

Signature Series Synthetic Motor Oil Battles Sludge



Think differentially THE NEW AMSOIL SEVERE GEAR® EASY-PACK







100% SYNTHETIC GEAR LUBE



^{1 U.S. QUART} • 946 mL

CAUTION: MAY CAUSE EYE IRRITATION Carefully read precadings



AMSOIL SEVERE GEAR 100% SYNTHETIC GEAR LUBE (SVG, SVO)

The new easy-pack helps you access tough-to-reach fill holes. The flexible packaging makes gear lube installation cleaner and faster, and eliminates the need for a pump.



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Letters to the Editor

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THE COVER

The 0W-16 viscosity is an up-and-coming need in the automotive market. If you're going to use an oil this light, it better be tough. We've got you covered.





From the President

When I was young, I realized that I had to dive in deep in order to succeed in school. I could not just coast by on autopilot and expect the high marks I desired. I had to immerse myself in my studies. I put images on my bedroom walls to remind me to stay focused. One of those images was of a snowboarder carving down an extreme mountainside, and it said "if it is to be, it's up to me," That really hit home with me. No one was going to help that guy off the mountain, the same way no one was going to give me my good grades. I gave that sign to my son and hung it in his bedroom in hopes that it will have the same effect on him.

Personal accountability is an age-old virtue I hold in the highest regard. It's extremely powerful, and it benefits not only those who employ it, but everyone around them. It's a big part of what made America the country it is. Unfortunately, not everybody feels the same way. Some of that is because truly holding yourself accountable is difficult, especially when the chips are down. We need to accept personal responsibility for our futures, and not make excuses or blame external conditions when we fail to meet our expectations. It's easy to blame someone else or some outside force when things go wrong. It's not easy to admit that you might have some responsibility for falling short of success.

The truth is, we have much greater control over our futures than many people believe. Holding yourself accountable and employing a strong work ethic will overcome many other shortcomings that might block your path. That's true for just about everything in life. Want to get in better shape? If you commit yourself and put in the work, you will. If you don't, you won't. Want to save money for a new UTV? If you manage your finances properly, you will. If you don't, you won't.

This is true for your AMSOIL business, too. The only way you are going to succeed is to take responsibility for your own future and go out and do it. That's what all of the successful Dealers who appear in this magazine did. They did not achieve success by waiting for business to come to them; they accepted responsibility for their own futures and worked hard to achieve their goals. There's no doubt they've logged lots of long days and weekends, but they did it with a positive attitude because they understood that their personal efforts were what would deliver success and financial security. When you have that attitude, work isn't a chore; it's an opportunity to realize your dreams. Were they a little lucky? I'm not so sure luck had much to do with it; however, it is true the harder you work the luckier you get.

You don't have to be a genius to be successful. If you've got common sense, you're highly motivated and you hold yourself accountable, my money's on you. If you're reading this. you're at least partway there. You recognized the AMSOIL opportunity as something of value. Now it's up to you to decide what you want to do with it, commit to your decision and act accordingly. If you want a more rewarding, financially secure future for you and your family, you've got to go get it. AMSOIL offers you a way of doing that. The rest is up to you. Don't wait - take charge and go get it!

Alan Annting

Alan Amatuzio President & CEO



LETTERS TO THE EDITOR

AMERICAN EXPRESS

Why does AMSOIL not accept American Express cards for payment online? Every other major online business does.

I use American Express as my primary business credit card, so it is inconvenient and creates extra paperwork having to use a Visa card to pay for my orders.

I have also had some of my customers ask why they cannot use American Express cards to pay AMSOIL online.

Regards,

Larry Simpkins

AMSOIL: Thank you for your question, Larry. We have considered accepting American Express, but due to the high fees, it's not a standard payment option at this time. It is something we evaluate regularly, and it is under examination by our finance team right now.

ONLINE PRODUCT GUIDES

Why don't you have categories for motor homes (diesel pushers) and RVs in the online Product Guides? Also Can Am* Spyders*?

