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Run hard, stop, run hard, repeat. **AMSOIL 100% Synthetic Hybrid Motor Oil** provides advanced, purpose-built protection to combat issues caused by the start/stop cycle of hybrid engines, including condensation-caused corrosion and fuel dilution.

## **AMSOIL 100% Synthetic Hybrid Motor Oil**

- Purpose built to combat issues common to HEV and PHEV vehicles
- 100% synthetic formulation helps maximize fuel economy
- Corrosion inhibitors fight corrosion caused by condensation
- Flows quickly to reach critical components when engine engages
- Helps keep combustion chamber and exhaust system clean
- API licensed





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**OCTOBER** 2023



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#### **THE COVER**

The AMSOIL Commercial-Grade line has expanded, creating more opportunities for Distributors to increase sales in the commercial market.



# From the Chairman

Last month I wrote about the values we adhere to at AMSOIL. These are personal to me and I expect all AMSOIL employees to act with those values in mind. As the company grows, it's important for everyone, including AMSOIL Distributors, to know our values and our mission. We recently formed a new mission statement. Many companies have meaningless mission statements filled with vague concepts and feelgood buzzwords. I don't care for that. The fact is, we are on a mission. and I want everyone to know what it is. It must reflect AMSOIL - our values, our bold nature and our attitude of determination - and it must carry meaning for AMSOIL Distributors, customers and employees. With that in mind, we formally adopted this mission statement:

We are driven to earn the loyalty of every customer by engineering innovative lubricant solutions

that deliver the protection and performance they've been promised.

While this is a seemingly simple sentence, we took great care in its development. Let's dissect it. First, we are driven. That speaks directly to our number-one value. determination. We are driven to earn the loyalty of every customer. We don't want one-and-done customers; we want customers for life, and to achieve that, we must earn their trust and loyalty. Loyalty is not something most people give freely; it must be earned. And we will earn it by engineering innovative lubricant solutions that deliver the protection and performance they've been promised. Solutions is a key word, as it speaks to things beyond lubricants, like our filters, fuel additives and the service we provide. We will continue pushing lubricant technology forward, and we will continue to develop innovative solutions to the problems our

customers face every day. Finally, we will deliver the protection and performance they've been promised. which means we will hold ourselves accountable to ensure that our products perform as advertised.

The commercial market is important for our continued growth, and it is a prime opportunity for us to demonstrate our values and fulfill our mission. The types of accounts we're targeting are underserved.

Alan Amatigio

Alan Amatuzio Chairman & CEO



**AMSOIL 100% Synthetic High-Mileage Motor Oil** is engineered specifically for the unique demands of high-mileage engines, helping extend the life of vehicles with over 75,000 miles (120,000 km) on the odometer.

## AMSOIL 100% Synthetic High-Mileage Motor Oil

- **Boosted** additive package fights oil breakdown and leaks
- **Enhanced** detergency removes deposits to help restore peak performance
- Consistent fluid film helps counteract compression loss by sealing combustion chambers
- Formulated to maintain viscosity, even in extreme temperatures
- Extra dose of seal conditioners helps restore aging seals and stop leaks
- **Protects** for up to 12,000 miles (19,000 km) or one year, whichever comes first
- API licensed



## **LETTERS TO THE EDITOR**

#### **MUSCLE CAR MANIA**

I don't know who wrote the "Muscle Car Mania" article in the June AMSOIL Magazine; it was good but they forgot to mention two Mopar\* hemi engines: the 354 and 392 were both very popular in drag racing in the late '50s and '60s. Remember Don Garlits's 392 with 671 GMC\* blower?

#### **Jake Jacobs**

AMSOIL: Great point, Jake, We're glad you enjoyed the article. We would've liked to cover every Mopar muscle-car engine, but unfortunately, we had to leave some off due to space constraints.

#### **OIL FILTERS**

Why has AMSOIL not produced engine-oil filters for the 2023 Duramax\* 6.6 engines? There must be thousands between Chevrolet\* and GMC. Seems like nobody but the dealers have them.

Thanks.

