

2009 GMC Acadia H2GO Test Results

The H2GO control electronics were adjusted to provide an optimal balance of mileage gains and emissions reduction.

Test results indicate CO2 reduction and mileage increase of 8% to 38%.

Re-tuning the electronics for production units should improve this range from approximately 15% to 42%.

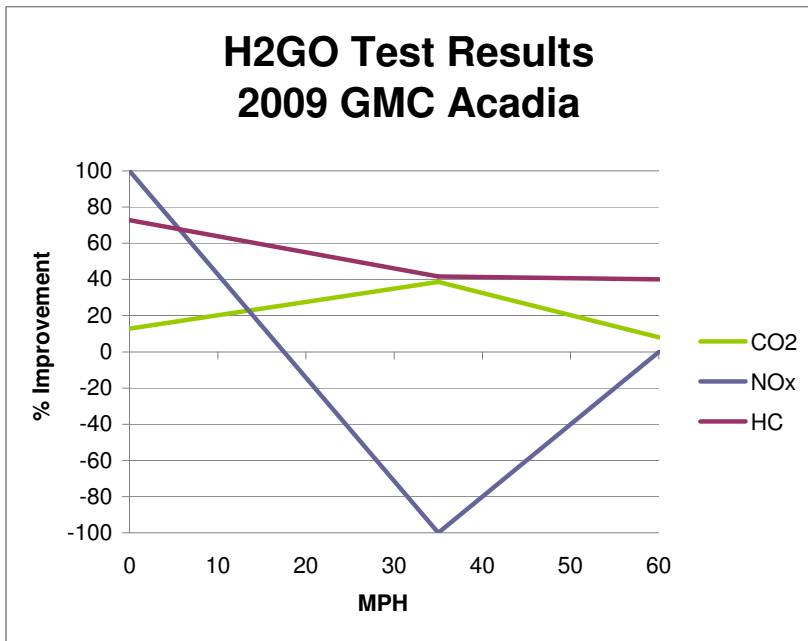
As the amount of CO2 produced by an engine is directly related to the amount of fuel burned, a 20% improvement in fuel economy provides a 20% reduction in CO2 emissions.

Hydrocarbon emissions were reduced an average of 51.46%, ranging from 40% to 72.73% depending on speed.

Adjusting & re-tuning the electronics for production units would improve the average HC emissions reduction an additional 15% to 20%.

Due to time limitations, results for NOx reduction were erratic and incomplete.

Based on prior testing, expectations are that production H2GO units will provide NOx reductions in the 50% range or higher.



* The data represents the average value at each speed over time.

* The % Improvement (vertical axis) represents the reduction in pollutants relative to the stock vehicle's output. The data was converted to percentages to better display the improvement and to facilitate comparisons between vehicles.

* The graph shows positive improvements in the reduction of polluting emissions at all speeds tested except for NOx. A limit on testing time on the dyno prevented further tuning of the electronics to improve the NOx results.

* Data from multiple tests was used to compile these results.

The following spreadsheet contains the actual data values as produced by the Mustang chassis Dyno.

To ensure the data is meaningful and easily understood the differences achieved from Stock to H2GO has been calculated as a percentage improvement, under the headings Fuel / CO2 Reduction, NOx Reduction & HC(hydrocarbon) Reduction

2009 GMC Acadia												
	MPH	Nox	HC	GPH	O2	CO2 %	GPH Change	CO2 Change [lbs/hr]	Fuel Savings [gal/hr]	Fuel/CO2 Reduction	NOx Reduction	HC Reduction
Stock	0	1.0	22.0	0.39	0.62	14.25						
Stock	35	0.0	12.0	1.50	0.17	14.66						
Stock	60	1.0	10.0	1.38	0.11	14.69						
H2GO	0	0.0	6.0	0.34	0.69	14.15	-0.05	-0.97	0.05	12.82%	100.00%	72.73%
H2GO	35	1.0	7.0	0.92	0.15	14.48	-0.58	-11.25	0.58	38.67%	-100.00%	41.67%
H2GO	60	1.0	6.0	1.27	0.12	14.46	-0.11	-2.13	0.11	7.97%	0.00%	40.00%
Average Change										19.82%		51.46%