Frederick Miller

AMSOIL: Motor homes and RVs present a challenge for us, Frederick. Manufacturers can change engine options for each model every year, and in some cases, within a year. While the RV market itself is large and we have had some success there, the return on investing in an RV Product Guide is insufficient to justify the substantial work it would require. As such, we have chosen not to focus on this area. Our Technical Services Department (715-399-TECH, tech@amsoil.com) is happy to help with any motor home and RV application questions.

You'll be glad to know that we will soon be launching an update to our Powersports Guide that will include many new models and 127 brands, including many Can Am Spyder applications.

PERFORMANCE STUDIES

I think there's a big need for new relevant studies of performance across the board of products.

Robin Gordon-Armstrong

AMSOIL: We are always working to provide more performance claims to aid

in the sale of AMSOIL products, Robin. Check out recent Signature Series Synthetic Motor Oil proof-of-performance testing in the areas of sludge protection (pp. 10-11 of this issue), turbocharger deposits (September AMSOIL Magazine), low-speed pre-ignition (August AMSOIL Magazine) and wear (July AMSOIL Magazine), as well as Signature Series Synthetic Diesel Oil proof-of-performance testing in the area of rust protection (May AMSOIL Magazine) and SABER® Professional proof-of-performance testing in the area of string trimmer protection (September AMSOIL Magazine). You'll also find a significant increase in claims highlighted in the new Factory-Direct Catalog inserted in this issue.

DIESEL FUEL ADDITIVES

When I order Diesel Injector Clean or Diesel Cetane Boost in the 64 oz. bottles, they leak. Have you considered a different cap?

Mark Cunningham

AMSOIL: Thank you for your question, Mark. If you see leakage before the bottle is initially opened, please contact Technical Services (715-399-TECH, tech@amsoil. com) for a replacement. If a leak occurs after the production seal is removed, that is a different issue. The secondary seal is a laminate of fibrous material and plastic that helps seal the package after the original seal is removed, but it has a shelf life due to the nature of the seal itself and the chemistry in the bottle. If you open the 64 oz. bottle, then let it sit for an extended period, try buying a smaller package size. We are in the process of searching for a more robust cap, but due to the nature of the chemistry, finding one is proving difficult. You can rest assured that we will continue to investigate this issue. Thank you for your patience.

45TH ANNIVERSARY CONVENTION

We would like to thank everyone involved for such a fantastic 45th Anniversary Convention. The event was first class all the way. Thank you does not seem to be enough. As Dealers, we also appreciate the work that AMSOIL corporate staff does daily to help us be successful and the extra work that went into putting on the convention. Everyone at AMSOIL has great enthusiasm and passion, are always willing to help and we want you to know it does not go unnoticed. We are happy and blessed to be a part of AMSOIL. It is infectious and helps make our Dealership fun. We look forward to everything we do and every time we have to contact someone at the AMSOIL office or distribution centers.

Thank you!

John and Dianne Moldowan

AMSOIL: We are thrilled you enjoyed the 45th Anniversary Convention, John and Diane, and thank you for your kind words.

CLOTHING AND PROMOTIONAL ITEMS

Just a thanks for the better items being offered as far as clothing and promotional items, but I still feel there is much needed in this department. Can we take more input and suggestions from Dealers? Also, I and many other Dealers feel AMSOIL should sell these items at cost for us. After all, it is corporate that has the most to gain by Dealers promoting the AMSOIL products. I know firsthand through other companies and people that the pricing on many of these items is overpriced. It's about all of us promoting AMSOIL products. The cheaper the cost on promoting, the more Dealers can promote.

Thank you,

Tom Kostreba

AMSOIL: Thanks for the feedback, Tom. We are taking a hard look at our clothing and promotional items right now. We are evaluating the current options and vendors, and we are making a concerted effort to bring down prices. We have always focused on supplying quality clothing items rather than cheap garments, and that often means having to charge a little more. Nonetheless, you can expect major changes ahead for the spring Clothing and Promotional Items catalog (G1650).

Email letters to: letters@amsoil.com

Or, mail them to: AMSOIL INC. Communications Department Attn: Letters 925 Tower Avenue Superior, WI 54880

Letters are subject to editing for length and clarity; please include your name, address and phone number. Unsigned letters will not be published.





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New technology offers new opportunities to excel

Timing-chain wear is the latest challenge facing the industry.