#### **Rick Parson**

AMSOIL: We offer the EAO11 Oil Filter for the 6.6L Duramax, Rick. We previously recommended the EAO52 for this engine, but GM design changes in 2019 prompted us to switch our recommendation to the EAO11. Check our online vehicle lookup for the proper filter recommendation for a specific vehicle. Please note it usually takes 6-9 months for the lookups to show filter recommendations for brandnew vehicles. In those situations, call or email Tech Services (715-399-TECH, tech@AMSOIL.com) for filter recommendations.

#### **PLANT TOUR**

I had a new customer today who recently purchased AMSOIL products. About 2-3 years ago, this customer was sightseeing in the Lake Superior region of Wisconsin. During his trip, he decided to stop by AMSOIL headquarters on his motorcycle and expressed interest in a tour of the plant. To his surprise, he received a positive response and was informed that he could go directly to the plant, where someone would be waiting to accompany him.

Without hesitation, he headed for the plant and was immediately impressed by the cleanliness and organization of the facilities. The working environment was impeccable, with well-maintained production lines and state-of-the-art equipment. Attention to detail and quality was evident at every stage of the manufacturing process.

In addition to the remarkable cleanliness of the plant, what impressed our customer most was the friendliness and warm welcome of the staff. They gave him a complete guided tour of the plant, explaining in detail every stage in the production of AMSOIL products. The employees were very willing to answer any questions he might have had, showing a genuine interest in his experience and providing in-depth information on products and processes.

During the visit, our customer was able to see the passion and professionalism with which AMSOIL employees work. He was impressed by their expertise and dedication to producing high-quality lubricants. This experience really reinforced his confidence in the AMSOIL brand and led him to become a loyal customer.

In summary, the unexpected visit to the AMSOIL factory had a significant impact on our customer. The exceptional cleanliness of the facilities and the friendliness of the staff left a lasting impression. This reinforced his confidence in the AMSOIL brand and helped establish a solid relationship as a new customer.

Thanks to the AMSOIL staff.

**Bruno Ranger** 

AMSOIL: That is great to hear, Bruno. Thank you for sharing. That's the way we operate at AMSOIL. We're glad your customer had a great experience and it reinforced his loyalty to AMSOIL products.

> 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.



# Diesel fuel quality can vary greatly from one location to the next.

With fewer details posted on the pump, diesel drivers have little indication of the fuel's quality or performance.

Mark Nyholm | SR. PRODUCT MARKETING MANAGER, COMMERCIAL

I can't tell you how many times I have stood at the #2 ultra-low-sulfur diesel (ULSD) pump and wondered just what I am getting out of that green-handled spout. This concern is heightened during seasonal changes from warm to cold when all diesel drivers begin worrying about fuel gelling. The regulations controlling what is posted at the pump are very different for gasoline and diesel fuel. When you pull up to a gasoline pump you at least know what octane fuel you are buying. Diesel fuel is different, but rest a little easier knowing there are federal regulations controlling certain performance properties of the fuel - they just don't have to post most of them at the pump.

Diesel fuel is a refined product of crude oil. If you performed a diesel fuel study and compared fuels across the country, you would find substantial differences in performance; however, you would also find that all fuel refineries meet a federally regulated standard for a few key fuel properties. The first is sulfur content. The maximum limit on sulfur content in on-road diesel fuel was reduced in 2007 from 500 ppm to 15 ppm, in accordance with the Environmental Protection Agency's Clean Air Highway Diesel rule mandating a 97 percent reduction in the sulfur content of highway diesel fuel. The new ultra-low-sulfur diesel allowed engines to be fitted with exhaust systems that emit less particulate matter and nitrogen oxide. Unfortunately, reduced sulfur in fuel results in increased wear in fuel systems and injectors. Sulfur in fuel acts as a natural anti-wear agent that protects fuel pumps and injectors from premature failure, so the reduced sulfur content left a hole that needed to be filled by lubricity additives.

Another regulation requires diesel fuel to have a certain level of lubricity out of the pump as measured by the high-frequency reciprocating rig (HFRR), a widely used friction and wear-scar testing system. For the HFRR test, the lower the number recorded (in microns), the more protection provided by the fuel. The maximum wear scar permitted in the U.S. is 520 microns. With sulfur all but gone from today's diesel fuel, refineries have started adding lubricity additives to ULSD to make up for lost wear protection.

