehicle to another, so it's best to use the owners manual rather than guess.
- Tire pressure should be checked at least monthly, including the spare. Operating a vehicle with tires under-inflated by 20% (8 psi) can reduce their life by 15,000 kms and increase fuel consumption by up to 4%.
- The air filter should be inspected at each oil change, which is recommended every 5,000 kms or per the owner's manual, and replaced when dirty, torn, water or oil soaked. Replacing a clogged filter can improve gas mileage by as much as 10%.
- Typical maintenance may include changing engine oil and filter, inspecting the brakes, rotating tires,

wheel alignment, replacing ignition system and/or emission system parts that may be needed, replacing the fuel and air filters, and inspecting the suspension system.

- Changing the oil and the oil filter as recommended in the owner's manual is one of the best ways to keep the engine running trouble free. Oils carrying the label "Energy Conserving" can reduce the fuel consumption by up to 2.7% compared to those not having the label.

### QUESTIONS TO ASK

- *My car is getting lower gas mileage than normal. Does this mean there's a problem?*
- *What components will you be inspecting and/or replacing as part of my service?*
- *Are my tires properly inflated and is there enough tread for safe/efficient performance?*
- *What is the most important thing I should do to my car to make sure I'm doing my part to protect the environment?*
- *If my car emits blue or black colored exhaust, does this mean there's something wrong with it?*
- *Where can I take my used oil, oil filter and other fluids for recycling?*

## Environmental Awareness

Your choice of a fuel efficient vehicle can go a long way toward protecting the environment and so can how well you maintain and drive your car. Routine maintenance at the intervals specified in the owner's manual reduces fuel consumption and minimizes the amount of smog forming pollutants from your car. In addition, for every litre of gasoline used, a vehicle produces about 2.3 kilograms of CO<sub>2</sub>, the principle greenhouse gas linked to climate change. It is also important to properly dispose of used fluids and components.



**Are you aware that nearly 6 in 10 people claim their driving behaviour has changed due to rising fuel prices, with 90% saying they drive less & 75% revealing that they are better maintaining their vehicles.**

### How Do I Do My Part?

**Drive Green:** Driving technique has a lot to do with your fuel consumption. Avoid sudden starts and stops and go the speed limit. Jerky and aggressive driving increases fuel consumption and increases wear and tear on your vehicle. Also, drive wise and minimize unnecessary kilometres by doing errands in one trip, getting good directions, and calling ahead.

**Regular Maintenance:** Regular maintenance will keep your car performing at its peak. This increases safety, helps you burn less fuel, pollutes less, and prevent car trouble down the line.

**Lighten the Load:** Get your stuff out of your car and junk out of the trunk. This does not mean that you should not keep important emergency items such as a spare tire, flares and a first-aid kit. However, items that are not needed weigh the vehicle down -- causing an increase in fuel usage.

**Tire Checks:** If every Canadian's tires were properly inflated, we could save around 643 million litres of

fuel each year. (Check your manual for optimal pressure). Tire pressure should be checked at least monthly, including the spare. Tires that are not properly inflated add rolling resistance that makes the engine work harder to move the vehicle. This increases fuel costs and in addition causes the tires to wear out more quickly.

**A/C Maintenance and Use:** The A/C system should be inspected as recommended in the owner's manual, during which a technician checks pressures to test operation, refrigerant charge and outlet temperatures. Use the windows to help keep the car cool. Parking in the shade and using a reflective windshield shade can keep your car cooler when parked, meaning it takes less to cool it off when you get back in.

**Avoid Unnecessary Idling:** One easy way to cut fuel consumption and save money is to avoid unnecessary idling. If you are going to be stopped for more than 60 seconds, except in traffic, it is best to turn the engine off.

**Did you know that 7 out of 10 consumers believe the benefits of regular vehicle maintenance will improve the environment, while nearly all believe it will increase fuel efficiency.**