



► DISTRIBUTOR EDITION

MAGAZINE

JULY 2024

WHERE IS THE U.S. AUTOMOTIVE MARKET HEADING?

| PAGE 8



Marti & Co. AG • Saxweg 5 • CH-9470 Buchs
www.marti-buchs.ch • Tel. 081 750 51 00 • info@marti-buchs.ch



Light Viscosity. Heavy Protection.

NOW AVAILABLE

Introducing AMSOIL 0W-8 100% Synthetic Hybrid Motor Oil

Our advanced synthetic hybrid motor oil line is expanding. AMSOIL 0W-8 100% Synthetic Hybrid Motor Oil (HE08) meets the new Toyota* specification for the Corolla* equipped with the 2.0L (M20A-FXS) engine. Nissan,* Mitsubishi* and Honda* are expected to adopt the new specification for certain models over time.

AMSOIL 100% Synthetic Hybrid Motor Oil

- Purpose-built protection to combat issues caused by the start/stop cycle of hybrid engines.
- 100% synthetic formulation helps maximize fuel economy.
- Corrosion inhibitors stop corrosion caused by condensation.
- Flows quickly to reach critical components when engine engages.
- Helps keep combustion chamber and exhaust system clean.
- JASO licensed.



Where is the U.S. Automotive Market Heading? | PAGE 8

FEATURES

- 8 Where is the U.S. Automotive Market Heading?
- 10 Introducing AMSOIL Synthetic-Blend Motor Oil
- 11 Ram Truck 500K-Mile Engine Teardown Showcases AMSOIL Protection
- 12 The Importance of Antioxidants in Marine Oil
- 14 Distributor Spotlight

DEPARTMENTS

- 4 From the Chairman
- 6 Letters to the Editor
- 7 Tech Talk

ADVERTISEMENTS

- 2 Light Viscosity. Heavy Protection.
- 5 Turn More Heads
- 13 Product Spotlight: AMSOIL Shock Therapy® Suspension Fluid
- 16 AMSOIL Marine Engine Oil Now Available in 1-Gallon Containers

STAFF

International Department

- Laurent Leduc
- Amber Gurske
- John Zhang - Asia
- Rachid Fatmi - Middle East/India
- Lucy Ibanez - Latin America/Caribbean
- Timur Pankov - Europe
- Mohamed Dadabhay - Africa

Ordering and Sales Coordination

Dan Maki

Editor

Terry Johnsen

Associate Editor

Joel Youngman

Staff Writers

- David Hilgendorf
- Brad Nelson
- Tiffany Tenley
- Jamie Trembath
- Joel Youngman

Graphic Design Manager

Jeff Spry

Senior Graphic Designer

Luke Boynton

Content Contribution

- Jamie Gibson
- Len Groom
- Alex Thompson

Editorial Contribution

Len Groom

Back Issues

Back issues of *AMSOIL Magazine* are available for \$1 each. Order G17D and specify the month and year.

On the Web

- AMSOIL.com
- AMSOIL.eu
- AMSOIL.lat
- AMSOIL.africa
- AMSOILasiapacific.com
- AMSOIL.fr
- AMSOIL.co.in
- AMSOIL.ca

Chairman & CEO

Alan Amatuzio

President

Bhadresh Sutaria

© 2024, AMSOIL INC.

All rights reserved.

Printed by Arrowhead Printing
Duluth, MN USA.

Letters to the Editor

AMSOIL INC.
Communications Department
The AMSOIL Building
925 Tower Ave.
Superior, WI 54880
letters@AMSOIL.com



From the Chairman

Last year, we launched AMSOIL Commercial-Grade Diesel Oil specifically to target commercial accounts. We learned that, regardless of the added protection and performance benefits our synthetic lubricants provide, most businesses that would make excellent commercial accounts won't even consider a full-synthetic option. They have their reasons – hydraulic hoses breaking frequently, requiring all-new fluid, leaky equipment that gets the job done but isn't worth the cost to repair the leaks and so on. For those people, the benefits of full-synthetic lubricants don't outweigh the cost. Others are just extremely price sensitive and can't grasp that synthetics provide an overall lower cost of ownership. Our research revealed that more than 80% of the commercial market won't consider synthetic solutions, so we launched the AMSOIL Commercial-Grade line and sales exceeded our projections. Many took advantage of the new doors these products opened and gained new business.

Now, we're following suit for installers. We want a stronger presence in the installer market, and that means we need a product portfolio that fulfills their basic requirements. Most oil changes performed by installers feature either full-synthetic, high-mileage or synthetic-blend motor oils. We are giving them what they need with new AMSOIL Synthetic-Blend Motor Oil. Now you have a complete solution for installers in your area in the package sizes they require.

