

BG Engine Performance Concentrate CASE STUDY

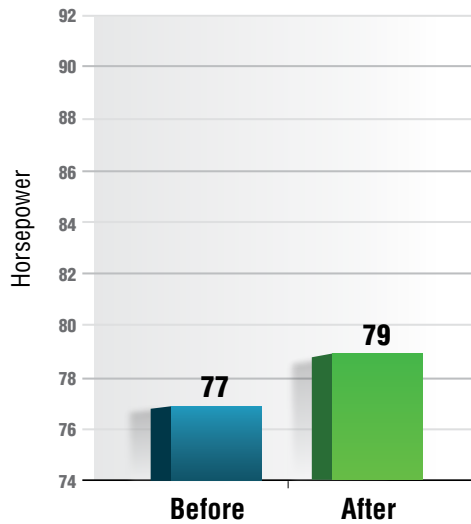
2001 Harley-Davidson FLSTF 18,000 miles (29,000 km)

Testing conducted at an independent facility. Weather calculations, such as temperature and humidity, are also factored into the testing.

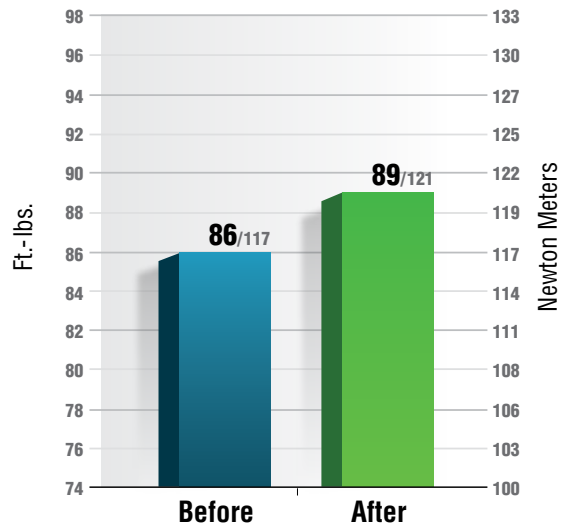


BG Engine Performance Concentrate, PN 1166

Horsepower



Torque



BG Engine Performance Concentrate CASE STUDY

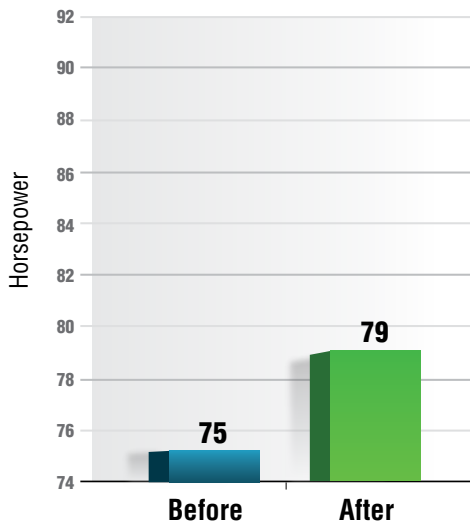
2007 Harley-Davidson FLHR 71,000 miles (114,000 km)

Testing conducted at an independent facility. Weather calculations, such as temperature and humidity, are also factored into the testing.