The second key property is cetane index. This is a measurement of diesel fuel's combustion efficiency during ignition. The higher the number, the more easily and completely the fuel combusts. In the United States the minimum cetane value is 40. Fuel with a cetane number greater than 52 rarely delivers a substantial performance benefit in engines designed in the U.S. Because cetane values vary from region to region and cetane numbers aren't posted at the pumps, diesel operators have no indication which stations offer higher cetane diesel. If you get your hands on test data, optimum engine performance is found with cetane values between 46 and 50

Depending on your winter driving conditions, the most important diesel fuel property may be its cold flow or its resistance to gelling in cold temperatures. The cold filter plugging point (CFPP) is used to determine the lowest temperature at which fuel will flow without plugging the fuel filter. Refineries accommodate seasonal changes by making a winter blend in which they mix the normal #2 ULSD with a percentage of #1 diesel (kerosene) and some cold-flow additives. Refineries increase the percentage of #1 diesel

and cold-flow additives depending on region and temperature throughout the winter months to combat potential fuel-related cold-weather driving problems. There are no federally mandated minimum CFPP values that refineries must target for cold temperatures; and, unfortunately, fuel stations again do not have to post the cold-weather performance of the fuel at the pump.

AMSOIL has long recognized this variation in diesel fuel properties and offers products that provide additional performance and security for diesel engines. AMSOIL Diesel Injector Clean (ADF) provides both detergency to clean fuel injectors and the combustion chamber, and a lubricity additive to help lubricate the fuel pump and injectors to compensate for the lack of lubricity in ULSD. AMSOIL Diesel Cetane Boost (ACB) increases the cetane index for improved ignition performance and power. AMSOIL Diesel Injector Clean + Cetane Boost (ADS) combines the benefits of Diesel Injector Clean and Diesel Cetane Boost in one convenient package. AMSOIL Diesel Cold Flow (ADD) helps reduce the cold filterplugging point and protects engines from fuel starvation in cold winter conditions. AMSOIL Diesel All-In-One (ADB) combines the benefits of Diesel Injector Clean. Diesel Cetane Boost and Diesel Cold Flow in one convenient package. In times of extreme cold, or when the fuel you purchased won't flow in cold conditions, AMSOIL Diesel Recovery (DRC) quickly dissolves gelled fuel and thaws frozen fuel lines and filters.

You can't guarantee high-quality fuel at the pump, but you can guarantee AMSOIL diesel fuel additives will make that fuel the best it can be to keep your diesel-powered application running at peak performance throughout the year.

## **Commercial-Grade Expansion**

The AMSOIL Commercial-Grade line has expanded to include a new 10W-30 Diesel Oil and Tractor Hydraulic/Transmission Oil.

The commercial market presents a tremendous opportunity to secure highvolume sales and increase commissions. Winning those prized commercial prospects, however, can be challenging as many are hesitant to switch lubricant brands for fear of risking the reliability of the vehicles and equipment on which they depend.

#### **New AMSOIL Commercial-Grade** Oils

New AMSOIL 10W-30 Commercial-Grade Diesel Oil (SBDT) and Commercial-Grade Tractor Hydraulic/ Transmission Oil (TCGSB) join 15W-40 Commercial-Grade Diesel Oil (SBDF) and Commercial-Grade Hydraulic Oil (HCG32, HCG46, HCG68) in the AMSOIL Commercial-Grade family. These competitively priced products are formulated specifically to provide protection and value for commercial customers, while helping Dealers compete against lowerpriced conventional products in the commercial market, win new commercial accounts and increase sales to existing commercial accounts.

#### **AMSOIL 10W-30 Commercial-Grade Diesel Oil**

While AMSOIL Heavy-Duty Synthetic Diesel Oil and Signature Series Max-Duty Synthetic Diesel Oil offer outstanding options with significant benefits, they can be a tough sell to commercial businesses that are primarily concerned about initial price when making purchasing decisions. Considering conventional and synthetic-blend lubricants dominate the commercial market with more than 80% market share, lower prices are a top priority for most commercial-business owners and decision makers.

Our research reveals that current API-licensed synthetic-blend diesel oils contain between 1-15% maximum synthetic content. Now available in 10W-30 and 15W-40 viscosities, AMSOIL Commercial-Grade Diesel Oil is an advanced synthetic-blend oil with greater than 50% synthetic base oil content. Specially designed for commercial equipment at the best price, it provides 2X better wear protection1 to help maximize equipment life and reduce maintenance costs and downtime. AMSOIL Commercial-Grade Diesel Oil provides outstanding value and excellent protection for customers seeking an upgrade over conventional diesel oils.

