

# Engine Oil Life Monitor Operation Calculation

2010 - 2015 All Passenger Cars And Light Duty Trucks

with Oil Life Monitor System

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

## Condition/Concern

Since 2010 all GM vehicles have been equipped with the oil life monitor (OLM) system

The monitor calculates the percent of oil life remaining, based on 3 pathways

The OLM starts its calculation for all pathways after the first 50 miles to account for marshalling and time before sale. Subsequently, calculations begin immediately after each reset.

## Recommendation/Instructions

Oil Life Monitor Calculation Pathways:

1. Engine revolutions- Oil life starts with a fixed number of revolutions and will decrease with each revolution. Cold / hot coolant temp readings have multipliers that reduce engine revolutions pathway quicker depending on how far from the normal oil temperature the vehicle is operating.

Note

If engine coolant temp gets above 260F, engine overheat condition, the oil life will go to 0%.

2. Mileage from last reset – Starting with MY 2013, the OLM is capped at 7500 miles for all GM powertrains except the Volt. In perfect conditions a vehicle would reach 7500 miles from the last reset and the oil life left would be 0%.
3. Time- This pathway is a liner function, a fixed decrease in oil life for a given time after the oil life is reset. The oil life will drop to 0% after 1 year regardless of the amount of engine revolutions or how many miles since the reset.

Note

The Volt uses a 2 year timer instead of 1 year. It also uses the engine revolution counter. It does not use the mileage pathway to count down.

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.