



Service Line

NEWS AND IDEAS FROM AMSOIL

Industry News . . .

U.S. Automakers Stepping up Ethanol-Use Programs

Demands for greater access to alternate fuels, such as ethanol, impact every segment of the automotive industry.

Although diesel is the trucking industry's main fuel, with about 665 million gallons per week burned, according to American Trucking Associations estimates, the industry's trucks also burn about 290 million gallons of gasoline every week.

General Motors and Ford Motor Co. have announced they are forming partnerships with energy companies on projects aimed to make ethanol a more mainstream fuel, according to a USA Today article in February 2006. The announcement in the newspaper was followed within a couple of days by online advertisements of the GM partnership.

The projects will work to make so-called E85 — a blend of 85 percent ethanol, an alcohol usually made from Midwest corn, and 15 percent gasoline — more of a mainstream fuel, according to USA Today.

The automakers plan to boost the number of U.S. E85 outlets. About 500 of 180,000 gas stations now sell the alternate fuel.

GM and Ford are ahead of Asian rivals in developing and marketing E85-compatible vehicles, called flex-fuel vehicles, according to the newspaper.

About 5 million of the vehicles already are on the roads, and Ford and GM plan to build another 600,000 this year, the paper reported.

Preparing for 2007 Engines

Some diesel engine and truck manufacturers have begun programs to train their technicians and distributors to work on 2007-model engines, according to an industry magazine in February 2006.

Environmental Protection Agency regulations reduce allowed levels of nitrogen oxides and soot emissions for new engines, starting in January 2007. The diesel fuel regulation limits the sulfur content in on-highway diesel fuel to 15 ppm (wt.), down from the previous 500 ppm, according to the EPA.

Manufacturers have said they will fine-tune their emission-control systems and add particulate filters for the first time to truck exhaust systems to meet EPA requirements, which means technicians and distributors need new training in servicing these models.

ULSD Regulations Challenge Industry

Engine makers report they are subsidizing the cost of ultra-low-sulfur diesel to customers testing their 2007 engines because the fuel is scarce and costs much more than regular fuel, according to industry reports.

Moving to ULSD has challenged the entire trucking industry, and is among top concerns as EPA regulations loom for the model-year 2007 and beyond.

Truck and engine manufacturers need to design technology that meets the regulations for ULSD, while petroleum companies and refineries need to provide the infrastructure and build up the supply to make ULSD readily available.

Industry executives report ULSD and even more stringent EPA regulations that will be phased in by 2010 are among the industry's greatest challenges, with some questioning whether the whole industry can prepare for the changes in time. EPA, however, issued an announcement in 2005 that the industry is on track to implement the changes.



AMSOIL Synthetic 15W-40 Heavy Duty Diesel Oils



- Engineered for all types of diesel engines with an emphasis on modern, low emission heavy-duty diesel engines.
- High 12 TBN controls acids from combustion blow-by and EGR.
- High levels of detergency and dispersancy additives control soot thickening, oxidation and wear.
- Protects against bore polishing, deposit formation and ring sticking.





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AMSOIL European Car Formula Offers Superior Quality, Versatility

AMSOIL Synthetic 5W-40 European Car Formula is specially formulated for the lubrication needs of modern European gasoline and diesel cars and light trucks.

This is one of the most versatile oils on the market today and is recommended for the latest specifications of all three major German original equipment manufacturers: Volkswagen (Audi), BMW and Mercedes-Benz.

Formulated with advanced AMSOIL synthetic base stocks, premium additives and a 5W-40 viscosity rating, AMSOIL

Synthetic 5W-40 European Car Formula is the preferred oil for virtually all European automobiles, especially turbo charged models.



It is the only motor oil in the North American market recommended for the VW 505.01, Mercedes-Benz 229.51 and BMW LL-04 specifications. AMSOIL Synthetic 5W-40 European Car Formula also is recommended for the vast majority of European passenger vehicle lubricant specifications. It may also be used for domestic gasoline and diesel models that require a 5W-40 viscosity, including those recommending API SM.

Currently, Castrol and Motul are the only competing motor oil companies that manufacture oils meeting the VW 505.01 specification. However, neither are formulated to meet the low sulfate ash requirements of MB 229.31, MB 229.51 or BMW LL-04, nor are they formulated to meet API SM/CF requirements.