Matt Erickson | TECHNICAL MANAGER – PCLT PRODUCTS AND MECHANICAL R&D

Back in March, I told you about a problem surfacing among some turbocharged gasoline-direct-injected (T-GDI) engines: timing-chain wear.

Experts think soot is to blame. Although most people associate soot with oldfashioned diesel engines, a modern T-GDI engine can produce more soot than an older diesel not equipped with a particulate filter.

Life is often a series of trade-offs, and engine design is no exception. The industry is willing to accept a little soot in exchange for improved fuel efficiency and performance.

Well, a little soot is turning into a big problem for some drivers. Soot can accumulate in the motor oil in T-GDI engines. The tiny particles can agglomerate into larger wear-causing particles that cause problems inside your engine before the oil filter has a chance to capture them. These particles appear to be causing accelerated timing-chain wear on some vehicles. In fact, Ford* issued a technical service bulletin (#14-0194) that acknowledges timing-chain wear as a problem in certain vehicles equipped with its popular 3.5L EcoBoost* engine.

If you've never seen an automotive timing chain, they're similar in design to a bicycle chain but far more robust. A series of links are connected by pins on which they pivot. Soot particles can lodge in the tiny clearances between the links and pins. They slowly scour the metal surfaces as the engine is running, enlarging the clearances.

After a while, the timing chain stretches. It doesn't "stretch" like a rubber band; instead the enlarged clearances between the links and pins create slack, effectively increasing the chain's



diameter. Soon your roughly 43-inch (109.22-cm) timing chain becomes a 43.1-inch (109.474-cm) or larger timing chain. While the tensioner can take up some of the slack, it has its limits.

If the chain stretches beyond the capability of the tensioner, the camshaft and crankshaft sensors can trigger an engine code and even send the engine into "limp" mode.

To combat this problem, the industry has developed a test specifically to measure an oil's ability to resist soot and fight timing-chain wear. It's scheduled to become part of API SP and ILSAC GF-6, the next generation of motor oil specifications. Those specs aren't slated for introduction until 2020, however, and don't be surprised if they're delayed (again).

Well, we don't wait around for the industry to catch up to problems – we develop solutions now. The current Signature Series Synthetic Motor Oil formulation is a prime example. We kept timing-chain wear in mind when we reformulated it last fall.

Even though passing a chain-wear test wasn't required at the time, we subjected Signature Series to the Chain Wear Test at an independent third-party lab anyway. Although the test was still

Soot particles can infiltrate and scour the clearances between timing-chain links and pins, causing the chain to stretch. Soon your engine triggers a check-engine light – or worse. Signature Series helps prevent timing-chain wear.

under development and hadn't been finalized, we wanted to run it anyway to get out front of timing-chain problems. The test used a Ford 2.0L EcoBoost engine run a total of 144 hours for 54 cycles. The timing chain is measured prior to installation, after break-in and following the test. Results are reported in percentage of change in chain length.

How did Signature Series perform? Bear in mind that the test and the allowable limits are still under development, but I'm happy to say Signature Series allowed just 0.05 percent change. It beat the proposed standard by more than 50 percent. By the way, the chain image shown here is the same timing chain we tested. You can see how great it looks.

This is yet another example of how we're pacing the industry. We were one of the first, if not the first, with oils that provided 100 percent protection against low-speed pre-ignition (LSPI),¹ another problem plaguing the industry. We introduced the new SEVERE GEAR[®] easy-pack, an industry first. And now, while the industry wrestles with the problem of timing-chain wear, we already have a formulation on the market that helps solve the problem. That's just another feather in your cap as you talk with prospects and customers.

18ased on zero LSPI events in five consecutive tests of AMSOIL Signature Series, XL and OE 5W-30 Motor Oil in the LSPI engine test required by the GM dexos1® Gen 2 specification.



OE OW-16 SYNTHETIC MOTOR OIL: LIGHT AND STRONG

AMSOIL OE 0W-16 Synthetic Motor Oil launches Oct.2. Adding a 0W-16 viscosity to the OE lineup helps you capture a growing market.

