

## OIL CHANGE INTERVALS

Ralph Seekins

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### **Question: How often should I change my car's engine oil and filter?**

**Answer:** There is no universal schedule. A number of factors come into play. For example, before I can answer, I'd like to know where you live, the age, make and model of your car, your particular driving habits, what kind of engine oil you are using and how much you value the engine in your car. Assuming you really do value your car's engine (believe me, some folks seem not to), and that you live in Interior Alaska, I'm going to suggest oil and filter change intervals that are probably quite different from those recommended by your vehicle's manufacturer.

The primary function of engine oil is to keep the engine's many metal parts from scraping together and becoming damaged. Engine oil provides a slippery cushion between the engine's moving parts which reduces wear and increases efficiency; carries off dirt and debris to the filter; contains detergents that combat moisture, acids, ash and other combustion byproducts that cause sludge or varnishing; and helps carry off heat from both friction and combustion. As it performs these functions, engine oil wears out. Therefore, to maximize power and fuel efficiency and to reduce wear, the oil and the filter need to be changed at regular intervals.

Different manufacturers recommend different maximum oil change intervals depending on the operating conditions of the vehicle. For sake of discussion, we will use the Ford Motor Company intervals. Ford calls the two categories "Normal schedule" and "Special Operating Conditions." You would be operating in Special Operating Conditions if you: use E85 fuel more than 50% of the time; idle over 10 minutes per hour of engine operation; operate in sustained ambient temperatures below -10 deg. F or above 100 deg. F; frequently operate at less than 25 m.p.h.; drive at high speeds loaded at maximum GVWR; use Biodiesel fuel up to and including 5% (B5); are towing; extensively idle and/or drive at low speeds; operate in dusty conditions; or drive your vehicle off-road. Or, in other words, if you live and drive in Interior Alaska just consider that you are operating in Special Operating Conditions. This means you should change

your engine oil and filter more frequently than you should or would if you operated in the so-called Normal Conditions.

Next, the older your vehicle, the more frequent you should change oil and filter. That is because newer vehicles with fuel injections systems meter fuels more accurately on cold winter mornings, are built to tighter clearances, and are set to run a little hotter than older engines – all of which helps reduce and burn off some contaminants (i.e. water and unburned fuel) that accumulate in the engine oil.

So, after years of experience maintaining and repairing vehicle engines in Interior Alaska, here is what we recommend. Look in your owner's manual or on line for your vehicle. Look at the recommended oil change schedule and reduce it by at least 25%. Then make sure you are using the correct grade of oil and use a high quality filter. A safe recommendation here in the Interior is to change oil and filter at least every 30 to 45 days in the winter. In warmer weather change at least every 60 to 75 days – more often if you are operating on dirt roads or under unusual loads. A few quarts of oil and a new filter is a small price to pay when compared to the price of an overhaul or of a new engine. Just remember to keep good records of each oil and filter change.

Good luck and safe motoring.