

# AMSOIL Introduces OE 15W-40 NOTES Synthetic Diesel Oil

#### P.i.® Money-Back Guarantee Extended

With the summer driving season in full swing and the price of gas continuing to remain high, AMSOIL has extended the P.i. Money-Back Guarantee through August 31, 2011. P.i. Performance Improver is so effective, AMSOIL offers a money-back guarantee on the product's fuel economy benefits. First-time users who fail to see improvement in their vehicle's fuel economy receive a full refund of the purchase price. For complete qualifications or to order, visit the P.i. page at http://www.amsoil.com/storefront/api.aspx.

#### Cabin Air Filter Sales Expected to Continue Climbing

According to Frost & Sullivan, U.S. cabin air filter sales are expected to grow substantially in the coming years as they are incorporated into an increasing number of vehicle models and more consumers become aware of the importance of changing them. In fact, between 2010 and 2017, the market is projected to increase at a compound annual growth rate of 11.5 percent in unit shipments and 14.1 percent in revenue.

AMSOIL offers premium quality WIX and MANN cabin air filters. Cabin air filter change procedures are available on the WIX and MANN pages of the AMSOIL corporate website at www. amsoil.com.

The recent launch of OE Synthetic Motor Oil has allowed AMSOIL to reach a whole new base of customers, while providing a stepping stone to the significant benefits and cost savings of XL Synthetic Motor Oil or the top-tier line of Signature Series Synthetic Motor Oil.

Based on the same concept, new AMSOIL OE 15W-40 Synthetic Diesel Oil (OED) offers high-quality protection and performance for original equipment manufacturer (OEM)-recommended drain intervals at an initial price extremely competitive with other standard-drain synthetic diesel oils.

OE 15W-40 Synthetic Diesel Oil meets API CJ-4

specifications and is suitable for modern and older, on- and off-road diesel applications. It is an excellent entry-level product for customers who want to move up to synthetic quality, but won't pay a significantly higher price than a conventional oil or aren't initially interested in extending their drain intervals.

OE 15W-40 Synthetic Diesel Oil is ideal for those applications excluded from the extended drain interval recommendations of Premium API CJ-4 Synthetic Diesel Oil due to persistent fuel dilution issues, including 2007 to present light-duty GM, Ford and Dodge diesel pickups and 2007 to 2009 Caterpillar C13 and C15 on-highway engines. It exceeds the higher

performance demands of modern engines and withstands the stress of heat, soot and acids to help prevent deposits, wear and corrosion.

#### Meets Emission System Requirements

AMSOIL OE 15W-40 Synthetic Diesel Oil is a low-sulfated ash formulation that meets the requirements for low-emission quality diesel oil and protects under the most severe conditions found in modern diesel engines. It is compatible with all exhaust treatment devices and is designed for engines equipped with diesel particulate filters (DPF).

#### Extreme-Temperature Performance

AMSOIL OE 15W-40 Synthetic Diesel Oil is formulated for improved heat and oxidation resistance over conventional

petroleum oil for cleaner engine operation. It maintains power and fuel efficiency for superior engine performance. OE Diesel Oil's dependable cold-temperature flow assures easier startup and improved post-startup protection.

#### Resists Oil Consumption and Emissions

Due to its low rate of volatility (burn-off), AMSOIL OE 15W-40 Synthetic Diesel Oil is able to reduce oil consumption and emissions. It maintains film strength even during high-temperature operating conditions to ensure dependable protection, performance and fuel efficiency.

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#### **Controls Soot-Thickening and Wear**

AMSOIL OE 15W-40 Synthetic Diesel Oil is formulated with premium synthetic base stocks and robust detergent/dispersant additives that keep soot particles from agglomerating and forming larger wear-causing particles. It allows for optimal soot-related viscosity control to maintain stay-in-grade performance.

#### APPLICATIONS

AMSOIL OE 15W-40 Synthetic Diesel Oil is recommended for diesel engines and, where appropriate, gasoline engines requiring any of the following specifications:

- API CJ-4, CI-4+, SM... ACEA E9 DDC 93K218 Cummins CES 20081 • MB 228.31 • CAT ECF-3, ECF-2, ECF-1-a
- Mack EO-O Plus
   Volvo VDS-4
   MAN 3575
   Renault RLD-3
- MTU Type 2.1



HEAVY DUTY 12 TBN

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## **More AMSOIL Synthetic Diesel Oils**

## Premium 5W-40 and 15W-40 API CJ-4 Synthetic Diesel Oil (DEO, DME)

The premium choice for model-year 2007 and newer diesel engines requiring API CJ-4 emissions quality oil standards. Also recommended for pre-2007 diesel engines. Incredibly shear-stable to withstand the stress of heat, soot and acids and help prevent deposits, corrosion and wear. Effectively resists oil consumption and emissions, while improving fuel efficiency. Compatible with all exhaust treatment devices, including diesel particulate filters. Recommended for three times the OEM drain interval recommendation in diesel applications.

### Series 3000 5W-30 Synthetic Heavy Duty Diesel Oil (HDD)

Engineered for on- and off-road diesel engines not equipped with diesel particulate filters (DPFs). Delivers extraordinary lubrication for extended drain intervals and withstands the stress of higher heat, higher acid levels and excessive soot-loading found in EGR-equipped engines. Consistently outperforms conventional and synthetic diesel oils for long-lasting performance and protection.