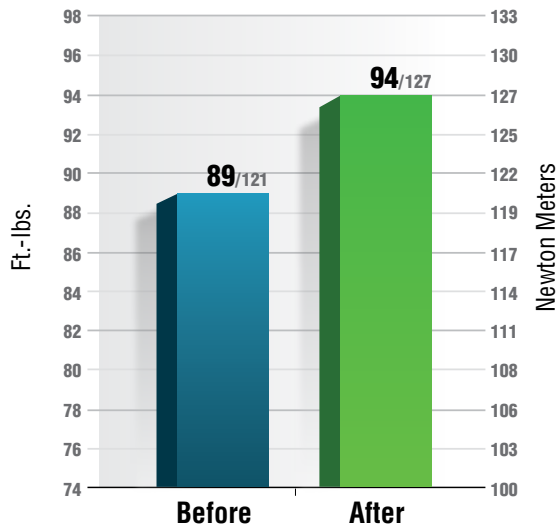


BG Engine Performance Concentrate, PN 1166

Horsepower



Torque



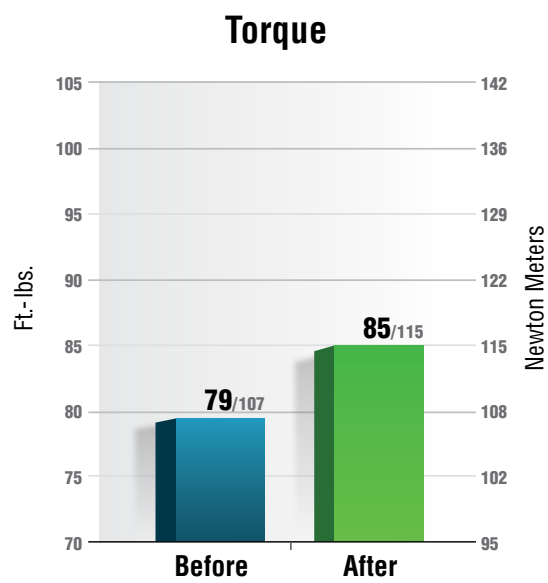
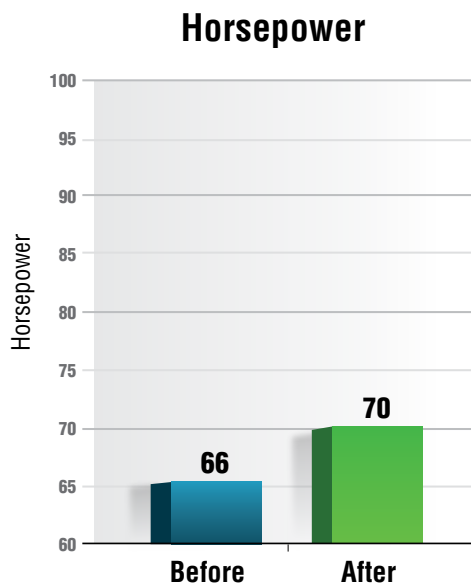
BG Engine Performance Concentrate CASE STUDY

2008 Harley-Davidson 138,520 miles (222,926 km)

Testing conducted at an independent facility. Weather calculations, such as temperature and humidity, are also factored into the testing.



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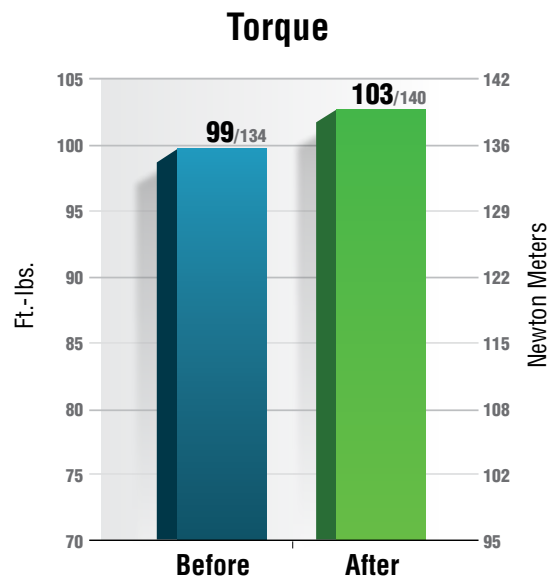
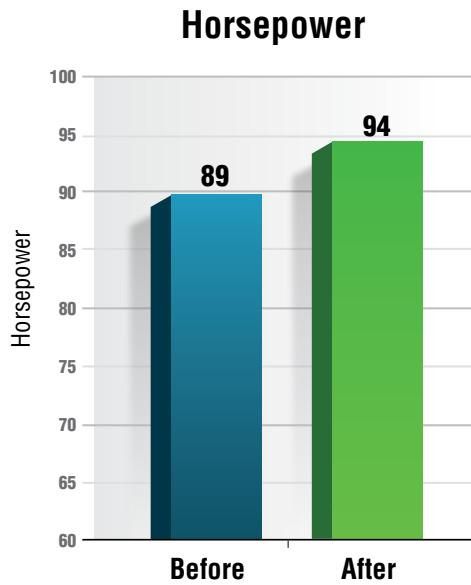
BG Engine Performance Concentrate CASE STUDY