- 2X better wear protection.1
- Meets the latest API CK-4 diesel-oil specification.
- Improved heat and oxidation resistance.
- Helps maintain power and fuel efficiency.
- Flows dependably in cold temperatures for reliable startup and engine protection.
- · Reduced oil consumption.

Common competitors for AMSOIL Commercial-Grade Diesel Oil include Shell Rotella T5\* and Mobil Delvac.\*



#### **AMSOIL Commercial-Grade Tractor Hydraulic/** Transmission Oil

AMSOIL Commercial-Grade Tractor Hydraulic/Transmission Oil is a synthetic-blend Universal Tractor Transmission Oil (UTTO) designed to provide outstanding value for customers seeking an upgrade over competing conventional and synthetic-blend oils. It provides excellent protection and long life in hydraulic systems, hydrostatic transmissions, wet brakes and the power takeoff systems in severeservice agricultural and commercial equipment. It delivers outstanding protection while suppressing wet-brake chatter for reduced maintenance and reliable operation.

- Formulated with greater than 50% synthetic content for excellent protection and performance.
- Anti-wear additives protect gears and other components under heavy loads for long pump and valve life.

## **AMSOIL COMMERCIAL-GRADE PRODUCTS CREATE MORE OPPORTUNITIES**

AMSOIL Commercial-Grade products are specifically designed to gain the attention of commercial customers who are not interested in higherperforming, full-synthetic lubricants.

- More than 80% of lubricants sold in commercial markets are conventional or synthetic blend. AMSOIL Commercial-Grade products will help you gain new business.
- AMSOIL Commercial-Grade Diesel Oil can help you gain more business from existing accounts that do not currently purchase AMSOIL synthetic diesel oil.
- Recommended for a range of applications, helping consolidate inventory and reduce misapplication.
- Friction-modifier additives promote consistent clutch operation, reduced chatter and smooth operation.
- Anti-foam additives help control fade and reduce sponginess.
- Resists oxidation at high temperatures for long oil and component life.
- Conditions seals and hoses to help prevent leaks.

Common competitors for AMSOIL Commercial-Grade Tractor Hydraulic/ Transmission Oil include John Deere HY-GARD\* and Mobil Delvac.\*



## AMSOIL 1,000-HORSEPOWER SUPERCHARGED LSX ENGINE BUILD

AMSOIL products protect custom-built, street-legal competition engines.

The automotive enthusiast who builds a high-horsepower, street-legal car commonly uses it for autocross, track days, drag racing or occasional weekend drives. You need to show off your work, right? AMSOIL set out to build a 1,000-horsepower engine that can consistently perform well anywhere, while remaining dependable as a daily driver.

#### **DESIGN MANDATES**

They say that if you do multiple things, you don't do anything well. A highperformance, street-legal engine needs to perform flawlessly when racing and still get you home after the checkered flag. So, do you simply target 1,000 hp, or do you want something more robust?

Our way of thinking is that owners want to do as much driving and as little maintenance as possible. So, we estimated how many visits the average driver might make to the track in one year. We calculated annual drive time on the engine at 25 hours, then ran the engine the same number of hours under power profiles designed to simulate a season of drag racing, autocross and light road use.

The biggest self-imposed restriction in building this 1,000-hp LS V-8 engine was the ability to run it on 91-octane pump fuel, available at any roadside gas station. The design focused on areas of the powerband that could become problematic with standard fuel. Since AMSOIL is not in the business of testing engine parts, hitting these goals was never an absolute certainty. We were simply aiming for a reliable engine that would make a consistent 1,000 hp using AMSOIL products.

#### **SELECTING PARTS**

AMSOIL Mechanical Lab Engineer Chris Orr helped set up the AMSOIL dyno testing lab in 2012 and was called upon to assemble our custom LS engine. Our team produced a complete aftermarket design using individually selected

components, rather than choosing a crate engine. The LS wasn't a platform with which we were familiar, so parts selection was based on personal experience with manufacturers that provide quality parts known to hold up in high-performance applications.