A 0W-16 viscosity motor oil may seem exotic to North American drivers, but as fuel efficiency requirements increase, it may become a common recommendation of manufacturers worldwide. Japanese engineers have long experimented with ultra-thin motor oils, and 0W-16 has been in regular use in Japan since the 90s.

The Benefits of Going Thin

Lower viscosity motor oil can increase fuel economy, and the pressure to create engines that sip less fuel has hastened the introduction of these viscosities to North America. The stated fuel mileage estimates for several 2018 vehicles were calculated with 0W-16 motor oil installed. Beyond fuel economy, lower viscosity oil can also provide excellent cold-starts in the most frigid temperatures.

OE 0W-16 Synthetic Motor Oil

The primary concern with low viscosity oil is wear protection. Like the rest of the OE line, OE 0W-16 develops a strong fluid film that keeps metal components separated and protected. Our work didn't end with simply blending a new viscosity. OE 0W-16 Synthetic Motor Oil (OES) is formulated with unique anti-wear additives that protect critical engine parts like pistons and cams. This added protection is particularly important in the extreme environments produced by today's smaller-displacement engines that run on lower viscosity oil.

- Provides advanced wear protection
- Improves fuel economy & maintains low emissions
- Protects pistons from low-speed pre-ignition
- Keeps engines clean
- Protects in all temperatures
- Meets the requirements of popular new vehicles like the 2018 Toyota* Camry* and the 2018 Honda* Fit*
- **Recommended** for use in applications that require the API SN PLUS (Resource Conserving) specification

OE Synthetic Motor Oil Data Bulletin

Stock # Qty. U.S. Can G3404 25 4.10 5.60

OE 0W-16 Synthetic Motor Oil

Why No API Starburst?

The International Lubricants Standardization and Approval Committee (ILSAC) has not recognized the 0W-16 viscosity for the current GF-5 oil category, which is required to display the startburst. It will likely be included in the new GF-6 category expected in 2019 or 2020. As the API "donut" indicates on the back label, OE 0W-16 is licensed for API SN Plus (Resource Conserving).

100% SYNTHETIC 100% SYNTHETIC MOTOR OIL ADVANCED ENGINE PROTECTION SAE OW-16



DIESEL RECOVERY RELAUNCHES

Temporarily unavailable over the summer as we explored new package options, AMSOIL Diesel Recovery relaunches in 30-oz. (887-ml) bottles (DRCQT) in the U.S. in late October (watch the Dealer Zone for an announcement of availability). The new containers will be available in Canada (DRCQTC) when supplies of the existing container (DRCCNC) are exhausted. The 1-gallon (3.78-litre) bottles (DRC1G) and 55-gallon (208-litre) drums (DRC55) are discontinued.

Gelled Fuel Plagues Diesel Engines in Cold Temps

As the temperature drops, wax naturally found in diesel fuel begins to form crystals. The point at which wax crystals form is known as the cloud point. These wax crystals can eventually clog the fuel filter and starve the engine of fuel, preventing it from starting and can even stall out a running engine.

Diesel Recovery Melts Gelled Fuel

Diesel Recovery quickly melts gelled fuel to allow the operator to start the engine and continue driving with minimal downtime. Diesel Recovery separates the molecular bonds of wax crystals that have agglomerated in diesel fuel. It thaws frozen fuel filters and reduces the need for a new filter, saving money and preventing an inconvenient trip to an auto parts store.

NEW



	Diesel Recovery
 •	

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MORE PREMIUM AMSOIL DIESEL FUEL ADDITIVES

DIESEL INJECTOR CLEAN (ADF)

- Cleans dirty injectors
- Lubricates pumps and injectors to reduce wear
- Extends fuel-filter life
- Improves fuel economy up to 8%
- Restores power and torque
- Reduces smoke and emissions

DIESEL COLD FLOW (ADD)

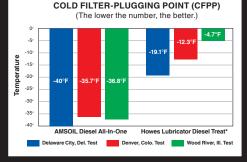
- Lowers cold filter-plugging point (CFPP) by up to 40°F
- Enhances engine reliability in cold temperatures
- Fights gelling in cold weather
- Improves low-temperature startability
- Prevents wax settling during storage
- Inhibits fuel-filter icing

DIESEL CETANE BOOST (ACB)

- Increases cetane up to 7 points
- Delivers maximum horsepower
- Increases fuel economy
- Improves startability
- Smooths idle
- Reduces smoke and emissions

DIESEL ALL-IN-ONE (ADB)

• Combines the benefits of Diesel Injector Clean, Diesel Cold Flow and Cetane Boost in one convenient package



Superior Cold-Temperature Protection

Provides as much as **32°F better protection** against cold-temperature gelling than Howes Lubricator Diesel Treat.¹ Plus raises cetane up to 4 points.