2013 Harley-Davidson 5,400 miles (8,690 km)

Testing conducted at an independent facility. Weather calculations, such as temperature and humidity, are also factored into the testing.



BG Engine Performance Concentrate, PN 1166





BG Engine Performance Concentrate

PN 1166

- ✓ Specially formulated to improve shifting in wet clutch applications
- ✓ Superior long-lasting protection against engine wear
- ✓ Prevents oxidation and thickening of engine oil
- ✓ Keeps piston rings, hydraulic lifters and other engine components clean
- ✓ Compatible with synthetic and petroleum-based oils
- ✓ Treats 4 Qts or 3.785 Liters (1:20 treat ratio), do NOT over-treat in wet-clutch applications



BG Supercharge® II

PN 2026

- ✓ Prevents deposit formation throughout the fuel system
- ✓ Improves engine performance
- ✓ Prevents rust and corrosion
- ✓ Excellent long-term storage fuel stabilizer
- ✓ Lowers tailpipe emissions



BG EPR® Engine Performance Restoration®

PN 1096

- ✓ Revolutionary “ring-clean” technology
- ✓ Dissolves hard-to-remove fuel gums on piston rings
- ✓ Increases compression
- ✓ Improves power
- ✓ Lowers tailpipe emissions

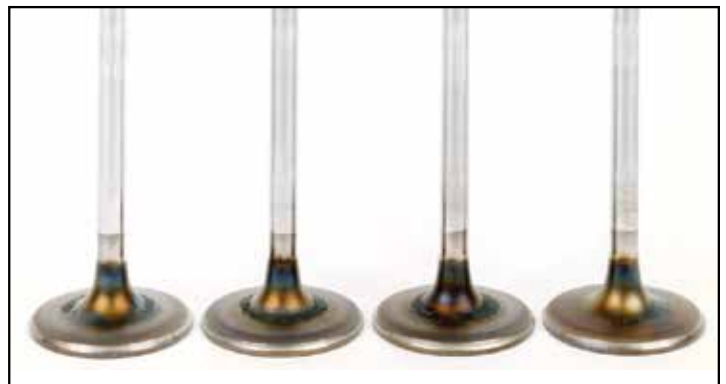
BG Powersports Service

Commercially available gasoline, regardless of the brand or grade of gasoline used, will cause deposits to form on intake manifolds, valves and ports. Deposit buildup in these areas will cause severe driveability problems such as loss of power, reduced fuel mileage, hesitation, rough idle and increased exhaust emissions.

BG Supercharge® II will keep the entire fuel system clean and free of deposits. It also contains special stabilizers which prevent fuel oxidation, thus preventing gum and varnish formation while fuel is in storage.



After 5,000 miles (8,000 km), an untreated reference gasoline left deposits on each intake valve.



After 10,000 miles (16,000 km), the same reference gasoline treated with BG Supercharge® II proved amazingly effective in preventing deposit formation.



**NEW
FORMULA**

Engine Performance Concentrate

PN 1166

Used with each oil change, BG Engine Performance Concentrate will reduce oil oxidation, reduce wear, keep piston rings, valve lifters and other engine components free of varnish, rust and other accumulated deposits. It provides outstanding friction-reducing and viscosity-improving characteristics which protect engine components during extended high-temperature operation.

BG Engine Performance Concentrate enhances and prolongs the performance of corrosion inhibitors, detergents, dispersants and antioxidant/anti-wear additives in engine oil. It helps maintain engine cleanliness and performance under tough operating conditions.

