

AMSOIL®

The First in Synthetics®

MOTORCYCLE PRODUCTS



***AMSOIL Synthetic Motorcycle Oils
deliver maximum protection,
power and performance
for all makes of motorcycles.***

AMSOIL Synthetic 20W-50, 10W-40 and 10W-30 Motorcycle Oils

Superior Wear Protection for Motorcycles.

AMSOIL Synthetic Motorcycle Oils are formulated with premium synthetic base stocks and high-performance additive technology that provide superior multi-functional benefits for the special requirements of motorcycle applications. Tests prove these independent and exclusive AMSOIL formulations provide second-to-none viscosity protection for hot-running American and foreign motorcycle engines, transmissions and primary chaincases. (See Shear Viscosity Charts below.)

AMSOIL 20W-50 Synthetic Motorcycle Oil (MCV) is recommended for Harley-Davidson, Buell, KTM, Ducati, BMW, Aprilia and Triumph motorcycles calling for a 15W-50 or 20W-50 viscosity, providing superior protection in engines, transmissions and primary chaincases.

AMSOIL 10W-40 Synthetic Motorcycle Oil (MCF) is recommended for Honda, Kawasaki, Yamaha, Suzuki, Victory, BMW and Husqvarna motorcycles calling for a 10W-40 or 20W-40 viscosity, providing superior protection in engines and transmissions.

AMSOIL 10W-40 Synthetic Motorcycle Oil is also an exceptional product for any two-cycle motorcycle transmissions requiring a 10W-40 lubricant.

AMSOIL 10W-30 Synthetic Motorcycle Oil (MCT) is recommended for Honda, Yamaha, Suzuki and Kawasaki motorcycles and scooters, providing superior protection in engines and transmissions.



MCV

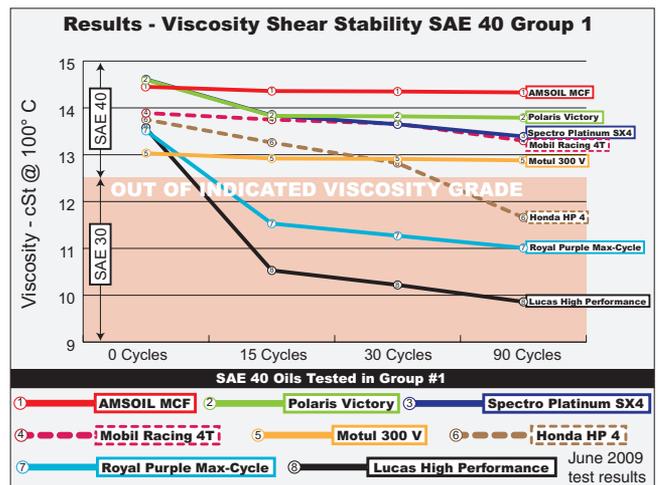
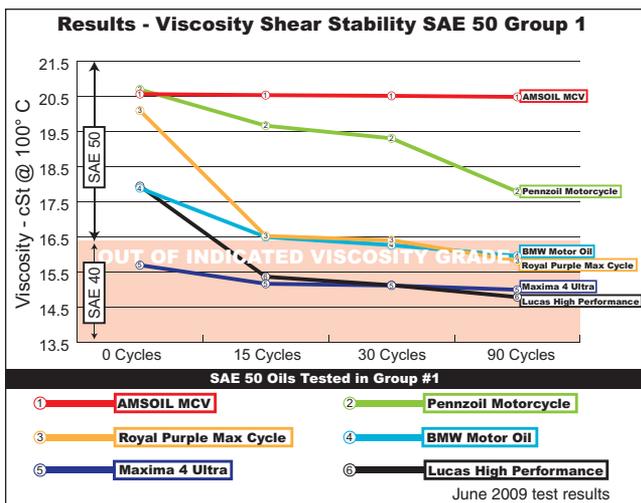
MCF

MCT

MAXIMUM TRANSMISSION PROTECTION

AMSOIL Synthetic Motorcycle Oils not only provide superior protection for motorcycle engines, they also provide superior gear protection, meeting API GL-1 and SAE 80 (MCT), SAE 80W-90 (MCF) and SAE 90 (MCV) gear lube requirements.