AMSOIL Synthetic-Blend Motor Oil is not designed for our typical customer who wants the absolute best protection. We have that area well covered. But that isn't to say our new synthetic-blend products aren't any good. On the contrary, in keeping with AMSOIL tradition, they are the best in their category. I've written in this column before about how there are no regulations governing what constitutes a "synthetic blend." A company could include 1% synthetic base oil

in its formulation and call the product "synthetic blend." Not us. Our synthetic-blend products include more than 50% synthetic content to deliver real benefits for consumers. These are products your installers can be confident in and proud to install in their customers' vehicles.

They are also products you can be proud to sell, and should help you gain new business. All of this work was done with one goal in mind: help you sell more oil.

Alan Amatuzio
Chairman & CEO



Turn More Heads

AMSOIL car-care products are engineered with advanced technology to deliver powerful cleaning action that helps vehicles shine brighter.

AMSOIL High-Foam Car Shampoo

Powerful pH-neutral formulation delivers exceptional cleaning action without harming coatings and finishes.

- Hybrid technology of surfactants, cleaning agents and degreasers.
- Optimal foaming action lubricates surfaces and lifts contaminants away.
- Anti-static.
- Prevents water spots.
- May be used with bucket, foam gun or foam cannon.



AMSOIL Ceramic Spray

Advanced SiO₂ ceramic technology enhances gloss and protects painted and plastic surfaces for up to 12 months with a simple spray-on, wipe-off application.

- Easy application.
- Repels water.
- Enhances gloss.
- Protects against UV rays.
- Requires no cure time.



AMSOIL Interior Detailer

Cleans and restores like-new luster on plastic, trim, dashes and displays without streaks or greasy residue.

- Safe on all surfaces.
- 90-day UV protection.
- Formulated with odor-trapping technology that's free from dyes, films and silicone.
- Available in light-lemon and unscented varieties.



LETTERS TO THE EDITOR

TESTIMONIALS

I am curious why you stopped putting testimonials in *AMSOIL Magazine*. I used to love reading success stories of customers and Dealers using AMSOIL in their vehicles and how AMSOIL made their vehicles last longer. Thanks for a great product! I have been using AMSOIL in all my cars and equipment for many years.

Fred Chartier

AMSOIL: Thank you for your long-time loyalty to AMSOIL products, Fred. We no longer publish testimonials monthly, but we do include them on occasion. Since we launched product reviews on *AMSOIL.com*, there are now thousands of mini-testimonials on our website. We always love hearing those success stories, and we invite anyone to submit theirs to testimonials@AMSOIL.com. You can expect to see some in *AMSOIL Magazine* in the months ahead, including in this edition.

OIL SPECS

I feel it would be useful to have an online search to be able to search just by an oil spec. For example, Ford WSS-M2C931-C; then any oil meeting that spec would come up.

Thanks,

Matthew Venturini

AMSOIL: Great idea, Matthew. We're currently working on this with our on-site search provider. Stay tuned.

AMSOIL APP

I was curious if there are plans to make an AMSOIL app for customers and Preferred Customers? I find the Dealer app convenient, especially to make personal orders. I think if customers or Preferred Customers have a general AMSOIL app they can use to make their own orders, it would be just as simple ordering from AMSOIL as it would be

buying things off Amazon* or any other retail online store.

Respectfully,

Joshua Tobosa

AMSOIL: Great idea, Joshua, and it's something we've been evaluating. If it's something we pursue, we'll certainly cover it in *AMSOIL Magazine*.

WANT YOUR VOICE TO BE HEARD? Write a Letter to the Editor

Have an idea, question or comment about an AMSOIL-related topic? Make your voice heard by both AMSOIL corporate staff and fellow AMSOIL Dealers by submitting a letter to the editor of *AMSOIL Magazine*:

letters@AMSOIL.com

Or

**AMSOIL INC.
Communications Department
Attn: Letters
925 Tower Ave.
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.





Len Groom | SR. PRODUCT MARKETING MANAGER, POWERSPORTS & POWER EQUIPMENT

What's the Difference Between Motorcycle Oils?

Different types of motorcycles present unique challenges to motor oil that a single formulation can't easily meet.

Customers who own more than one motorcycle might be curious if they can use the same lubricants in their V-twin, metric motorcycle and dirt bike. However, there are significant differences in the usage of different types of motorcycles and each application creates unique challenges that are best suited for a tailor-made engine-oil formulation.

Motorcycle oil must protect the engine and transmission against wear and fight the damaging effects of extreme heat, including deposit formation that robs the engine of efficiency and power, and oxidation that causes chemical breakdown of the oil. The faster an oil breaks down, the quicker it loses its ability to guard against wear and deposits. Let's look at what makes AMSOIL motorcycle oils different.

V-twin

Classic air-cooled V-twin engines get extremely hot. In dyno testing, we saw cylinder temperatures reach 420°F (216°C). That intense heat wrecks havoc on cheap motor oil, causing it to lose viscosity and become thinner. Running an engine on a lighter viscosity than specified increases the risk of internal engine wear.