The engine was designed around mandates of reliability and consistent performance, and not on outside support. We selected parts early in the process and then asked certain vendors if they were interested in participating, but none of the parts were sponsored. Some vendors offered modest discounts, but more importantly, many of them offered invaluable advice and support.

Challenges arise when you take 40 different aftermarket parts and assemble them into one engine. It's not just bolting pieces together; it's a fully aftermarket assembly with a precise tolerance stack throughout. You must look at the whole thing as a system. Thankfully, it all went together flawlessly.

An ultra-efficient supercharger was included in the build, which also adds additional stress to key engine components, specifically the bearings.

#### **DRY SUMP**

This engine build is not easy on oil, which is good because we wanted to push our oil to its limits. Because LS engines may exhibit oiling cavitation and aeration limitations in the standard oil pump, we decided to dry sump the LS to provide better oiling to the engine throughout. The dry sump provides less air-entrained oil to critical components such as the camshaft and main and rod bearings under high horsepower, rpm and cylinder pressure, and allows for precision valve control.

The testing produced temperatures and pressures designed to break the oil. For instance, you don't want temperatures over 200°F (93°C) during the breakin process, but the engine quickly exceeded that and would have screamed right past 300°F (149°C) (NASCAR\* level) and kept going if left unmonitored.

#### RESULTS

It took about a year to build, and thanks to smart design, the engine achieved its targeted 1,000-hp goal and remained extremely healthy throughout testing. There are trade-offs when building a premium engine. You can change various properties, but it doesn't always help, and can even be detrimental.

The engine netted a little less than its maximum potential power because it has conservative timing. This is an expected compromise when attempting to make an engine dependable rather than wringing every bit of performance out of it. The LS could make more power with better cams, fuel and timing, but it provides peace of mind knowing that this conservative and reliable engine consistently makes 1,000 hp without imploding.

The engine delivered on all expectations and ran extremely consistently. You can stack the dyno runs on a chart and it looks like one big, thick line. That's an exceptional attribute, because moonshots and big power numbers are cool, but repeatable horsepower and reliability are more important in the real world where constant engine rebuilds are not an option.

#### **TESTING**

We used AMSOIL DOMINATOR® Synthetic Racing Oil, which is not something we recommend in your daily driver, but it's extremely capable in highperformance, low-usage applications. Peak performance came in at 1,022 hp at 7,110 rpm.

For more on our 1,000-horsepower build, visit youtube.com/amsoilinc.





Machine Shop: Line Performance

#### **Engine Block:**

GM\* Performance LSX 376 B15 iron block

#### **Displacement:**

415 cubic inches (6.8 liter)

#### **Bore x Stroke:**

4.065 x 4 (square for power)

**Crankshaft:** Molnar\* 4-inch stroke, 58-tooth

reluctor, FCW billet

Bearings: Clevitte\*

Rods: Molnar LS 6.125 power adder

#### **Pistons & Rings:**

J&E\* forged and dished to prevent LSPI on boosted pump gas

#### Oil Pump & Pan:

Dailey\* LS 3-stage dry sump

Timing Set: Rollmaster\*

#### **Cylinder Heads:**

AFR\* 260cc 12deg Mongoose 6-bolt

Manley\* SS 2.165 intake, 1.600

exhaust

#### **Valve Springs:**

Manley springs, tool steel retainers, locks

#### Camshaft:

Bullet\* Racing Cams Solid Roller

#### Lifters:

Jesel\* GM LS1 .937-inch body

#### **Rockers:**

Jesel AFR LS3 Mongoose 1.70/1.70 shaft

**Pushrods:** Trend\* 3/8-inch diameter, 1.35 wall

EFI System: Holley\* Dominator

Injectors: FIC\* 127#

Throttle Body: Whipple\* 109mm

Intake Manifold: Whipple

#### **Headers:**

Schoenfeld\* dyno/sprint car type

#### **Power Adder:**

Whipple 3.0-liter supercharger (99% volumetric efficiency)

#### **Ignition System:**

Holley 'Big Coil' system

#### **Fuel System:**

Aeromotive\* variable-speed fuel pump

Fuel Type: 91 octane

#### Horsepower/Torque:

1,022.61 hp STPPwr @ 7,110 rpm 851.06 lb.-ft. STPTrg @ 4,476 rpm

Dyno: SuperFlow\* 902S, AMSOIL

INC.

