

**INSIDE:**  
Factory-Direct Catalog  
New Diesel Oil Handout  
V-Twin Promo



**MAGAZINE**

APRIL 2019

# MORE AMSOIL PRODUCTS AVAILABLE IN THE AWARD-WINNING EASY-PACK

| PAGE 8



# WHY BUY SIGNATURE SERIES?

**DO YOU DRIVE IN HOT TEMPERATURES?**



In testing, **kept pistons clean** and **held oil thickening to only 6 percent**, a minimal amount compared to the proposed specification limit of 150 percent <sup>4</sup>. **50 percent more** detergents<sup>5</sup> to help keep oil passages clean and promote oil circulation. Provides **90 percent better protection** against sludge<sup>6</sup>.

**DO YOU HAVE LONG COMMUTES?**



**30 percent more acid-neutralizing power<sup>9</sup>** than Mobil 1\*, and 36 percent more than Royal Purple\*, helping engines stay cleaner, longer. **Reserve protection**, so you can go up to **25,000 miles**, 700 hours of operation or one year between oil changes, whichever comes first.

**DO YOU WANT EXTRA ENGINE PROTECTION?**



**Far superior wear protection** compared to the competition – kept bearings looking like new after 100,000-mile test<sup>1</sup>.

**DO YOU TOW OR HAUL?**



**75 percent more engine protection** against horsepower loss and wear<sup>7</sup>.

**DO YOU DRIVE IN COLD TEMPERATURES?**



**66 percent better cold-temperature performance** for easier starting, better fuel economy, improved oil flow and reduced wear.

**DOES YOUR VEHICLE HAVE A TURBOCHARGER?**



**72 percent better turbocharger protection** than required<sup>2</sup> by the GM dexos1<sup>®</sup> Gen 2 specification. Achieved **100 percent protection** against low-speed pre-ignition (LSPI)<sup>3</sup>.

<sup>1</sup>Testing conducted in an independent lab using AMSOIL Signature Series 5W-30 Synthetic Motor Oil and a leading synthetic-blend 5W-30 motor oil in Ford F-150 trucks with 3.5L twin-turbo engines. <sup>2</sup>Based on independent testing of AMSOIL Signature Series 5W-30 in the GM turbo coking test. <sup>3</sup>Based on zero LSPI events in five consecutive tests of AMSOIL Signature Series 5W-30 Motor Oil in the LSPI engine test required by the GM dexos1 Gen 2 specification. <sup>4</sup>Based on the ILSAC GF-5 PLUS specification. <sup>5</sup>vs. AMSOIL OE Motor Oil. <sup>6</sup>Based on independent testing of AMSOIL Signature Series 5W-30 in the ASTM D6593 engine test for oil screen plugging as required by the API SN specification. <sup>7</sup>Based on independent testing of AMSOIL Signature Series 0W-20, in ASTM D6891 as required by the API SN specification. <sup>8</sup>Based upon independent testing of Mobil 1 Annual Protection Full Synthetic 5W-30, Royal Purple High Performance 5W-30 and AMSOIL Signature Series 5W-30 in ASTM D2896. Oils purchased 05/03/18. <sup>9</sup>All trademarked names 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.



See back label for details.



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**THE COVER**

Servicing ATV and UTV transmissions and differentials can be just as messy and frustrating as servicing pickup diffs. The easy-pack is about to change that.



# From the President

I've mentioned a few times that I believe in the constant pursuit of improvement in all areas of life. As part of that pursuit, I read quite a bit about topics related to business and success. One common theme runs through them all: you have to be totally consumed by what you're doing in order to be successful. You have to immerse yourself. You have to dive deep and allow no distractions.

Think about when you go on vacation. Why does the week leading up to vacation become extra productive? Why can't you be at that productivity level every day? You can! You can teach yourself to reach that level of intensity daily. It can be uncomfortable for some people, but imagine what you could accomplish.

There's another important element to commitment: time. You can't practice that immersion for a week and decide it isn't worthwhile. You have to give it time. Are you familiar with the 10,000-hour rule? It claims you have to spend 10,000 hours practicing something to become a master. That's 8 hours a day for almost 3.5 years. People

have argued its validity, claiming that practice will only provide mastery in stable fields where the rules don't change – sports and music, for example. Business, they claim, is too unpredictable. There are too many variables to account for to allow deliberate practice to make more than a marginal difference.

The detractors make some valid points, but committing time to something will help you succeed. I'd argue that your AMSOIL business demands it. How are you going to know which program to enroll someone in if you haven't dedicated the time to learning our programs and how to qualify customers and accounts? How are you going to make customers feel confident in your recommendations if you haven't spent time studying our products and the basics of lubrication? Sure, you can get by without doing those things for a while, but you certainly aren't going to get far.