¹Based on independent testing in July 2017 of AMSOIL Diesel All-In-One and Howes Lubricator Diesel Treat using diesel fuel representative of the U.S. marketplace and Howes' recommended treat ratio for above 0°F.



721215/1114

Signature Series has **50 percent more detergents**¹ to help keep oil passages clean and promote oil circulation.

¹ vs. AMSOIL OE Motor Oil

SIGNATURE NOTOR OIL

The Sequence VG Engine Test measures an oil's ability to prevent harmful engine deposits and sludge. Signature Series Motor Oil delivers 90 percent better protection against sludge² to keep engine oil passages clean and clear.

The health of your engine depends on motor oil circulating quickly and efficiently through the system, but sticking components and obstructed passages inhibit motor oil from lubricating, cooling and protecting your engine. Engine "sludge" occurs when oxidized oil and contaminants build up on engine surfaces. It can restrict the flow of oil to the point of engine failure and costly repairs.

The Sequence VG Engine Test

Engine failures due to sludge are often caused by a clogged pick-up tube screen – the motor is effectively starved of oil. The Sequence VG Engine Test determines how well an oil resists sludge formation and keeps the lubricant flowing freely throughout the system. The test is required for API SN PLUS – a specification recommended by most domestic vehicle manufacturers.

WHY YOU SHOULD WIN THE WAR AGAINST SLUDGE

- Clean engine = efficient engine
- A clogged component, like an oil pick-up tube, will result in oil starvation and **eventual engine failure.**
- Sludge can greatly reduce the amount of oil circulating through your engine, leaving it vulnerable to damage and wear.



SERIES SYNTHETIC BATTLES SLUDGE



THE RESULTS

Signature Series Synthetic Motor Oil was subjected to the Sequence VG to measure its ability to prevent sludge. As expected, Signature Series produced an oil pick-up tube screen virtually free from sludge (see image). Our unique combination of detergents and high-quality base oils control oxidation and sludge to keep engines clean and efficient.

90% better protection against sludge²

TEST PARAMETERS

Engine	Ford* 4.6L V-8
Duration	216 hours
Measures	Sludge and varnish deposits, piston ring sticking, clogged oil pump screens and roller pin wear
Simulates	Taxi, delivery or commuter vehicle service
Requirement	Oil pick-up tube screen limited to 10 percent blockage

SLUDGE: WHERE IT STARTS & HOW IT ENDS

The valve cover and oil pan are generally the first areas sludge appears.



The oil pick-up tube screen is often the next spot it accumulates, impeding oil flow through the system.



What begins as a thin film of lacquer or varnish deposits eventually bakes into an expensive mess.

² Based on independent testing of AMSOIL Signature Series 5W-30 in the ASTM D6593 engine test for oil screen plugging as required for the API SN PLUS specification.



HOW AN EXHAUST POWER VALVE WORKS (AND HOW TO PROTECT IT)

Exhaust power valves enable snowmobiles to deliver excellent throttle response at low rpm and maximum top-end power. That's why you'll find them on just about every two-stroke sled made since the 1980s. But performance suffers if you use a low-quality oil. Here's why.

Like any engine, a two-stroke snowmobile engine requires air to operate. The engine must draw sufficient air into the cylinder for combustion. Just as importantly, though, the engine must expel the spent gases through the exhaust port and out the muffler. In a properly running engine, this takes place thousands of times per minute and goes unnoticed by the rider.

Two-stroke snowmobile engines, however, are extremely sensitive to exhaust-port size. A smaller port leads to higher air velocity, which translates into improved low-rpm power and throttle response. As an analogy, think of placing your thumb over the end of a garden hose. Restricting the opening increases water velocity.

