

AMSOIL[®]

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MAGAZINE

MAY 2012



New Label and Sharper Sales Focus Increase Appeal of HP Marine™

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Five Challenges (and Solutions) to Optimum ATV Life & Performance | PAGE 10

AMSOIL lets YOU decide

When it's time to change your oil

**SIGNATURE
SERIES**

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CHANGE OIL AT
**25,000
MILES**
OR 12 MONTHS



CHANGE OIL AT
**10,000
MILES**
OR 6 MONTHS



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**3,000+
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THE COVER

HP Marine Synthetic 2-Stroke Oil provides outstanding protection in severe service, and AMSOIL provides conclusive proof in the Marine E-TEC Field Study.

From the President's Desk

I was approached recently by a man who was quite familiar with AMSOIL products. He introduced himself, and I soon discovered that the retail establishment he owned was an AMSOIL account. He was pleased to report that his AMSOIL customer base has grown steadily, and he has had outstanding results with our products in all of his personal vehicles.

That was the good news.

It turns out he had not seen or heard from his AMSOIL servicing Dealer for over a year. Prior to this, the Dealer had contacted him regularly, delivered products when needed and established himself as an authority on lubrication. In short, he had done a nice job. But now the man had no AMSOIL products on his shelves and was missing out on sales. It was not something I wanted to hear.

This guy could have ordered products directly from AMSOIL, of course, but that was not the issue as I saw it. He had become accustomed to receiving service at the personal level and depended on his Dealer for guidance. Now, that wasn't happening.

Normally, I might reserve this message for Dealers only, but it's important for those Preferred Customers who may one day become AMSOIL Dealers to receive it too. There is virtually nothing that will destroy an AMSOIL business more quickly than a lack of service, especially if the business relationship had been built on that service.

That is not to say that all Dealers are negligent in the service they provide. Far from it. And it is not to say that all Dealers must become totally hands-on and hover over their accounts. Dealers have tremendous flexibility in the degree of service they elect to provide. In most cases it is contingent on the needs of the account. Some accounts are content with ordering product completely on their own and require only an occasional phone call, email or personal visit. In many cases just a periodic newsletter will suffice. Other accounts require more. It is up to the Dealer to determine the appropriate level of service he or she needs to provide to satisfy any particular account.

The important thing to remember is that the Dealer network, to a large extent, is the face of AMSOIL, and the image our Dealers project and the professionalism they display reflect directly on the company and all other AMSOIL Dealers. It has taken forty years to build the strong, quality-first image we have built, and I expect all Dealers and our corporate staff to respect the tremendous effort that has been invested to achieve it.

I realize, of course, that the vast majority of AMSOIL Dealers do an absolutely outstanding job, and I couldn't be more pleased. I have seen Dealers from all different backgrounds,

interests and skill levels build incredibly successful AMSOIL Dealerships. Dealers keep proving over and over again that you don't have to be a professional salesperson to succeed in this business. It all comes down to a belief in the products and a commitment to dig in and work.

As an independent business owner you are free to operate your business as you see fit. I make no demands. I ask only that you represent the company with integrity and always do what is best for your AMSOIL customers.



A.J. "Al" Amatuzio
President and CEO, AMSOIL INC.

Dean Alexander
Executive V.P. /
Chief Financial Officer

Alan Amatuzio
Executive V.P. /
Chief Operating Officer

A.J. "Al" Amatuzio
President &
Chief Executive Officer





THERE ARE REASONS TO CHECK YOUR OIL

When Bill Mattson checked the oil on his new pickup he was surprised to find his oil level was going up after the first thousand miles. The next time he checked his oil it was higher still, even though he hadn't added any. He became concerned and decided to have his oil analyzed. Sure enough, the oil in his new truck was being diluted with fuel, a serious problem with serious consequences if left unchecked.

Though most often used for detecting wear metals, oil analysis is an invaluable diagnostic tool for a whole host of maladies affecting engines, from fuel dilution to head gasket leaks. Routine oil analysis helps heavy equipment owners graph a working history of their machinery and other engines. Oil analysis can also affirm that extended-

drain synthetics are still "good to go" for truckers and others interested in saving their hard-earned money.

Oil analysis enables vehicle owners to peek inside their engines without costly teardowns, providing a proactive approach to vehicle maintenance. For those who say frequent oil changes are "cheap insurance," oil analysis is cheaper still and tells a much more compelling story.

Oil Analyzers
INC.

