

AMSOIL[®]

► DISTRIBUTOR EDITION

MAGAZINE

JUNE 2026



RAISING THE BAR FOR PERFORMANCE — AGAIN

| PAGE 8



Premium Protection No Matter
What You Ride | PAGE 12

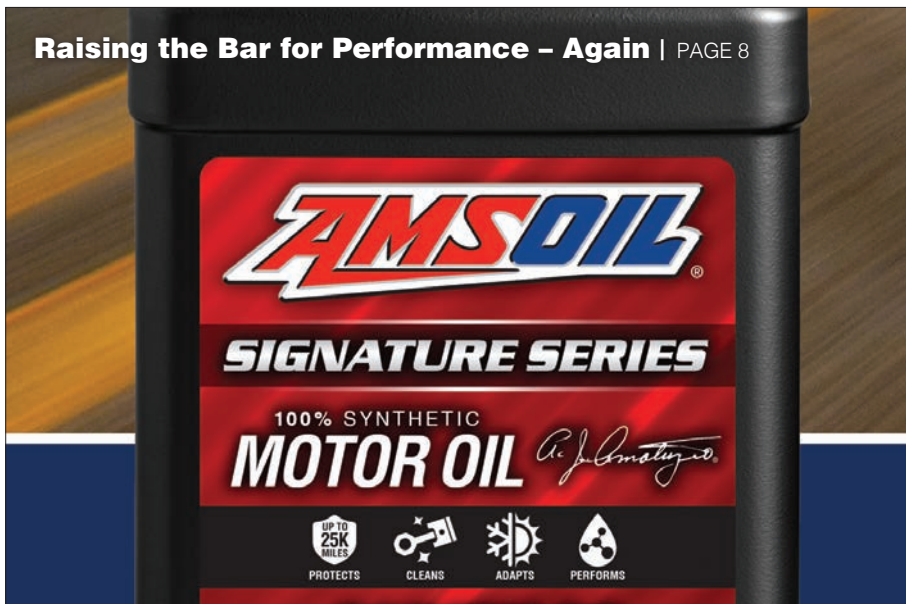


NEW AMSOIL SYNTHETIC MOTORCYCLE OIL

- MAXIMUM POWER & PERFORMANCE
- SUPERIOR ENGINE PROTECTION
- SMOOTH AND PRECISE SHIFTING

AMSOIL Synthetic Motorcycle Oil is precision engineered to **deliver maximum power and performance**, no matter how hard you ride. It meets the latest international API SP and JASO MA2 standards for all four-stroke street, adventure, touring and racing motorcycles.





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From the Chairman

The conflict in Iran continues to disrupt energy and petrochemical supply chains, creating unprecedented instability. Prices of critical raw materials have risen at a record pace and continue to rise. A significant portion of the world's supply of certain materials is unavailable, either because the facilities that make them have been damaged and are out of commission, or because the materials are trapped in the Middle East, unable to exit the Strait of Hormuz. The issue is compounded by limited export storage in the Middle East, meaning prolonged closure of the Strait of Hormuz will force production curtailments in facilities that are operable. The longer this conflict lasts, the longer it will take our industry to recover.

As a result, uncertainty continues to ripple across the industry and security of supply is emerging as a potential competitive advantage. While no one can predict what the next 12 months will bring, I want you to know this: AMSOIL is in good shape.

We entered this period with strong supplier relationships and clear commitments in place to help maintain our raw-material supply. Years of disciplined, forward-looking decisions have positioned us to manage through volatility, not react to it. And we are not standing still.

We are acting boldly and continuing to put you in a strong position. That includes the introduction of new AMSOIL Synthetic Motorcycle Oil, the launch of next-generation Signature Series Synthetic Motor Oil and updated cartons that strengthen our brand clarity and the customer experience. These investments are deliberate. Even in uncertain times, we continue to build for the future.

We don't know when the market will stabilize. There is the potential for lasting effects that will challenge everyone involved — from manufacturers to distributors to customers. In the months ahead, shoppers may find that some of their usual lubricant options are unavailable. That may create opportunities for you. Thanks to

our proactive approach and steady execution, AMSOIL is well positioned to continue providing exceptional solutions when others cannot. Availability matters. Trust matters. And performance matters more than ever.

Volatile markets test companies. They also reveal which organizations are built for the long haul. I am confident in AMSOIL and grateful for the focus and commitment you bring every day as we navigate this together.

Alan Amatuzio
Chairman & CEO

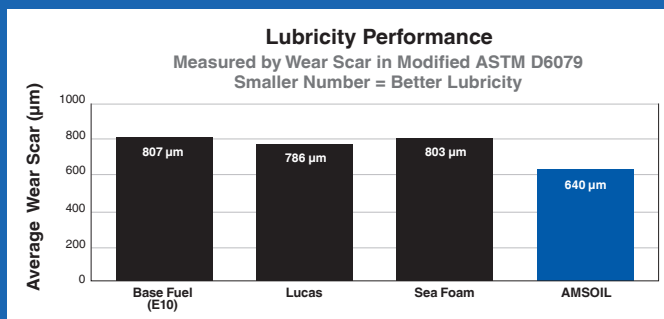
RESTORE HORSEPOWER AND PRESERVE PERFORMANCE



AMSOIL Upper Cylinder Lubricant delivers 18 percent more lubricity than Lucas* and 20 percent more than Sea Foam* for better retention of horsepower and fuel economy.^R

Upper Cylinder Lubricant

- Lubricates fuel system and upper cylinders
- Fights ethanol-related corrosion
- Helps keep injectors clean
- Capless compatible