Increased air velocity translates into immediate throttle response and excellent low-rpm power. Riders notice the effect when they rocket off the starting line or accelerate out of a corner.

Power plateau

The problem, however, is that a twostroke engine's power band is extremely narrow. As engine rpm climbs, power quickly plateaus, leading to poor highrpm performance. Narrowing the exhaust port leaves riders with a sled that jumps off the line, but lacks top-end speed.

Larger exhaust ports create the opposite effect. Reduced air velocity reduces throttle response and low-rpm power, but boosts top-end power. How can engineers design an engine that offers the best of both worlds? The solution seems obvious: vary exhaustport size relative to operating conditions.

That's exactly the function of exhaust power valves, which are commonplace on modern snowmobiles. Yamaha* patented what's considered the first exhaust power valve in 1977 for its racing dirt bikes. By 1985, the technology appeared on a Rotax*-powered race snowmobile that competed in the Eagle River World Championship Derby. The sled, running what was dubbed the "Rotax Adjustable Variable Exhaust Valve," or "RAVE" valve, showed a distinct advantage off the line and out of the corners compared to other sleds. Sometimes you still hear riders refer to exhaust power valves as RAVE valves.

How do exhaust power valves work?

An exhaust power valve automatically varies exhaust-port size based on conditions. When starting from a dead stop, it restricts port size, increasing air velocity and throttle response. As engine rpm climbs, the valve opens to provide better high-rpm power.

Older exhaust power valves were strictly mechanical. They relied on air and spring pressures to open and close under the proper conditions. Though not as tunable as today's versions, they were extremely reliable. Ski-Doo* used mechanical exhaust power valves into the mid-2000s.

Modern exhaust power valves are electronically controlled. The sled's electronic control module uses enginerpm and throttle-position data to electronically actuate the valves for best performance. This arrangement provides more finely tuned performance than older mechanical power valves.

However they're actuated, exhaust power valves share some common attributes.

Guillotine-shaped

Power-valve shape is no accident. They're designed to conform to the shape of the exhaust port, allowing the opening to expand or contract while



maintaining its shape. Their up-and-down action invites comparison to the infamous 18th Century device.

Reside in the exhaust stream

As the name implies, exhaust power valves are placed directly in the path of hot exhaust gases that can reach 1,000°F (538°C).

• Sensitive to oil quality

Two-stoke engines burn oil as part of combustion, meaning deposits can form on the power valves if the oil doesn't burn cleanly.

Oil quality is vital for peak performance

Oils incapable of burning cleanly and resisting deposits in the face of extreme heat allow deposits to form on the power valve. If bad enough, the valve will stick and reduce engine power and performance. Riders are forced to remove and clean the valves periodically, wasting time.





POLARIS* 600 POWER VALVE ASSEMBLY **Exploded View**



Exhaust Port Low-rpm (partially closed)



Exhaust Port High-rom (fully open)

pressure so the exhaust power valve's leading edge protrudes into the port and restricts its size. This increases air velocity for maximum throttle response and low-rpm power.

In the Polaris 600 engine shown here, increasing cylinder pressure from the rider depressing the throttle actuates the exhaust bellows, which overcomes spring pressure and allows the valve to open. This results in optimum top-end power and speed. But if heavy carbon deposits form on the valve due to low-quality oil, the valve can stick, reducing performance.

RECOMMEND THE CORRECT AMSOIL SNOWMOBILE OIL TO YOUR CUSTOMERS

- Prevents piston scuffing
- Fights exhaust power valve deposits
- Outstanding cold-flow (-69°F)

TARGET MARKET

- Hardcore enthusiasts
- · Owners of powerful new sleds that require extra protection, including those with Ski-Doo* E-TEC* and Arctic Cat* C-TEC* engines
- Snowmobile dealerships and other shops that cater to snowmobilers
- Easy start
- Low smoke
- Excellent wear protection

TARGET MARKET

- Retailers • Occasional riders
- Those who desire the convenience of using one oil for snow and marine applications
- Vintage sled owners
- Cost-conscious customers



• Maximizes power

- Burns cleanly
- Outstanding piston & bearing protection

TARGET MARKET

- Racers
- Competition sleds
- · Heavily modified engines

The AMSOIL advantage

AMSOIL synthetic two-stroke snowmobile oils are designed with clean-burning synthetic base oils and powerful high-temperature detergents to help keep power valves clean and functional. This can be extremely important to riders who value peak performance and who don't want to

spend unnecessary time performing maintenance.

