AMSOIL Synthetic Motorcycle Oils and NGK Spark Plugs Provide Maximum Horsepower and Torque

To test the ability of AMSOIL Synthetic Motorcycle Oils and NGK Spark Plugs to increase motorcycle horsepower and torque, AMSOIL INC. submitted AMSOIL 20W-50 Synthetic Motorcycle Oil (MCV) and NGK Iridium IX Spark Plugs to Cycle Solutions Inc., one of the top motorcycle dyno tuners in the U.S., for a pair of motorcycle dynamometer tests on late model V-Twin Harley-Davidson motorcycles.

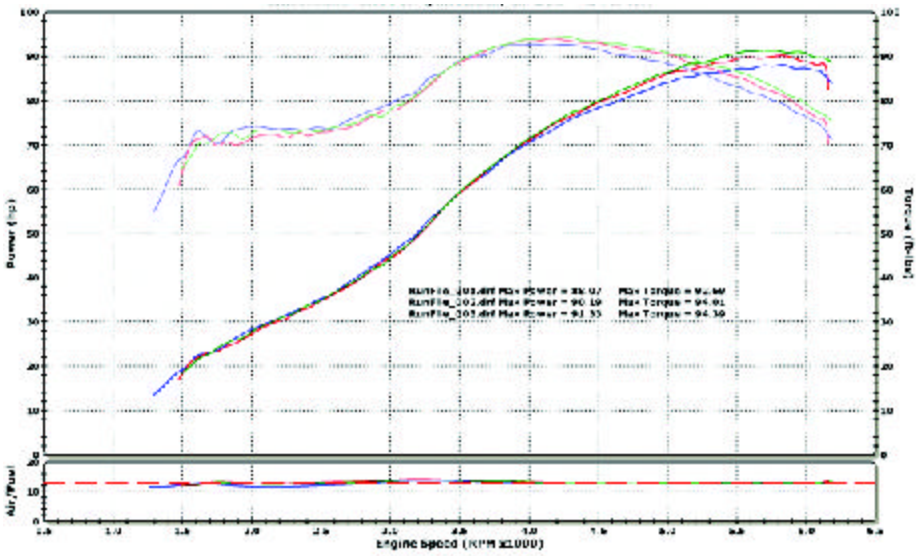
Segment 1: Baseline Test
In order to establish a baseline, each bike was equipped with conventional oil and spark plugs and placed on the chassis dynamometer until operating temperature stabilized. Next, each bike was operated from idle speed to wide open throttle (W.O.T.), with horsepower and torque continuously recorded at the rear wheel.

Segment 2
The conventional motor oil was removed and replaced with AMSOIL 20W-50 Synthetic Motorcycle Oil, and the dynamometer test was performed again. Test results show the AMSOIL 20W-50 provided horsepower increases of 2.41 percent in the first test and 2.1 percent in the second test, while torque increased 1.42 percent and 3.1 percent respectively.

Segment 3
The conventional spark plugs were removed and replaced with NGK Iridium IX Spark Plugs, and the dynamometer test was performed again. Test results show the combination of AMSOIL 20W-50 and NGK Iridium IX Spark Plugs provided horsepower increases of 3.7 percent in the first test and 6.9 percent in the second test, while torque increased 1.8 percent and 5.2 percent respectively.

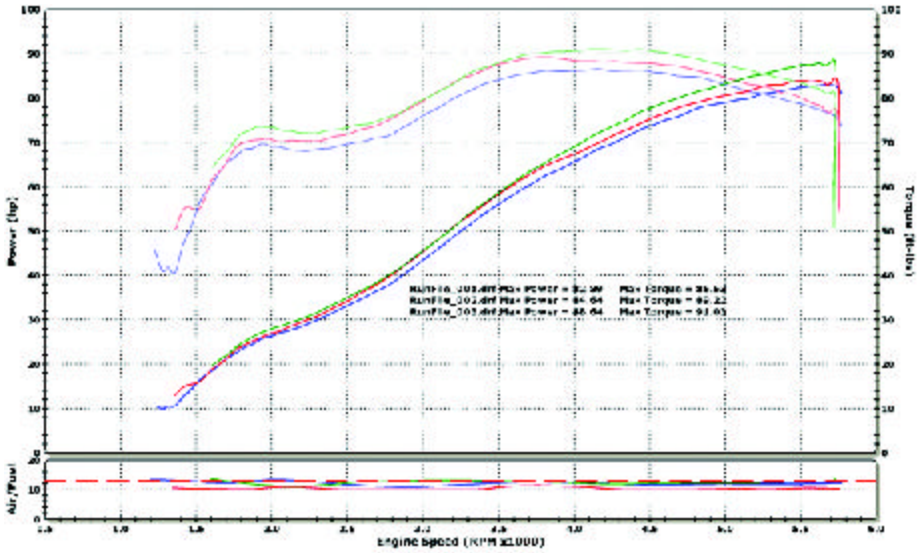
BIKE 1: 2006 Harley-Davidson Screamin Eagle 103 Ultra				
Cycle solutions inc.	Maximum Horsepower (at rear wheel)	Maximum Torque (ft-lbs)	Change Over Baseline Horsepower	Change Over Baseline Torque
Segment 1 **Baseline Test**	88.07	92.69	N/A	N/A
Segment 2 **With AMSOIL MCV Only**	90.19	94.01	+ 2.41%	+ 1.42%
Segment 3 **With AMSOIL MCV and NGK Plugs**	91.33	94.39	+ 3.7%	+ 1.8%
With NGK Plugs Only (calculated)			+ 1.27% (calculated based on segment 2 and 3 data)	+ 0.4% (calculated based on segment 2 and 3 data)
BIKE 2: 2002 Harley-Davidson Screamin Eagle 103 Ultra				
Segment 1 **Baseline Test**	82.89	86.53	N/A	N/A
Segment 2 **With AMSOIL MCV Only**	84.64	89.22	+ 2.1%	+ 3.1%
Segment 3 **With AMSOIL MCV and NGK Plugs**	88.64	91.03	+ 6.9%	+ 5.2%
With NGK Plugs Only (calculated)			+ 4.7% (calculated based on segment 2 and 3 data)	+ 2.0% (calculated based on segment 2 and 3 data)

BIKE 1: 2006 Harley-Davidson Screamin Eagle 103 Ultra March 2008 Test Results



-- Segment 1 -- Segment 2 -- Segment 3

BIKE 2: 2002 Harley-Davidson Screamin Eagle 103 Ultra March 2008 Test Results



-- Segment 1 -- Segment 2 -- Segment 3

Dyno testing showed both horsepower and torque increased with use of AMSOIL 20W-50 Synthetic Motorcycle Oil and NGK Iridium IX Spark Plugs.

AMSOIL Synthetic Motorcycle Oils

Formulated with premium synthetic base stocks and high performance additive technology that provide superior multi-functional benefits for the special requirements of motorcycle applications. These independent and exclusive AMSOIL formulations provide second-to-none viscosity protection for hot-running American and metric motorcycle engines, transmissions and primary chaincases.

NGK Iridium IX Spark Plugs

Provide unsurpassed performance in auto/light truck and powersports applications. The iridium alloy electrode is extremely durable to heat, corrosion and electrical wear. The fine wire electrode reduces the energy required to create a spark while providing increased ignition efficiency and superior ignitability. The center electrode has an extra anti-fouling mechanism.