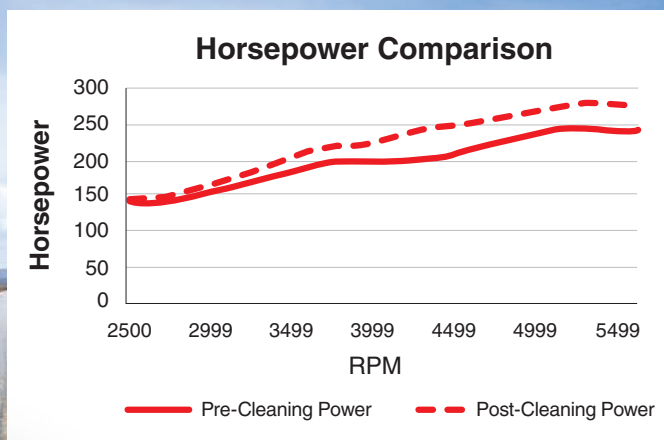
^RBased on independent testing of AMSOIL Upper Cylinder Lubricant, Lucas Upper Cylinder Lubricant and Sea Foam Motor Treatment obtained on 02/13/2019 using the ASTM D6079 modified for use with gasoline. *All trademarked names and images are the property of their respective owners and may be registered marks in some countries. No affiliation or endorsement claim, express or implied, is made by their use.

AMSOIL P.i.[®] restores up to 14% horsepower.^{NN}



P.i.[®] Performance Improver

- Restores power and performance
- Reduces need for costly higher-octane fuel
- Reduces noise from carbon rap and pre-ignition
- Controls pre-ignition "knock"
- Maintains the engine efficiency, fuel economy and power of new vehicles
- Capless compatible



^{NN}Based on third-party testing in a 2016 Chevrolet[®] Silverado[®] 1500, 5.3L V-8 GDI with 100,616 miles, using one tank treated with AMSOIL P.i. Actual results may vary. *All trademarked names and images are the property of their respective owners and may be registered marks in some countries. No affiliation or endorsement claim, express or implied, is made by their use.

LETTERS TO THE EDITOR

OIL FILTERS

I became an AMSOIL Dealer in 1985, and became a Lifetime Dealer in 1986. I've never had any gripes until now. In early January 2024, I brought my new 2023 Chevrolet* Colorado ZR2* home from the dealership (ordered in July 2023). When it came time for the first oil and filter change, I did an engine flush using AMSOIL Engine and Transmission Flush (FLSH), then installed Signature Series 5W-30 (ASL) and a WIX WL10351 filter. Since then, I have been changing at 7,500-mile intervals. However, I much prefer to run an AMSOIL Oil Filter, but AMSOIL does not yet have one for the L3B/L4 2.7L 4-cyl. TurboMax.* That's my gripe. These engines are also available in the full-size 1500s and have been in production for nearly nine years now.

So, why hasn't AMSOIL designed a filter for it yet? The AMSOIL Filter I run on my Scag* zero-turn mower is larger than the WIX WL10351. Since the TurboMax uses such a small filter, there is certainly a dire need for superior filtration. WIX is a fairly good filter, but certainly can't match the filtration efficiency of AMSOIL filters. So, when can I and the tens of thousands of other TurboMax owners expect to have an AMSOIL EAO or at least an EA15K Oil Filter available for this engine?

David Bess

AMSOIL: We understand your frustration, David. Good news: we frequently review our filter portfolio for gaps in coverage. The 2.7L TurboMax has been a known gap and something we are actively working on to offer a premium solution. In the meantime, the WIX WL10351 remains a good alternative.

EMPTY BOTTLES

I was curious if there was ever a thought of selling empty, labeled container kits for show purposes? The reason I ask is for if a Dealer has a setup at a fair, car show, etc. and someone decides to steal some product from their setup tables and the Dealer loses money. This would prevent money loss.

Thank You,

Cris Cantu

AMSOIL: We did at one time offer a program through which Dealers could purchase empty AMSOIL containers for display purposes, Cris. It turned out, however, to be extremely labor-intensive. Employees who were normally engaged in more productive work were required to gather the empty containers, carefully apply labels, drill holes through each (to ensure against re-filling) and arrange for shipping. In addition, demand was very low due to the high cost of the empty containers. The problem was compounded by the assortment of product requests that were received.

COOLANT/COOLANT BOOST

Many places in Canada, winter temperatures can be -40°C (-40°F) or colder. According to the article in the January 2026 *AMSOIL Magazine*, AMSOIL coolants are rated to a mere -37°C (-34°F). Are you inherently recommending Canadians not to use AMSOIL coolant?

I've appreciated AMSOIL DOMINATOR® Coolant Boost (RDCB) reducing the time for heat delivery into the passenger compartment of my vehicles. After recently buying a replacement vehicle, I was disappointed to learn Coolant Boost is no longer available in Canada. What changed?

Robert Wolfe

AMSOIL: Thank you for your questions, Robert. Because AMSOIL Passenger Car/Light Truck Antifreeze & Coolant (ANTPC) and Heavy-Duty Antifreeze & Coolant (ANTHD) are pre-mixed with 50% water, they have inherently higher freezing points. For extreme temperatures, we recommend using AMSOIL Propylene Glycol Antifreeze & Coolant (ANT). As a concentrated formula, lower freeze points can be achieved by using a higher coolant concentration. See the product data sheet (G1156) for more information. Unfortunately, Coolant Boost was discontinued in Canada due to low demand.

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.



Alex Thompson | DIRECTOR, PRODUCT MARKETING – AUTOMOTIVE & COMMERCIAL

Packaging That Protects AMSOIL Performance

When we think about lubricant performance, our first thoughts are likely about base oils, additives and proof of performance. It's unlikely packaging makes the list. However, packaging is a critical part of the overall product lifecycle, playing a direct role in protecting AMSOIL lubricants from the time they leave production until they are installed in a vehicle or piece of equipment.

Effective packaging must preserve chemical integrity, prevent contamination, withstand demanding shipping conditions and deliver a positive user experience. That's why we design our packaging with the same technical scrutiny as the lubricants inside.

Beyond the Bottle

Packaging design begins with material science and compatibility testing. Certain chemistries can absorb or react with packaging materials, potentially altering product performance. Bottle and cap materials must be chemically compatible with the lubricant they contain, ensuring no leaching, softening or degradation over the product's shelf life.