#### **AMSOIL PRODUCTS:**

AMSOIL DOMINATOR®

15W-50 Synthetic Racing Oil (RD50)

AMSOIL Break-in Oil (BRK)

AMSOIL Engine Assembly Lube (EAL)



## SCOTT DOUGLAS INDUCTED INTO OFF-**ROAD MOTORSPORTS HALL OF FAME**

Scott Douglas's family belonged to a Jeep\* club in California in the early 1970s. Riding in the back seat ingrained an early love for the excitement of off-roading and the importance of taking care of public lands.

In the mid-1970s, Douglas began racing motorcycles at Riverside International Raceway. He transitioned from two wheels to four in 1980 after buying an old Ford\* F-150\* truck at a used car lot with his brother. Together, they prepped it for Class 8 and entered the infamous Baja 500, finishing fifth in their class.

Douglas's career took a major leap in 1990 when off-road legend Walker Evans hired him to pilot a factory-backed Jeep Cherokee.\* Douglas brought home a class championship for Jeep and Walker Evans Racing, and Evans moved Douglas up to a Class 7 Dodge\* Dakota\* factory ride.

In the mid-1990s, Douglas was hired to drive the Herzog Dodge\* Ram\* PRO-2 pickup in the growing Short-Course

Off-Road Drivers Association (SODA) series. Douglas immediately became a dominant force in SODA with podium finishes and short-course wins.

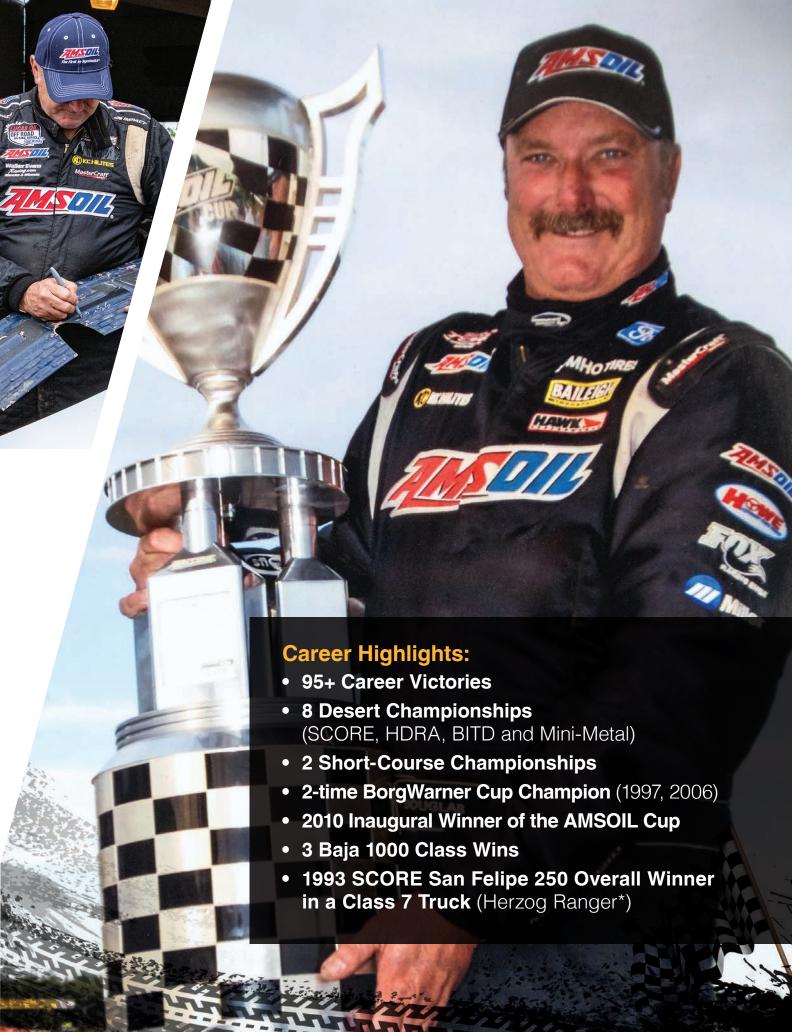
Douglas moved to PRO-4 in 1996, winning the championship for Rampage Racing two years in a row. He doubled down in 1997 by winning the coveted BorgWarner Manufacturer's Challenge Cup for Ford Motor Company at Crandon International Off-Road Raceway. He won a second BorgWarner in 2006.

