

SAE J2723 AUG2007



**SAE Power Certification
Form J2723 B**



GM Powertrain

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SAE Certified Power Program
400 Commonwealth Drive
Warrendale, PA 15096

Kris / Gary -

Please find the J1349 submission form for the 2014MY Chevrolet Malibu (GMX351) and the 2.5L LKW engine. This rating is based on the witnessed SAE certification performed on December 11, 2012 at the GM Powertrain Headquarters in Pontiac, MI for the Chevrolet Impala (GMX352) with the LKW. The Malibu's scheduled start of production is later than the Impala and was not included in the original paperwork submitted to SAE on December 13, 2012.

The induction system is common between the Malibu and the Impala; however, the exhaust system is different. Included in the submission paperwork is the transient first gear test results on a Malibu equipped with the LCV engine as no LKW-equipped Malibu was available at the time of test. The LKW is a variable intake cam lift variant of the LCV engine and both engines have similar airflow characteristics when running at WOT conditions, therefore, based on engineering judgment, the LCV exhaust flow vs. backpressure curve for a given exhaust system would be valid for the LKW as well. The exhaust systems for the Malibu are common for LCV and LKW. In both cases (LCV rating and LKW analysis), the worst case (single outlet) exhaust system restriction was selected.

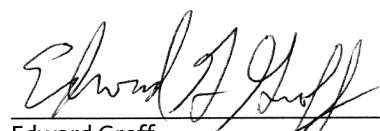
The Malibu transient backpressure test resulted in a pre-close coupled catalyst backpressure of 68.1 kPa @ 6200 RPM as measured by a kiel probe in the exhaust as specified in the test procedure. The LKW Impala witness rating run was performed at 67.6 kPa @ 6200 RPM, which falls within the +/- 1.5 kPa tolerance as outlined by the J1349 procedure, therefore the original LKW Impala rating run is judged to be valid for the Malibu as well.

Respectfully,

Brian Betz

 5/8/13

Brian Betz Date
Ecotec Lead Dyno Calibration Engineer

 4/30/13

Edward Groff Date
Ecotec Gen2 Assistant Chief Engineer

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Power

Manufacturer Name	General Motors Powertrain
Address:	777 Joslyn Rd
City:	Pontiac
State	MI
Country:	USA
Postal Code	48340
Engine:	ECOTEC Gen2 LKW
Type of Certification:	Single Engine Certification
Model Year & Vehicle	2014MY Chevrolet Malibu; original
Application(s).	test submitted for 2014MY Chevrolet Impala
Test Standard:	J1349: Sep2011, SAE
Test Location:	Pontiac Dyno Lab Test Cell D211
Engine Serial Number:	P3KWWG134AJ
Test/Run Number:	2012-11-19-2273.2551 / 147673
Test Date:	December 11, 2012

RESULTS:

The engine described herein was tested on December 11, 2012 according to the requirements prescribed in J1349: Sep2011, SAE, Engine Power Test Code in the presence of a qualified SAE Witness, and was determined to produce the following results:

Parameter	Rated Speed	Rated Output	Measured Speed	Measured Output	% Difference
Power (hp)	6300	196	6300	194.42	0.81406942
Torque (lb-ft)	4400	186	4400	184.92	0.58038971

Witness

Date

APPROVALS:

The manufacture declares that the engine tested for this report is representative of engines in series production. The manufacturer further declares that the performance of engines in series production will characteristically fall within 2% of the rated torque and power values indicated on this report.

Name:

Edward G Groff

Title:

Assistant Chief Engineer

Date:

4/11/13