



"The First in Synthetics"®

MOTORCYCLE PRODUCTS

AMSOIL synthetic motorcycle oils deliver maximum protection, power and fuel efficiency for all makes of motorcycles.



AMSOIL Synthetic 20W-50 and 10W-40 Motorcycle Oils

Superior Wear Protection for Motorcycles.

AMSOIL MOTORCYCLE OILS

AMSOIL synthetic 10W-40 and 20W-50 motorcycle oils give motorcyclists what they need: superior wear protection for high-stress motorcycle engines and transmissions and clutches that stay clean and deposit-free.

- **Runs cooler—reduces crankcase temperature.**
- **Superior 12+ TBN synthetic formulation provides long service life and maximum protection against engine wear.**
- **Wet clutch compatible.**
- **Recommended for all V-twin and other motorcycle engines requiring an API CD, JASO MA, SG-CG or SH-CD oil.**



THE AMSOIL ADVANTAGE

Motorcycle manufacturers want the best protection possible for their equipment, calling for rugged oils that exhibit high temperature deposit control additives. AMSOIL Synthetic Motorcycle Oils are specially formulated with the best synthetic basestocks and high performance additives to provide tough lubricating protection for all four-cycle motorcycle and ATV engines in the most demanding operations.

AMSOIL Motorcycle Oils are formulated for both water-cooled engines and the unique demands presented by air-cooled V-twin motorcycle engines, including Harley-Davidson. Conventional petroleum oils break down and oxidize when faced with high temperatures, such as those experienced when idling in traffic, contributing to the formation of deposits, sludge and varnish. AMSOIL withstands oil breakdown and oxidation in high temperatures, holds contaminants in suspension and keeps engines running cool and clean.

Zinc and phosphorus additives are extremely important to engines faced with high-pressure conditions, especially motorcycle engines, which typically have steep cam slopes, creating high pressure between the parts. In motorcycles, friction modifiers (prevalent in automotive oils) have been attributed to engine start failures, a rough running feel, increased fuel consumption due to higher engine stall speeds and other problems. AMSOIL Synthetic 10W-40 and 20W-50 Motorcycle Oils have beefier anti-wear and detergent/dispersant packages with no friction modifiers, keeping motorcycles running smoothly and efficiently, while allowing for extended drain intervals of up to three times longer than manufacturers' recommendations.

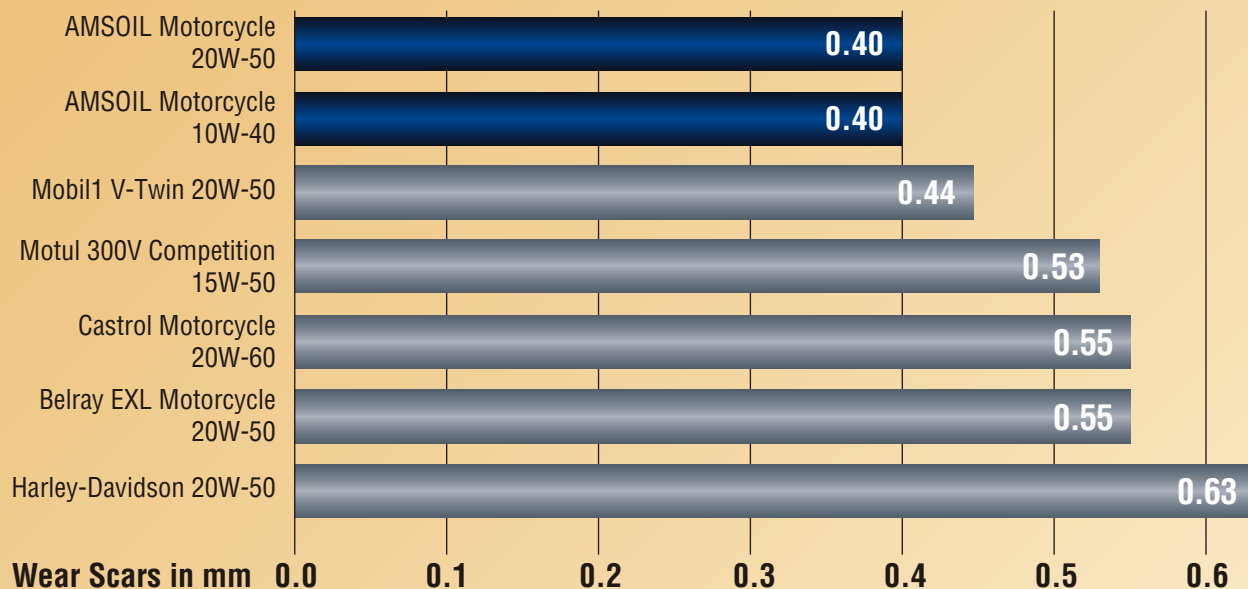
How do other motorcycle oils compare to AMSOIL Synthetic Motorcycle Oils in wear protection?

