

AMSOIL[®]

MAGAZINE

JULY 2020

NEW BENEFITS FOR AMSOIL

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More Power, Less Oil: The Challenges of Protecting Your Dirt Bike



In industry-standard testing, AMSOIL Z-ROD® completely prevented rust formation while a leading competitor did not.¹¹



¹¹Based upon in-house testing of AMSOIL Z-ROD 10W-40 and a leading competitor obtained on 7/25/2019 in ASTM D1748-10.

Performs on the Street & Protects During Storage

New Z-ROD 10W-40 Synthetic Motor Oil (ZRD) provides the benefits of Z-ROD, including **rock-solid wear protection** for flat-tappet cams and proven **protection against rust** during storage, to applications that require a 10W-40 viscosity. It delivers modern technology for classic cars.

- **Engineered** for classic vehicles
- **High-zinc** formula
- **Protects** against rust during storage



DISTRIBUTOR

EDITION

JULY 2020



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WHY BUY AMSOIL Synthetic Diesel Oil?

**DO YOU WANT
EXTRA ENGINE
PROTECTION?**



Independent testing shows **AMSOIL Heavy-Duty Synthetic Diesel Oil** delivers **4X** more protection against wear.¹ For even greater protection, **Signature Series Max-Duty Synthetic Diesel Oil** provides **6X** more protection against wear.²

**DO YOU TOW
OR HAUL?**



Signature Series Max-Duty delivers up to **60% better turbo cleanliness**,³ effectively withstanding the extra demands you place on the turbo when hauling heavy loads or updating the tune for maximum horsepower.

**DO YOU STORE
YOUR VEHICLES
OR EQUIPMENT?**



Signature Series Max-Duty provides up to **2X better** rust protection.⁴

**DO YOU
DRIVE IN HOT
TEMPERATURES?**



AMSOIL synthetic diesel oils **retain their protective viscosities** for added engine protection in extreme temperature conditions.

**DO YOU
DRIVE IN COLD
TEMPERATURES?**



AMSOIL synthetic diesel oils stay fluid in sub-zero temperatures for **easier starting, improved oil flow and reduced wear**.

Signature Series 0W-40 has a broad viscosity range that offers **4X better** cold-cranking ability than a 15W-40.

**DO YOU
OWN A
HIGH-MILEAGE
VEHICLE?**



Heavy-Duty Synthetic Diesel Oil provides up to **66% less** oil consumption, while Signature Series Max-Duty provides up to **76% less** oil consumption.⁵



¹Based on independent testing in the Detroit Diesel DD13 Scuffing Test for specification DFS 93K222 using 10W-30 as worst-case representation. ²Based on independent testing in the Detroit Diesel DD13 Scuffing Test for specification DFS 93K222 using 5W-30 as worst-case representation. ³Based on specification standards of CAT C13 2nd Ring Top Land Carbon testing. ⁴Based on industry standard testing using the NMMA FC-W Rust Test. ⁵Than required by the API CK-4 standard in the Caterpillar-1N oil consumption test.

LETTERS TO THE EDITOR

ENVELOPE DESCRIPTIONS

I have made repetitive mistakes in ordering envelopes in the Dealer Zone. There are no images for the items being sold. There are no descriptions, except very basic generic info. The most detail in the envelope category is G2608, which actually states 9 x 12. May I suggest, for instance, a description: "Use this catalog for the small G100 style catalogs" or "This is a standard business #10 envelope." You might also look at plastic bags. Give us a picture. The Shopper Bag is right on the money with a full description. You might say it is following the theme of clarity across the board, even beyond our oil products.

Thanks in advance.

Tom Georgalos

AMSOIL: Thank you for bringing this to our attention, Tom. We have updated this particular webpage with more pictures and details.

LEADS

When the leads from the Dealer Empowerkit websites are intercepted by AMSOIL and if they go back to a Dealer as an "assigned" account, why wouldn't they be eligible as qualified customers for the Dealer Certification Program, particularly if they came to the Dealer's own website originally?