It takes time to learn our products and programs, and it takes even more time to learn how to effectively sell

in the field. Devoting the necessary time and fully committing to your AMSOIL business goes against the norm today. Our society has trained us to want everything now. We need patience. Take a look at our top Dealers. With few exceptions, they are Dealers who have been around for a long time. They have demonstrated the commitment and patience necessary for success and it is paying off for them now.

I can't guarantee your success – even if you spend 10,000 hours on your AMSOIL business. But I can guarantee it won't hurt your chances. I'd like nothing more than to see you put in the work and enjoy the benefits of a successful AMSOIL Dealership.

**Alan Amatuzio**  
President & CEO

# LETTERS TO THE EDITOR

## AMSOIL ADVERTISEMENT

I saw the new outstanding AMSOIL advertisement in the December 2018 issue of *Car and Driver* magazine. Can AMSOIL tell us more about the test conducted? Showing the ad to people generates comments like, "One vehicle probably had an easy life and the other worked hard." I would like to provide more follow-up to that kind of a reaction.

**Jim Kochmann**

**AMSOIL:** Absolutely, Jim. The testing featured in this ad (shown below) was conducted in an independent laboratory using two Ford\* F-150\* pickup trucks with new 3.5L EcoBoost\* engines. AMSOIL Signature Series 5W-30 was installed in one, while a leading brand's synthetic-blend 5W-30 was installed in the other. The tests were run to the same specifications, with power sweeps done at the beginning and end to evaluate horsepower and torque retention. Signature Series not only helped maintain engine performance throughout the 100,000-mile test, it provided far superior wear protection and kept engine bearings looking like new (as seen in the pictures). You can see actual footage of the test in our commercial featured on Motor Trend Network and in the video at [www.amsoil.com/auto](http://www.amsoil.com/auto).

**PROBLEM. SOLUTION.**

**THEIR OIL** **AMSOIL**

\*Testing conducted in an independent laboratory using AMSOIL Signature Series 5W-30 Synthetic Motor Oil against a leading brand 5W-30 synthetic-blend motor oil in Ford F-150 trucks with 3.5L EcoBoost engines.

Your bearings shoulder the burden whenever you tow, haul or drive in deep snow. That's why they need powerful protection for bearings and other critical engine components. The demonstration, an independent lab put AMSOIL synthetic motor oil through a 100,000-mile test. AMSOIL, being comprised of a 100% synthetic base oil, provided far superior wear protection and kept bearings looking like new. Get your ride the protection it deserves.

**AMSOIL**  
The First in Synthetics™

Buy it at:  
[amsoil.com/retailanddriver](http://amsoil.com/retailanddriver)

Free Delivery to Your Door  
Some restrictions apply. See [www.amsoil.com](http://www.amsoil.com) for details.

Call or go online for our FREE Pick-Up Order Fuel Catalog 1-800-952-5288

## OIL RECOMMENDATION

Here is the dilemma. I purchased a new RAM\* with 3.0 Ecodiesel\*. I would like to use AMSOIL in this new motor. The motor has been out since 2014. During that time they originally used 5W-30 oil. As you have referred to, this was probably for fuel economy. They had some engine issues and switched to recommending T6 Shell Rotella\* 5W-40. Even though I have legal standing if I use Signature Series, I don't want to get in a legal battle over oil either with Fiat Chrysler\* or AMSOIL if there is an engine failure. Does AMSOIL provide legal counsel in issues involving their oil?

Thanks and God bless,

**Duke Downs**

**AMSOIL:** Thank you for your letter, Duke. We are aware of the issues with first-generation RAM 3.0L engines, and we changed our viscosity recommendation for this engine to 5W-40. Signature Series Max-Duty 5W-40 Synthetic Diesel Oil (DEO) is an outstanding choice. Using the appropriate AMSOIL product for your engine will not void the vehicle manufacturer's warranty. If you receive notification from the dealership that using Signature Series Max-Duty 5W-40 will void your warranty, contact AMSOIL Technical Services at (715) 399-8324 or [tech@amsoil.com](mailto:tech@amsoil.com), and we can assist you. We will always do whatever we can to help you, but we do not provide legal counsel.

## GOVERNMENT BIDS

I have the chance in the coming year to bid on products by AMSOIL with our local government entities. Is there a process for this type of sales?

**F.M. Menou**

**AMSOIL:** Government bids are a significant challenge for AMSOIL Dealers, F.M. In most cases, the initial price of the product is the government entity's primary consideration, while many also present service and delivery obligations that are impossible for AMSOIL or the AMSOIL Dealer to meet. One major limiting factor can be the lubricant specifications called for in

the bid. For instance, are they looking for synthetic oil or simply the cheapest product that meets the equipment specifications? Dealers who choose to pursue government bids face the risk of spending a significant amount of time and effort on something that, most often, doesn't pan out. This time and effort is better spent pursuing more attainable business, including new Dealers and P.C.s. Before entering a bid process, it is best to speak with your regional sales manager, who can walk you through the steps and offer valuable advice.