Extreme heat also hastens chemical breakdown, as the rate of oxidation doubles for every 18°F (10°C) increase in oil temperature. That means for every 18°F increase in temperature, oil life is cut in half. To protect hot V-twin engines, AMSOIL Synthetic V-Twin Motorcycle Oil is formulated with heat-resistant synthetic base oils that maintain viscosity despite extreme heat.

Bikes that use the same oil for both the engine and transmission are especially

prone to viscosity loss as the force of transmission gears can also break down the oil's molecular structure. AMSOIL Synthetic V-Twin Motorcycle Oil is shear stable and does not thin from mechanical activity in the engine, transmission or primary chaincase, offering the convenience of a single oil for most V-twins.

Metric

Adventure (ADV), touring and sport bikes are known for delivering performance and responsiveness, with high-revving engines that can easily surpass 10,000 rpm. The mechanical action of the crankshaft spinning that fast can whip air into the oil, causing it to foam. When foam bubbles collapse between meshing gears or bearing surfaces, only air remains, providing no protection against wear.

Most metric motorcycles also have wet clutches that require compatible lubricants to deliver smooth, efficient and consistent shift performance. Touring and ADV bikes are designed to be comfortable for long, cross-country trips, which benefit from extended drain intervals.

AMSOIL Synthetic Metric Motorcycle Oil is formulated with anti-foam additives that help prevent the formation of air bubbles, resulting in excellent wear protection. Its advanced synthetic technology delivers excellent wet-clutch compatibility, enables smoother shifts and maximizes engine responsiveness to help riders confidently achieve maximum speed, acceleration and cornering ability. It also extends drain intervals up to twice the bike manufacturer's recommendations, allowing riders to confidently wander far from home.

Dirt Bike

Dual-sports and dirt bikes undergo ample low-speed stress punctuated with periods of high revving. Racing requires frequent repetition between wide-open throttle on the straights and rapid acceleration through the corners. Jumping causes the rear wheel to spin freely, followed by a heavy load on the engine when it contacts the ground. Trail riding requires lots of clutch and throttle manipulation to maneuver over and around obstacles.

Dirt-bike engines are typically extremely lightweight, high-performance designs, but removing mass and increasing power also increases engine stress. The combination of high rpm and lighter materials creates the perfect scenario for engine failure.

Dirt-bike pistons tend to have shorter skirts to reduce friction, with only a microscopic oil film providing protection. A shorter piston wants to rock inside the cylinder, which concentrates tremendous force on the tiny area where the piston skirt and cylinder wall contact. We've seen dirt-bike pistons crack after barely 100 hours of use. Making matters worse, dirt bikes only hold about one quart of oil to fight wear, resist heat and prevent deposits. Most dirt-bike riders change oil frequently. In heavy use, the engine top-end may need to be rebuilt as often as every 15 hours.

AMSOIL Synthetic Dirt Bike Oil is designed to deliver superior protection against engine wear under extreme stress, enhancing four-cycle engine performance and reliability, plus it is far less expensive and less hassle than rebuilding your top end. DOMINATOR® Synthetic 2-Stroke Racing Oil (TDR) provides two-stroke riders with the same level of engine protection.

Where is the U.S. Automotive Market Heading?

We've said it before: the future of vehicle design is eclectic, not electric.

For the past few years, many auto-industry analysts have predicted that electric vehicles (EVs) had unstoppable momentum in the marketplace and would soon replace traditional gas- and diesel-powered vehicles, and there were reasons to believe them. In 2017, GM* upset the industry when it announced a shift to focusing entirely on making electric trucks and cars, and it set a timeline to completely phase out internal-combustion vehicles. Around the same time, Volkswagen,* Volvo,* Honda* and Ford* also dramatically increased spending on EV development. At first, that investment seemed to be paying off. Sales of EVs boomed as early adopters rushed to take advantage of new-model offerings and incentives from vehicle manufacturers and Uncle Sam. But the party's over. The push to sell EVs has outpaced consumer demand and EV sales have fallen far behind projections.

Why? Most drivers are still spooked by range anxiety, a shortage of charging stations, slow charging speeds and high purchase prices with rapid depreciation. In addition, homeowners looking for a respectable charging speed must pay to have charging stations installed in their garages. Renters in all but the newest apartments must charge their electric cars at work or find a commercial site. With these headwinds and a loss in profitability in the EV sector, vehicle manufacturers like Ford and GM have begun cutting EV production for higher-

demand and higher-profit gasoline and hybrid models. EVs are still selling and becoming a measurable portion of vehicles on the road; but they do not appear likely to overtake traditional internal-combustion vehicles any time soon.

As we have been saying all along, the future is eclectic, not electric. The future U.S. car fleet will be a mix of electric, plug-in hybrid, hybrid and internal-combustion vehicles.

