

SAE J2723 AUG2007

SAE Power Certification
Form J2723 B

Manufacturer Name	General Motors Powertrain
Address:	895 Joslyn Ave.
City:	Pontiac
State	MI
Country:	United States
Postal Code	48340-2920
Engine:	2.4L LEA Ecotec
Type of Certification:	Single Engine Certification
Model Year & Vehicle Application(s).	2012 Buick Verano; (Via ISOPower certification process)
Test Standard:	J1349:Aug2007
Test Location:	Powertrain Warren Dyno lab E11N
Engine Serial Number:	P0AFG146AJ
Test/Run Number:	NST_027-34P0AFG146AJ
Test Date:	December 5, 2008

RESULTS:

The engine described herein was tested on December 5, 2008 according to the requirements prescribed in J1349:Aug2007, 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)	6,700 rpm	180 bhp	6,700 rpm	178.74	0.70%
Torque (lb-ft)	4,900 rpm	171 ft-lb	4,900 rpm	169.93	0.63%

SAE Certified Witness	
Date	

APPROVALS:

General Motors Powertrain declares that the engine tested for this report is representative of engines in series production. General Motors Powertrain further declares that the performance of engines in series production will characteristically be at least 98% of the rated torque and power values indicated on this report.

Name:	<i>Ommy Sost</i>
Title:	<i>Assistant Chief Engineer</i>
Date:	<i>7/15/2011</i>

WOT ENGINE POWER PLOT (as tested)



Enter AIS Subsystem Pressure Loss (kPa)	Enter Pre-CCC Total Exh Back Pressure (kPa)
3.84	40.6
@ Air Mass Flow Rate (g/s)	@ Exhaust Mass Flow Rate (g/s)
140.0	160.0

AIS SSPL @ 140 g/s (kPa)	Stag BP @ 160 g/s Exh Flow (kPa)	SAE Net Power (hp) Predicted Value
3.84	40.56	179.68

Note : Enter the values in Blue and get the estimated power in Red

Values are normalized to 160 g/s exhaust flow

The above table / function can only interpolate data, if data entered is beyond the bounds of data in sheet "Table" it gives an error "9999" for power prediction

Peak Power Calculation			
Speed	ISOPower	FEAD Loss	Rated Power BHP
rpm	BHP	BHP	BHP
6700	179.68	0.934	178.7

Peak Torque Calc			
Speed	ISOPower Torque	FEAD Loss	Rated Torque
rpm	lbf-ft	lbf-ft	lbf-ft
4900	170.50	0.569	169.9