## WIND TURBINES

I just read the article in the January AMSOIL Magazine about the wind turbine business. It prompted me to write about an experience I had last 4th of July while at a community picnic.

A fellow walked by me with a camo shirt that had AMSOIL across the chest. It was a shirt that I had never seen before, even in the promotional materials catalog. I stopped him, introduced myself as a local AMSOIL Dealer and commented on the shirt. He said that he worked for GE\* in the wind turbine market and that AMSOIL gear lube was the factory fill on them with 80 gallons. I was surprised by that and have always thought about the market potential.

**Don Sass**

**AMSOIL:** Thank you for sharing, Don. We are proud of what we have accomplished in the wind industry.

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



**Len Groom** | TECHNICAL PRODUCT MANAGER, POWERSPORTS

## Small engines need big protection

Clean, protected power helps professionals keep their equipment running all season.

Here in the Northland, spring has officially arrived, while folks to our south have enjoyed warmer weather for weeks. Spring means the sound of lawnmowers running across many neighborhoods. And to many businesses, that sound means they're making money.

Professional landscapers rely on their lawnmowers more than any other piece of equipment in their fleets. Zero-turn and stand-on mowers allow crews to quickly produce professional-looking lawns and grounds through a combination of precision, power and speed. Next to his truck, a zero-turn mower is usually a landscaper's most expensive investment, with new models pushing \$10,000.

You can imagine how a business owner wants to keep his mowers running strong. Unfortunately, operating conditions can frustrate that goal. Landscapers rarely work in ideal environments. Equipment runs all day in hot, damp and dirty conditions. This can lead to deposits and wear that invite several problems.

### Decreased engine power

Engine compression equals engine power, and engine power equals speed and efficiency – two goals busy landscapers strive for on every job site.

Heavy deposits due to heat breaking down the motor oil can cause the piston rings or valves to stick. Stuck rings prevent the combustion chamber from sealing properly, which reduces compression. Valve sticking disrupts engine operation and leads to compression loss, further reducing power. Crews are left with mowers

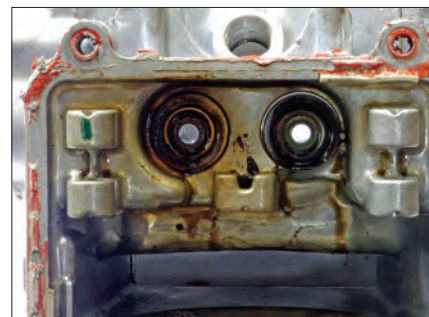
that run poorly and lack the like-new efficiency needed to complete jobs on time and up to standards.

### Lost profitability

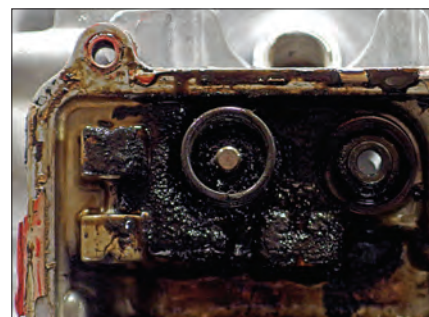
Eventually, deposits will lead to engine failure. Look at the bottom image of the valve-guide area in a Honda\* 5-hp engine tested in our mechanical lab. A competitor's oil resulted in heavy deposits that caused the valve to stick. In fact, the technician who tore down the engine couldn't remove the valve due to excessive deposits. Had this engine been in the field, it would have just been a matter of time before it failed, leading to a costly repair or replacement. AMSOIL 10W-30 Synthetic Small-Engine Oil (ASE), in contrast, minimized deposits and kept the engine running strong, which helps professionals maintain profitability.

In our experience, most small-engine oils are just re-labeled automotive oils, which are formulated with fuel economy in mind, not engine durability. That doesn't cut it when a business owner's reputation and profitability are at stake. While easy to assume small equals simple when it comes to engines, the opposite is often true. Compared to liquid-cooled automotive engines, air-cooled small engines run hotter; operate under constant load; generate more contaminants (with many not using a filter); and are exposed to mud, dirt and rain. Plus, they're often overlooked when it comes to maintenance.

We kept all that in mind when we formulated Synthetic Small-Engine Oil. It's not merely a re-labeled automotive oil – it's designed specifically for commercial-grade small engines. We



**AMSOIL 10W-30 Synthetic  
Small-Engine Oil  
125 Hours**



**Leading Oil Brand  
125 Hours**

added a heavy dose of zinc anti-wear additives and potent detergency additives to fight wear and help prevent power-robbing deposits. We like to say it provides clean, protected power, which helps professionals keep their expensive equipment running strong for years.

This season, make that your focal point as you talk to landscapers and other professionals.



Mark Nyholm | TECHNICAL MANAGER, HEAVY DUTY AND MECHANICAL R&D

## Engine Oil Should Change with Temperature

We design our oils to withstand the effects of large temperature swings.

I was talking to a respected diesel magazine editor recently when he mentioned a question his readers sometimes pose: How do dramatic temperature swings affect engine oil?