EV euphoria is dead

With EV fervor subsiding, automakers like Ford, GM, Mercedes-Benz,* Volkswagen, Jaguar Land Rover* and Aston Martin* are pulling back on their electric-vehicle plans. Chevrolet* delayed introduction of the new Bolt* passenger car until 2025. Ford cut planned production of its F-150 Lightning* in half for 2024, a major reversal after the automaker significantly increased plant capacity for the electric vehicle in 2023.

Marin Gjaja, chief operating officer for Ford's EV unit, spoke to CNBC in March for an article titled "EV Euphoria is Dead. Automakers are scaling back or delaying their electric vehicle plans."

"What we saw in '21 and '22 was a temporary market spike where the demand for EVs really took off," said Gjaja. "It's still growing but not nearly at the rate we thought it might have in '21, '22."

Hertz* recently sold about 20,000 Tesla* vehicles from its U.S. rental fleet just two years after inking a deal with the automaker. Part of the problem for Hertz was that even people who might buy an EV do not necessarily want to rent one while traveling. Travelers are not always certain they will have the ability or time to charge an electric vehicle.

The second issue for Hertz and regular consumers alike is the EV price war that Tesla launched in 2023. The move amplified EV-depreciation problems, making it difficult to sell used EVs without sustaining a substantial loss, or for other EV manufacturers to compete without selling new vehicles below production costs.

Even though sales have been lighter than anticipated, full-electric vehicle sales are still predicted to grow over time. EV sales reached a record 1.2 million units last year, approximately

7.6% of the overall vehicle market (that number dropped to 6.5% for February 2024). Some analysts are still forecasting that share will rise to 30%+ of new vehicles sold by the end of the decade, still a far cry from total EV domination.

The rise of hybrids

While U.S. automakers are backtracking from their ambitious EV goals, they are gearing up to sell more hybrid vehicles. Ford and GM are shifting some of their investment dollars from EVs to hybrid cars and trucks, while Toyota* and Honda double down on investments to extend their leads in the sector.

For many drivers, hybrid vehicles offer a sweet spot. They provide excellent fuel economy, produce fewer emissions and offer an antidote to EV range anxiety. Unlike early hybrids, road testing is proving that hybrids can be faster and more fun to drive than their gas-powered counterparts.

The new hybrid Chevrolet Corvette* E-Ray,* for example, doesn't trade performance in the name of fuel economy; it's wicked fast. The E-Ray gets from 0 to 60 mph in 2.5 seconds and covers the quarter mile in 10.5 seconds. On the street, the car's combined 655 horsepower, all-wheel-drive traction and instant electric-motor torque make it a stoplight beast capable of ferocious launches.

Hydrogen has a long way to go

Once heralded as a new era in transportation, hydrogen fuel-cell vehicles (FCEVs) seem to have lost enthusiasm with consumers recently. The first quarter of 2024 saw a 70% plummet in new FCEV sales.

Hydrogen-vehicle owners face limited vehicle options, high hydrogen prices and a sparse refueling network. When

factoring in the overall efficiency, cost of vehicles and lack of refueling infrastructure, it's a big hill to climb for hydrogen vehicles.

All that said, there has been a lot of recent investment into development of hydrogen-powered vehicles, especially within the commercial-vehicle space. When or if hydrogen vehicles truly arrive in earnest is still uncertain.

Internal-combustion vehicles still dominant

Even as vehicle options increase, traditional internal-combustion vehicles remain dominant with consumers. In 2023, hybrid sales accounted for 7.2% of new-vehicle sales, plug-in hybrids 1.7% and full-electric vehicles 6.7%. Gas- and diesel-powered vehicles still grabbed 84% of total sales. Including hybrid and PHEVs, 93% of new vehicles sold still have an internal-combustion engine.

The future of motor-oil design

Because internal-combustion engines will continue to be a major part of the North American vehicle fleet, policymakers have continued to tighten emissions and fuel-economy regulations. To meet those targets, automakers have continued to develop the next generation of engine technologies and prepare for the introduction of gasoline particulate filters on North American gasoline vehicles. With these changes, industry-standards organizations have been developing updated API and ILSAC specifications planned for 2025. The API SQ and ILSAC GF-7A/B specifications will be revamped to further improve fuel economy, reduce timing-chain wear and lower sulfated-ash limits to protect gasoline particulate filters.

These more stringent specifications also come with increased LSPI testing, including a new aged-oil LSPI test.

Research has revealed that motor oil can lose its ability to prevent LSPI as it ages. The new test will ensure that motor oil can protect against the damaging effects of LSPI for the duration of its service life.

"One thing is certain," said AMSOIL Sr. Product Marketing Manager – Automotive Alex Thompson. "AMSOIL is prepared for these market and technology changes with advanced formulations engineered to meet or exceed industry standards, and deliver the performance and protection our customers have come to expect from us. In fact, our team is already formulating for the next generation of oils beyond GF-7."