Packaging must also perform across a wide range of storage conditions, from temperature swings in unconditioned warehouses or garages to long-term shelf storage. Shipping durability is equally important; containers must tolerate vibration, compression and impact.

Cap-to-bottle interface design is especially critical. Proper thread engagement, gasket selection and torque specifications ensure a secure seal that prevents leaks and protects against moisture and contamination. Label materials are selected to align with manufacturing processes and equipment, match product shelf life, resist chemicals, survive handling and maintain legibility through shipping and storage. The result is packaging that protects quality, reinforces confidence and performs reliably in real-world conditions.

Leading the Way: The AMSOIL Easy-Pack

One of the most visible examples of AMSOIL packaging engineering is the award-winning, frequently imitated

easy-pack. Designed specifically for gear oils and other products that go into hard-to-reach locations, the easy-pack is not just a convenient design, it is a performance-driven packaging system.

The easy-pack undergoes rigorous testing to ensure it can withstand shipping loads, pressure fluctuations and repeated handling without leaks or failures. Internal sealing elements and reinforced seams are validated to survive vibration and drop testing, protecting product integrity from the distribution center to the customer's door.

User experience is equally important. Traditional rigid containers often require pumps, funnels and awkward positioning during installation. The easy-pack integrates a flexible bag, internal spouted cap and controlled flow design that allows product to be delivered directly into hard-to-reach fill ports. This reduces the risk of user error, product waste and contamination.

The Complete Package: Carton Consolidation

Primary packaging is not the entire equation. Shipping cartons must protect products through a complex and often unforgiving logistics chain. Cartons experience stacking loads in distribution centers, compression under palletization and vibration or drops throughout truck and parcel-carrier networks.

Our carton consolidation project addresses these challenges head-on. New shipping cartons incorporate up to 28% stronger corrugate, stronger tape and optimized dimensions that reduce internal product movement and eliminate pallet overhang. These structural improvements are designed and validated using industry-standard

shipping-durability protocols such as International Safe Transit Association (ISTA) 1A and 3A testing, which simulate real-world drop, compression and vibration conditions.

Precision Packaging: Fuel Additives

Packaging engineering becomes even more specialized when dealing with fuel additives. For example, AMSOIL Upper Cylinder Lubricant and P.i.® bottles are designed with unique thread profiles and bottle-neck geometries to align with modern fuel-system filler designs. Controlled flow characteristics help ensure accurate dosing while reducing splash-back and spillage.

Delivery by Design: Aerosol Cans

Aerosol packaging introduces another dimension of engineering: spray-pattern control. Different AMSOIL aerosol products use fan or stream patterns depending on their intended application. Valve selection, actuator geometry and internal pressure are all matched to product chemistry and use-case requirements, ensuring consistent delivery and optimal performance.

Packaged for Performance

Packaging is not an afterthought. From material compatibility and sealing integrity to user-focused designs and robust shipping cartons, every packaging decision is made to protect the performance built into the product. The result is a system that maintains quality from production through installation, reduces damage and waste, improves ease of use and reinforces trust in the AMSOIL brand. In the end, great lubricants require equally great packaging – we engineer both with intention and purpose.



Raising the Bar for Performance – Again

The next generation of AMSOIL Signature Series 100% Synthetic Motor Oil launches this month.

After an intense period of research and development, AMSOIL founder Al Amatuzio developed the world's first synthetic motor oil for automotive applications and by 1968, he was selling synthetic oil under the AMSOIL brand name. In the beginning, Al did everything himself in a tiny garage – from blending to packaging to distribution. Al was determined not just to succeed in business, but to bring a product to market that provided consumers with benefits no one else was giving them. He wanted people to have the best. No compromises. It was a humble beginning for a revolutionary idea. But by 1972, AMSOIL cemented its place in automotive history when AMSOIL Synthetic Motor Oil became the world's first synthetic motor oil to pass API testing requirements. Born from aerospace-inspired innovation and a refusal to accept conventional limits, that breakthrough proved synthetic oil could deliver superior protection, performance and longevity — and it forced an entire industry to follow our lead. That spirit of determination and resolve to make the world's best motor oil still drives us today.

Signature Series 100% Synthetic Motor Oil is already regarded as the gold standard for engine protection and performance. After years of research, advanced formulation work and relentless validation, we have made it even better. The new

formulation raises the bar for motor-oil performance, ensuring that we continue to lead the industry and remain prepared to meet a future of increasingly demanding engines. But bold claims demand evidence, and the testing performed at a third-party lab provides it. The next generation of Signature Series delivers stunning performance results.

SUPPORTING EXTENDED DRAINS

Extended-drain protection has always been a defining feature of Signature Series, and the next-generation formulation reinforces that legacy. To demonstrate its performance while practicing extended drain intervals, we installed Signature Series 5W-30 Synthetic Motor Oil (ASL) in a 2025 Ford® F-150 Raptor* with a high-output 3.5L engine and strapped it into a dyno at a third-party lab for 125,000 miles (201,168 km). Oil was changed at 25,000-mile (40,234-km) intervals. Throughout the test, no oil consumption was observed, the additive package held strong, viscosity remained in grade and very low wear metals were produced.