Boy, did he come to the right place for the answer to that question. Big temperature swings are common in much of North America. In February 2011, the town of Nowata, Okla. saw a record low of -31°F (-35°C). Just a week later the temp climbed to 79°F (26°C). That's a 110°F (61°C) swing in only a week.

The underlying concern for motorists is that ambient temperature changes will permanently degrade engine oil. So, is it possible? When using AMSOIL synthetic lubricants, the short answer is no. But, if your customer is using conventional oil, the answer is much longer and can get a little muddy.

To illustrate, suppose you had been in Nowata during that record-setting week and you had been using conventional oil. Early in the week, the oil would have thickened in the cold – maybe enough to prevent the engine from starting. If the engine had started, the oil pump could have sheared the ultra-thick oil, permanently reducing its viscosity. Oil that has lost viscosity can fail to provide adequate wear protection, placing your engine at risk.

By the weekend, with the temperature rising, you had shed your winter coat and broken out the shorts. Feeling energized, you loaded the UTVs on the trailer and decided to hit the trailhead.

The warmer temps, combined with towing, could have increased your engine's operating temperature

enough to oxidize the oil, permanently increasing its viscosity. This leads to reduced fuel efficiency since the engine has to work harder to circulate the thicker oil. It also increases oil temperature, further hastening chemical breakdown, which invites harmful deposits and reduces the oil's service life.

Oil formulators know that temperatures change continually. Extreme temperatures are common all over the world, and we don't want oil to permanently change viscosity due to your local weather. This is why oil is designed to *temporarily* change with the temperature – in large part due to formulating oil with viscosity-index (VI) improvers. Here's how it works.

VI improver additives contract when it's cold, allowing the viscosity to decrease, or become thinner. This ensures the oil flows readily and provides protection to critical components when you start the engine. It also ensures the oil pump doesn't shear the oil and permanently reduce its viscosity. As the temperature increases, VI improvers relax and slow the rate at which the lubricant's viscosity decreases. Think of VI improver additives like springs. They contract when cold, but stretch when hot. As they stretch out inside the lubricant, they bump into each other and strategically control viscosity.

VI improvers sound great, but they can have drawbacks. Low-quality VI improvers are prone to mechanical shear. As the oil is squeezed through tight tolerances, like the piston ring/cylinder wall interface, the pressure can tear apart, or shear, the VI

improvers. Continuing with our spring analogy, imagine cutting a spring in half. The two pieces will still stretch, but not nearly as much as a complete spring. As a result, the oil loses high-temperature viscosity. Eventually your 5W-40 oil may become a 5W-30. Permanent viscosity loss from shear is not good. Viscosity influences the oil's fluid film, which helps prevent metal-to-metal contact and wear. Every original equipment manufacturer designs its engines with specific clearances designed to be filled by a specific viscosity of oil. If the VI improvers shear too much, viscosity decreases, inviting engine wear.

Like base oils, VI improvers come in a range of qualities. We use high-quality VI improvers that resist shear despite intense stress. As a result, AMSOIL synthetic oils maintain viscosity to provide excellent wear protection despite the weather outside.

So, big temperature changes can affect engine oil, but it's something we know and can design around. AMSOIL synthetic engine oils stay fluid in the cold while maintaining protective viscosity in the heat. They let you rest assured that your engine is protected without permanent damage to your oil, even if the temperature spikes 110°F (61°C) in a week.

# MORE AMSOIL PRODUCTS AVAILABLE IN THE AWARD-WINNING EASY-PACK

The revolutionary SEVERE GEAR® easy-pack has earned accolades and loyal customers since its introduction last summer. In fact, it has received both a SEMA Global Media Award and a Flexible Packaging Achievement Award. Now, AMSOIL Synthetic Marine Gear Lube and AMSOIL Synthetic ATV/UTV Transmission & Differential Fluid are the latest products to be packaged in the easy-pack, bringing the benefits of **less waste, less mess and less frustration** to powersports applications.



## GAME PLAN

- The easy-pack is perfect for marinas and repair shops. Explain how the product could improve the efficiency of their shops.
- People react strongly to seeing and touching the easy-pack in person. Bring a sample along when you visit current and prospective accounts.
- Sell enthusiasts on the convenience of the flexible packaging and how it eliminates the need to improvise special tools or purchase pumps.
- Highlight the easy-pack's unique place in the market and its potential to spark interest that could result in new customers.