WEAR PROTECTION

AMSOIL submitted five popular motorcycle oils to spectrographic analysis and Four-Ball Wear (ASTM D 4172) testing and compared the results to those of AMSOIL Synthetic 20W-50 and Synthetic 10W-40 Motorcycle Oils.

None of the popular motorcycle oils compared favorably to the AMSOIL products in wear additive

The Smaller the Wear Scar, the Better the Protection



Four-Ball Wear Test ASTM D 4172 40 kgf, 150°C, 1800 rpm, 1 hour

content or wear protection (see Spectrographic Analysis chart and Wear Protection graph).

As seen in the chart, AMSOIL Synthetic Motorcycle Oils contain significantly higher levels of zinc and phosphorus than the competing oils, and while simply adding more zinc and phosphorus doesn't insure good performance, AMSOIL has formulated motorcycle oils with the best additives in the optimal quantities to provide superior wear protection.

What about oil temperature and wear? A Four-Ball Wear Test was conducted at 302°F/150°C, a higher temperature that would typically be associated with motorcycle oil operating temperatures in extreme high performance situations. AMSOIL products protect better in higher temperatures than any of the tested motorcycle oils do, leaving a wear scar up to 37 percent smaller.

Some motorcycle transmissions and engines share a common oil sump, so the engine oil must also provide wear protection to the transmission gears, which, according to *Motorcycle Consumer News* (Aug. 1998)

are subject to high gear surface pressures and gear rotation speeds. The superior performance of the AMSOIL Motorcycle Oils in the Four-Ball Wear Test applies here, too.

Motorcyclists will find no better oils than AMSOIL Synthetic Motorcycle Oils.

ANTI-WEAR CHEMISTRY

SPECTROGRAPHIC ANALYSIS: ZINC AND PHOSPHORUS

	Zinc ppm	Phosphorus ppm
AMSOIL Synthetic 20W-50 Motorcycle Oil	1336	1160
AMSOIL Synthetic 10W-40 Motorcycle Oil	1357	1174
Belray EXL Motorcycle 20W-50	1183	962
Harley-Davidson 20W-50	1129	911
Mobil1 20W-50	1218	1017
Motul 300V Competition 15W-50	1196	1075
Castrol Motorcycle 20W-60	1133	998

Optimal quantities of zinc and phosphorus are essential to wear protection and top performance.

AMSOIL 2-Cycle Oils

Today's high-stress, high-revving two-cycle motorcycle engines demand superior lubrication for optimal performance. Two-cycle engines in motorcycles are frequently pushed to severe operating conditions and abuse which results in high engine temperatures and dirty operating conditions.

AMSOIL Synthetic 2-Cycle Oils provide maximum protection and performance in two-cycle gasoline engines. AMSOIL Synthetic 2-Cycle Oils reduce engine operating temperatures, increase power output and keep engines cleaner than petroleum oils. AMSOIL Synthetic 2-Cycle Oils also provide maximum oxidation protection, anti-corrosive characteristics and improved operation in low temperatures.



AMSOIL Synthetic 2-Cycle Injector Oil is formulated for use in all injector-type two-cycle gasoline engines. It may also be used as a premix at the manufacturer's recommended mix ratio.



AMSOIL Synthetic 100:1 2-Cycle Oil is formulated for premixing with gasoline at a fuel/oil mix ratio of 100:1.



AMSOIL Series 2000 Synthetic 2-Cycle Racing Oil is formulated for the most demanding injector and premix applications.

AMSOIL 2-Cycle Oils

RESIST THERMAL BREAKDOWN FROM HEAT

AMSOIL Synthetic 2-Cycle Oils resist oil breakdown caused by heat to prevent the formation of varnish and carbon deposits. AMSOIL Synthetic 2-Cycle Oils also lower engine temperatures to inhibit power-robbing thermal expansion in hard driven engines. This protection reduces maintenance costs and helps engines last longer.

RESIST HIGH TEMPERATURE DEPOSITS

AMSOIL Synthetic 2-Cycle Oils promote clean burning. They eliminate the formation of gum, varnish, sludge, carbon or ash residues. Deposits previously formed from conventional oils are often dissolved. Spark plug fouling and excessive carbon build-up on piston domes, exhaust ports and valving are virtually eliminated. Rings remain free for excellent compression and combustion and exhaust emissions are greatly reduced.