Thank you,

Jim Anderson

AMSOIL: Thanks for the question, Jim. These accounts do count toward achieving Customer Certification. A lead who arrives at amsoil.com from a Dealer website is assigned to the referring Dealer once the lead makes a purchase, and that customer counts as a new qualified customer for the Dealer Certification Program.

SUGGESTIONS

I am fairly new to the AMSOIL family and I absolutely love this company! I take great pride in my AMSOIL business dealings. I would, however, like to offer up a couple suggestions if I may. I would love to see AMSOIL

develop and manufacture our very own version of GoJo* or Grip Clean* hand cleaner. I would use it often and I know many others that would buy from me. Another thing is I ride off-road motorcycles, and I would love to buy an enduro motorcycle jacket with our very cool AMSOIL logos all over it. I just wanted to share a couple ideas with the awesome company I work with. Thanks, AMSOIL, for being such a great American company!

Kris Fortner

AMSOIL: Thank you for your suggestions, Kris, and we appreciate your enthusiasm for AMSOIL. We are glad to have you on the team! We also thought hand cleaner and motorcycle jackets were great ideas, and at one time we offered SCRUB Hand Cleaner, both with and without pumice. More recently, we offered leather motorcycle jackets. Unfortunately, sales were slow for both products and they were discontinued. Although we have no current plans to reintroduce either item, we constantly have our eyes on the market and you never know what the future holds.

UPS

Since most (if not all) of my AMSOIL orders are delivered by UPS, I wanted to make sure that AMSOIL headquarters is aware of how their shipments are being handled by UPS.

First, let me set the stage in my case. I live in the country, where my mailbox is 1/4 mile away so I cannot see it from my house. The road to my house is a gravel town road that is well-maintained by the Town of Ridgeville. Our mailbox is on a county road that is paved.

We have lived here for nine years without any problems receiving UPS deliveries. However, recently the UPS deliveries have been left at our mailbox 1/4 mile away. Twice the packages have been left sitting in the snow at the base of the mailbox. It is only by the grace of God that the packages haven't been stolen or hit by the snow plow since UPS deliveries are made late in the day after I have gotten the daily mail. I have contacted UPS to complain. They

referred me to a process they call "ups.com/mychoice" where supposedly I can give the delivery person instructions where I'd like the packages left. Obviously, I want them delivered to my porch, which is what I paid for. However, when I try to use the service by filling out their online form, it says "UPS cannot process my request." Frustrating!

Am I the only one experiencing this poor service from UPS? Perhaps AMSOIL headquarters would have more clout with UPS since it is your products being put at risk, and AMSOIL will be asked to cover losses due to poor delivery actions.

Your assistance in addressing this matter would be greatly appreciated.

Wayne A. Edgerton

AMSOIL: Thank you for bringing this issue to our attention, Wayne. That's not the type of service we expect and we can understand why you're frustrated. UPS uses temporary and part-time delivery drivers during the holiday season when the orders you described were delivered, and it's likely the seasonal driver made the decision to drop off at your mailbox to save time and meet drop-off volumes during this busy time. We have contacted UPS and made them aware of the situation. If you experience further issues, we encourage you to attempt registering with UPS My Choice again as it is a powerful tool that has helped many other Dealers and customers in similar situations. Be sure to contact UPS if you have trouble registering.

Email letters to:
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Or, mail them 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.



Matt Erickson | DIRECTOR, TECHNICAL PRODUCT MANAGEMENT

Synthetic lubricants excel in summer heat.

Heat creates deposits. And deposits create problems.

While we rarely have triple-digit temperatures here in the Northland, drivers in the southern U.S. can easily see 100°F (38°C) and hotter throughout summer. Driving in these conditions stresses lubricants, especially when towing or hauling. In fact, our testing in Las Vegas showed that oil-sump temperature increased significantly throughout the day as the sun radiated more intensely off the asphalt.