Ahead of the curve

EVs are not a near-term threat to the internal-combustion engine. The vast majority of vehicles still use an internal-combustion engine and will for the foreseeable future. No matter how vehicle trends evolve, AMSOIL is prepared to meet that future. We are ahead of the curve with advanced formulations designed to deliver protection beyond industry standards. In the past year, we launched AMSOIL 100% Synthetic High-Mileage Motor Oil and AMSOIL 100% Synthetic Hybrid Motor Oil in response to two vehicle trends, the increasing average age of vehicles and the increasing number of hybrids. AMSOIL will continue to engineer advanced, specially formulated motor oil designed to protect vehicles, no matter how they are designed or used. Our process will remain the same: target the unique conditions of each vehicle to maximize performance and protection and keep the opportunities rolling strong far into the future.



INTRODUCING AMSOIL SYNTHETIC-BLEND MOTOR OIL

Durable Protection for Everyday Driving

New AMSOIL Synthetic-Blend Motor Oil expands your opportunity to make sales, providing a full product lineup for installers and a solid step up in performance for their customers who want more than a conventional oil can provide. The new synthetic-blend line provides protection for the rigors of the daily commute or difficult tasks, and it's designed with high-quality components to protect modern engine technologies, including turbochargers and direct injection.

AMSOIL Synthetic-Blend Motor Oil was developed exclusively to help Dealers expand sales in the installer market. Installers frequently offer their customers good-better-best options, where conventional oil is "good," synthetic-blend oil is "better" and full-synthetic oil is "best." AMSOIL Synthetic-Blend Motor Oil allows you to offer installers a high-quality synthetic-blend motor oil that fulfills their mid-tier product offering. While the line is available for purchase at AMSOIL.com/AMSOIL.ca, it is not marketed to AMSOIL Preferred Customers or online/catalog customers.

"AMSOIL Synthetic-Blend Motor Oil allows us to better serve the installer market," said AMSOIL Sr. Product Marketing Manager – Automotive Alex Thompson. "Full-synthetic and synthetic-blend motor oils are the two largest-volume categories for installers. If we're going to be a premier choice for installers, we need a top-quality synthetic-blend option for them."

All-Temperature Protection

A blend of conventional base oils with a high dose of synthetic base oils and an advanced additive package helps AMSOIL Synthetic-Blend Motor Oil perform well in modern, hotter-running engines. It effectively stands up to heat to control deposits, prevent thickening and limit oil consumption.

Keeps Engines Clean

AMSOIL Synthetic-Blend Motor Oil is formulated to resist deposit formation. Detergent and dispersant additives provide sludge- and deposit-control properties. AMSOIL Synthetic-Blend Motor Oil helps keep engines clean and running strong.

Helps Reduce Oil Consumption

Motor-oil volatility can lead to oil consumption, reduced performance, decreased fuel economy and increased engine deposits. AMSOIL Synthetic-Blend Motor Oil resists volatility to reduce oil consumption and maximize efficiency and protection.

Available Viscosities

AMSOIL Synthetic-Blend Motor Oil is available in 0W-20, 5W-20, 5W-30, 10W-30, 10W-40 and 20W-50 viscosities.

More Opportunity

AMSOIL Synthetic-Blend Motor Oil is formulated with high-quality components, providing a substantial upgrade for those currently using conventional oils in their vehicles. The line will open new doors with the potential to capture additional high-volume sales. Watch for additional tools and resources to help you sell AMSOIL Synthetic-Blend Motor Oil and make new inroads.



Adam Kane trusts AMSOIL Signature Series Max-Duty Synthetic Diesel Oil to protect his hard-working engine.



The team at Backwoods Diesel in Fort Littleton, Pa.



The camshaft and other major components on Kane's heavy-duty pickup truck were still in spec after 500,000 miles (804,672 km) of hard use.



Ram Truck 500K-Mile Engine Teardown Showcases AMSOIL Protection

Backwoods Diesel & Repair Performance in Fort Littleton, Pa. recently saw customer Adam Kane bring in his 2018 Dodge* Ram* 6.7L for service. The truck had nearly 500,000 miles (804,672 km) on the engine and was due for a teardown.

Kane purchased the truck new to pull a two-car trailer for his hot-shot trucking business, Adam Kane Transport LLC. The heavy-duty pickup is worked hard, hauling a typical load of 23,000-27,000 lbs (10,433-12,247 kg) daily through the mountains and highways of Pennsylvania.

At the truck's first oil change, Kane installed AMSOIL Signature Series Max-Duty 15W-40 Synthetic Diesel Oil (DME) to help the engine handle the abuse he knew it would endure (he recently switched to Signature Series Max-Duty 5W-40). Because his business relied on the truck, Kane didn't take any chances with maintenance, changing the oil and performing oil analysis every 13,000-17,000 miles (20,921-27,359 km).