### THE OLD WAY:

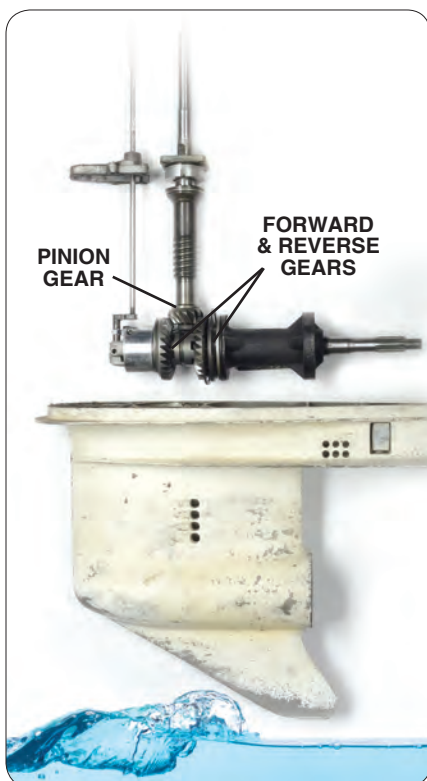
- More Mess
- More Waste
- More Frustration



### THE NEW EASY-PACK:

- Less Mess
- Less Waste
- Less Frustration

**Dump the Pump – eliminates the need for a messy pump**



**AMSOIL Synthetic Marine Gear Lube (AGM) continues to provide the same great performance.**

- **Protects** components, even when contaminated with 10% water
- **Reduces** friction and wear
- **Helps** prevent rust and corrosion
- **Durable** easy-pack makes the job cleaner and faster

**Updated labels and packaging?** Yes

**Formulation change?** No

**New stock numbers?** No. The new package type will be indicated by "PK" after the product code.

**Traditional quart packaging still available?** Yes

**Marine Gear Lube Pump (G3456) still available?** Yes

### Why Change Marine Gear Lube?

Marine motors are constantly exposed to water. If water infiltrates the lower unit and contaminates the gear lube, it can cause foam, which weakens the fluid film and leads to wear. Water contamination also invites corrosion, which acts like sandpaper and scours bearing and gear surfaces.

Frequent throttle bursts, meanwhile, concentrate tremendous pressure on the pinion gear and the forward and reverse gears. The gear lube fluid film can rupture, especially if it's been weakened due to water contamination, leading to metal-to-metal contact.

To avoid breakdowns and get the most out of your time on the water, service marine lower units seasonally.



**THE OLD WAY:**

- More Mess
- More Waste
- More Frustration



**THE NEW EASY-PACK:**

- Less Mess
- Less Waste
- Less Frustration

**Easily access tough-to-reach fill holes**

**COMING NEXT MONTH**

Look for the following AMSOIL products to be available in the easy-pack next month:

- Signature Series Multi-Vehicle Synthetic Automatic Transmission Fluid (ATF)
- Signature Series Fuel-Efficient Synthetic Automatic Transmission Fluid (ATL)
- SEVERE GEAR® 75W-110 Synthetic Gear Lube (SVT)
- Synthetic Manual Transmission and Transaxle Gear Lube (MTG)
- 80W-90 Synthetic Gear Lube (AGL)

**AMSOIL Synthetic ATV/UTV Transmission & Differential Fluid (AUDT) continues to provide the same great performance.**

- **Protection** for demanding chores and tough terrain
- **Reserve** protection for heavily loaded gears
- **Durable** easy-pack makes the job cleaner and faster

**Updated labels and packaging?** Yes

**Formulation change?** No

**New stock numbers?** No. The new package type will be indicated by "PK" after the product code.

**Traditional quart packaging still available?** Yes

**Why Upgrade to AMSOIL Performance?**

ATV and UTV owners invest thousands of dollars in their machines and accessories to improve utility and performance. Owners, particularly UTV owners, often purchase expensive upgrades, including roof panels, doors, winches, skid plates and snow plows. These upgrades improve UTV utility and safety and maximize ATV performance, but increased weight and severity of service are side effects directly affecting lubricants.

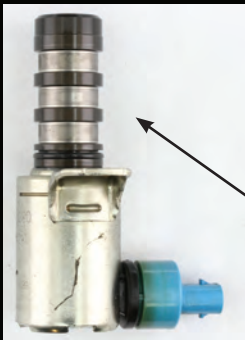
Elevated heat can break down lubricants while increasing the likelihood that heavily loaded, high-torque gears and bearings will fail. In addition, while accessories increase performance and versatility, the added weight and the propensity of these machines to be used for towing or hauling increase harmful heat and stress on gears and bearings. The negative effects of severe-service riding increase the importance of high-quality lubricants for increased protection.

Ever drive your UTV through water deep enough to run over your floorboards? Then you probably have water in your differentials, compromising your protection.

AMSOIL Synthetic ATV/UTV Transmission & Differential Fluid provides another performance upgrade that helps owners safely and confidently push their machines to the limit. After spending thousands of dollars on a new UTV or ATV and equipping it with expensive upgrades, it makes sense to upgrade to AMSOIL performance.

# WHERE OIL GOES AND WHAT IT DOES

A typical engine contains hundreds of parts, none of which could function properly without oil. Far from a simple commodity, oil is a dynamic enabler of performance. It must lubricate, cool, protect, seal, actuate components and more. And it must do it all while exposed to tremendous heat and stress. Here, we highlight key areas where oil goes inside your engine and what it does once it's there.



