



Matt Erickson

A CLOSER LOOK AT THE PASSENGER CAR/LIGHT TRUCK MARKET

As modern cars and trucks continue to become more sophisticated and require higher-quality lubricants, the market will only expand for AMSOIL Dealers. Matt Erickson, AMSOIL Product Manager, Passenger Car, offers an inside look at the passenger car/light truck market.

What is the most important development affecting the passenger car/light truck market?

In two words, fuel economy. Despite gas prices hitting five-year lows recently, automobile manufacturers are still pressing to get as many miles out of a gallon of gasoline as possible. Federally mandated Corporate Average Fuel Economy (CAFE) requirements are set to increase to 54.5 mpg by 2025. In the meantime, manufacturers will continue to introduce cars and trucks with increasingly sophisticated engine systems, such as direct fuel injection, variable valve timing (VVT) and turbochargers, designed to increase fuel economy.

What challenges do these systems present to motor oil?

Direct-injected engines place the fuel injector directly in the combustion chamber as opposed to traditional fuel injection, which locates the injector in the air intake ports. This arrangement allows for increased control of the fuel-injection event, which increases power and efficiency, but which also increases operating temperatures and can lead to fuel contaminating the oil.

VVT permits the opening and closing of the valves to occur sooner, or be

delayed, relative to the position of the piston. This makes it possible to achieve optimal fuel economy and performance at both low- and high-rpm driving conditions. These systems are hydraulically controlled using motor oil, and they are very sensitive to sludge and deposits.

Turbos push more air into the combustion chamber, and tuning for efficiency can improve fuel economy, especially when combined with other technologies. But turbos create extreme operating temperatures that can cause low-quality oils to quickly break down, creating deposits and shortening the life of the oil.

To make things worse, many engines are now calling for low-viscosity oils to further improve fuel economy, yet they must still protect as well as, or better than, higher viscosities. In short, these new engine designs are brutal on motor oil, and not all oils are up to the challenge of protecting them.

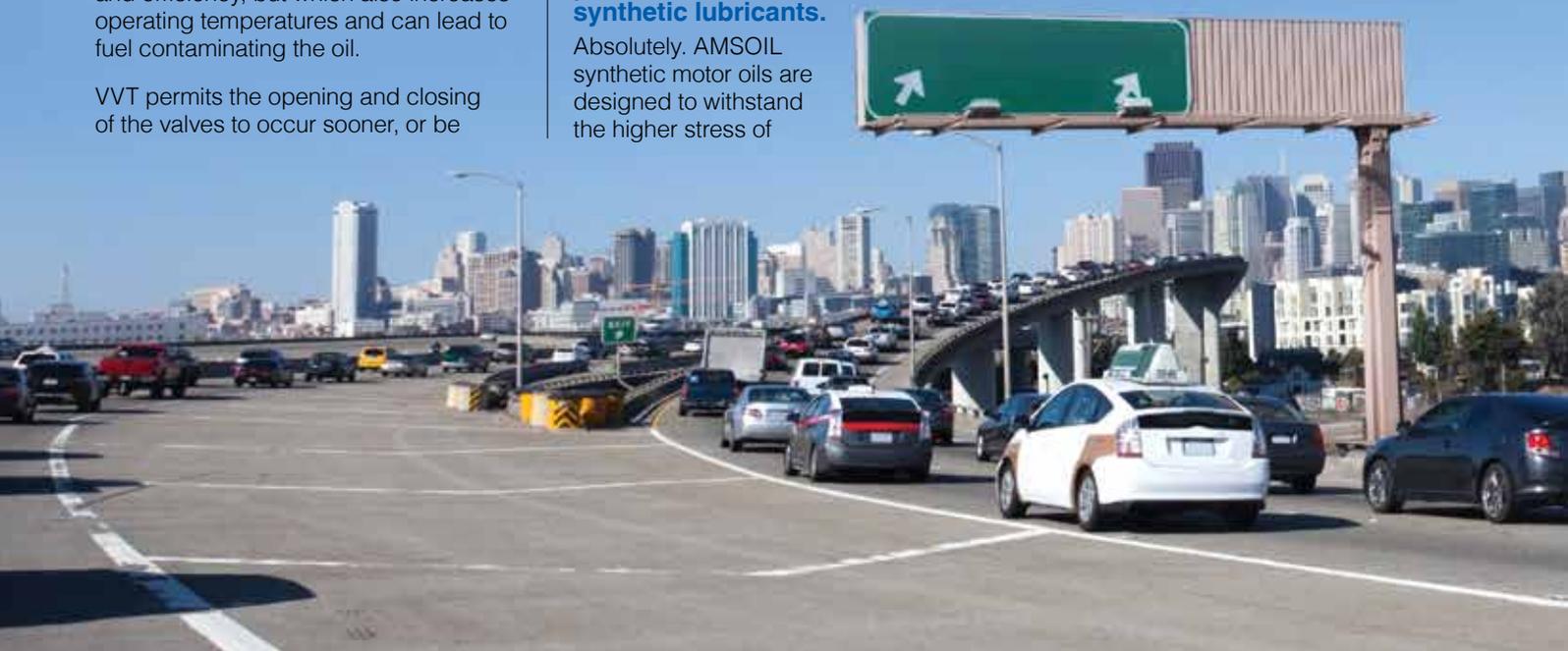
Those sound like great selling points for AMSOIL synthetic lubricants.