- **Improves viscosity**
- **Keeps engine components clean**
- **Reduces oil consumption**
- **Reduces engine wear**
- **Helps prevent costly repairs**

**Specially formulated
to improve shifting in
wet clutch applications**



Thin Film Oxygen Uptake Test

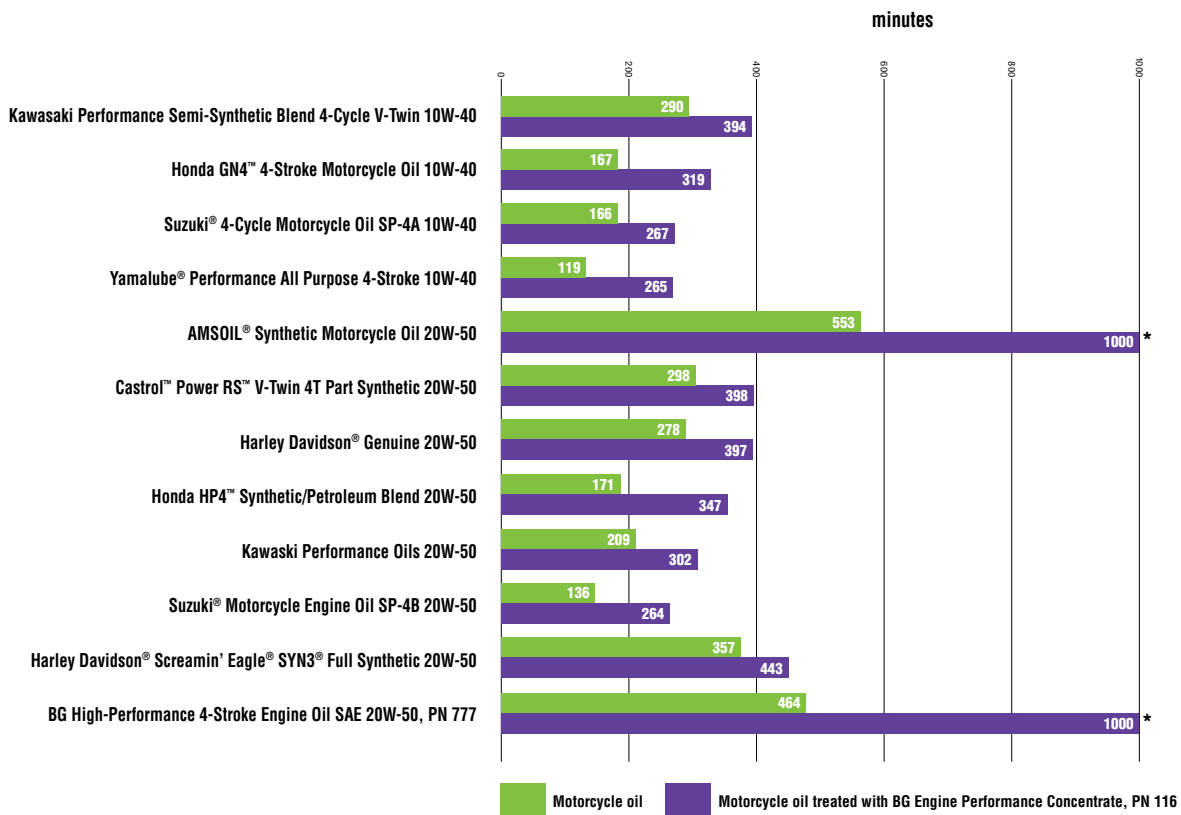
ASTM D4742

The Thin Film Oxygen Uptake Test, ASTM D4742, measures oxidation stability of a lubricant.

The chart shows the results for some base engine oils and these same base oils with BG Engine Performance Concentrate added. The results are in minutes. The higher the time value (result), the better the oxidation stability of the fluid.

Basically, the oil sample is absorbing oxygen. Oxygen, in turn, will cause oxidation and breakdown of fluid. This is when viscosity increase may occur, as well as sludge formation. The endpoint of the test (in minutes) occurs when the fluid sample is saturated with oxygen.