FIND OUT MORE ABOUT OIL ANALYZERS INC. AT OAITESTING.COM

NEW LABEL AND SHARPER SALES FOCUS INCREASE APPEAL OF HP MARINE™

HP Marine Synthetic 2-Stroke Oil (formerly hp Injector®) features a re-designed label and packaging aimed specifically at marine enthusiasts. The formulation, however, has not changed; its durable synthetic base oils and MAXDOSE™ system of advanced additives minimize wear and deposits throughout the engine, as demonstrated in the new Marine E-TEC™ Field Study (G2968). HP Marine is designated by product code HPM; pricing remains unchanged. hp Injector (HPI) is available while supplies last.



Marine-Focused

hp Injector was introduced as a high-quality synthetic two-cycle oil with a performance emphasis on direct-fuel-injected engines. Though primarily marketed for marine use, it was also recommended for snowmobiles, dirt bikes and other two-cycle applications. AMSOIL research and experience indicates consumers prefer products formulated and clearly labeled for specific applications compared to those intended for a wide range of uses. Therefore, AMSOIL re-branded HP Marine specifically for use in all two-cycle outboard motors, including, but not limited to, Johnson® and Evinrude® FICHT® & E-TEC® (replaces XD100™ 2-Cycle Oil); Mercury® EFI & Optimax®; Yamaha®; Nissan® and Tohatsu® TLDI®; Suzuki®; Mariner®; and Force®. It is also recommended for use in all two-cycle personal watercraft (PWC). HP Marine eases the buying decision for consumers, and the change also positions AMSOIL ahead of the evolving powersports market.

Easier Buying Decision

The new name clearly indicates HP Marine is formulated for marine applications. Many competing oils are formulated for multiple applications and can confuse consumers. Enthusiasts can quickly determine HP Marine is the correct product without referring to a two-cycle recommendation chart or consulting a lengthy label.

Evolving Powersports Designs

Although HP Marine provides excellent performance in snowmobiles and other two-cycle applications, evolving engine designs require oils with specialized properties. AMSOIL INTERCEPTOR™ Synthetic 2-Cycle Oil (AIT) is a better choice for newer snowmobile applications.



Stock #	Qty.	U.S.	Can.
G2968	1	1.05	1.15

Marine E-TEC Field Study

Exclusively recommending HP Marine for the marine market allows AMSOIL to conduct market-specific testing and field studies. The Marine E-TEC Field Study validates the performance of HP Marine in the popular Evinrude E-TEC marine motor specifically, and other high-performance two-cycle marine motors in general. E-TEC motors are unique in that they offer an alternative, lean-mix setting that allows the engine to use less oil. Whether programmed to operate at the standard mix ratio or reprogrammed to the lean-mix setting, E-TEC engines use electronic equipment to monitor conditions, including rpm and throttle position, to determine the appropriate gas-to-oil mixture. To use the lean-mix setting, however, enthusiasts have been told they must have the engine reprogrammed by an authorized Evinrude dealer and agree to use Evinrude XD100™ 2-Cycle Oil exclusively.

To validate that HP Marine provides excellent protection for E-TEC motors, HP Marine and XD100 were installed in identical 250-hp Evinrude E-TEC engines powering a SEA-TOW® marine rescue vessel. Following 534 hours of severe-duty service (506 at the factory-lean setting), both engines were disassembled and rated for deposits, wear and other distress by a calibrated ASTM rater. HP Marine provided strong performance and excelled in critical-component lubrication. The cylinder bores, for example, demonstrated 0.00 percent scuffing, while the main bearings demonstrated only trace to light wear. The engine also displayed no ring sticking, earning perfect 10 merit ratings.

New Label Includes Test Results

Select results are included on quart and gallon back labels with the invitation to visit www.amsoil.com/proof for complete results. Including visual proof of performance on each bottle substantiates the claims of AMSOIL and helps convince enthusiasts that HP Marine is the best choice for their two-cycle marine motors, regardless of make or model. ■

Field Studies Validate AMSOIL Product Performance

The 75W-90 Long-Life Synthetic Gear Lube Field Study (G2975) is the latest in a series of studies designed for the diesel trucking market. The series, which includes the Diesel Fleet Fuel Economy Study (G2904) published last fall and the SAE 50 Long-Life Synthetic Transmission Oil Field Study (G2961) released in March, demonstrates to owner/operators and fleet managers that AMSOIL synthetic lubricants can reduce costs by addressing specific challenges in the industry.

One of the biggest challenges is the skyrocketing cost of diesel fuel. The Diesel Fleet Fuel Economy Study proves, through industry-standard testing, that AMSOIL synthetic lubricants can increase fuel economy in short- to medium-haul trucks as much as 6.54 percent compared to conventional lubricants. The results can also be extrapolated to conclude the fuel economy benefits extend to other diesel applications as well, including over-the-road (OTR) applications.