PRESERVING HORSEPOWER AND TORQUE

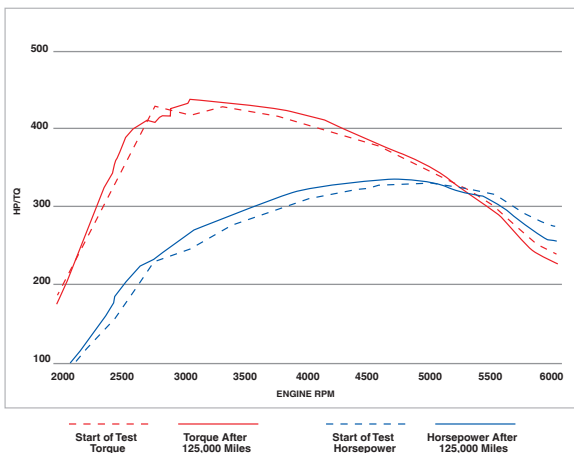
When engines wear, power fades. AMSOIL Signature Series Synthetic Motor Oil helps engines run stronger, longer. To



demonstrate, power sweeps were conducted on the dyno at the beginning of the 125,000-mile Raptor test and at the end. The conclusion was clear: **AMSOIL Signature Series preserves horsepower and torque.**¹

As the graph shows, **Signature Series maintained performance throughout the 125,000-mile test, even under the elevated stresses of a high-output engine.**²

TORQUE & HORSEPOWER MEASURED BEFORE & AFTER 125,000-MILE TEST



4X LSPI PROTECTION

Low-speed pre-ignition (LSPI) is still a serious concern for modern turbocharged engines — especially as motor oil ages. We tested Signature Series for its ability to protect against LSPI using the industry-standard Sequence IX test. AMSOIL

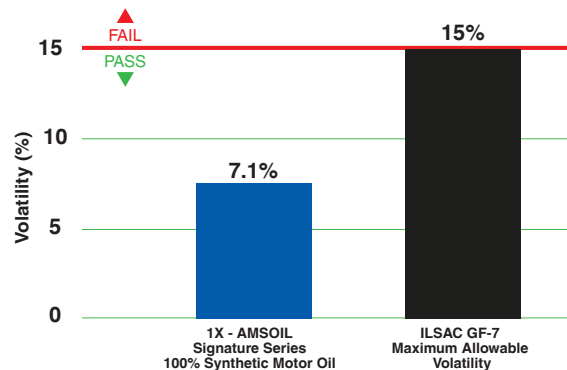
Signature Series far exceeded benchmarks. Even after 25,000 miles of use, **AMSOIL Signature Series delivers four times more piston protection against LSPI**,³ confirming that Signature Series is engineered to provide sustained LSPI protection, even while practicing extended drain intervals.

REDUCED VOLATILITY

Volatility directly affects oil consumption, deposit formation and long-term protection. Signature Series was evaluated using the NOACK volatility test. To meet the ILSAC GF-7 specification, an oil can have a maximum of 15% evaporation in the NOACK test. **AMSOIL Signature Series delivers two times better protection against volatility.**⁴

Lower volatility translates into tangible benefits: **less evaporation, fewer top-offs, more protection.**⁵

NOACK VOLATILITY ASTM D5800



¹Using 5W-30 Signature Series in a 2025 Ford F-150 Raptor in 125k-mile mileage accumulation study. ²Based on comparative start of test and end of test horsepower and torque. ³Using AMSOIL Signature Series 5W-30 Synthetic Motor Oil following a 25,000-mile service interval in the Sequence IX aged oil LSPI test. ⁴Based on AMSOIL Signature Series 0W-20 compared to the API SQ limit using the ASTM D5800 NOACK volatility test. ⁵Based on AMSOIL Signature Series 0W-20 compared to the API SQ limit using the ASTM D5800 NOACK volatility test.

INDUSTRY-LEADING PISTON CLEANLINESS

Keeping pistons clean is essential for maintaining efficiency, power and reliability — and it's an area where Signature Series excels. The new formulation delivered eye-popping results in the Sequence IIH test, proving that AMSOIL



Signature Series protects against piston deposits. In fact, **AMSOIL Signature Series provides 72% more protection against piston deposit formation than industry standards.**⁶

To further challenge the formulation, we had the third-party lab double the length of the industry-standard test, and Signature Series continued to outperform expectations. Even after doubling the Sequence IIH test,



Signature Series delivered cleaner pistons than required by the industry standard – delivering 31% better protection than required.⁷

NO SLUDGE, JUST PROTECTION

Sludge formation can starve engines of oil, restrict critical oil passages, impair heat transfer and accelerate wear on vital components — often leading to overheating, reduced efficiency and catastrophic engine damage.

To demonstrate real-world sludge prevention, Signature Series was subjected to a demanding test. In the 125,000-mile accumulation study on a Ford Raptor, Signature Series demonstrated 0% oil-screen plugging. The conclusion is straightforward: **AMSOIL Signature Series prevents sludge.**⁸



ALWAYS DRIVING FORWARD

Each generation of Signature Series has raised the bar, and the new formulation represents another meaningful leap for protection and performance. Evolving engines demand more from motor oil than ever before, and that will continue to be true. AMSOIL is meeting that future by raising the bar – again.

NEW FORMULA, SAME PROMISE:

Maximum Engine Life and Performance

Years of research and experimentation, scores of candidate formulations, endless hours and miles of validation have all culminated in an exciting leap forward in motor-oil performance. The next-generation formulation of AMSOIL Signature Series 100% Synthetic Motor Oil launches in June, and we sat down with AMSOIL Chairman & CEO Alan Amatuzio to discuss the goals behind the upgrade and the significance of the performance gains we achieved.

AMSOIL Magazine: Signature Series Synthetic Motor Oil was last reformulated in 2017. At that time, you said it was the best oil AMSOIL has ever made. Conventional wisdom would say, “don’t change the recipe when you’re making good biscuits.” Why make a change?

Alan Amatuzio: With decades of formulation expertise under our belts and mountains of data at our disposal, we know what to throw out and what to keep. AMSOIL is always moving forward with an eye on the horizon for what’s next. Meanwhile, gasoline particulate filters are being introduced for automotive applications and that is driving the introduction of new specifications like ILSAC GF-7 and GF-8. We continually explore different base-oil and additive materials to uncover new versions or combinations of materials that can potentially unlock new levels of performance and protection. We are always seeking to improve. Always. And if we can develop improved technology that delivers stronger benefits for our customers, we do it. That is what we’ve done with the new Signature Series. The last formulation was the best oil we’d ever made; this one is even better and not just by a little bit.

AM: That is a bold claim. How is the new formulation better?