## Variable Valve Timing (VVT)

To increase fuel economy and reduce emissions, most modern engines use VVT systems to adjust when the valves open and close. VVT systems use motor oil as a hydraulic fluid to actuate cam-phaser components. Solenoids, like the one shown here, control cam-phaser timing. **These solenoids contain tiny openings through which the oil must flow.** Even minimal varnish or deposits can disrupt the system, triggering a check-engine light. The oil must maintain viscosity to function as a hydraulic fluid while resisting deposits to maximize VVT system performance.

## Valves and Seals

Though not illustrated here, valve seals prevent oil from running down the valve stems. This keeps the oil on valvetrain components and prevents it from entering the intake and exhaust ports and burning, increasing oil consumption. The oil must condition these seals to prevent drying, cracking and leaking. The oil also helps cool the valves and control cylinder-head deposits, helping prevent valve sticking.

## Wrist Pins & Undercrowns

Crankshaft eccentrics splash-lubricate the cylinders, wrist pins and piston undercrowns. Some engines have small nozzles that spray oil directly onto the wrist pins and undercrowns. The rapidly spinning crankshaft causes air entrainment in the oil, creating foam. If foam bubbles in the oil pass between metal parts, they collapse and cause metal-to-metal contact. The oil must contain anti-foam additives to quickly dissipate foam. The oil must also contain detergent additives to help keep the wrist pins and undercrowns clean.

## Signature Series Delivers Powerful Protection

AMSOIL delivers powerful protection. How good is it? An independent lab compared AMSOIL synthetic motor oil head-to-head against a leading competitor in a 100,000-mile (160,934-km) test<sup>†</sup>. AMSOIL provided far superior wear protection and kept bearings looking like new.



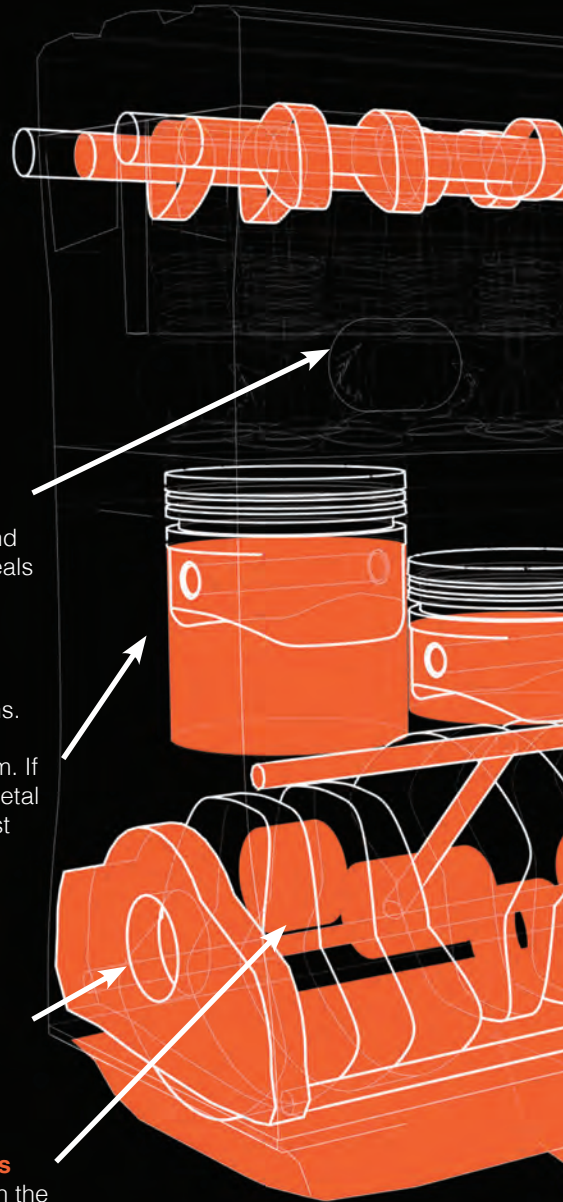
<sup>†</sup>Testing conducted in an independent lab using AMSOIL Signature Series 5W-30 Synthetic Motor Oil and a leading synthetic-blend 5W-30 motor oil in Ford F-150 trucks with 3.5L twin-turbo engines.

## Main Seals

The seals at the ends of the crankshaft keep the oil inside the engine. The oil must condition seals to prevent drying, cracking and leaking.

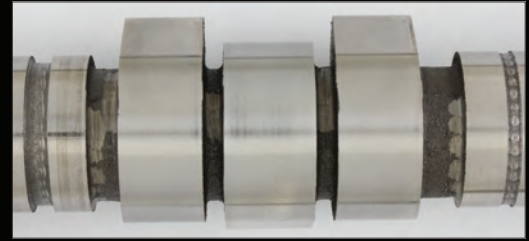
## Connecting Rods & Main Bearings

Combustion drives the pistons down the cylinder, creating intense pressure between the connecting rods, main journals and bearings. Oil molecules act like microscopic ball bearings that support this pressure and allow the rods and crankshaft to rotate without metal-to-metal contact. The oil must maintain its protective viscosity despite increased pressures, temperatures and shearing forces. If the fluid film weakens, the oil will squeeze from between the journal and bearing clearances, resulting in metal-to-metal contact and bearing wear.



