

On the Line

Lube Service Intervals

Are You Making the Right Service Recommendation?

For those accustomed to 2,500 mile lubrication schedules, extended service intervals are a concern. Tripling that mileage service interval (sometimes more) just doesn't seem right for the health of the engine. Due to high warranty repairs, some vehicle manufacturers are calling for more frequent service intervals.

New technology has made the internal combustion engine more efficient and less polluting to the environment. In addition to improved lubricants, high efficiency filters can greatly extend the service intervals. While these extended service intervals may be good for the environment, save the resources and reduce maintenance expense for the vehicle owner, they must be managed properly to prevent a catastrophic event to some mechanical components. It is imperative that vehicles being driven for extended service intervals be fitted with an extended life oil filter. If not, filter bypass will likely occur, resulting in unfiltered oil flowing to the vital engine components.

NORMAL VS. SEVERE SERVICE

Identifying how the vehicle is to be operated on a daily basis is the first step in making the proper service recommendation.

Normal Service... is a vehicle driven continuously at constant highway speeds. During these conditions the engine is operating efficiently.

Severe Service... most vehicle owners are surprised to learn that they operate under severe service conditions, which involves about every driving condition other than constant highway speeds. For a complete description of the conditions that qualify as severe service, review *Tech Tip #187: Scheduled Maintenance* or any vehicle owner's manual.

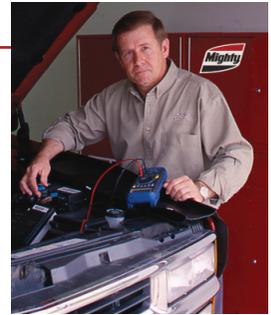
SLUDGE VOIDS WARRANTY

Sludge build-up affects lubrication, resulting in premature engine or component failure. It is not uncommon for the vehicle manufacturer to deny warranty coverage for sludge related conditions. The formation of these deposits and excessive warranty returns has resulted in some vehicle manufacturers making adjustments to their recommended service intervals, requiring a more frequent service.

OIL LIFE MONITOR UPDATE

Excessive engine warranty claims have prompted GM to update the software for the oil life monitoring system, which will result in more frequent oil changes. Certain applica-

tions built prior to the production change will receive a software update from GM. Those applications include 2010-2011 Buick LaCrosse, 2011-2012 Buick Regal, 2010-2012 Chevrolet Equinox or GMC Terrain, equipped with a 2.4L engine and are identified by VIN number. This engine has been plagued with premature balance chain wear.



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OIL LIFE MONITOR CALCULATION

GM vehicles have been equipped with an Oil Life Monitor (OLM) system since 2010. The system calculates the percent of oil life remaining on three pathways:

1) Engine revolutions... The oil life starts with a fixed number of engine revolutions and will decrease with each revolution. Cold and hot coolant temperature readings have multipliers that reduce the engine pathway quicker, depending on how far from the normal oil temperature the engine is operating. If the coolant temperature gets above 260 degrees F, the oil life will go to 0%.

2) Mileage from last reset... Starting with the 2013 model year, the OLM is capped at 7,500 miles for all GM powertrains operating under normal service conditions, except the Volt. In perfect conditions, a vehicle would reach 7,500 miles from the last reset and the oil life would be 0%. Under severe service conditions, the service interval may be much less.

3) Time... This function provides a fixed decrease in the oil life for a given time once the OLM is reset. The oil life will drop to 0% after one year, regardless of the amount of engine revolutions or how many miles since the last reset. The Volt uses a two year timer instead of the one year and the engine revolution counter. It does not use the mileage pathway to count down.

NISSAN SERVICE INTERVAL

For the Murano, the standard maintenance under normal and severe service calls for an oil and filter change every 5,000 miles or 6 months with the exception of Flex Fuel vehicles and Taxi, which calls for service at 3,750 miles or 3 months. For most operators their driving conditions would qualify the vehicle under a taxi use category.

Summary: Identify your customer's operating category and recommend a maintenance service that is compatible with their driving conditions.