AA: It is better in every way. Specifically, next-generation Signature Series provides 12.5% better results in Cold Cranking Simulator testing. In the Thermo-Oxidation Engine Oil Simulation Test, the TEOST, it performed three times better than the old formula. In Sequence IIH, we saw a 16% improvement in weighted piston deposits versus the old formula, and that’s a big deal. Dealers who have been around for a while know that we ran a double-length Sequence IIH on the last version of Signature Series and the results were outstanding. Well, we did it again and the results are even better.

⁶Based on AMSOIL Signature Series 5W-30 in the Sequence IIH Test. ⁷Based on AMSOIL Signature Series 5W-30 in a double-length Sequence IIH test. ⁸As demonstrated in a 125K-mile accumulation study on a 2025 Ford F-150 Raptor which had 0% oil screen plugging and Sequence VH testing demonstrating 0% oil screen plugging.

INTERVIEW WITH THE CEO

AM: For those of us who are not as in touch with oil formulation and performance, are those impressive numbers?

AA: Absolutely! Signature Series was already in a class of its own. Consider the 16% improvement in piston-cleanliness results in Sequence IIH, for example. With the old formula, pistons from the test were nearly spotless after a normal test cycle. You wouldn't think we could improve on that, but we did. When you can take something that is on the leading edge of what is possible and make measurable improvements that translate into meaningful benefits for customers, it is remarkable.

AM: Tell us more about Sequence IIH.

AA: The Sequence IIH test is an industry-standard test designed to evaluate motor oil in several key performance areas. It's a 90-hour test that essentially simulates driving a fully loaded pickup towing a heavy trailer up a long mountain grade in the desert for 3,000 miles (4,828 km) without a break, and it must be passed to meet API and ILSAC specifications. Results are a good indicator of how well an oil will perform in the real world. It is common for competing oils to barely pass the standard test with minimum passing scores. Signature Series is *barely challenged* by Sequence IIH. The ability to prevent piston deposits is one of the main areas Sequence IIH measures. After the test, the engine is torn down and the pistons are examined. They receive a score based on weighted piston deposits, and the higher the score, the cleaner the oil kept the pistons. After the standard 90-hour Sequence IIH test, our new Signature Series formulation received the highest rating ever achieved at the lab that performed the test – and that lab tests many different oils. So we doubled the test to 180 hours and Signature Series still easily passed and provided cleaner pistons than required.

AM: So you're saying if you want an oil that keeps pistons clean, Signature Series is the best choice?

AA: Without question. We saw a substantial improvement in deposit prevention compared to the old formula, excellent viscosity control and zero stuck rings.

AM: When the last formulation of Signature Series launched, low-speed pre-ignition, or LSPI, was a relatively new phenomenon that was creating challenges for motor-oil formulators. Is LSPI still a concern?

AA: LSPI is still a concern, but the industry has learned a lot about what causes it and what to consider in regards to oil performance. Particularly, how oil manages LSPI over the course of its useful service life. With the old formulation, we referenced the GM* dexos* LSPI test, which only tested oil when it was new. Now, the industry has settled on the Sequence IX test to evaluate a lubricant's resistance to uncontrolled pre-ignition events under boosted, low-speed, high-load conditions. The standard Sequence IX test uses a Ford* 2.0-liter EcoBoost* engine, and it evaluates laboratory-aged oil. That's a key difference. Now, the oil is aged for 72 hours to simulate oil

degradation over about 4,000 miles (6,437 km). We modified the test to increase the severity and try to challenge Signature Series. All standard test protocols were followed, except we aged the oil for 25,000 miles in a high-output 3.5-liter EcoBoost in a Ford Raptor. Even after 25,000 miles of use, Signature Series far exceeded the minimum requirements for protection against LSPI.

AM: Outstanding. Each iteration of Signature Series is claimed to be better than the last. It looks like you've got plenty of proof to back that up.

AA: We absolutely do, and for the record, AMSOIL never takes a step backward. We push performance forward. It is extremely important to me that we uphold our brand promise. When you buy an AMSOIL product, you will get what you paid for. If we can find a better way to serve customers or make a better product that will provide them with more peace of mind or help them improve the profitability of their business, we will do it. The new Signature Series delivers the best viscosity control, the best deposit prevention, the best engine cleanliness, the best varnish control, the best volatility prevention and the best cold-temperature performance we have ever achieved. It is, again, the best oil we have ever formulated and that is no easy task in today's environment.

AM: Why is it more difficult today?

AA: Evolving engine technologies are introducing new challenges, protecting emissions systems limits options for additive packages and, generally, motor oil is being asked to do more than ever. Next-generation Signature Series is the result of what can be done when you combine deep technical expertise, relentless testing and the freedom to engineer without compromise.



Premium Protection No Matter What You Ride

Different types of motorcycles present unique oil challenges that a single formulation doesn't easily meet. Whether you ride a Harley-Davidson* cruiser, Honda* touring bike, Ducati* sportbike, KTM* dirt bike or Vespa* scooter, AMSOIL motorcycle oils are specifically designed to prevent oil breakdown under extreme heat and pressure and maximize engine and transmission performance and protection in each application.

AMSOIL Synthetic Motorcycle Oil

Street, touring, adventure and racing motorcycles deliver high levels of performance and responsiveness with engines that can easily surpass 10,000 rpm. The mechanical action of crankshafts and gears spinning that fast can damage the oil and the components it's meant to protect.



AMSOIL Synthetic Motorcycle Oil is precision engineered to deliver maximum power and acceleration, precise shifting and long-lasting protection against engine and transmission wear at high rpm and extreme temperatures. It also extends drain intervals up to twice the bike manufacturer's recommendation, allowing riders to confidently wander far from home.

AMSOIL Synthetic V-Twin Oil

The air-cooled V-twin engines in most Harley-Davidson motorcycles get extremely hot. Intense heat causes inferior motor oil to lose viscosity and become thinner, increasing the risk of internal engine wear. Extreme heat also accelerates oil breakdown and deposit formation.