The remaining two studies demonstrate the excellent wear protection and deposit control provided by SAE 50 Long-Life Synthetic Transmission Oil (FTF) and 75W-90 Long-Life Synthetic Gear Lube (FGR) in OTR trucks practicing 500,000-mile drain intervals. Beginning in July 2006, each lubricant was installed in new model year 2007 and 2008 Kenworth® trucks operated

by Jeff Foster Trucking, based in Superior, Wis. The fleet undergoes frequent severe-service operation hauling petroleum, aggregate, forest products and other freight throughout North America. Transmission oil and gear lube samples were collected from a cross-section of vehicles at various mileage intervals. Following 512,000 miles in service, the transmission and front and rear differentials from unit 2168 were randomly selected for disassembly and inspection by an ASTM calibrated rater.

As shown in the SAE 50 Long-Life Synthetic Transmission Oil field study, many of the transmission's gears and bearings received perfect merit ratings despite the challenging operating conditions. Likewise, the front and rear differentials demonstrated excellent protection. Results of the 75W-90 Long-Life Synthetic Gear Lube Field Study are separated into sections for oil analysis and component disassembly.

Oil Analysis

Oil analysis results are provided for viscosity retention and iron content. The lubricant resisted mechanical shear and maintained its viscosity extremely well, allowing formation of a strong lubricating film.

Disassembly Results

Pictures of all critical gears, bearings and other components are shown along with their merit ratings assigned by the ASTM

calibrated rater. All components achieved high scores; the ring and pinion gears, for example, demonstrated no ridging, pitting, spalling, scoring or corrosion despite undergoing intense pressure and sliding contact that can wipe away the lubricant, inviting distress. Wear was likewise inhibited to low levels. Results for all other components are equally impressive.

Valuable Sales Tools

The diesel trucking studies series forms a strong case for the high level of protection and cost-savings AMSOIL synthetic lubricants provide diesel trucking applications in numerous markets, including the following:

- OTR fleets
- Road construction
- Beverage distributors
- Waste management fleets
- Delivery fleets
- General contractors

The studies are another way AMSOIL validates the performance of its products. They and other forms of testing demonstrate to consumers that AMSOIL doesn't make unsubstantiated claims. Rather, the company goes to great lengths to demonstrate the performance of its products in real-world situations and publishes the results. ■

75W-90 Long-Life Synthetic Gear Lube Field Study

Stock #	Qty.	U.S.	Can.
G2975	1	1.05	1.15

Diesel Fleet Fuel Economy Study

Stock #	Qty.	U.S.	Can.
G2904	1	1.05	1.15

SAE 50 Long-Life Synthetic Transmission Oil Field Study

Stock #	Qty.	U.S.	Can.
G2961	1	1.05	1.15



OUTSTANDING WET-CLUTCH PROTECTION AND PERFORMANCE

Wet clutches are widely used in motorcycle applications. In a wet-clutch design, the oil acts as a heat-transfer medium, reducing operating temperatures and minimizing varnish and lacquer formation that can lead to slippage and increased heat. The oil also minimizes build-up of wear debris on the frictional plates and provides lubricity to components and wear areas within the clutch, including the bearings and the points of contact between the outer tabs of the frictional plates and the clutch basket.

Wet-Clutch Configurations

Wet clutches can be found in three different configurations. One features a separate oil reservoir for the clutch (isolated from the engine and transmission), another features a shared oil reservoir for the transmission and clutch, and the third features a shared oil reservoir for the engine, transmission and clutch. The different configurations place unique demands on the lubricants that protect them. In the first example, the oil must handle the lubrication and frictional demands of the clutch and possibly a roller chain or single gear set. In the second example, the oil must handle both clutch and transmission lubrication. In the third example, the oil must handle clutch, transmission and engine lubrication, requiring a dynamic fluid capable of meeting a variety of needs.

Frictional Requirements

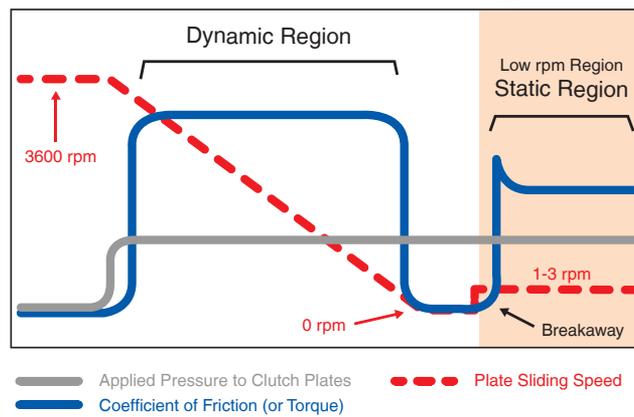
Good wet-clutch performance is extremely important to ensure satisfactory drivability. Frictional resistance is separated into two types: static and dynamic friction. The force required to begin movement of a box across the floor is an example of static friction, while the force required to keep it in motion is an example of dynamic friction. It takes less effort to keep the box moving than it does to break it loose. In motorcycles, static friction is the force that keeps the frictional plates and steel plates locked together and prevents them from slipping when the clutch is engaged. Dynamic friction comes into play as the clutch is engaged and the plates begin to contact each other. Dynamic friction begins the rotation of the steel plates. When there is enough contact and the forces of static friction are overcome, the steel

plates rotate at the same speed as the clutch and become locked together.