Use this information to help pique the curiosity of prospects during the buy-sell process by asking pointed questions:

"Exhaust power valve sticking can be a problem with some oils. Has that been the case with you?"

"Do you ever notice lack of top-end power with your sled?"

If so, introduce the appropriate AMSOIL synthetic snowmobile oil as the solution. See above for guidelines on which oil to recommend to customers.







11/1

VTERCEPTOF

MAKING MEMORIES ON 6,700-MILE HARLEY* RIDE

When you take a road trip on your Harley, you want to know it's going to make the trip. And there's nothing like a road trip to test the mettle of AMSOIL products.

Dealer Todd Bleecker of Mayville, Wis. took that road trip and tells a great story about AMSOIL synthetic lubricants.

Last July, three generations of Bleecker men set out on an adventure that took them more than 6,000 miles, riding Harleys and taking in the sights. Todd was accompanied by his father, Richard, and son Gage, 12.

"We made it to Alaska via the famous Alaska Highway," said Bleecker. "We saw some beautiful sights. (We) rode in rain, hail, sunny skies and freezing rain. We made lots of memories with three generations along for the ride.

"On our way back, we went through Sturgis (S.D.) during the rally. My wife, Andrea, rode her own motorcycle out to meet us. We saw Devils Tower, buffalo (bison) at Custer State Park, went to Mt. Rushmore, lots of riding and beautiful weather. All in all it was 6,700 miles and 16 days of motorcycle adventures."

Bleecker is a long-time user of AMSOIL products. "I've been using AMSOIL in everything I own for some 20 years now," he said. He registered as a Dealer in 2012. He uses AMSOIL 20W-50 Synthetic V-Twin Motorcycle Oil and AMSOIL Synthetic V-Twin Transmission Fluid in his Harleys and his father's. He installed AMSOIL Shock Therapy® Suspension Fluid in the front forks of his bikes.

"I did break in the new motor on my Harley with AMSOIL Break-In Oil, and drained and refilled with the 20W-50 V-Twin Oil.



FIRST STOP AT STURGIS - The Bleeckers pay a visit to "Smudge" at Sturgis, who hand pinstriped Todd Bleecker's Harley, "Nikki" (named for the Prince song, "Darling Nikki").



CROSS HATCHING STILL VISIBLE – This photo shows the like-new condition of the cylinders after more than 67,000 miles with AMSOIL 20W-50 Synthetic V-Twin Motorcycle Oil. The obvious cross hatching visible on these well-used cylinders can be attributed to the wear protection properties of AMSOIL synthetic motorcycle oil.

Bleecker, whose day job is in aircraft maintenance, also runs a small hobby motorcycle shop, Mayhem Powersports.

"People usually really like to hear from me about the products," he said. "I think it's because of my past education (aircraft maintenance was very in-depth to science of oils), which helps me understand more specific details and offer explanations to questions.

"Also, I've got a lot of first-hand experience with trips and the wrenching I do. My typical approach is I'll just ask what they are using and then tell them what I know."

The Bleeckers had traveled from southern Wisconsin by motorcycle (without trailers) to Lloydminster, Saskatchewan, Can. when Todd's bike experienced a valve spring collapse.

"In defense of my Harley-Davidson, I have been running .575 lift cams for 52,000 miles or so now. That can't be easy on the valvetrain," Bleecker said. "Upon returning home, I made it a point to get my engine reworked, being concerned about the other three valve springs failing. I always do all my own work on my bike. I removed my cylinder heads to have them ported and polished, (and installed) bigger valves and better springs."

"I've been using AMSOIL in everything I own for some 20 years now."