#### 15W-40 Synthetic Heavy Duty Diesel & Marine Motor Oil (AME)

Engineered for on- and off-road diesel engines not equipped with diesel particulate filters (DPFs). High 12 TBN chemistry neutralizes acids and controls soot thickening from EGR and blow-by to protect against corrosion, cylinder bore polishing (wear) and varnish/sludge deposits. Resists heat and breakdown for long-lasting extended drain performance and protection.

#### 15W-40 Synthetic Blend Gasoline & Diesel Oil (PCO)

Engineered for on- and off-road diesel engines not equipped with diesel particulate filters (DPFs). Combines versatility and heavy-duty engine protection into one cost-effective motor oil. Formulated with high levels of dispersant and detergent additives that effectively control acids and soot-thickening to help prevent corrosion, wear and deposits.

## 10W-30/SAE 30 Synthetic Heavy Duty Diesel Oil (ACD)

Engineered for on- and off-road diesel engines not equipped with diesel particulate filters (DPFs). Exceeds both 10W-30 multi-grade and SAE 30 straight-grade viscosity requirements. Designed to stop viscosity loss and associated bearing and cylinder bore wear over extended drain intervals, while high 12 TBN neutralizes acids from blow-by, exhaust gas recirculation (EGR) and high-sulfur diesel fuels.

## New AMSOIL Z-ROD™ **Synthetic Motor Oil**

MODERN TECHNOLOGY FOR CLASSIC CARS

AMSOIL now offers a synthetic motor oil engineered specifically for classic cars and performance vehicles. Available in 10W-30 and 20W-50 viscosities, AMSOIL Z-ROD Synthetic Motor Oil (ZRT, ZRF) features high-quality synthetic base stocks and a proprietary additive package tailored to perform on the street and protect during storage.

#### Vintage Vehicles Have **Different Needs**

As engine design has evolved over the past 50 years, oils have also evolved to meet these changing needs. Use of modern emissions regulation devices has resulted in the limitation of zinc dialkyldithiophosphate (ZDDP) content in motor oil. High amounts of phosphorus in ZDDP additives can negatively affect a vehicle's catalytic converter and reduce its effectiveness. However, ZDDP additives are proven, effective anti-wear agents that are especially important in classic and performance vehicles that feature flat-tappet camshafts and custom lifters and rocker arms for increased performance: the limitation of these additives in modern oils reduces the oil's effectiveness in classic and performance applications.

#### **Protecting Flat-Tappet Cams**

Two main types of camshafts are used in automotive applications: flat-tappet and roller. The tappet, or lifter, on the flattappet camshaft is flat and requires an oil film to keep its surface separated from the cam lobe. Flat-tappet camshafts produce high friction (high heat) because the surfaces slide rapidly against each other. The oil film is the only barrier that prevents the lifter and cam lobe from welding together.

The friction between the two components can eventually wear down the flat-tappet cam and affect valve operation. Engine power and efficiency decline if the flattappet cams can't lift the valves enough to adequately charge the chamber for ignition or adequately release exhaust fumes. In addition, these areas are splash-lubricated rather than pressure-lubricated like other areas of the engine, putting extra strain on anti-wear additives.

#### Z-ROD is Packed with ZDDP

AMSOIL Z-ROD Synthetic Motor Oil is formulated with high levels of ZDDP to protect flat-tappet cams, lifters, rockers and other areas susceptible to wear. Its high-zinc, high-phosphorus formulation provides the extra wear protection these critical splash-lubricated components

#### Long-Term Protection from **Rust & Corrosion**

Rust and corrosion are the classic car owner's nemesis. Classic cars spend most of their existence in storage and only hit the road in the summer months. The rarity of these vehicles and their often treasured place in the hearts of their owners place extra importance on protection during extended periods of storage. AMSOIL Z-ROD Synthetic Motor Oil is formulated with a unique blend of rust and corrosion inhibitors to ensure maximum protection during long-term storage. To prove its effectiveness, AMSOIL submitted Z-ROD Synthetic Motor Oil to the Standard Test Method for Rust Protection in the Humidity Cabinet (ASTM D-1748). This test evaluates the rust-preventative properties of oil under high-humidity conditions, similar to those faced by a covered hot rod in a damp garage. After 192 hours, the metal coupon treated with AMSOIL

no signs of oxidation. while the coupon treated with a leading competitor's product failed the test.

#### Applications

AMSOIL Z-ROD Synthetic Motor Oil is recommended for older or modified engines requiring either 10W-30 or 20W-50 motor oil, Z-ROD Synthetic Motor Oil meets API SL and earlier specifications. allowing for the increased levels of antiwear additives. ZDDP levels in Z-ROD Synthetic Motor Oil exceed the limits of API SM and newer specifications.

#### Service Life

Because engines in classic cars, hot rods and other performance vehicles are generally modified, a universal oil drain interval recommendation for these applications cannot be given. Responsibility for determining the drain interval duration rests with the owner. As a general service guideline, the maximum drain interval for Z-ROD Synthetic Motor Oil should not exceed 5,000 miles or one year, whichever comes first. In heavily modified engines (e.g. forced induction, nitrous) the maximum drain interval should not exceed 3,000 miles or one year. whichever comes first.



AMSOIL Z-ROD 10W-30 Synthetic Motor Oil shows no sign of oxidation afhumidity cabinet.



The leading competitive product failed the test after 192 hours in the humidity cabinet.