In 2010, Douglas missed the opening win at Crandon's Spring Challenge Cup by less than two-tenths of a second. However, he took home the trophy as the inaugural winner of Crandon's Fall Challenge race, the AMSOIL Cup.

Over a 40-year career, Douglas successfully raced everything from stock classes to unlimited trucks, including SCORE trophy trucks and short-course Pro-4s, before retiring in 2019 after the 50th Crandon World Championships.

Despite his racing success, Douglas says the highlight of his career was listening to American soldiers in Iraq and Afghanistan share their stories during a 14-day Middle East Off-Road Champions tour in 2011. The troops signed vinyl pieces that Douglas used to cover the hood of his Pro-4 for a race in Charlotte.

Scott Douglas was inducted into the Off-Road Motorsports Hall of Fame on September 9, 2023.



#### **October Closeout**

The last day to process October orders is Tuesday, Oct. 31. 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 October business must be submitted by 11:59 p.m. Central on Monday, Nov. 6.

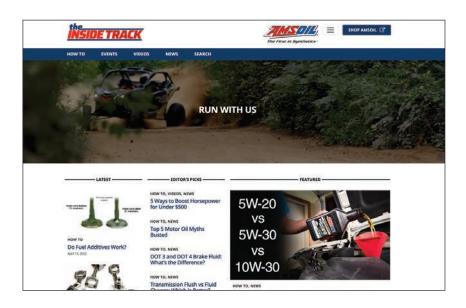
Volume transfers must now be submitted in the Dealer Zone (Business Tools>General Business Tools>Volume Transfer) or DBS. Transfers can no longer be submitted on

the Dealer-to-Dealer Order Form (G01) or other forms through email or fax.

#### **Signature Series** 10W-30 Max-Duty Synthetic Diesel Oil Now Available in Quarts

Effective Oct. 4. **AMSOIL Signature** Series 10W-30 Max-**Duty Synthetic Diesel** Oil (DTT) will be available in quarts.





#### **Visit The AMSOIL Inside Track**

The AMSOIL Inside Track (blog.AMSOIL.com) provides a single destination for how-to videos, customer testimonials, blog posts, product news, racing/events information and more. Be sure to add The Inside Track to your favorites and check frequently. We add new content every week and it's a great source of marketing material for your social media accounts and website. Email or text content directly to customers and prospects using Dealer-number transferring links to ensure you receive credit for all registrations and sales.





#### **AMSOIL Exhibits at** Automechanika Johannesburg

Last month, AMSOIL teamed up with our new official Distributors from South Africa to showcase products and talk to customers and enthusiasts alike. We are excited to have representation in this part of the world as we continue to grow globally. The show took place at the JHB Expo Centre, and hosted attendees from all over the sub-Saharan region and exhibitors from all over the world.



# GO LONG XL Protection XL Drain Interval

AMSOIL Extended-Life 100% Synthetic Motor Oil is overbuilt for road warriors so they can confidently drive up to 20,000 miles (32,000 km) or one year, whichever comes first, between oil changes.

## AMSOIL Extended-Life 100% Synthetic Motor Oil

- Provides extended drains up to 20,000 miles (32,000 km) or one year, whichever comes first
- Advanced synthetic base oils and additive package promote prolonged engine life
- Boosted additive package neutralizes acids and resists sludge, corrosion and carbon deposits
- Maintains viscosity under the most extreme conditions
- Unique chemistry protects against low-speed pre-ignition (LSPI)



## What's the Right Motor Oil for You?

No matter what you drive or how you drive, we formulate industry-leading motor oil to protect your vehicle. Use the chart below to choose the right motor oil for your ride.

#### **Frequently Asked Questions**

Why do I need AMSOIL High-Mileage Motor Oil? For engines exceeding 75,000 miles (120,000 km) with unknown maintenance history or known usage of lower-quality oil, AMSOIL High-Mileage Motor Oil provides an added boost of detergents to clean sludge and deposits. It also features a robust viscosity that provides additional wear protection, even after some wear has already occurred. Added seal conditioners extend the life of seals and help protect against drying, cracking and leaking.