The surface condition of the plates affects the amount of friction generated during lock-up. There are significantly different surfaces in a clutch: the rough frictional plate and the smooth steel plate. The resulting force required for the two different plates to grab and lock-up is called the coefficient of friction. A rough plate will lock-up quicker than a smooth plate.

The graph displays a typical friction profile. As the clutch is engaged, spring pressure forces the rotating frictional plates up against the non-rotating steel plates. Dynamic friction between the two plate-types increases rapidly, causing the steel plates to begin rotating. The level of dynamic friction remains relatively constant until both plate-types are rotating at the same speed. Once rotation speed is equalized, undesirable slippage between the two plate-types is minimized by the resistance provided by static friction. The ability to minimize slippage when the clutch is engaged and locked is depicted on the right-hand side of the graph. Static friction is highest just prior to the plates breaking away or slipping. Once slipping, the resistance force is reduced as dynamic friction takes over.

Dynamic friction should have a high and relatively flat trace, providing a shorter time between clutch engagement and lock-up, and resulting in faster shifting. The level of dynamic friction should decrease slightly as the plate rotation speeds equalize, providing a smooth shift feel. If there is too much dynamic friction, the shift feels abrupt and harsh. If there is not enough, the shift is elongated and increases the potential for excessive plate slippage. High static friction is also desirable as it provides good clutch holding power and the ability to transfer the maximum design capacity through the clutch.



Wet-Clutch Lubrication

Not all lubricants are suitable for use in wet-clutch applications. Frictional properties, cleanliness, clutch material/oil compatibility, anti-foaming properties, shear stability and high-temperature stability are all important to maintain the integrity and performance of a wet-clutch system.

Properly selected synthetic base oils perform very well in wet-clutch applications and can improve performance and longevity; however, additive chemistry has a far greater impact on performance. Friction modifiers can decrease the coefficient of friction within the clutch pack and result in excessive plate slippage, while extreme-pressure additives commonly used in gear lubricants can cause excessive clutch slippage and related damage.

AMSOIL Synthetic Motorcycle Oil is multi-functional and provides outstanding protection for wet clutches. It is shear stable and resists thinning from mechanical activity, performing like a gear lube without the negative effects of extreme-pressure additives. AMSOIL Synthetic Motorcycle Oil contains no friction modifiers and promotes smooth shifting and positive clutch engagement. It controls heat and helps prevent slippage and glazing, while its high TBN helps improve clutch life by resisting the acids that can degrade clutch material. ■



Dan Peterson | VICE PRESIDENT, TECHNICAL DEVELOPMENT

Chemical reactions occur in motor oil, even when not in use.

A high-quality lubricant is engineered to withstand the effects of these reactions longer, but there are limits.

Many people already know that severity of service puts additional stress on engine oil, but we don't talk much about the effects Father Time has on oil. Chemical and physical changes are occurring in your engine oil from the day it is installed in your vehicle, even when the vehicle is not in use. Just like inside your body, there are a number of different reactions occurring inside your engine that impact its overall health. Like eating too many Big Macs and drinking too much Coca-Cola can accelerate reactions that can harm your health, contaminants introduced into your motor oil can accelerate reactions that can harm your engine.

AMSOIL Signature Series Synthetic Motor Oil is recommended for 25,000 miles in normal service. I've driven only 18,000 miles since last spring when I changed my oil, so why do I need to change it after a year in service? The oil level is full, so why not just keep driving and get the full 25,000 miles out of the oil? It may be possible through oil analysis, but without verifying a clean bill of health, the oil must be changed to ensure the vehicle is protected.

Motor oil is continually subjected to a variety of forces and contaminants that degrade the oil's quality until, ultimately, fresh oil is required. Forces such as oil-pump shear and contaminants such as combustion by-products, fuel, water and coolant all affect the expected life of motor oil.

Combustion by-products pass by the rings, seep into the oil sump and reduce motor oil life. Higher concentrations of by-products in the oil affect the rate at which chemical reactions occur, but the amount of time combustion by-products are in contact with motor oil also has an effect. The acids

and free-radicals created when burning gasoline or diesel fuel accelerate chemical reactions that degrade motor oil. When you install brand new oil and start the vehicle, these reactions begin and continue, to an extent, even when the vehicle is not operating. These chemical reactions result in increased viscosity, oxidation and nitration levels in the motor oil.