Viscosity is the most important characteristic of a lubricant. Motorcycle gears create a shearing effect that causes permanent oil viscosity loss. This thinning effect



reduces the oil's ability to prevent metal-to-metal contact and wear. AMSOIL Synthetic Motorcycle Oils exhibit absolute shear stability as measured by the industry-recognized Kurt Orbahn shear stability test (ASTM D-6278). They provide superior protection compared to competitive oils and eliminate the need for separate gearbox or chaincase oils.

EXCELLENT WET-CLUTCH PERFORMANCE

Many motorcycles use a clutch that is immersed in the motor oil. The friction modifiers present in many automotive motor oils and the extreme-pressure additives present in EP gear lubricants produce a low coefficient of friction between the clutch discs and plates, resulting in clutch slippage and glazing. Slippage leads to increased operating temperatures and reduced clutch life. AMSOIL Synthetic Motorcycle Oils are formulated without friction modifiers, providing positive clutch engagement, longer equipment life and reduced temperatures. AMSOIL Synthetic Motorcycle Oils meet the clutch compatibility requirements mandated by JASO MA/MA2 and ISO standard ISO-L-EMA2.

EXCELLENT CORROSION PROTECTION

Most motorcycles spend the majority of their lives either parked or in storage, but most motorcycle oils fail to address corrosion problems. Corrosion protection during storage and in humid conditions is essential to extending equipment life. AMSOIL Synthetic Motorcycle Oils are formulated with specialized additive technology that not only protects against corrosion and acids during operation, but also provides exceptional protection during storage. The ASTM D-1748 Rust Test measures a lubricant's ability to protect against rust and corrosion. A standard metal reference coupon is

immersed in the test oil before being placed in a humidity cabinet for 24 hours at 120° F. As seen in the photos, the reference coupon treated with AMSOIL 20W-50 Synthetic Motorcycle Oil showed no signs of rust and corrosion, while the competitor failed the test.

AMSOIL 20W-50 (MCV)

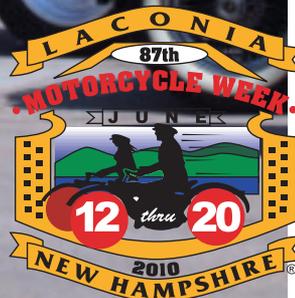
Castrol GPS 20W-50



TEST DATE: AUGUST 2008

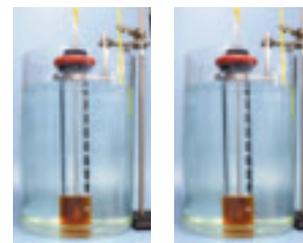
OUTSTANDING HEAT RESISTANCE

Motorcycles operate in demanding, high-heat conditions that require robust high-temperature deposit control additives. While many conventional oils break down and oxidize when faced with high temperatures, causing formation of carbon and sludge deposits, AMSOIL Synthetic Motorcycle Oils effectively withstand oil breakdown and oxidation, keeping equipment running cooler and minimizing oil consumption, thickening and emissions. Air-cooled engines get especially hot while idling in traffic, commonly reaching temperatures of 270° F or higher. The extra margin of protection provided by AMSOIL Synthetic Motorcycle Oils is especially important for hot-running, air-cooled motorcycle engines.

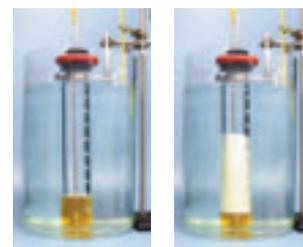


SUPERIOR FOAM CONTROL

High engine speeds and transmission gears in motorcycles churn the oil, suspending air and causing foam. When this oil and air mixture is drawn into a loaded area, the air compresses and decreases the thickness of the oil film, compromising wear protection. In addition, suspended air promotes oil oxidation, reducing its service life. The Foam Tendency Test (ASTM D-892) is divided into three sequences. In each sequence, air is bubbled through the oil for five minutes and the foam generated is measured in millimeters immediately following the test. At the end of the sequence, the oil is allowed to settle for 10 minutes and the remaining foam is measured again. The photos at right show AMSOIL 20W-50 and Lucas High Performance Motorcycle Oils before one sequence of the Foam Tendency Test and five minutes after completion of that sequence. AMSOIL Synthetic Motorcycle Oils provide outstanding foam control and are formulated with anti-foam agents that allow for quick air release. They provide long-term lubricating protection in high-speed, high-RPM conditions.