When should I use AMSOIL High-Mileage Motor Oil? A good rule of thumb is to use AMSOIL High-Mileage Motor Oil at or around the time your vehicle has accumulated 75,000 miles (120,000 km). While 75,000 is not an extreme number of miles today, it is an ideal time to prepare your engine for the road ahead with an added boost of protection.

Do I need to use AMSOIL High-Mileage Motor Oil if I've already been using AMSOIL motor oil? No. If you've been consistently using AMSOIL motor oil, your engine is already operating at peak performance and has been protected against wear. However, if you've been

using AMSOIL OE and are looking for an upgrade in overall engine protection as it ages, AMSOIL High-Mileage Motor Oil is an excellent choice.

Aren't AMSOIL motor oils recommended for vehicles regardless of mileage? Correct, all AMSOIL motor oils offer outstanding performance and protection regardless of vehicle mileage. However, for those seeking targeted benefits at an affordable price, AMSOIL High-Mileage Motor Oil is the best choice for high-mileage applications. For those seeking the ultimate performance and protection regardless of miles, we still recommend Signature Series Motor Oil.

Is AMSOIL High-Mileage Motor Oil the best AMSOIL product to use in highmileage vehicles? AMSOIL offers two excellent products that provide boosted benefits for high-mileage applications. AMSOIL High-Mileage Motor Oil focuses on the key challenges that high-mileage vehicles face at a lower price point. AMSOIL Signature Series Motor Oil does everything High-Mileage Motor Oil does, while providing industry-leading performance and protection across the board. Signature Series is the best choice regardless of vehicle mileage.

#### Why do I need Hybrid Motor Oil?

Hybrid engines operate under a different set of parameters and conditions that typically result in additional fuel and water contamination, leading to corrosion. AMSOIL Hybrid Motor Oil is uniquely formulated to address these specific challenges.

When should I use Hybrid Motor Oil? AMSOIL Hybrid Motor Oil is an excellent choice for any hybrid electric (HEV) or plug-in hybrid electric vehicle (PHEV), regardless of miles or age of the vehicle.

What if I've been using another AMSOIL motor oil in my hybrid vehicle? If you've already been using AMSOIL motor oil, your engine has received excellent protection. All AMSOIL motor oils of the appropriate viscosity are compatible with hybrid technologies, but AMSOIL Hybrid Motor Oil is specially tailored to focus on the unique challenges presented by hybrid vehicles at an affordable price. If you've been using AMSOIL OE and are looking for an upgrade in hybrid-engine protection, AMSOIL Hybrid Motor Oil is an excellent choice.

		SIGNATURE SERIES	EXTENDED-LIFE (XL)	HIGH-MILEAGE	HYBRID	OE	
	WEAR PROTECTION	VVVV	V V V	V V V	V V V	V V	
	ENGINE CLEANLINESS	VVVV	V V V	<b>VVV</b>	~ ~	V V	
	SERVICE INTERVAL	VVVV	V V V V	V V V	VVV	V V	
	EXTREME TEMP PERFORMANCE	VVVV	~~	V V	V V V V	V V	
	CORROSION PROTECTION	VVVV	V V V	V V	V V V V	V V	
花	OIL-CONSUMPTION CONTROL	VVVV	V V V	V V V	~ ~	~~	n te
	VISCOSITY CONTROL	VVVV	V V V	V V	VVV	VV	
	LEAK PROTECTION	VVVV	~~	<b>VVV</b>	V V	V V	
	SEVERE-SERVICE PROTECTION	VVVV	V V V	V V	V V	V V	



ISO 9001/ISO 14001 REGISTERED

#### **Questions/Comments**

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October 2023

# High Performance, Meet High Performance

The AMSOIL 100% Synthetic European Motor Oil line has expanded to include 0W-30 and 10W-60 viscosities.

#### AMSOIL 0W-30 MS Synthetic European Motor Oil (EOT)

Proprietary formula designed for the unique demands of gasoline, diesel and hybrid European vehicles. Precise blend of advanced synthetic base oils and premium additives deliver exceptional engine protection without harming emissions systems.

#### AMSOIL 10W-60 FS Synthetic European Motor Oil (ETS)

Engineered for high-performance European vehicles. Precise blend of advanced synthetic base oils and premium additives deliver exceptional protection in extreme conditions. Provides excellent shear resistance, reduced oil consumption and reliable performance to confidently push engines to the limit.

