


2009 Silverado 4WD

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Subject:	DTC P0101 With Non-GM Air Filter	
Models:	2007-2009 Chevrolet Silverado	
	2007-2009 GMC Sierra	
	Equipped with the 6.6L Diesel Engine RPO Code LMM	

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

Condition/Concern:

A dealer may encounter a customer concern of reduced power and SES light on.

Diagnostics may reveal MAF (Mass Air Flow) sensor DTC P0101.

Recommendation/Instructions:

Complete the current SI diagnostics for P0101. If diagnostics were inconclusive its possible DTC P0101 is setting due to a Non-GM air filter. Non-GM air filters have shown a slightly higher than normal MAF reading.

The MAF sensor g/s reading can be monitored to help diagnose a P0101. The MAF sensor reading should be monitored at idle with the EGR off and EGR on. The EGR valve is not commanded on until the engine reaches 140 degrees (60 degrees Celsius). Take an initial reading with engine temperature below 140 degrees, and one with the temperature above 140 degrees. Compare MAF g/s readings to a like vehicle with the proper A/C Delco filter, or document the readings with the non-GM filter, and then compare the readings when A/C filter is installed. MAF sensor readings will differ depending on vehicle location/elevation.

With engine temperature below 140(60 degrees Celsius) and EGR not on, MAF sensor g/s reading(at sea level) is at or near 40 to 45 g/s.


With engine temperature above 140(60 degrees Celsius) degrees and egr on, MAF sensor g/s reading is at or near 15 to 20 g/s.

Note: If the vehicle has the calibration for P0401 "Engine calibration update to address frequent occurrences of DTC P0401" the EGR will be commanded off if the engine is left idling for more than 50 seconds at operating temperature. If the vehicle has the calibration for P0401, this MAF test would have to be completed right at start up cold(engine idle stabilized), then started and checked with engine idling at operating temperature for less than 50 seconds.

Non-GM air filters have shown to run 4 to 5 g/s higher than an A/C Delco replacement air filter.

If the MAF g/s readings change substantially when the filter is swapped, evaluate the P0101 with proper A/C Delco filter installed.

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.

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