Fuel dilution is another major cause of motor oil degradation. Vehicles driven for short trips that do not reach normal operating temperatures don't get hot enough to evaporate fuel from the sump. Gasoline trapped in the oil sump thins the oil and promotes chemical reactions that degrade the oil. This phenomenon is more pronounced in diesel applications because diesel is less volatile and does not readily evaporate, reducing engine oil viscosity as fuel builds up in the oil sump.

Water and glycol contamination tend to occur together, but water without glycol is also common. Glycol, a common component of antifreeze, is a particularly damaging contaminant and is estimated to account for 60 percent of all engine failures. Antifreeze can enter the engine through a leaky head gasket, faulty oil cooler or other area. It doesn't take much glycol to degrade motor oil, reduce lubricity and react to thicken the oil to the point where the oil pump cannot supply enough oil to the engine for proper lubrication. Once that happens, the engine comes to a screeching stop.

Water is usually the primary source of trouble for oil in a vehicle that is only driven occasionally, such as an RV or a classic car. In those cases, water from condensation can build up in the crankcase and remain there for long periods if the engine is not brought up

to operating temperatures on a regular basis. Once an engine is warmed up, the water evaporates and is removed from the engine by the crankcase ventilation system. If not, the water will degrade the oil and potentially promote corrosion within the engine.

Other forms of contamination that affect oil life include questionable oil additive products, excessive soot from a poorly running diesel and residue left by pressurized injector cleaning. These contaminants all affect engine oil life over time. As vehicles age, the chance of encountering some or all of these contaminants increases. Since these reactions start with the turn of a key and continue even when the engine is not running, there has to be a time limit placed on lubricant life for good vehicle protection. Without a qualified used oil analysis program in place, a conservative limit is used to ensure the oil is changed prior to becoming critical; hence the one-year limit on AMSOIL Signature Series Motor Oil. Keeping your vehicle working optimally through good preventative maintenance also helps to keep contamination to a minimum, but it does not eliminate it altogether.

The bottom line is that after being used for one year, there are just too many possible chemical reactions to guarantee protection without used oil analysis for verification. If you are using an AMSOIL product, you have proven that you care about your equipment. Making wise choices and following proven techniques is the next step in becoming a lubrication expert. If it is true that information is power, then everyone should be able to explain how contamination affects engine oil life over time – on a quest to reach AMSOIL superhero status! ■

Five Challenges (and Solutions) to Optimum ATV

ATVs and UTVs used for racing, trail riding, heavy hauling and nearly every other application share at least one trait: they pose significant challenges to the fluids that protect them. Despite spending thousands to purchase and modify their machines, some enthusiasts mistakenly see no reason for using premium fluids when performing service. AMSOIL synthetic motor oil, grease, fuel additives and other fluids, however, are formulated to meet the challenges posed by ATVs and UTVs better than lower-cost conventional products.

1. Extreme Engine Stress

High-rpm, hot-running ATV and UTV engines create extreme conditions that can quickly degrade inferior oils. The churning action of engine parts combined with elevated heat causes shearing forces that can tear apart, or shear, the molecular structure of the oil. Additionally, the intense pressure the oil undergoes as it is repeatedly forced through tight clearances, such as the interfaces of the piston ring/cylinder wall and cam lobe/lifter, also causes viscosity loss due to shear. Oil that has sheared out of its intended viscosity range can fail to form a protective lubricating film on critical engine parts, leading to accelerated wear.

2. All-Season Performance

Adding to the challenge, engine oil must balance cold-weather fluidity with high-temperature protection, particularly in models used year-round where ambient conditions vary widely. For this reason, many ATVs and UTVs require oils with a broad viscosity rating (e.g. 0W-40). Lower “W” numbers indicate the oil flows more readily at colder temperatures, improving

cold starts and allowing the oil to circulate quickly for fast engine protection. The second number indicates the oil’s viscosity at operating temperature. Higher numbers indicate the oil remains thicker. Because increased viscosity relates to the oil’s ability to bear load, one might assume a higher viscosity at operating temperature equals increased protection. However, using oil with an unnecessarily high viscosity can increase fluid friction, which reduces fuel efficiency. It can also increase operating temperature, hastening oil oxidation and degradation. Oil that is too thick to flow through oil galleries and tolerances designed for a specific viscosity can fail to protect the engine. Finding the optimum balance is vital to all-season performance.

The synthetic chemistry of AMSOIL Formula 4-Stroke® Power Sports Synthetic Motor Oil (AFF) provides performance conventional oils simply can’t match. Conventional oils contain wax, which causes them to thicken in cold weather. They also can boil off at high temperatures, leaving behind harmful engine deposits. Formula 4-Stroke Power Sports Oil, on the other hand, does not contain wax or other impurities. It offers improved resistance to high-temperature boil-off and viscosity loss due to shear, resulting in maximum wear protection and all-season protection and performance.