Extreme heat causes oil to chemically break down faster, resulting in deposits and sludge. As a general rule, chemical reaction rates double with every 10°C (18°F) rise in temperature. Deposits can form throughout the engine, causing issues. Excessive combustion-chamber deposits cause pre-ignition, which reduces engine performance and can damage the engine. Deposits also lead to ring sticking, which reduces compression and horsepower.

The ability to keep your engine clean when exposed to extreme heat is a main differentiator for lubricant performance. As the image shows, AMSOIL Signature Series Synthetic Motor Oil does an excellent job keeping pistons clean. We tested Signature Series in the Sequence IIH test, which is required by the ILSAC GF-6 and API SP specifications, to demonstrate its ability to keep engines clean. The test subjects oil to 151°C (304°F) heat for 90 minutes – far hotter than your engine will ever get. Signature Series didn't even break a sweat. Its viscosity was like that of new oil, and the pistons were still nearly spotless. To really test the oil, we told the lab to reassemble the engine and run the test again using the same oil. Even after doubling the test length, the oil still

beat the standard by delivering 40 percent cleaner pistons.

These results were achieved because we formulate Signature Series to provide maximum protection. Among other features, it is fortified with potent detergent and dispersant additives that keep contaminants in suspension and keep them from settling in the engine. This is vital to everyone who cares about engine protection, but doubly so for motorists in regions where the temperature hits triple digits several months out of the year.

Maintaining sufficient viscosity to keep bearing surfaces separated is another concern when driving in the heat. While anti-wear additives are critically important, lubricant viscosity, or thickness, is the main mechanism to keep surfaces separated by an oil film.

Heat, however, reduces oil viscosity, compromising wear protection. When oil loses too much viscosity (gets too thin), it can fail to prevent metal-to-metal contact, causing wear. Since lubricants generally thin as temperatures increase, we must formulate them to provide effective separation at the highest expected operating temperature. The base oil

AMSOIL Keeps Pistons Cleaner

Even after doubling the length of the industry-standard test, AMSOIL delivered **40% cleaner pistons** than required by the standard.^{FF}



^{FF}Based on independent testing of AMSOIL Signature Series 5W-30 in the Sequence IIH Engine Test (ASTM D8111), required by the ILSAC GF-6 and API SP specifications.

influences a property called viscosity index (VI), which indicates the change in oil viscosity in relation to temperature. Oils with high viscosity indices do a better job maintaining viscosity in extreme heat. As you might expect, synthetic motor oils have higher viscosity indices than conventional oils, meaning they protect better when the heat is on.

In these situations, you can drive confidently and carefree knowing that you have AMSOIL synthetic motor oil in your engine. It has been tested in the field and in labs at temperatures far beyond those your engine will ever see. It's proven to provide excellent protection, even at those extremes.

EXPLAINED:

The Difference Between Summer and Winter Gas



Summer has its benefits: Fishing season. Dirt-track racing. Wrenching in the garage with the door open and the tunes blaring.

Another benefit is a slight fuel-economy boost. That's because refiners alter their gasoline and diesel formulations depending on the season, and summer gasoline contains about 1.7 percent more energy than winter-blend gas. Regardless of the time of year, it pays to know a little about what's going in your tank to ensure you're properly maintaining your fuel system.

Under Pressure

A primary difference between summer and winter fuels is their Reid Vapor Pressure (RVP). RVP is a measure of how easily the fuel evaporates at increased temperatures. The higher the fuel's RVP, the more easily it evaporates.

Winter-blend fuel requires increased RVP. If the fuel doesn't evaporate readily in cold temperatures, the engine will start hard and run rough at cold temperatures.

To achieve this, refiners often blend winter gasoline with butane, a relatively inexpensive additive with a high RVP. They adjust the RVP of the final formulation to as high as 15.0 psi to help the gasoline ignite readily in the cold.