AMSOIL Synthetic V-Twin Motorcycle Oil is specifically engineered to maintain viscosity at extreme temperatures and under heavy loading in the engine, transmission and primary chaincase of large V-twin bikes. It provides reliable protection against wear under harsh conditions and the convenience of a single oil for all three reservoirs. For bikers who prefer three separate oils, AMSOIL Synthetic V-Twin Transmission Fluid and Synthetic V-Twin Primary Fluid are engineered to the same exacting standards.

AMSOIL Synthetic 4T Performance Motorcycle Oil

AMSOIL Synthetic 4T Performance Motorcycle Oil is formulated for the high temperatures common to air-cooled V-twins, aggressively driven sport bikes and daily drivers operating in the most severe conditions. It delivers the confidence and security that come with outstanding protection and performance.



AMSOIL Synthetic Dirt Bike Oil

Dual-sports and dirt bikes operate in dusty and muddy off-road conditions. The constant clutch and throttle manipulation generates low-speed stress punctuated by periods of high revving, rapid acceleration and wide-open throttle that place intense load on the engine and transmission. Dirt-bike engines are inherently lightweight designs built for performance, which adds additional engine stress and tremendous force on piston skirts and



cylinder walls. Only a microscopic oil film provides the protection needed to help the engine survive.

AMSOIL Synthetic Dirt Bike Oil is specifically engineered to provide superior oil film strength for enhanced engine performance and reliability in extreme off-road conditions. And AMSOIL DOMINATOR® Synthetic 2-Stroke Racing Oil (TDR) is designed to meet the toughest two-stroke off-road racing engine needs.

AMSOIL Formula 4-Stroke® Synthetic Scooter Oil

Modern high-tech four-stroke scooters punch well above their weight class. Unfortunately, enclosing a small engine inside a comparatively large scooter means the engine works harder and gets hotter.



AMSOIL Formula 4-Stroke Synthetic Scooter Oil delivers outstanding protection against friction and wear for longer engine life and cooler operating temperatures. A special anti-corrosion additive package also provides long-term protection when your scooter is parked or in storage.

AMSOIL Premium 100% Synthetic Scooter Oil

AMSOIL Premium 100% Synthetic Scooter Oil is formulated to provide maximum wear protection and helps reduce heat while delivering smooth shifts, perfect for today's powerful scooter engines.



RIDE HARD. RUN COOL.®

OFFICIAL OIL



**AMSOIL RESISTS
VISCOSITY
BREAKDOWN**

6X

**BETTER THAN
HARLEY-DAVIDSON*
SYN3***

for improved protection against
compensator and transmission gear wear.**



ORDER AT
AMSOIL.com

**Based on testing of AMSOIL 20W-50 Synthetic V-Twin Motorcycle Oil and Harley-Davidson Screamin' Eagle SYN3 purchased on 1/26/24 in the CEC L45-KRL, ASTM D445 test.

Transmission Shudder: CAUSES, SYMPTOMS, SOLUTIONS

Transmission shudder is an unsettling problem for drivers. It often feels like a vibration, shaking or juddering sensation, especially during light acceleration or when a vehicle shifts gears or engages the torque-converter clutch. While sometimes mistaken for engine misfires or driveline issues, transmission shudder is often related to fluid performance intersecting with modern transmission design. Understanding why it happens and how to fix it can prevent costly damage and restore performance.

What Is It?

Transmission shudder occurs when internal components fail to engage or disengage properly. Leading causes of shudder include worn clutch plates, sticky valves within the valve body or a malfunctioning torque-converter clutch.

Clutch plates are responsible for smoothly applying and releasing power during shifts and torque-converter clutch operation. Over time, normal friction wear, heat or fluid degradation can reduce their ability to maintain consistent grip. Instead of applying evenly, worn plates can momentarily slip and then re-engage, creating a rapid vibration or shaking sensation felt through the vehicle. This irregular engagement is especially noticeable under light throttle or steady cruising, when the transmission is trying to maintain a precise balance between slip and lockup.

Sticky valves in the valve body contribute to shudder by disrupting hydraulic pressure control. The valve body routes transmission fluid to clutches and bands using precisely moving valves. When varnish, sludge or degraded fluid causes these valves to stick or respond slowly, fluid pressure can fluctuate. As a result, clutches may apply and release in quick succession

rather than transitioning cleanly, leading to the pulsating engagement that drivers perceive as shudder. This condition often worsens as fluid temperature rises and contaminants circulate through the system.

When operating as designed, the torque-converter clutch applies smoothly to mechanically link the engine and transmission, eliminating converter slip to improve efficiency and fuel economy.

This controlled lockup depends on precise friction characteristics between the clutch friction material, steel surfaces and transmission fluid. If those characteristics are altered by wear, glazing, contamination or incorrect fluid chemistry, the clutch may oscillate between slipping and grabbing as hydraulic pressure increases, producing vibration or shudder during light acceleration or steady cruising conditions.

Left unaddressed, it can accelerate wear, reduce drivability and eventually lead to transmission failure.

The Roles of ATF

Automatic transmission fluid is often central to both the cause and solution for shudder. Automatic transmission

fluid performs several critical functions: lubricating moving parts, transferring power, cooling components, removing contaminants and providing proper friction characteristics for clutch engagement. To pull all that off, ATF must contain the following properties:

1. Function as a hydraulic fluid

Automatic transmissions use pressurized transmission fluid to change gears. This stressor can cause the fluid to shear and lose viscosity.

2. Protect gears against wear

Automatic transmissions contain a system of sun, planetary and ring gears that require a durable lubricant film to prevent metal-to-metal contact.

3. Fight heat

Heat accelerates oxidation. Oxidation leads to sludge and varnish, which can clog narrow oil passages and contribute to clutch glazing. Without the right protection, vehicles can begin to shift hard, jerk or hesitate.