## Camshaft

The camshaft and lifters open and close the intake and exhaust valves. To prevent wear, the oil must form a strong fluid film that separates the cam lobes and lifters. It also must contain robust anti-wear additives to maximize the life of the camshaft and bearings. As the image shows, AMSOIL Signature Series 0W-20 Synthetic Motor Oil (ASM) did an excellent job protecting against cam wear in rigorous, third-party testing.



## Pistons, Rings & Cylinders

The pistons compress the air in preparation for combustion. The piston rings perform several critical functions: they must seal the combustion chamber, return excess oil on the cylinder walls to the sump and transfer extreme piston-crown heat to the cylinder walls.

To prevent wear despite intense heat and shearing forces, oil must maintain a strong, consistent film between the rings and cylinder walls. It also must prevent deposits that cause ring sticking, increased oil consumption, compression changes and low-speed pre-ignition (LSPI).



Example of piston damage due to an LSPI event observed during the testing of a competitor's motor oil. The red arrows indicate sections of the ring land that have broken away from the piston.

Signature Series Synthetic Motor Oil achieved **100 percent protection against LSPI<sup>1</sup>** in the engine test required by the GM\* dexos1<sup>®</sup> Gen 2 specification – zero occurrences were recorded throughout five consecutive tests.

## Oil Galleries & Passages

An engine contains an intricate network of oil galleries and passages that carry oil to components. Passages in the crankshaft, for example, carry pressurized oil to the rod and main bearings, while similar passages in the upper end carry oil to the valvetrain. Oil that thickens in the cold can fail to flow through narrow passages and starve the engine of oil. Sludge, meanwhile, can plug passages and have the same effect. The oil must remain fluid when the temperature drops, and it must prevent sludge.

## Oil Pick-Up Tube Screen

The oil pump draws oil through a fine screen and pressurizes it so it can flow through the oil galleries and passages to the bearings and valvetrain. Sludge can plug the screen, starving the engine of oil. Oil that thickens too much to pass through the screen has the same effect. Therefore, oil must remain fluid when cold to pass through the screen and flow throughout the engine at startup (when the majority of wear occurs). The oil also must prevent sludge to keep galleries and passages clean, ensuring maximum oil flow.

## Signature Series Cleans

AMSOIL Signature Series Synthetic Motor Oil has **50% more** detergents<sup>DD</sup> to help keep oil passages clean and promote oil circulation. It provides **90% better protection** against sludge<sup>DD</sup>.



The oil pick-up tube screen is virtually free of sludge.

<sup>DD</sup>vs. AMSOIL OE Motor Oil  
<sup>DD</sup>Based on independent testing of AMSOIL Signature Series 5W-30 in the ASTM D6593 engine test for oil screen plugging as required by the API SN specification.

<sup>1</sup>Based on independent testing of AMSOIL Signature Series 5W-30 motor oil, in the LSPI engine test as required for the GM dexos 1<sup>®</sup> Gen 2 specification.



# AMSOIL BYPASS SYSTEMS

- **Outstanding** sales opportunity – excellent pricing, limited competition
- **Get your foot in the door** with new customers and accounts
- **Earn sales** even if you can't get past objections to buying lubricants
- **Repeat** filter sales • **Earn** great commissions

## AMSOIL BYPASS FILTRATION BENEFITS

- **Significantly** extended engine life • **Efficient** small-particle and soot removal
- **Reduced** maintenance costs • **Improved** oil cooling • **Extended** drain intervals



**Jamie Prochnow** | COMMERCIAL PROGRAM MANAGER

## Product claims are great attention-getters

Here's how to use them to earn a sale.

AMSOIL synthetic lubricants are the best in the world. I know what you're thinking – *that's what every oil company says about its own products.* Well, we take it a step further by publishing results of comparative testing against competitors' oils and the latest industry standards. Performance testing is in our DNA, and you can plan on seeing more of it in the future.

We're not shy about touting our test results, either. You can find them on select product labels, in our catalogs and on our advertisements, among other places. A product comparison, however, can become nothing but noise to prospects if not used properly. As noted, every company boasts about some performance claim or another. Today I want to talk about how you can best use our test results when talking to prospects or customers.

### Sell benefits, not features

People want to know what a product *does* more than what it *is*. Think of what the product does as its benefits. When talking to prospects, explain how the product benefits help them.

Let's use SABER® Professional Synthetic 2-Stroke Oil (ATP) as an example. It's a great product for landscapers and other commercial accounts.