REDUCE WEAR THROUGHOUT THE ENGINE

AMSOIL Synthetic 2-Cycle Oils protect pistons and rings from wear caused by metal-to-metal contact under the hottest loaded conditions. The lubricity properties in AMSOIL Synthetic 2-Cycle Oils provide a durable film that protects moving parts against wear. Also, AMSOIL Synthetic 2-Cycle Oils reduce friction to lower engine operating temperatures.

OUTSTANDING LOW TEMPERATURE PERFORMANCE

AMSOIL Synthetic 2-Cycle Oils mix readily with fuel, even in low temperatures. AMSOIL Synthetic 2-Cycle Oils resist gelling to provide excellent performance and protection in low temperatures.

PREVENTS RUST AND CORROSION

AMSOIL Synthetic 2-Cycle Oils contain special rust and corrosion inhibitors which provide two-cycle engines with excellent protection, especially during off season storage.



AMSOIL Series 2000 2-Cycle Racing Oil

Reduces Heat, Friction and Wear...

*Two-time National Champion and
2000 World Supercross Champion*
MIKE LAROCCO



*Catch Team AMSOIL Supercross and Motocross
racers Mike LaRocco, Steve Boniface and
Branden Jesseman on ESPN and ESPN2.*

AMSOIL Series 2000 Synthetic 2-Cycle Racing Oil provides the ultimate protection for the hardest working, hottest running two-cycle engines. When two-cycle engines run hot, pistons expand and the piston to cylinder wall clearance is reduced. This increases friction and the likelihood of piston scuffing, reduced power and ultimately engine seizure. AMSOIL Series 2000 2-Cycle Oil reduces friction and prevents thermal runaway. AMSOIL Series 2000 2-Cycle Oil virtually eliminates piston scuffing and ensures peak performance in two-cycle engines.

Burns Clean...

Because two-cycle motors burn oil, it is important the oil burn clean to prevent carbon build-up. Carbon build-up in the ring areas causes ring sticking, and on the spark plug causes plug fouling.

AMSOIL Series 2000 2-Cycle Racing Oil is specially formulated to burn clean, ensuring optimal engine performance. AMSOIL's synthetic base oils are combined with specialized detergents to keep two-cycle components clean.

Motorcycle Accessory



P.I. PERFORMANCE IMPROVER

Dissolves and removes fuel system deposits and other contaminants for improved power and overall performance in gasoline engines. Reduces exhaust emissions. Improves engine idle, response and starting. Ideal for both fuel injected and carbureted systems. One ounce treats ten gallons.



SERIES 2000 OCTANE BOOST

Maximizes power, reduces engine knock and improves ignition and engine response. Helps fuel burn cleaner, removes carbon deposits and inhibits corrosion.



SYNTHETIC GEAR LUBE

Out-performs conventional petroleum gear lubes. Reduces friction for improved fuel efficiency. Gears run cooler and last longer.

NEW!