AMSOIL before & AMSOIL after 5 minutes



Lucas before and Lucas after 5 minutes

EXCELLENT WEAR PROTECTION

AMSOIL Motorcycle Oils are formulated with robust anti-wear additive packages to provide superior wear protection and longer equipment life. They are designed to withstand the hard-pounding, high-revving environment found inside motorcycle engines. AMSOIL Motorcycle Oils provide dependable protection for virtually all motorcycles.

COST EFFECTIVE

AMSOIL Synthetic Motorcycle Oils provide excellent cost-effectiveness and are cost competitive with competing high-end motorcycle oils. The premium protection and performance provided by AMSOIL Synthetic Motorcycle Oils is excellent insurance for today's expensive motorcycles and custom bikes.

AMSOIL Synthetic Motorcycle Oils are recommended for twice the manufacturer's recommended drain interval for on-road motorcycles.

AMSOIL SYNTHETIC MOTORCYCLE OILS

- **Excellent for roller bearings** and do not cause "skate" or "float" in V-Twin Engines
- **Formulated to prevent foaming** in high-RPM engines
- **Eliminate the need for multiple lubricants**
- **Absolute shear stability** maintains protective viscosity in high-heat, high-shear conditions
- **Better performance and price** than competitive motorcycle oils
- **Recommended for twice the manufacturer's recommended drain interval** for on-road motorcycles
- **Provide exceptional protection** against rust and corrosion during storage
- **Robust anti-wear additive packages** provide superior wear protection and longer equipment life

AMSOIL PRODUCTS FOR ALL HARLEY-DAVIDSON APPLICATIONS

AMSOIL 20W-50 Advanced Synthetic Motorcycle Oil provides superior protection and performance for new and recent models of Harley-Davidson bikes, but older engine generations require a different oil. AMSOIL provides gear lube and motor oils for all Harley-Davidson models.



AHR

AMSOIL SAE 60 SYNTHETIC SUPER HEAVY WEIGHT RACING OIL

AMSOIL SAE 60 Synthetic Super Heavy Weight Racing Oil's (AHR) high-viscosity formulation makes it very well-suited for use in Harley-Davidson motorcycles that require a heavier fluid. It resists the thinning effects of fuel dilution and provides excellent wear protection, friction reduction and maximum power. AMSOIL SAE 60 Synthetic Super Heavy Weight Racing Oil is highly resistant to thermal degradation and oxidation.



SV0



SVT

AMSOIL SEVERE GEAR[®] SYNTHETIC EP GEAR LUBES

AMSOIL Severe Gear[®] Synthetic EP Gear Lubes (SVG, SVT, SVO) are specifically engineered for high-demand applications. Their superior lube "film strength" combined with extra additives protects gears and bearings from scoring and wear. They resist high heat and possess excellent cold-flow properties. AMSOIL Severe Gear Synthetic EP Gear Lubes outperform conventional gear lubes.

Harley-Davidson Models	First	Second	Third
Flathead			
Engine	AHR	MCV	—
Transmission	SVT	SVO	—
Knucklehead			
Engine	AHR	MCV	—
Transmission	SVT	SVO	—
Panhead			
Engine	AHR	MCV	—
Transmission	SVT	SVO	—
Shovelhead			
Engine	AHR	MCV	—
Transmission	SVT	SVO	—
Evolution 1340, Big Twins 1450, and Revolution-V-Rods			
Engine	MCV	—	—
Transmission	MCV	SVT	SVO
Primary Chain Case	MCV	—	—
Ironhead & Evolution Sportsters			
Engine, Transmission/Chain Case	MCV	—	—

First: AMSOIL preferred recommendation
 Second: Option two
 Third: Option three

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

RESIST THERMAL BREAKDOWN FROM HEAT

AMSOIL Synthetic 2-Cycle Oils resist oil breakdown caused by heat to help prevent the formation of varnish and carbon deposits. AMSOIL Synthetic 2-Cycle Oils also control 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 inhibit the formation of varnish, carbon or deposit residues. Spark plug fouling and excessive carbon buildup on piston domes, exhaust ports and valving are virtually eliminated. Rings remain free for excellent compression and combustion.