3. Ethanol Problems

Currently, most gasoline sold in the U.S. contains up to 10 percent ethanol (E10), and government agencies and lawmakers have authorized sale of gas containing 15 percent (E15). Ethanol is susceptible to water intrusion; when water collects

in the gas tank through condensation or other means, the bond between ethanol and gasoline can break because ethanol is hygroscopic (it likes water more than it likes gasoline). This phenomenon is known as phase separation. The ethanol bonds with the water and sinks to the bottom of the fuel tank, which can create a host of problems, including the formation of gums, varnish and other insoluble debris that can plug fuel flow passages and negatively affect engine performance. When this ethanol/water mixture is pulled into the engine, it creates a lean-burn situation that increases combustion chamber temperatures and can lead to piston scuffing or catastrophic engine failure.

Treat gasoline stored in cans with AMSOIL Quickshot® (AQS), formulated to address ethanol-related problems, specifically phase separation. Quickshot contains a high concentration of potent cleaning agents that clean combustion chamber, injector and carburetor deposits for maximum performance. It is designed for use at each fill-up for best performance.

4. Chaincase & Gearcase Protection

To reduce costs, some enthusiasts use automatic transmission fluid or gear lube in their chaincases and gearcases. Neither fluid, however, is engineered for these applications. Automatic transmission fluid is a hydraulic fluid formulated without the extreme-pressure additives needed to provide enhanced wear protection, leaving gears and chains vulnerable to premature



Life & Performance

failure. Automotive gear lube is designed to lubricate hypoid gears and is generally too thick for proper chain and gear lubrication, impairing circulation and leading to wear and decreased energy efficiency.

AMSOIL Synthetic Chaincase & Gear Oil (TCC) is specifically formulated for powersports chaincase and gearcase applications. It contains extreme-pressure additives to provide an extra measure of wear protection, while it is also designed to repel water and resist foam and corrosion.

5. Water Washout & Increased Heat

Whether at work or play, ATVs and UTVs are commonly exposed to water, mud and ice. Frequent water exposure can wash the grease from suspension and steering components, inviting corrosion and wear. AMSOIL Synthetic Water Resistant Grease (GWR) features increased adhesion and cohesion properties compared to other greases. It resists water washout to remain in place, making it perfect for ATV and UTV applications. It is available in convenient 3-oz. cartridges (GWR3P) for use with the AMSOIL Grease Gun Kit (GLCKT), which provides the ideal package size for powersports applications.

AMSOIL Series 2000 Synthetic Racing Grease (GRG) is recommended for high-performance racing ATVs exposed to high heat and friction. It is specifically formulated for maximum friction-reduction and high-temperature performance.

Following these simple yet effective guidelines when performing maintenance can help enthusiasts get the best performance and most years out of their ATVs and UTVs. ■



Premium AMSOIL ATV & UTV Products

Formula 4-Stroke® Power Sports Synthetic Motor Oil

Specially formulated to provide serious protection and performance in recreational four-stroke motors, including ATVs and snowmobiles. Broad 0W-40 viscosity rating provides superior protection in both hot and cold temperature extremes.

Quickshot®

Formulated to thoroughly clean varnish, gums and insoluble debris in two- and four-stroke gasoline-powered small engines and powersports equipment fuel systems, restoring peak performance. Effectively addresses performance issues related to ethanol, water and dirty pump gas. Stabilizes fuel between uses and during short-term storage periods. See package for treat rates.

Synthetic Chaincase & Gear Oil

Provides superior protection and performance for enclosed chains. Ideal for snowmobiles, ATVs and general equipment. Extreme-pressure additives provide extra wear protection. Extends chain life, repels water and inhibits rust, oxidation and foam. Superior low-temperature starting, performance and protection. Includes convenient pour spout.

Series 2000 Synthetic Racing Grease

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

Synthetic Water-Resistant Grease

Resists water washout and degradation. Excellent protection for boat trailer wheel bearings, outboard motors, ATVs, UTVs and other components frequently exposed to water.





Barcia Crowned East Coast Champion, Again

Team AMSOIL rider takes back-to-back titles

Justin Barcia made the most of his time on top of the GEICO/AMSOIL Honda CRF 250 this season. “Bam Bam,” as he is affectionately referred to for his long, golden locks and his aggressive riding style, wrapped up his second straight Monster Energy Supercross East Coast Lites championship in New Orleans.