The Law Restricts Sales

Once the temperature warms up in summer, however, high-RVP gasoline can volatilize more easily, which contributes to increased emissions and air pollution. For that reason, federal law restricts sale of gasoline with an RVP greater than 9.0 from June 1 through Sept. 15. To comply, refiners reduce the amount of butane in the gasoline and instead use pricier additives, hence one reason gas prices generally increase in summer. The blending process also takes longer, adding to the cost.

Some areas set even lower RVP standards in summer to further limit emissions. California, for example, has a 7.0-psi limit. Given the state's climate, refiners may sell summer-blend gas as early as April 1 and as late as Oct. 31.

For the most part, the semi-annual switch from winter to summer gas and vice versa happens seamlessly and goes unnoticed by drivers.

Lowest Additive Concentration

Regardless of the season, gasoline contains detergent additives designed to keep fuel injectors and other fuel-system components clean.

Some automakers, however, think the additive content, called the lowest additive concentration (LAC), is insufficient for modern vehicles. It takes a low level of additive to pass the tests, and most gasoline on the market contains as little as 123 ppm of additive.

The low levels of detergent additives in modern gasoline allow deposits to build up on critical fuel-system components, and most motorists are unaware of how dirty the insides of their engines are. This provides a great opportunity to sell the benefits of AMSOIL fuel additives.



Use this information to pique a prospect's interest and tell him or her about the benefits of AMSOIL fuel additives. Use the Why Buy AMSOIL Fuel Additives handout (G3667) shown on the right to help. It fits perfectly inside the Factory-Direct Catalog (G100, G300 Can.) and our market catalogs.



MORE POWER, LESS OIL: THE CHALLENGES OF PROTECTING YOUR DIRT BIKE

Like other vehicles, dirt bikes today produce more power from smaller engines. In many cases, only about a quart of oil is responsible for protecting against wear and the devastating effects of extreme heat. The oil must be up to the challenge for enthusiasts to get maximum performance and life from their bikes.

Whether they're riding the trails near home or competing in sanctioned motocross races, riders' motivation is the same: to get out in front of their buddies or grab the holeshot and ride their way to a checkered flag. As such, riders are constantly on the throttle. Dirt bike engines rev high, with some models hitting 10,000 rpm.

In addition, summer is peak riding season. Hot ambient temperatures combined with a high-revving engine create severe conditions that can reduce performance and shorten engine life.

Heat causes metal engine components to expand. If, for example, the piston expands beyond normal tolerances, it can break the lubricant film separating it from the cylinder wall and rub directly against the metal, causing scuffing and wear. Eventually, the piston will fail and wreck the engine.

Motor oil is an enthusiast's number-one defense against piston scuffing and wear. The oil absorbs heat and allows it to dissipate into the atmosphere via the oil sump. It should also form a thick, resilient film on engine parts to prevent metal-to-metal contact. Its detergents and

dispersants must hold combustion by-products in suspension and prevent them from forming harmful engine deposits that can lead to piston-ring sticking and power loss.

Most dirt bikes use about the same volume of oil as a push lawnmower despite making 10X the power.

Most dirt bikes, however, hold only about a quart of oil. A minimal amount of oil is asked to perform the daunting task of resisting extreme heat and wear in your expensive, powerful dirt bike engine. The oil had better be up to the challenge or else the engine can wear out and fail.

This situation presents a great opportunity to highlight the performance of AMSOIL Synthetic Dirt Bike Oil.

Our dirt bike oil isn't merely a rebadged automotive oil. We identified the suffering points of modern dirt bikes by working with professional supercross and motocross riders. We validated AMSOIL Synthetic Dirt Bike Oil on the track and in our mechanical lab.

The result is an advanced oil that delivers excellent protection against wear and extreme heat in high-revving, powerful bikes.

In addition, we designed it to provide confident clutch feel. Riders look for lubricants that provide not only wear protection, but consistent clutch feel from the time the gate drops until they cross the finish line.