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 reduces friction and protects moving parts against wear.

REDUCE SMOKE, ODOR AND EMISSIONS

AMSOIL Synthetic 2-Cycle Oils burn clean, minimizing smoke, odor and emissions.

AMSOIL MOTORCYCLE OIL WHITE PAPER

In 2006, AMSOIL released the most comprehensive study of motorcycle oils ever produced and the industry reacted. AMSOIL released an updated version of this no-frills study in 2009 to help consumers make informed decisions when selecting motorcycle oils. See how 28 top-selling motorcycle oils compare in the most critical areas of motorcycle oil performance. There is no hype, no sales pitch, just facts.

A STUDY OF MOTORCYCLE OILS WHITE PAPER

Download a free copy at www.amsoil.com

See for yourself how the full range of the most popular motorcycle oils stands up to the hot-running, hard-pounding, high-RPM conditions of motorcycle applications. This complete battery of tests includes wear protection, rust protection, oxidation stability and more . . .



Even though AMSOIL 2-Cycle Oils have been optimized for specific applications, they are multi-functional and recommended for use in many areas. The ratings for each oil's performance abilities per application are as follows:

Excellent: The primary recommendation for the oil. The oil is specifically designed for the operating conditions of the motors in these markets. There is only one "Excellent" recommendation per category.

Very Good: A main recommendation for the oil. Identifies an oil that is very good for the operating conditions of these motors.

Good: A secondary recommendation for an oil. The oil was not specifically designed for these applications. However, the chemistry in the oil is suited to the operating conditions of these motors.

Racing: Excellent for racing or modified motors. Very good for recreational use.

AMSOIL DOMINATOR Synthetic 2-Cycle Oil (TDR) is excellent for motorcycle racing applications. It is very good for recreational use.

AMSOIL INTERCEPTOR Synthetic 2-Cycle Oil (AIT) is excellent for two-cycle motorcycle applications.

AMSOIL Saber Professional Synthetic 2-Cycle Oil (ATP) is very good for pre-mix only two-cycle motorcycle applications.



AMSOIL Fogging Oil and Gasoline Stabilizer

AMSOIL ENGINE FOGGING OIL

Two- and four-stroke motorcycles are commonly operated seasonally or infrequently, then stored for long periods of time. During these periods of inactivity, and as a result of fluctuations in ambient temperatures, water vapor can form condensation within the engine, eventually becoming surface corrosion on cylinder liners, piston rings, anti-friction bearings and steel/iron contact surfaces on rotational seals.

AMSOIL Engine Fogging Oil (FOG) offers superior film retention, providing long-term protection against corrosion and dry starts, extending engine life and reducing operating expenses. Its aerosol spray formulation offers easy and clean application, while reaching more components and offering better distribution than straight motor oil.

AMSOIL Engine Fogging Oil applications include, but are not limited to, motorcycles, snowmobiles, ATVs, outboard motors, stern drive and inboard marine engines, personal watercraft, lawn equipment, cars, trucks and much more.



FOG

AMSOIL GASOLINE STABILIZER

It is difficult to drain all of the fuel from equipment before storage, and doing so would expose the system to other problems, including the formation of rust and corrosion on the bare metal in the tank and fuel system and the drying and cracking of gaskets and seals. Some fuels are pre-treated with oxidation inhibitors that allow them to be stored for short periods without forming excessive deposits, while other fuels have no inhibitors at all.



AST

AMSOIL Gasoline Stabilizer (AST) reduces the oxidation process that occurs when fuel is stored for extended periods. It is formulated to prevent the formation of varnish and sludge which can clog injectors, stick floats and cause poor engine performance. AMSOIL Gasoline Stabilizer is ideal for stored seasonal equipment such as motorcycles, snowmobiles, lawnmowers and boats. The treat rate is one ounce with every 2.5 gallons of fuel. One bottle treats 40 gallons.