The New Jersey native spent the offseason at his Georgia home preparing to defend his 2011 title, and he started the 2012 season on a hot streak by winning the first four East Coast Lites races. He picked up a second in Indianapolis and returned to the winner’s circle in Toronto. In Houston, he finished second despite leading the entire race before tangling with a lapped rider. Entering the New Orleans event, Barcia held a 32-point lead in the standings and needed a clean ride to wrap up the championship.

“I’m not going to let the chance to win the championship change what I’m doing,” said Barcia prior to the New Orleans event. “I just want to go out there and race smart and smooth like I have every weekend.”

In New Orleans, Barcia did something he hadn’t done in two years: he missed the podium for the first time in his professional career

since the Jacksonville race in April 2010. The podium finish wasn’t what mattered most, however, and “Bam Bam” ran a smart, clean race, finishing fourth and wrapping up the title.

“We all put a lot of hard work into this season,” Barcia said. “Personally, I’ve put in 100 percent effort, and got 100 percent out of it. The team did its very best to make sure the bike was perfect every weekend. This title and tonight’s celebration is a reward everyone on the GEICO/AMSOIL/Honda team is sharing tonight.”

In 2013, it is expected Barcia will move up to the Supercross class. Barcia has been a championship rider for Team AMSOIL since his amateur days, which produced an astounding 10 amateur titles.

As a pro, Barcia has 10 wins in the Lites class and will have a chance to pick up wins 11 and 12 at the Monster Energy Supercross finals in Las Vegas May 5. The Las Vegas race also wraps up the 2012 West Coast Lites championship, which is expected to come down to the very end as Barcia’s teammate, Eli Tomac, is battling with Dean Wilson for the championship.

The Las Vegas finale will air live on SPEED.



The 2012 TORC season kicked off in Charlotte last month, and the best show on dirt lived up to its reputation. Team AMSOIL found the podium multiple times throughout the weekend. Deadlines are too tight to provide full coverage this month, so you’ll have to wait until June to read about all the TORC action in *AMSOIL Magazine*.

But that isn’t your only option; we update amsoilracing.com daily. If you want to keep up with TORC, Monster Energy Supercross and all the other great race series AMSOIL sponsors, check out amsoilracing.com regularly.

While you’re there, take a minute to explore the Events section of the site. We’ve developed some great partnerships with annual competitions, tours and rallies that bring performance-minded people together for a good time. Whether you’re a race fan, a performance buff or both, amsoilracing.com is the place to keep up with all the latest news.

Rinker, Teague Power Team AMSOIL on the Water

AMSOIL continues partnerships in powerboat industry

Rinker Racing won 13 series and national championships in 2011. Bob Teague was equally impressive, winning seven races and three championships. Both teams will be back on the water in 2012 searching for continued success across the nation's waterways.

Long-time Team AMSOIL powerboat driver Terry Rinker was joined full-time under the awning in 2011 by his son, Rob Rinker. Together, the father and son duo gobbled up wins and titles as both drivers were inducted into the APBA Hall of Champions.

"I would have to say 2011 was one of our best years ever," said Terry Rinker. "We raced a lot, but we also won a lot. We are looking forward to 2012 and getting some more wins for the AMSOIL/Rinker Racing Team."

Rinker started the 2012 season with four wins at the first two events. The team races again June 23-24 in Bay City, Mich.

For Teague, last season was a continuance of a career filled with highlights. In 2011, Teague pushed the #77 AMSOIL Skater to

the AMSOIL Offshore Powerboat Association National, World and High Points (all classes) championships.

Teague also won the Bimini Ocean Challenge Endurance race while setting a new Cat Lite record. He also propelled the boat to a POPRA World Kilo Record of 131.981 mph.

"It's kind of been the norm to go out and win races and set records," said Teague. "But we couldn't do it without the support we get from AMSOIL. They mean a lot to our program and the sport of off-shore racing."

Teague and the AMSOIL Offshore Powerboat Series start the 2012 season in Ocean City, Md. for the "Bull on the Beach" Grand Prix May 11-13. The show will air on Velocity later in the year.



TORC Moves Television Package to SPEED TV

Top off-road short-course series will feature 18 weeks, plus two live shows in 2012

The top off-road short-course racing series in the world is moving exclusively to SPEED TV. In April, officials with SPEED and the Traxxas TORC Series presented by AMSOIL announced a new partnership that moves "The Off-Road Championship" to SPEED, with 18 new episodes this fall. Additionally, the Charlotte (4/20) and Chicago (7/20) rounds of the series will be broadcast live.

"Unprecedented!" said USAC President Kevin Miller of the live broadcasts and TORC's new partnership with SPEED. "Our two live airings from the Charlotte and

Chicago NASCAR venues are groundbreaking for the sport of short-course off-road racing."