4. Deliver the right frictional requirements

Engagement and disengagement of the clutch packs must happen flawlessly for optimum performance.



Shudder is most noticeable at steady highway speeds, during gentle acceleration or when the transmission shifts under light load. Left unaddressed, it can accelerate wear, reduce drivability and eventually lead to transmission failure.

Transmission fluid is engineered to maintain very specific frictional properties to allow clutch packs and torque-converter clutches to engage smoothly without slipping or grabbing. When fluid degrades, becomes contaminated or is the incorrect fluid for the application, its friction modifiers may not function as intended, leading to shudder.

Degraded Fluid

Automakers are in a continuous arms race with their competitors to engineer more powerful engine designs. All that added power must pass through the transmission before reaching the wheels, yet modern transmissions are smaller and lighter than their predecessors. That translates into less (and sometimes thinner) fluid protecting against wear and intense heat inside a transmission that handles more power.

Heat is the arch-nemesis of transmission fluid. High temperatures cause the fluid to oxidize, diminishing its ability to lubricate and cool and accelerating sludge formation and varnishing of internal components. As viscosity changes and friction modifiers break down, clutch engagement becomes inconsistent, leading to vibration.

Incorrect Fluid

Using the wrong type of ATF is another frequent cause of shudder. Modern transmissions are highly engineered systems that require fluids to meet exact specifications. Today's advanced transmissions, many with eight, nine or 10 speeds, depend on precisely balanced friction characteristics. The wrong fluid may not deliver the correct clutch performance, even if

the transmission appears to function normally at first.

Using the Shop by Vehicle tool at [AMSOIL.com](https://www.amsoil.com) or through the app makes finding the right ATF simple and easy.

Shear

Transmission fluid must withstand intense shearing forces between gears and clutch packs. Inferior fluids can lose viscosity under stress, reducing film strength and altering friction behavior. This can cause torque-converter shudder under light acceleration when precise control is most critical.

Contamination

As fluid ages, it accumulates clutch material, metal particles and moisture. These contaminants interfere with smooth clutch operation and can worsen shudder symptoms. In some cases, contamination also accelerates wear on internal seals and friction surfaces.

Calibration Sensitivity

Modern transmissions are computer-controlled and calibrated for maximum efficiency. Many engage the torque-converter clutch earlier and more frequently than older models. While beneficial for fuel economy, this design makes transmissions less forgiving of fluid degradation or incorrect friction characteristics, increasing the likelihood of shudder.

Fluid Replacement

Assuming no lasting damage has already occurred, replacing degraded fluid with a high-quality ATF often resolves shudder entirely. ATF must maintain proper viscosity and frictional properties across the operating

temperature range, often from extreme cold to extreme heat, to ensure proper shifting performance.

AMSOIL Signature Series 100% Synthetic Automatic Transmission Fluid is purpose-built for high-performance and hard-working vehicles that operate in severe service. It remains fluid in sub-zero temperatures and provides reserve protection during heavy use and abuse like heavy towing, elevated temperatures and challenging terrain. It handles heat so well, you can confidently double your vehicle manufacturer's severe-service drain interval with guaranteed AMSOIL protection.

When New Fluid is Not Enough

If fluid replacement does not solve the issue, a manufacturer software update may be required. In more advanced cases, worn torque-converter clutches or damaged valve bodies may be the issue, requiring mechanical repair.

Solid and Strong

Transmission shudder is often a symptom of fluid-related problems rather than catastrophic mechanical failure. Degraded, incorrect or underperforming transmission fluid is the leading cause, especially in modern compact, efficiency-driven designs. By choosing high-quality, application-specific ATF, drivers can often eliminate shudder, restore smooth operation and protect one of the most complex and expensive components in their vehicle. Proper fluid selection and maintenance remain the foundation of transmission longevity – and the best defense against shudder.

June Closeout

The last day to process June orders is Tuesday, June 30. The ordering line (800-777-7094) is open until 7 p.m. Central Time. Online orders that don't require manual processing or validation can be submitted until 11:59 p.m. Central. All orders received after these times will be processed for the following month. Volume transfers for June business must be submitted in the Dealer Zone or DBS by 11:59 p.m. Central on Monday, July 6.

Holiday Closings

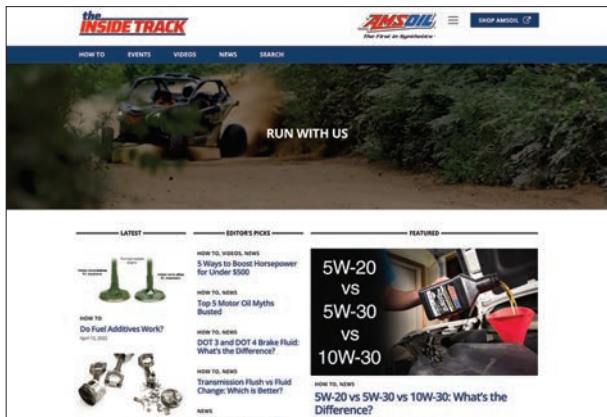
The AMSOIL corporate headquarters and U.S. distribution centers will be closed Friday, July 3 for Independence Day. The Edmonton and Toronto distribution centers will be closed Wednesday, July 1 for Canada Day.



AMSOIL 3x5 Flag

Prominently features the AMSOIL logo on both sides. Reinforced leading edge with 2 grommets for easy installation/application. Screen printed with UV-resistant inks to reduce fading. Standard 3' x 5' flag size.

STOCK # **G3958**
 U.S. Price: \$46.00
 CAN Price: \$60.00



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PRODUCT SPOTLIGHT:

AMSOIL Synthetic Multi-Purpose Grease (GLC)

WHAT IS IT?

Premium synthetic grease that delivers the ultimate combination of protection and convenience.

WHAT DOES IT DO?

- **Provides** exceptional film strength and shear resistance for robust protection in severe service.
- **Delivers** superior adhesion to resist water washout and stay in place longer.
- **Excels** in hot and cold temperature extremes.
- **Provides** excellent load-carrying and EP performance for heavy and abusive loads.
- **Protects** against corrosion.