The Ram performed dependably for many years under severe-service, all-weather conditions, almost constantly hauling a trailer for thousands of miles per week. However, at 494,000 miles (795,016 km), it finally needed a major repair. The half-million miles of extreme use led to a piston issue, and an engine teardown was needed to replace it.

Kane brought the truck to Backwoods Diesel & Repair Performance, one of the leading diesel-repair facilities and performance-product dealers in the South-Central Pennsylvania region. Shop owner Ron Brown got to work tearing down the engine. Once he got into the engine and saw the components, he was stunned by what he saw.



"I'd always known AMSOIL was good, but this proved it; AMSOIL is the best," said Brown. "The inside of the motor, bearings and push rods, crankshaft and every component was still in spec."

Brown was impressed given the mileage on the truck and the harsh operating conditions in which it operated every day. He and his team rebuilt the engine and reinstalled fresh AMSOIL lubricants to get the truck back on the road and on the job.

Kane is also a believer. "I'm happy with how the inside of this engine looks and I will continue to use AMSOIL," he said. "This truck is my work truck. It's how I make a living."

This was not the first time Brown witnessed the benefits of using AMSOIL products. He purchased a 2005 Ford* F250* that had never seen a harsh winter for his mother, but it soon faced cold-weather starting issues in Pennsylvania. After installing AMSOIL products, it fired right up. He's also used AMSOIL products to help alleviate injector issues he's seen with Power Stroke* engines.

The Importance of Antioxidants in Marine Oil

While oxygen is necessary for us to live, it is bad for lubricants. Oxidation increases the rate at which a lubricant breaks down and becomes ineffective. Marine engines constantly operate under severe conditions that increase the risk of oil oxidation, which leads to chemical breakdown and sludge. Let's take a closer look at the oil components to see what's happening.

Oxidation

Oxidation causes oil degradation that leads to oil thickening and the formation of sludge, corrosive acids and varnish. As oil oxidizes, it forms deposits that increase its viscosity and adhere to component surfaces, reducing engine efficiency and increasing component wear. Oxidation can also deplete the additive content of motor oil, leaving both the oil and the engine susceptible to the effects of degraded oil. The effects of oxidation are accelerated as temperatures increase.

Sludge

Sludge is a thick residue typically composed of oxidation and combustion byproducts. It can also be formed by contaminants like wear particles, water, fuel and coolant, which are often acidic and insoluble in motor oil. These contaminants can agglomerate and deposit on surfaces inside the engine. The polar nature of sludge pulls other contaminants out of suspension and

bonds with them, accelerating the sludge-formation process. As sludge deposits rapidly expand, they start causing performance issues.

Sludge can form anywhere, but it typically starts on non-moving engine components, including the tops of cylinder heads, valve covers and oil pans. Marine engines are particularly susceptible to sludge and deposits as they produce extreme stress on engine oil due to water and fuel dilution and higher temperatures, which all accelerate byproduct creation.

Base Oil

Base-oil performance properties provide most of an engine oil's oxidation resistance. Synthetic oil molecules are saturated with hydrogen molecules, which help prevent oxygen molecules from attaching and initiating the oxidation process. Synthetic base oils are also contaminant-free, which further improves their inherent antioxidant properties.

Antioxidants

Better oxidative stability slows the rate of oil oxidation to help prolong the oil's life, especially at higher temperatures. Antioxidant additives prevent oil from reacting with oxygen and improve its oxidation resistance. Antioxidants decompose peroxides and terminate free-radical reactions to slow oxidation and extend lubricant life.

AMSOIL Advantage

AMSOIL Marine Engine Oil is engineered with high-quality synthetic base oils and a robust antioxidant additive package that increase oxidative stability to inhibit sludge formation and help the oil last longer in severe-service marine applications. It also contains premium detergents and dispersants that help neutralize sludge-forming acids and keep solid contaminants in suspension to be removed at the next oil change.





PRODUCT SPOTLIGHT:

AMSOIL Shock Therapy® Suspension Fluid

WHAT IS IT?

A race-grade suspension fluid formulated to make shocks more predictable and responsive.

WHAT DOES IT DO?

- Prevents fade in extreme temperatures.
- Makes suspension systems more predictable.
- Conditions seals for extended service life.
- Provides consistent, smooth damping.

WHAT IS DAMPING AND WHY DOES IT MATTER?

Suspension damping helps absorb and minimize the impact when a vehicle drives over irregular surfaces and ensures that the vehicle's tires maintain contact, providing a smoother ride and improved handling. Aggressive riding or driving can heat suspension fluid enough to cause viscosity loss, resulting in reduced damping and soft, inconsistent suspension feel.