Absolutely. AMSOIL synthetic motor oils are designed to withstand the higher stress of

today's more advanced engines. They resist extreme heat, guard against harmful deposits and maintain the correct viscosity throughout the entire drain interval. The market is moving toward synthetic lubricants as vehicles continue to evolve and require higher-quality oils. It's a great time to be an AMSOIL Dealer, and Dealers are well-served to highlight these points when making sales.

The engine isn't the only vehicle system evolving, correct?

That's right. We're seeing advancements throughout the entire drivetrain, particularly from the transmission. Traditional stepped transmissions are evolving to contain more gears than previous models. In fact, eight- and nine-speed transmissions are becoming common. The added gears improve fuel economy by keeping the engine closer to the most efficient rpm. Even though more gears are being added, their overall weight is being reduced by using more advanced materials and manufacturing processes.



What about continuously variable transmissions (CVTs)?

CVTs are also gaining popularity because they do the best job maintaining the rpm in the “sweet spot” since they essentially have an infinite amount of gear ratios to work with. This means the passengers don’t feel the bump that’s present in a traditional transmission when it shifts, making vehicles with CVTs fun to drive. CVTs are usually found in smaller vehicles because they are limited on the amount of load they can carry. We introduced AMSOIL Synthetic CVT Fluid (CVT) last year to help Dealers capture this growing market, and their sales have far exceeded expectations.

What challenges do modern transmissions present to lubricants?

Modern transmissions require a clean, high-quality transmission fluid to function as designed. The fluid doesn’t just lubricate; it acts as a hydraulic fluid to enable shifting. Fluids that oxidize can result in damaging sludge that clogs fluid passages and results in poor performance. Transmission fluid is also exposed to high levels of shearing as it is forced between gear teeth. This can quickly break down an inferior fluid, causing viscosity loss and reduced wear protection. Like motor oils, newer transmissions call for lower-viscosity fluids, so there is not much room for additional viscosity loss due to a low-quality fluid breaking down. CVTs require unique friction properties to help the metal belt or chain hold firmly on the pulleys. If a formulator designs

for price rather than quality, friction properties may diminish and the belt or chain can slip, requiring expensive repairs. Properly formulated synthetics that use quality additives meet the performance needs of modern transmissions and can protect them for extended periods.

The Signature Series line added 5W-50 and 0W-40 viscosities recently. What prompted their introduction?

Though neither viscosity is widely recommended, they open new doors for Dealers. They are niche viscosities used primarily in Ford Mustangs (5W-50) and Chrysler performance vehicles (0W-40). These are high-horsepower applications that require superior oil for adequate protection when the pedal is pushed to the floor. These oils were specifically designed for that task. As a high-performance company, it’s important that AMSOIL have top-tier motor oils for these high-performance cars.

How has the growth of synthetics changed the market for Dealers?

That is a great question, and I’m sure all Dealers have felt the joys and pains of the changing marketplace to some extent. The good news is that the market is headed in our direction. However, since the synthetic category is growing rapidly, many other companies have joined the race. This has made the synthetic market more crowded, and consumers can now get synthetic oil anywhere oil is sold. People love convenience, and many are no longer willing to go out of their way to get

synthetic oil. Therefore, it is important for AMSOIL Dealers to adjust to those changing buying habits by showing up where consumers prefer to shop for oil – retail stores and auto service centers. Partnering with independent stores and shops in their community can be mutually beneficial to grow both businesses.

What else do we know about motorists’ buying habits as they pertain to synthetic lubricants?

We have been busy conducting intensive market research over the past months and have learned quite a bit. We have new insights into several different market segments to share with Dealers to help grow their businesses, and this information is currently being integrated into training materials for AMSOIL University and the DJ Convention. It’s a great reason to register soon and make the trip to Duluth/Superior this year. I’m looking forward to seeing a big crowd up here in May! ■