AMSOIL Ea Motorcycle Filters

EA MOTORCYCLE AIR FILTERS

The filtration media in Ea Motorcycle Air Filters (EaAM) is pleated and has epoxy-coated wire on the face and back of the media for additional strength and stiffness. High-quality plastisol potting compounds bond the pleat packs to the plastic or aluminum side plates. The S&S-style round filters are manufactured with high-quality plastisol that bonds the media to the wire backing and sealing area.

SUPERIOR FILTRATION

The synthetic nanofiber media featured in AMSOIL Ea Motorcycle Air Filters has sub-micron diameters and small inter-fiber spaces, resulting in more contaminants being captured on the surface of the media and lower restriction. Cellulose, wetted gauze and foam filters are larger and have larger spaces between the media that cause contaminants to load in the depth of the filter, resulting in airflow path plugging, higher restriction and lower capacity.

CLEANABLE FOR LONG SERVICE LIFE

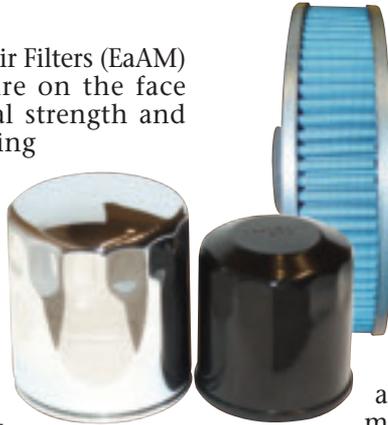
AMSOIL Ea Motorcycle Air Filters are cleanable, providing excellent protection and long service life. AMSOIL Ea Motorcycle Air Filters should be cleaned every year or according to operating conditions. Operation in extremely dusty or dirty environments may require more frequent cleaning. Ea Motorcycle Air Filters should be changed every four years.

CLEANING INSTRUCTIONS

AMSOIL Ea Motorcycle Air Filters are cleaned in the same manner as AMSOIL Ea Air Filters for cars and light trucks: with a vacuum or shop air.

To clean with a vacuum, place the filter on a flat surface and carefully vacuum the filter media on the dirty side where the incoming airflow enters the filter. Using a vacuum with too much suction may damage the filter.

To clean with shop air, hold the filter with one hand and carefully blow the filter media at a 45-degree angle on the clean side of the filter using low-pressure (15 to 20 psi) shop air. Using too much air pressure will damage the filter media.



SUPERIOR ALTERNATIVE

AMSOIL provides Ea Motorcycle Air Filters for Harley-Davidson, Honda and virtually all other domestic and metric applications, plus specialty filters for S&S carburetors and air cleaner housings, Baron Big Air Intakes, Screamin' Eagle and many more.