WHAT'S THE DIFFERENCE BETWEEN #5 AND #10?

Use AMSOIL Shock Therapy Suspension Fluid Light #5 in suspension systems where less damping and quicker rebounds are desired.

Use AMSOIL Shock Therapy Suspension Fluid Medium #10 in suspension systems where more damping and slower rebounds are desired.

"Was having problems with leaking fork seals, cleaned them several times with no success. Changed out my fork oil for the AMSOIL #10 and have not had any problems with leaking since."

– Bill, Verified Buyer



"Used in my 2005 Softail Deluxe. What a wonderful difference. Ride is smoother and better in all temperatures hot to cold."*

– Troy, Verified Buyer

IN WHAT APPLICATIONS CAN I USE IT?*

Use Shock Therapy Light #5 or Medium #10 in snowmobile, dirt-bike, motorcycle, ATV/UTV, car and truck suspensions that require any of the specifications listed below, including those made by Bilstein,* Custom Axis,* FOX,* Harley-Davidson* (E/B), Kayaba,* Koni,* KYB,* Öhlins,* Penske,* Race Tech* (US1/US2), RydeFX,* Showa* and WP.*

- DIN 51524 Part 2 • Afnor E 48-603
- BF Goodrich 0152 (except PM 500 Series)
- Denison HF-0, HF-1, HF-2 • Ford M6C-32
- Lee Norse 100-1 • Racine Variable Vane Pump

AMSOIL.com/shockfluidcrossreference



DISTRIBUTOR SPOTLIGHT

In 2020, Azmerika (portmanteau of Azerbaijan and America) was seeking to distribute a high-quality, ultra-premium lubricant brand that allowed creative freedom for localized business and marketing needs. The experienced team applied its extensive knowledge of the global lubricants market to identify a brand that stood out from the others.

The Azerbaijan market had no serious American lubricant product distribution. While researching potential products, the team discovered many online discussions about the superior technical characteristics and performance of AMSOIL products. Azmerika partnered with AMSOIL in the primary regions of Azerbaijan four years ago and has been distributing AMSOIL products countrywide since 2023 after finding great initial success.

The technical characteristics of AMSOIL Signature Series are outstanding.

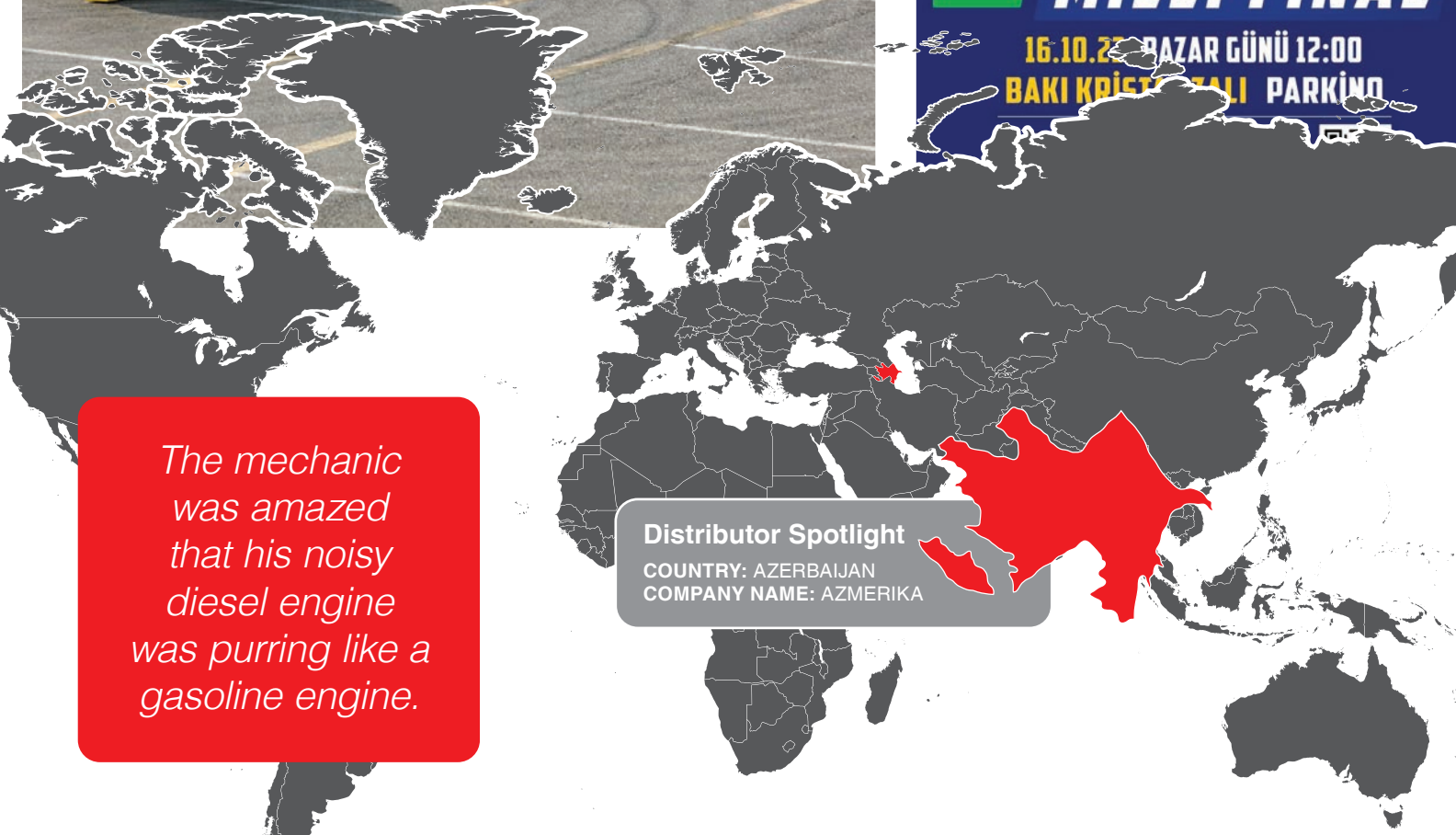
The team believes it chose the right lubricant partner based on the continuous communication from AMSOIL, high-quality promotional materials, wide range of products and excellent product quality. It backs up that belief by offering every product in the AMSOIL portfolio. The company has a strong and well-developed consumer distribution channel and is also actively developing new corporate and government accounts, targeting accelerated growth in these areas.