- **Delivers** confidence in clutch feel
- **Superior** protection against gear, bearing & piston wear
- **Maximizes** horsepower
- **Helps** extend clutch life



2020 KTM* 450 EXC-F

2020 Honda* CRF450R

2020 Kawasaki* KX* 450



53 hp

53 hp

52 hp



1.27 qts

1.1 qts

1.0 qts

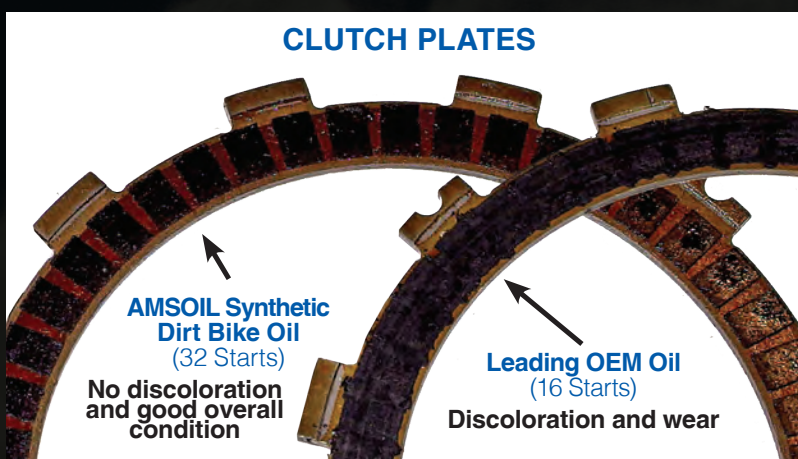
Oils that break down due to heat and stress lead to clutch slippage and sloppy, inconsistent clutch feel, reducing rider performance. Here, too, AMSOIL Synthetic Dirt Bike Oil proves superior, as the test results show.

When talking to dirt bike prospects, tie their desire to protect their expensive bike and improve their riding to the performance of AMSOIL Synthetic Dirt Bike Oil. For more insights into the dirt bike market, see the Synthetic Dirt Bike Products Dealer Sales Brief under the Learning Center tab of the Dealer Zone.



AMSOIL delivers confident clutch feel.

AMSOIL provides excellent clutch protection.[†] How good is it? In extreme simulated-start testing, AMSOIL provided superior wear protection and kept clutch plates looking new.



[†]Based on dyno testing of a Honda* CRF450 dirt bike using AMSOIL 10W-40 Synthetic Dirt Bike Oil and a leading original equipment manufacturer 10W-40 conventional dirt bike oil. *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 MARKET CATALOGS – TOOLS TO INCREASE YOUR SALES

Full-sized product brochures are expensive, and you need multiple versions to cover multiple product lines. That's why we replaced them with AMSOIL market catalogs. They **reduce your costs, allow you to show prospects and customers more products and include pricing**. Plus, they showcase the benefits of becoming a Preferred Customer or account – and P.C.s and accounts typically provide a bigger boost to your income over time. Get your market catalogs today.

Online Store: www.amsoil.com | Telephone: **1-800-777-7094** | EZ Online Order Form: my.amsoil.com



Commercial Program Catalog

(G3469 U.S., G3474 Can.)

WHO'S IT FOR?

Current and prospective commercial accounts.

- Contractors
- Fleets
- Over-the-road truckers
- Heavy-duty off-road equipment operators
- Farmers/ranchers
- Landscapers

WHAT PRICING DOES IT SHOW?

Wholesale cost



Retail Program Catalog

(G3520 U.S., G3521 Can.)

WHO'S IT FOR?

Current and prospective retail accounts.

- Independent mechanics
- Quick lubes
- Transmission shops
- Tire shops
- Hardware stores
- Auto parts stores
- Powersports dealerships

WHAT PRICING DOES IT SHOW?

Wholesale cost and MSRP



Automotive Catalog

(G3549 U.S. G3550 Can.)

WHO'S IT FOR?