Each base oil responds differently when BG Engine Performance Concentrate is added because each engine oil manufacturer may be using different additive chemistry.



* This sample did not experience rapid oxidation and deterioration, therefore it does not have an assigned value. The test was stopped at 1000 minutes.



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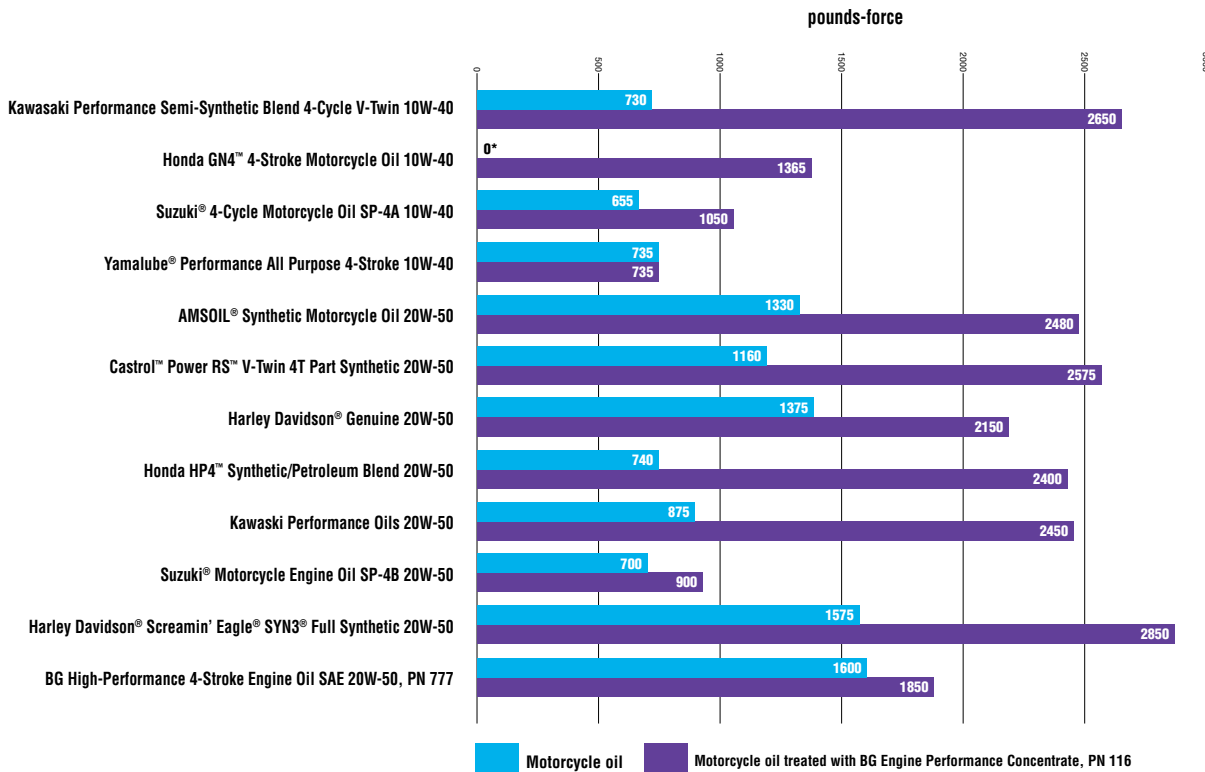
Measurement of Wear Properties of Fluid Lubricants (Falex Pin and Vee Block)

ASTM D3233A

The test is designed to measure the load carrying property of a lubricant under a given set of conditions. A steel journal (pin) is rotated between two stationary V-shaped blocks at 290 RPM while immersed in 60 ml of lubricant. The pressure of the vee blocks against the rotating pin is gradually increased at a constant rate until the test pin breaks due to excessive load pressure. This pressure is the recorded end point.



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*This oil failed in the pre-test warm up.