What he discovered when he broke down the engine was a surprise. "Once I removed the factory 103 c.i. cylinders I was pleased to see that AMSOIL did such a good job of protecting my cylinders that the original cross hatching was still more than visible," Bleecker said. "That's 66,853 miles of AMSOIL on my 2011 Harley-Davidson Street Glide. The only reason I decided to pull the cylinders was to install a 110 c.i. big bore kit. "Had I known they were still in this condition I would have probably kept them installed. Be that as it may, I am going to keep these cylinders on the shelf and just tell the story again in the future. After all, AMSOIL and those cylinders have taken me to nearly 67,000 miles and 27 states."

When his cousin bought a new truck, Bleecker offered to get him AMSOIL products when he was ready to change the fluids. His cousin asked why AMSOIL was so much better. "I walked him into the garage and showed him the two cylinders pulled from my Harley. He said 'sold.' Five-minute conversation. New customer."

What's next?

"We are planning our next trip," Bleecker said. They plan to head to the San Diego Zoo and up the coast to the redwood forest and Mt. Hood, then back to Sturgis on the way home.



ENGINE REBUILT - Dealer Todd Bleecker ran AMSOIL lubes in his 2011 Harley-Davidson Street Glide with the factory 103 c.i. cylinders for more than 60,000 miles before he rebuilt it with a 110 c.i. big bore kit.



ON THE WAY – Richard, Gage and Todd Bleecker (left to right) stand at the beginning of the Alaska Highway on their most recent motorcycle adventure.



October Close-Out

The last day to process October orders in the U.S. and Canada is the close of business on Wednesday, Oct. 31. Individual telephone and walk-in orders will be processed if initiated by the close of business. Internet and fax orders will be accepted until 3 p.m. Central Time on that day. All orders received after these times will be processed for the following month. Volume transfers for October business will be accepted until 3 p.m. Central Time on Tuesday, Nov. 6. All transfers received after this time will be returned.

Refreshed Website Coming this Fall

Later this fall, we will launch a refreshed amsoil.com web experience and transition to a new ecommerce platform, helping support sales growth now and into the future.

What to Expect

- Improved customer shopping experience
- Refreshed, more modern-looking interface on computers, tablets and mobile devices
- Enhanced profile and streamlined checkout, including saved carts and credit cards

What's New

• Canadian Dealers and customers will have a dedicated Canadian website at www.amsoil.ca. U.S. Dealers and customers will continue to shop at amsoil.com.

What Will Continue

- The amsoil.com and new amsoil.ca websites will continue to be the go-to destinations to buy AMSOIL products online.
- All existing links pointing to amsoil.com will continue to resolve at amsoil.com, Dealer numbers included. We will post an updated sitemap in the Dealer Zone later this fall for both the U.S. and Canadian sites. Rest assured that customers visiting amsoil.com or amsoil.ca from Dealer websites should not encounter a disruption in their experience.

New P.i.[®] Bottle and Reformulation Coming Soon

P.i. Performance Improver Gasoline Additive will receive a new bottle, label and reformulation in November. The new P.i. bottle is compatible with capless gas tanks. Look for more details in next month's *AMSOIL Magazine*.





THREE POWERFUL NEW AEROSOLS

AMSOIL Mudslinger, Engine Degreaser and Glass Cleaner deliver performance that customers can see immediately.

MUDSLINGER (AMS)

- **Provides** a protective layer of armor against mud, dirt and snow
- Eases clean-up after riding
- Restores, cleans and shines plastic,
- fiberglass and painted surfaces

 Provides a protective layer to counteract
- the damaging effects of UV rays
- Pleasant cherry scent

ENGINE DEGREASER (AED)

- Removes the toughest grease, dirt and grime
- Leaves no residue
- Easy to use
- Powerful stream
- Safe on all engine components

GLASS CLEANER (AGC)

- Quickly cuts through grease and grime
- Does not drip or run; stays where you
 - spray it **Leaves** no streaks or haze
- Ammonia-free and safe on all glass, including tinted windows
- Works great on countertops, glass, mirrors and appliances

BEFORE ENGINE DEGREASER



AFTER ENGINE DEGREASER



Mudslinger, Engine Degreaser and Glass Cleaner are not available in Canada.



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