



# Service Line

NEWS AND IDEAS FROM AMSOIL

## AMSOIL Helps Take the Bite Out of Fuel Prices

Unstable gasoline and fuel prices in 2005 have riveted the nation's attention. Crude oil prices rose to record highs during the summer, then climbed higher after the horror of hurricanes Katrina and Rita. US Energy Information Administration projected gasoline and diesel fuel prices would fall from record highs of more than \$3 a gallon, yet remain high across the nation into 2006 and beyond.

"With as much as 5 percent of refinery capacity expected to remain shut down for months, it will take time for the gasoline supply system to return to normal, implying that prices could remain elevated (the U.S. average retail price was \$2.93 per gallon during the first week of October) for some time to come. With significant volumes of refinery capacity expected to remain out for an extended period, consumers should not expect prices to decline quickly, since the disruption to supply is still occurring," the EIA said in a mid-September report.

Consumers looking to reduce fuel costs should start with lubricants.

The "goal" of the engine and drivetrain is the maximum transfer of the energy released from fuel combustion to the wheels to move the vehicle.

The engine and drivetrain accomplish their goal mechanically. Each mechanical component has moving parts that require lubrication for friction, heat and wear control. Ironically, while parts move with significantly reduced friction when a lubricant separates them, the lubricant itself contributes some friction to the system because of the way its molecules slip over one another.

Conventional petroleum oils consist of molecules of varying sizes in long carbon chains that don't easily slip across one another, which contributes to friction and reduces fuel efficiency.

AMSOIL lubes are engineered with uniform, smooth synthetic lubricant molecules that slip across one another easily. That reduces intra-fluid friction, which in turn improves power and fuel economy, because more of the energy released from fuel combustion reaches the wheels and moves

the vehicle. The vehicle accelerates more quickly and powerfully because more of the fuel goes to moving the vehicle instead of overcoming friction. The vehicle also *works* more efficiently, which increases fuel economy, or miles per gallon, because more of the fuel goes to moving the vehicle than to overcoming friction.

Furthermore, the various sized molecules in conventional petroleum oils also are sensitive to heat at relatively low temperatures, which changes the oil's viscosity. Heat causes oils to oxidize, which forms sludge and deposits that cause the oil to thicken and create drag on moving parts. That drag reduces fuel efficiency.

Likewise, heat causes the lighter molecules in petroleum oils to volatilize, or "boil off." Again, this leaves behind a thicker oil, which creates drag on the moving parts and increases fuel consumption.

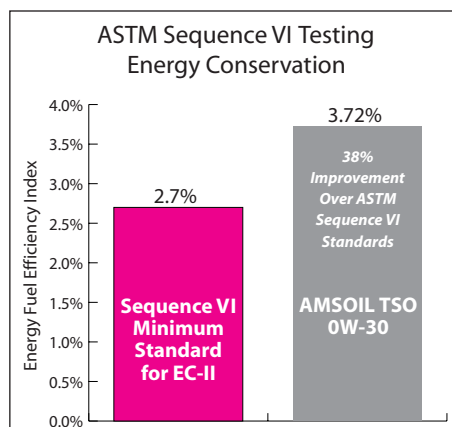
Again, because AMSOIL synthetic motor oils are engineered with uniform molecules, they are significantly more resistant to the effects of heat and inhibit oxidation and volatilization, which means they inhibit thickening and the formation of sludge and deposits that reduce fuel efficiency.

Research indicates synthetic motor oils can increase fuel efficiency by 2 percent to 3 percent. However, anecdotal reports claim even greater fuel efficiency.

AMSOIL synthetic motor oils were the first fully synthetic motor oils on the market in 1972. AMSOIL uses only the very best synthetic base stocks and world-class additive packages formulated specifically for each engine oil and lubricant application.

In fact, certified test results report AMSOIL Synthetic Motor Oil shows an Energy Conservation (EC-II) pass of the ASTM Sequence VI test for fuel efficiency at 3.72 percent. Minimum standards require an oil to pass by 2.7 percent.

"The 3.72 percent EFEI (Energy Fuel Efficiency Index) represents a 38 percent improvement over the minimum requirement for EC-II," according to the ASTM report.



# Rinker Wins ChampBoat Series

It took a winless 2004 for Terry Rinker to get motivated. The 2003 ChampBoat Series Champion didn't like losing, so he rebuilt his boat and his body and stormed out front for his second ChampBoat Series championship in Kankakee, Ill. over the Labor Day weekend.

Rinker won three of the first four races in 2005, and had to fight through adversity to stay on top after the final race of the season. Thousands of fans lined the shorelines of the Kankakee River for the 21st Annual American Power



Boat Association's OPC Nationals. The championship weekend would feature a narrow two-pin, one-mile course.

Rinker would not breeze through the weekend as he hoped. After qualifying sixth on Sunday, Rinker would take to the water on Monday morning for the warm-up session. But a self-proclaimed "driver error" put the yellow #10 on its back. The crash caused a massive rush to fix the damaged boat in time for the final event. If the boat didn't get fixed in time, Rinker would have had to take out his back-up boat and start dead last. But the team was able to dry out and fix the boat in time for the start.



*Return of the Champ – Rinker scores second championship.*

When the final event began, Rinker was sitting in his sixth qualifying spot and optimism was running high. The AMSOIL-backed driver raced hard during the 50-lap feature and when the checkered flag dropped, Rinker had finished fifth. That was enough to secure his second career title. Three wins and five podiums aided Rinker in the eight-race season.

"It is such a great feeling to be back on top," said Rinker after the race. "We had one goal this year, and that was to win something. We didn't care what it was, just as long as we won something. Well we won something alright, and we did it by rolling up our sleeves and getting our hands dirty."

**The AMSOIL Service Line sent courtesy of your Servicing AMSOIL Dealer.**

Jeff Fisher

866-292-4700

[www.SyntheticOils.us](http://www.SyntheticOils.us)

Printed in U.S.A. © Copyright 2005

R 10/05