Entering its third season of production, TV's premiere off-road racing reality show, "TORC: The Off-Road Championship," has revolutionized high-definition motorsports coverage as the largest long-form TV production that uses RED digital cinema cameras. Never-before-seen viewpoints are created using HD GoPro cameras mounted on radio-controlled helicopters in the sky and Traxxas radio-controlled trucks driven right on the track. The 18

new episodes of original programming begin on SPEED this fall with week-to-week story-telling of all the action, both on and off the track.

A full schedule will be made available at www.amsoilracing.com. The second weekend of racing will be held Memorial Day Weekend at Red Bud MX in Buchanan, Mich.

All 2012 TORC races are streamed live at www.amsoilracing.com. ■

SPEED

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Holiday Closings

The AMSOIL corporate headquarters and U.S. distribution centers will be closed Monday, May 28 for Memorial Day. The Edmonton and Toronto distribution centers will be closed Monday, May 21 for Victoria Day.

Filter Applications and Cross-Reference CD and Download Now Available

The new Filter Applications and Cross-Reference Guide CD (G3001) and download are now available, allowing users to upload the file to their computers and receive automatic updates when new filter and application information becomes available. The CD is available for a minimum charge, and the download is available free-of-charge to Dealers and customers at www.amsoil.com/filterapplicationsguide.aspx.

Stock #	U.S.	Can.
G3001	5.00	5.30

OE Synthetic Diesel Oil Now API-Certified

For customers and accounts that prefer an API-certified diesel oil, AMSOIL OE 15W-40 Synthetic Diesel Oil (OED) is now API CJ-4 certified and bears the API starburst on its packaging.

WIX and NGK Price Adjustment Effective June 1

Effective June 1, WIX and NGK products are subject to a minimal price adjustment.

SAE 60 Super Heavy Weight Synthetic Racing Oil 2.5-Gallon Bottles Discontinued

Due to low demand, 2.5-gallon bottles of SAE 60 Super Heavy Weight Synthetic Racing Oil (AHRTP) are discontinued and available while supplies last.

CLOTHING AND PROMOTIONAL ITEMS

Very limited quantities of the following AMSOIL clothing and promotional items are available while supplies last.



2011 Rally T-Shirt

Highlights AMSOIL as the Official Oil of the Sturgis Motorcycle Rally, Daytona Bike Week and Laconia Motorcycle Week. Constructed of 100 percent cotton. Sizes L-3X.

Stock #	Size	U.S.	Can.
G2838	L	15.75	16.95
G2839	XL	15.75	16.95
G2840	2X	17.75	19.05
G2841	3X	17.75	19.05

Logo Key Ring

Features AMSOIL logo and "The First in Synthetics" on a black background.



Stock #	U.S.	Can.
G2046	1.20	1.30

Navy and Black Flame Beanie

Navy and black flame beanie with embroidered AMSOIL logo on front.



Stock #	U.S.	Can.
G2740	13.95	14.95

AMSOIL DEALERSHIP OPPORTUNITIES AVAILABLE

Be your own boss. Full-time or part-time, an AMSOIL Dealership is the ideal business opportunity. No quotas to fill. No inventory requirements. Contact your sponsoring Dealer or see the Preferred Customer Zone for more information. To upgrade to Dealer, click the "Opportunities" link at the top of www.amsoil.com (while logged into the Preferred Customer Zone) or order or download a Change of Status Form (G18US in the U.S., G18UC in Canada) from the Preferred Customer Zone.

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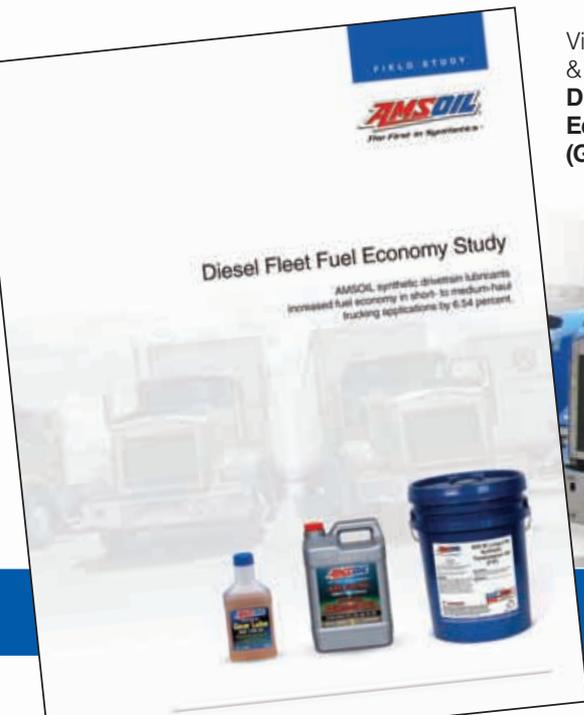
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