SHOCK THERAPY SUSPENSION FLUID

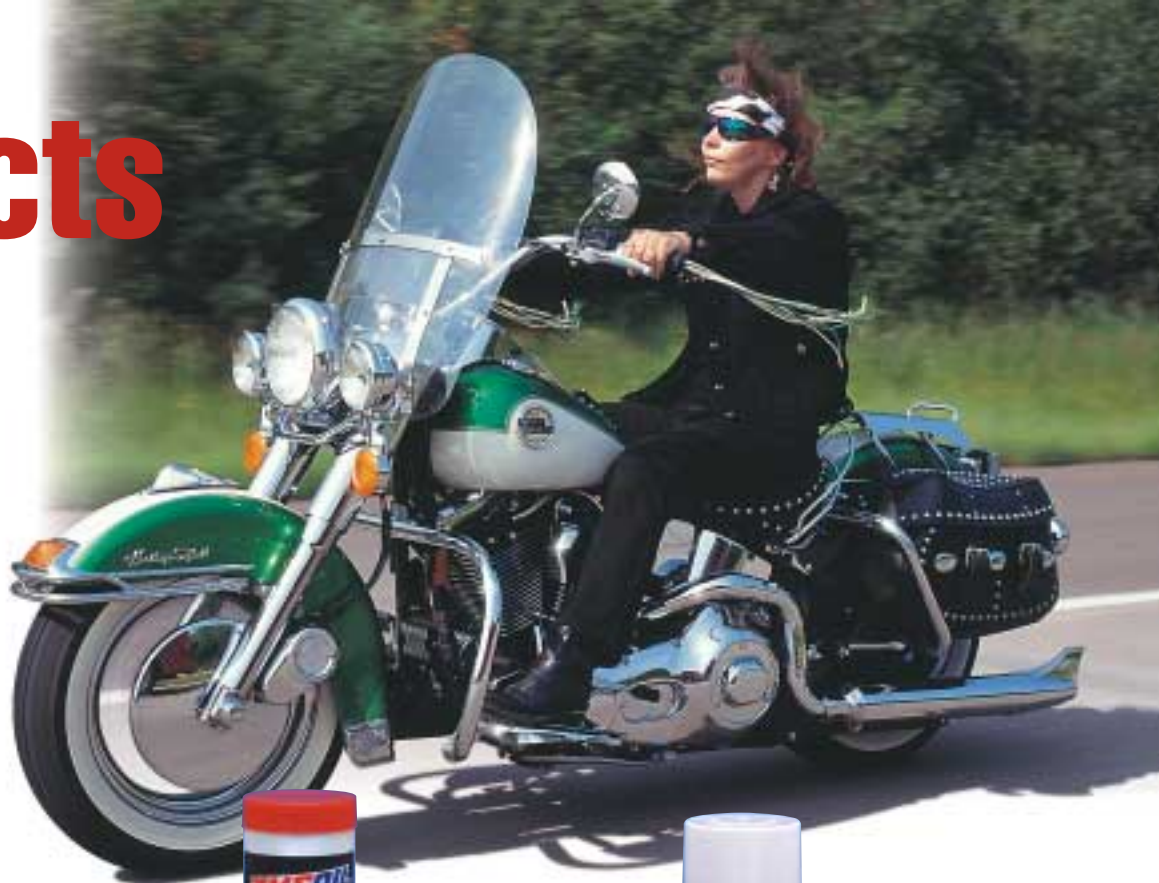
Formulated for fade-free dampening and smooth rebounds in racing and recreational applications. Controls friction and heat, reduces wear, scuffing, frictional energy loss and heat buildup and prevents fade more effectively than conventional suspension fluids. Ideal for both front forks and shocks. Available in two viscosity grades.



GASOLINE STABILIZER

Keeps fuel from deteriorating during storage. Reduces the oxidation process and prevents varnish and gum build-up. Recommended for all motorized vehicles and equipment.

Products



MIRACLE WASH WATERLESS WASH AND POLISH

A unique dry car wash and polish delivers outstanding performance with quick, easy and economical applications. No water required.

Incredibly easy to use: simply apply, use a clean terry cloth towel to spread Miracle Wash and wipe clean with a second terry cloth towel. No scratching, no scraping. It's a miracle.



SERIES 2000 RACING GREASE

Ultimate protection for hard-driven, high performance motorcycles. Dramatically reduces friction and wear for improved performance.



POWER FOAM

Improves starting and performance. Cleans dirty intake systems and spark plugs, frees sticky valves. Also removes gum, varnish and carbon deposits from engine exterior surfaces.



HEAVY DUTY METAL PROTECTOR

A heavy duty spray lubricant fortified with special rust and corrosion inhibitors. It penetrates and adheres to metal surfaces, leaving a long lasting protective coating. Ideal for motorcycle, bicycle and ATV chains.



MP METAL PROTECTOR

Disperses water and protects metal surfaces from rust and corrosion. Penetrates existing rust build-up and dries wet electrical systems.



Courtesy of Flat Trak Fotos



Supercross

HONDA CR 250R

AMSOIL INC. sponsors supercross/motocross racer Mike LaRocco and the Factory Connection Racing Team. LaRocco is a two-time national champion, 2000 world supercross champion and has placed in the top ten for an incredible 13 straight years.

Factory Connection owner and race team manager Rick Zielfelder saw AMSOIL Series 2000 2-Cycle Racing Oil in action for Team AMSOIL, the AMSOIL-sponsored Snocross Team. A Series 2000 2-Cycle Racing Oil dyno test clinched the deal for Zielfelder.

“After seeing the AMSOIL Racing Team’s performance last snocross season, and knowing how well the products perform, you know the company is dedicated to quality.”



Miller Racing

13 TOP TEN FINISHES 1999 GLRRA & AMA/FASTTRAX

“I run a Yamaha R6, which is the dominant bike on my racing circuit. Of all the guys who run these bikes, the only ones that don’t use up any oil are mine and the others who use the AMSOIL products. My engine has run great all season thanks to AMSOIL lubricants.”

– Mike Miller

AMSOIL products and Dealership information are available from your local AMSOIL Dealer.