EA MOTORCYCLE OIL FILTERS

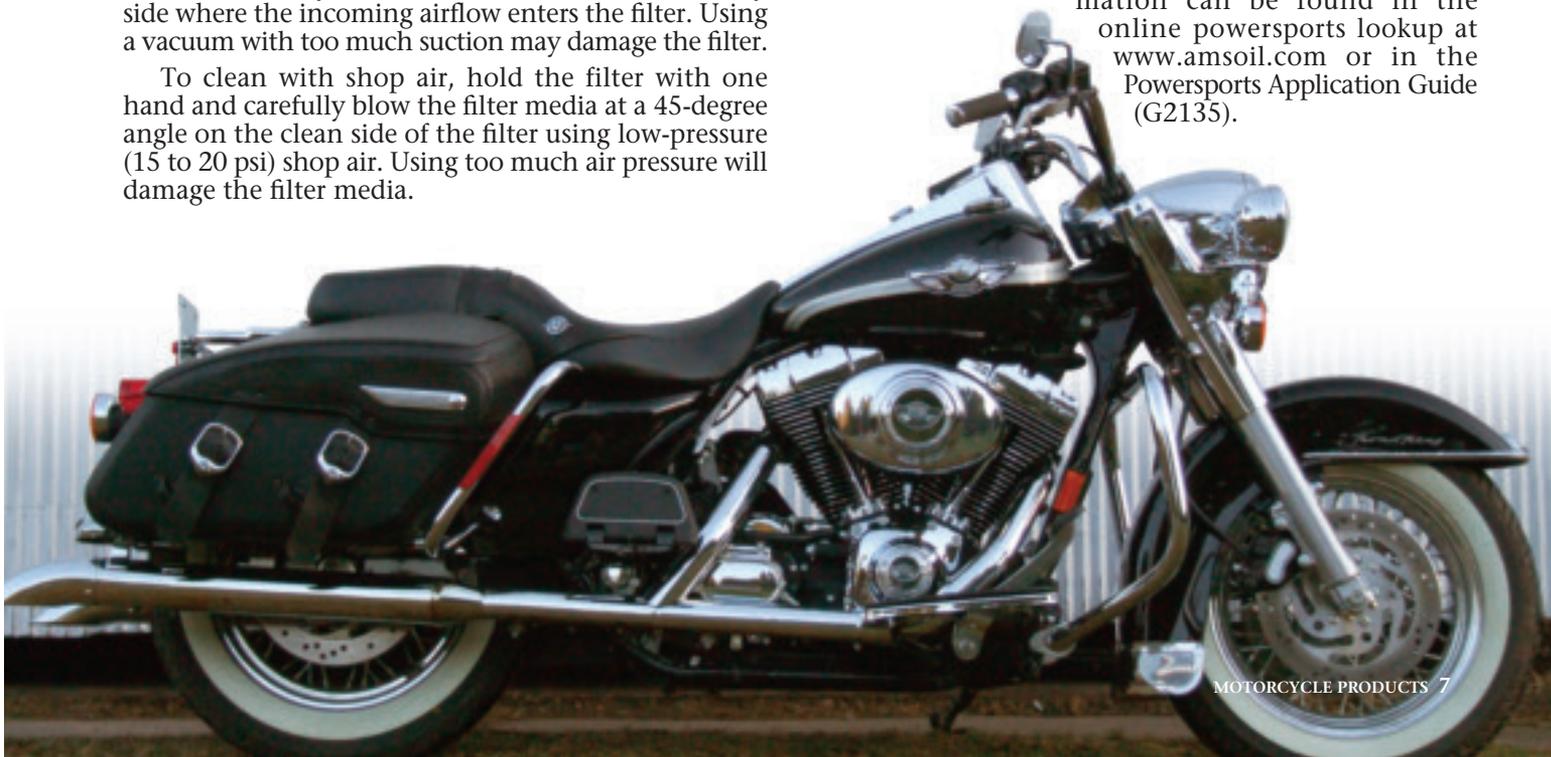
Ea Motorcycle Oil Filters (EaOM) feature a specially-constructed silicone anti-drainback valve and a nitrile sealing gasket to go along with the full-synthetic Ea nanofiber media. The anti-drainback valve provides excellent protection during startup and remains flexible in all temperatures, and the nitrile sealing gasket resists chemical breakdown, providing excellent durability and ensuring long filter life.

SUPERIOR FILTRATION

The unique construction and full-synthetic media of AMSOIL Ea Motorcycle Oil Filters allow them to provide outstanding performance in motorcycles and other powersports equipment. EaOM Filters are designed to last longer, stop smaller dirt particles and offer less restriction than other filters. Ea Motorcycle Oil Filters provide filtering efficiency of 98.7 percent at 15 microns, outperforming the best cellulose/synthetic blend media on the market. For maximum protection, AMSOIL recommends changing Ea Motorcycle Oil Filters at every oil change.

SUPERIOR ALTERNATIVE, MULTIPLE APPLICATIONS

AMSOIL Ea Motorcycle Oil Filters provide excellent protection for motorcycles, ATVs, four-stroke personal watercraft, four-stroke snowmobiles and four-stroke outboards. AMSOIL currently provides Ea Motorcycle Oil Filters for the most popular powersports applications, many of which are chrome plated. Application information can be found in the online powersports lookup at www.amsoil.com or in the Powersports Application Guide (G2135).



Motorcycle Accessory Products

SHOCK THERAPY SUSPENSION FLUID (STL, STM)

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.



STL



AMP

MP METAL PROTECTOR (AMP)

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

SERIES 2000 OCTANE BOOST (AOB)

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



AOB

HEAVY DUTY METAL PROTECTOR (AMH)

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



AMH

SERIES 2000 RACING GREASE (GRG)

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



GRG



APF

POWER FOAM (APF)

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

MIRACLE WASH WATERLESS WASH AND POLISH (AMW)

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.



AMW

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