Current and prospective P.C.s and online/catalog customers.

- Auto enthusiasts
- Turbodiesel enthusiasts
- DIYers
- Classic car lovers
- European car owners

WHAT PRICING DOES IT SHOW?

Online/catalog and P.C. pricing



Powersports & Racing Catalog

(G3511 U.S., G3512 Can.)

WHO'S IT FOR?

Current and prospective P.C.s and online/catalog customers.

- Motorcycle owners
- ATV/UTV enthusiasts
- Anglers
- Snowmobilers
- Dirt bike riders
- Racers

WHAT PRICING DOES IT SHOW?

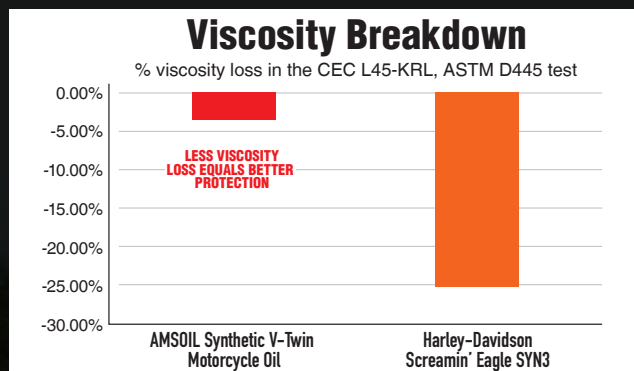
Online/catalog and P.C. pricing

EVERYTHING YOUR HARLEY NEEDS, INCLUDING BETTER PROTECTION

Dealers and customers asked for more V-twin oil-change kits, and we've delivered. Four kits are now available, including kits with an extra quart of oil for larger Milwaukee-Eight* engines or a black oil filter instead of chrome. And, as always, Synthetic V-Twin Motorcycle Oil delivers **excellent protection against extreme heat** so you have **peace of mind your bike is protected**.

AMSOIL Resists Viscosity Breakdown

AMSOIL resists viscosity breakdown **6X better** than Harley-Davidson* SYN3* for **improved protection** against compensator and transmission gear wear.^{BB}



^{BB}Based on testing of AMSOIL 20W-50 Synthetic V-Twin Motorcycle Oil purchased on 3/19/19 and Harley-Davidson Screamin' Eagle SYN3 purchased on 3/19/19 in the CEC L45-KRL, ASTM D445 test. *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 V-Twin Oil Change Kits include...

- 4-5 quarts of 20W-50 Synthetic V-Twin Motorcycle Oil (MCV)
- 1 chrome or black AMSOIL Motorcycle Oil Filter (EAOM103/EAOM103C)
- 1 drain-plug O-ring



Check out the Motorcycle Product Guide at amsoil.com to find the right kit for your Harley-Davidson.



CHANGE SERVICE REQUESTED

Published 12 times annually

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ISO 9001/ISO 14001 REGISTERED



WE HONOR



(Discover in U.S. only)

Your installer accounts will now earn volume discounts. Read the article in this issue for details, and look for your installer accounts' discount levels in the Reports section of your Dealer Zone. my.amsoil.com



Minimum 10%
Post-Consumer Fiber

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Protect Your Time on the Water

If you're like most anglers, you never have enough time to fish. Don't waste a second on unnecessary maintenance or downtime – protect your motor from wear and performance-robbing deposits that try to sideline your boat at the marina.

AMSOIL marine products fight wear and deposits in the toughest operating conditions. They deliver the benefits you need, whether you own a four-stroke or two-stroke motor.

- **Superior** wear protection
- **Excellent** rust and corrosion resistance
- **Maximum** engine cleanliness
- **Reduced** smoke (two-stroke)

PRO TIP

AMSOIL[®] HP Marine[™] is excellent for use in Evinrude[®] E-TEC[®] engines at the factory-lean setting and is a fraction of the cost of Evinrude XD100[®] 2-Cycle Oil.