WHO IS IT FOR?

Do-it-yourselfers, commercial accounts, retail accounts. Use AMSOIL Synthetic Multi-Purpose Grease in heavy- and light-duty applications found in manufacturing facilities, automobiles, trailers and landscaping, agricultural and powersports equipment. These include, but are not limited to, roller bearings, plain bearings, thrust bearings, gears, electric motors, presses, winches, bushings, wheel bearings, chassis lubrication, universal joints, ball joints, tie-rod ends and steering knuckles.





Matt Palen | GENERAL COUNSEL

Protecting Customer Information: What Every AMSOIL Dealer Needs to Know

Privacy protection is an essential part of conducting business.

Customer trust is one of the most valuable assets in any business. Today, that trust increasingly depends on how well we protect personal information. Across the United States, privacy laws are expanding rapidly – more than 20 states have now enacted comprehensive consumer-privacy legislation – and enforcement is becoming more active. For AMSOIL Dealers, understanding and following basic privacy practices is no longer optional. It's part of doing business the right way.

At its core, privacy law is about respecting how customer information is collected, used and protected. When customers share their names, email addresses, home addresses or phone numbers, they are trusting that information will be handled responsibly. As Dealers, you play an important role in maintaining that trust.

What Does This Mean for You?

You don't have to be a legal expert to comply with privacy laws, but you do have to follow a few key principles.

- 1. Only use customer information for permitted purposes.** If a customer provides their information to place an order or receive support, that does not automatically mean they have agreed to receive marketing emails or promotions. If you want to send marketing communications, you need clear consent from the customer first.
- 2. Give customers a way to opt out.** Customers must have an easy way to unsubscribe from marketing emails or texts. If someone asks to

be removed from your list, you must honor that request promptly.

- 3. Respect deletion requests.** Many privacy laws give customers the right to request that their personal information be deleted. If a customer asks you to remove their information from your records, take that request seriously and follow through.

- 4. Keep track of consent and requests.** It's important to maintain basic records of the following:

- When and how a customer gave consent.
- Any opt-out requests.
- Any deletion requests.

You don't need a complicated system, but you must be able to show that you're handling customer data responsibly.

- 5. Never sell or share customer information.** Customer information should never be sold to third parties or shared with others outside of what's necessary to fulfill an order or provide service. Customers have no expectation that their personal information will be passed along to others, and in many states, doing so without consent is against the law.

- 6. Protect the information you have.** Customer information should be stored securely and only accessed when needed. Simple steps like using strong passwords, keeping software updated and limiting who has access to customer records go a long way.

Why This Matters Now

Privacy laws don't come with a small-business exemption. Whether you run your Dealership full-time or as a side business, these laws can apply to you. Violations can result in financial penalties, and in some states, customers have the right to take legal action directly against businesses that mishandle their information.

Beyond the legal risk, customers are paying closer attention to how their information is used. A single negative experience, like receiving unsolicited emails or finding out their information was shared without their knowledge, can damage trust and your reputation in ways that make it hard to recover.

This is why privacy compliance matters not just as a legal obligation, but as a business value. The Dealers who earn lasting customer loyalty are the ones customers feel they can trust.

The Bottom Line

Privacy isn't just a legal issue – it's a trust issue. Customers choose to do business with AMSOIL and its Dealers in part because of the integrity and professionalism our brand represents. How we handle their personal information is part of that promise.

AMSOIL MARINE PRODUCTS

Marine engines operate under high loads in wet conditions, inviting corrosion and engine wear that can reduce performance and even cause catastrophic engine failure. AMSOIL marine products are engineered to deliver peak performance and maximum engine life in harsh marine environments, so you can spend more time on the water.

AMSOIL SYNTHETIC MARINE ENGINE OIL (WCT, WCF, WCM)

- **Protects** highly stressed four-stroke marine engines.
- **NMMA licensed** and FC-W Catalyst Compatible.

AMSOIL HP MARINE™ SYNTHETIC 2-STROKE OIL (HPM)

- **Burns** clean to minimize smoke, odor and aquatic toxicity.
- **Maximizes** power and engine life.

AMSOIL OUTBOARD 100:1 PRE-MIX SYNTHETIC 2-STROKE OIL (ATO)

- **Burns** clean to reduce emissions and deposit formation.
- **Maximizes** power and engine life.

AMSOIL SYNTHETIC 2-STROKE INJECTOR OIL (AIO)

- **Burns** clean to reduce emissions and deposit formation.
- **Inhibits** rust and wear.

AMSOIL UNIVERSAL SYNTHETIC MARINE GEAR LUBE (AGM)

- **Protects** high-torque outboard lower units and sterndrives.
- **Prevents** gear wear at up to 15% water contamination.

AMSOIL SYNTHETIC WATER-RESISTANT GREASE (GWR)

- **Ideal** for submerged boat-trailer wheel bearings, outboard motors, etc.
- **Resists** water washout and water degradation.

AMSOIL POWERSPORTS OIL FILTERS (EAOM)

- **Powder-coated** and corrosion-resistant finish.
- **99%** efficient at 20 microns.

AMSOIL ENGINE FOGGING OIL (FOG)

- **Inhibits** corrosion during storage.
- **Prevents** dry starts after storage.

AMSOIL GASOLINE STABILIZER (AST)

- **Inhibits** oxidation to prevent gum and varnish.
- **Keeps** fuel fresh for up to 12 months.

AMSOIL QUICKSHOT® (AQS)

- **Removes** varnish and gum in gasoline fuel systems.
- **Stabilizes** gasoline during short-term storage.





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TOW WITH CONFIDENCE

AMSOIL SEVERE GEAR® Synthetic Gear Lube and Signature Series Synthetic Automatic Transmission Fluid provide maximum protection in demanding environments such as towing, hauling and commercial use, providing increased lubricant film protection and reduced wear at elevated temperatures.