Cost Effective

In addition to offering superior protection and performance for more vehicle models, AMSOIL Synthetic 5W-40

European Car Formula is more cost effective and readily available than competing motor oils. In fact, the Castrol 505.01 motor oil is only available at Volkswagen and Audi dealerships and sells for \$9.99 a quart, while the Motul 505.01 motor oil is also difficult to find and sells for between \$7 and \$7.75 a quart. AMSOIL Synthetic 5W-40 European Car Formula is readily available from AMSOIL INC. Its suggested retail price is \$6.85 a quart.

CI-4 Plus Oils

Because Synthetic 5W-40 European Car Formula has been reformulated for the stringent chemical limitations of the VW 505.01 and MB 229.51 specifications, it is no longer recommended for vehicles requiring the North American heavy duty diesel specification CI-4 Plus.

For applications that require the CI-4 Plus specification, AMSOIL offers the following oils:

- AMSOIL Series 3000 Synthetic 5W-30 Heavy Duty Diesel Oil (HDD)
- AMSOIL Synthetic 15W-40 Heavy Duty Diesel and Marine Motor Oil (AME)
- AMSOIL SAE 15W-40 Synthetic Blend Gasoline Diesel Oil (PCO)
- AMSOIL Synthetic 10W-30/SAE 30 Heavy Duty Diesel Oil (ACD)

Service Life

Under both normal and severe operating conditions, AMSOIL Synthetic 5W-40 European Car Formula is recommended for the longest drain intervals recommended by the manufacturer. Drain intervals may be extended further based on oil analysis.

AMSOIL Synthetic XL Motor Oils Offer Customers Peace of Mind

AMSOIL XL Synthetic Motor Oils provide peace of mind for quick lube customers.

AMSOIL XL 10W-40, XL 5W-20, XL 5W-30 and XL 10W-30 are specifically designed for oil drain intervals of 7,500 miles/six months, or longer where recommended by vehicle manufacturers or indicated by oil life monitoring systems.

Unlike competitors, who have only recently developed synthetic oils and lubricants, AMSOIL INC. has more than 34 years of experience in the manufacture, research and development, and maintenance of the most rigorous standard of quality control in the industry.

AMSOIL Synthetic Motor Oils simply are the best and First in Synthetics.



For price information, contact your AMSOIL servicing Dealer, visit the AMSOIL website at www.amsoil.com, or consult your AMSOIL pricelist.



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For price information, contact your AMSOIL servicing Dealer, visit the amsoil website at www.amsoil.com or consult your price list.



AMSOIL Synthetic Motor Oils

*Unrivaled quality
Since 1972*



- AMSOIL revolutionized the motor oil industry in 1972 when it introduced synthetic motor oils. The company brought quality and commitment to delivering unrivaled performance and long life to every engine type.

- For more than 34 years, AMSOIL has produced 100 percent synthetic motor oils that live up to their promise of superior performance, extended equipment and engine life and unrivaled cutting edge technology.



Customer: 'AMSOIL Saved the Motor'

AMSOIL customer Jeff Stull, Racine, Wis., puts AMSOIL synthetics in everything he gets his hands on. Stull uses AMSOIL 10W-30 Synthetic Motor Oil in his 2005 Dodge Grand Caravan, his 1992 Dodge conversion van and his 1996 Geo Metro. He's also running AMSOIL products in his riding lawn tractor and push mower. Stull has converted his daughter's 1999 Chevy Malibu and his son's 1996 Plymouth Voyager to AMSOIL products as well.

"I started using Mobil 1 back in the mid 1970s," said Stull. "I later head of AMSOIL, and that it was a better synthetic oil."

Stull made the switch five years ago. He's convinced AMSOIL saved one engine from certain doom.

Stull related the story of when his son, Isaac, was driving his Voyager behind a truck and debris started falling from it.

"Instead of avoiding it, he drove over the stuff and, with out knowing it, put a hole in the oil pan," said Stull.

Isaac was 2.5 miles from home when he noticed the oil light was turning on and off, and for the last 1.3 miles, the light stayed on. Stull inspected the van when his son arrived.



Jeff and Isaac Stull with Isaac's van. The Stulls are thoroughly impressed with AMSOIL.

"There was no oil in the oil pan," said Stull. "I thought the motor was now junk."

Stull plugged the hole in the oil pan, added more AMSOIL Synthetic 15W-40 and started the engine.

"There was absolutely no motor noise," said Stull.

Stull took the car straight to his local repair shop and told them what had happened. They removed the oil pan, rod caps and main bearings and found absolutely no damage.

"This car has over 144,000 miles on it, and no parts were replaced at all," said Stull. "AMSOIL saved the motor."

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

Jeff Fisher

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