The road to growth hasn't been easy due to an extremely competitive local market and limited brand awareness. All the international oil giants and many global lubricant blenders have a presence in Azerbaijan. If that wasn't enough, the company also started AMSOIL distribution at the beginning of the pandemic in 2020, so sales were declining as competition was growing. But the team had clear goals and a belief in the success they wanted to achieve,

which has led them to continuous growth every year.

Azmerika uses fundamental distribution tactics, including market monitoring and competitor analysis. The team set unified pricing and focuses heavily on prestige, presenting AMSOIL as a boutique brand. This year, it focused on expanding marketing with a combination of outdoor advertising and trending content partnerships with reputable influencers and racers. The company sponsors about 75% of automotive-enthusiast events held throughout the country.

Signature Series and Extended-Life Synthetic Motor Oil are best-sellers, due to Azmerika's luxury marketing focus. However, many customers were requesting a 5W-30 motor oil certified for ACEA A3/B4, BMW LL-01 and MB 229.5, so the team reached out for support. After receiving the request and verifying the expected sales volume, AMSOIL quickly worked to expand the



The mechanic was amazed that his noisy diesel engine was purring like a gasoline engine.

Distributor Spotlight
 COUNTRY: AZERBAIJAN
 COMPANY NAME: AZMERIKA



European Motor Oil line to fulfill the local market need and make the qualifying product (product code EFT) available to all AMSOIL Distributors. The company objective is to make it psychologically easy for every customer

to choose AMSOIL products. The Azmerika sales team consists of a dozen representatives who visit retail customers twice a week to develop personal relationships and make sure everything is going smoothly. The team has earned strong trust and loyalty by always sharing completely honest knowledge and information. Customers love the constant support and knowing that the company stands behind the products. For example, a Land Rover* and Jaguar* service center had been using a competing product for several years. The head mechanic agreed to try Signature Series in his diesel Range

Rover. Three days later, the Azmerika sales representative drove by and the mechanic ran out onto the road, waving his arms. He was amazed that his noisy diesel engine was purring like a gasoline engine. The service center placed a substantial order for AMSOIL products and became a loyal customer. Dedication to strategic planning, innovative marketing, building strong partnerships and a customer-centric approach enabled the Azmerika team to achieve great success with AMSOIL products in a crowded market.



The First in Synthetics®

ISO 9001/ISO 14001 REGISTERED

Questions/Comments

international@AMSOIL.com

On the Web

- AMSOIL.com
- AMSOIL.eu
- AMSOIL.lat
- AMSOIL.africa
- AMSOILasiapacific.com
- AMSOIL.fr
- AMSOIL.co.in
- AMSOIL.ca

*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 INC., 925 Tower Ave., Superior, WI 54880 • 715-392-7101 • Printed in the USA | AMSOIL.com | July 2024
© 2024, AMSOIL INC. All rights reserved. The AMSOIL logo is a registered trademark of AMSOIL INC.

AMSOIL MARINE ENGINE OIL NOW AVAILABLE IN 1-GALLON CONTAINERS

AMSOIL Marine Engine Oil (WCT, WCF, WCM) is engineered for superior performance and protection in marine applications, and it is now available in 1-gallon (3.78-liter) containers for boats with larger sumps.



The new gallon containers are not available in Canada.