What does SABER Professional's ability to fight carbon mean to the person to whom you're speaking? You know, the person who's likely in a hurry and isn't interested in hearing a lengthy sales pitch.

Simply put, heavy carbon on two-stroke equipment like string trimmers, blowers and chainsaws is bad for business and affects the bottom line. Tie the product's benefits to the prospect's pain points. Has he or she ever had to waste time cleaning a spark-arrestor screen to restore equipment operability? Has he or she fought with hard-starting equipment that lacks the power to get the job done on time and up to standards? SABER Professional eliminates these hassles. Switching to SABER Professional maximizes equipment operability, power and life. For a company, this means increased profitability. And we haven't even mentioned the money saved using a 100:1 mix ratio with SABER Professional.

### Listen a lot, talk a little

Two-stroke equipment is just the start. All your customers and prospects have stories about wasting time and money on unreliable vehicles or equipment, whether a car, truck, boat or lawnmower. It's my belief that the best sales people have big ears and small mouths – if you listen, you can identify clues that tie the person's needs to one of our product comparisons.

Maybe he or she has a turbocharged vehicle and is concerned about taking care of it since turbo repairs can be expensive. AMSOIL Signature Series Synthetic Motor Oil is the perfect solution. As our testing shows, it protects turbochargers 72 percent better\*\* than required by

the GM\* dexos1® Gen 2 specification. The benefit worth highlighting, in this case, is the peace of mind that comes with an oil proven to deliver above-and-beyond turbo protection compared to the latest industry standards. Your prospect can drive his car like it's meant to be driven without worrying about burning up the turbo.

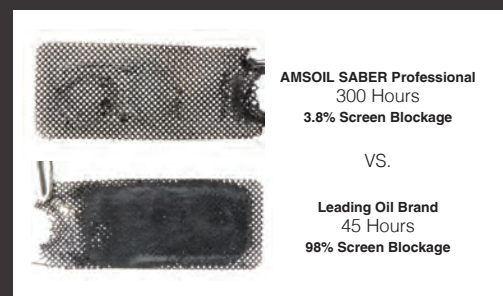
Comparisons are great, but understanding why they're important to your customer is where the rubber meets the road. Remember – **always sell the benefit, not the feature.**

You can find all current performance tests at [www.amsoil.com/performance-tests.aspx](http://www.amsoil.com/performance-tests.aspx). Find the test results relevant to the needs of your prospects and customers and use them to help close your next sale.

Happy selling!

### SABER Professional Fights Carbon

Equipment using SABER Professional was **96% carbon-free<sup>N</sup>**.



<sup>N</sup>Based on spark-arrestor testing.

# WHY BUY OE SYNTHETIC MOTOR OIL?

**DO YOU  
DRIVE IN HOT  
TEMPERATURES?**



**Fights heat** to control deposits, prevent thickening and limit oil consumption

**DOES YOUR  
VEHICLE HAVE A  
TURBOCHARGER?**

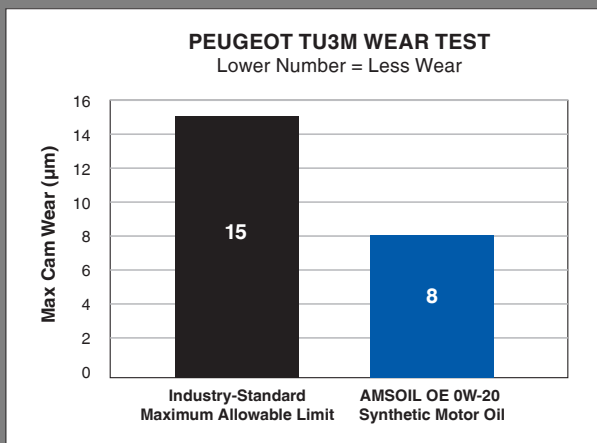


Achieved **100 percent protection** against low-speed pre-ignition (LSPI)<sup>2</sup>

**DO YOU WANT  
EXTRA ENGINE  
PROTECTION?**



**47 percent** more wear protection<sup>1</sup> than required by the GM dexos1 Gen 2 specification



<sup>1</sup>Based on independent testing of OE 0W-20 in the Peugeot TU3M Wear Test as required by the dexos1 Gen 2 specification. <sup>2</sup>Based on zero LSPI events in five consecutive tests of AMSOIL OE 5W-30 Motor Oil in the LSPI engine test required by the GM dexos1 Gen 2 specification. \*All trademarked names 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.





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WE HONOR



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Our new limited-time retail motorcycle promotion allows new retail accounts to receive a 10 percent rebate on their first qualifying order, as well as a free motorcycle shelf display and counter mat. See the flyer inside and the Dealer Zone for details.



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April 2019

# THREE POWERFUL AEROSOLS

AMSOIL Mudslinger, Engine Degreaser and Glass Cleaner deliver performance you 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

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

### BEFORE ENGINE DEGREASER



### AFTER ENGINE DEGREASER



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