

Fleet Survival Mode



WHAT CAN YOU DO NOW?

Fuel Crisis Survival

- A 10-cent increase in the price of diesel fuel will put 1,000 trucking companies out of business.*
- High price of idling
 - Save fuel by cutting back on engine idling
- Save fuel by reducing engine friction
 - 5W-40 synthetics show 2-5% fuel savings versus conventional 15W-40 oils

*Source: Newport Heavy Duty Trucking

- Improving Maintenance Efficiency is of high priority for fleets today. Fleets cannot succeed operating based on whatever worked in the past will work for today and tomorrow. The following information will contribute to solutions to meet the challenges. A major hurdle that fleet managers often face is accepting change and developing a full understanding of these solutions. Before proceeding with the following information, you may choose to go to the US Environmental Protection Agency website and review their reference to Low-Viscosity Lubricants. Major engine builders and fleet owners in Europe have already adopted these solutions.
- This is a summary and quote from the EPA Smartway Transport Partnership message you will find at this website:
http://www.epa.gov//oms/smartway/smartway_fleets_strategies.htm#lub
The combined effect of low-viscosity synthetic engines and drive line lubricants can improve fuel economy by about 3%, saving nearly 500 gallons of fuel and eliminating five metric tons of greenhouse gas emissions per year for a typical freight truck.

Fleet Survival

- Solutions to the problem
 - 5W-40 Syndurance HDEO
 - SAE 5W-40
 - API CJ-4
 - Full Synthetic
 - Fuel Savings
 - Reduces Maintenance Costs



CITGARD® SynDurance™

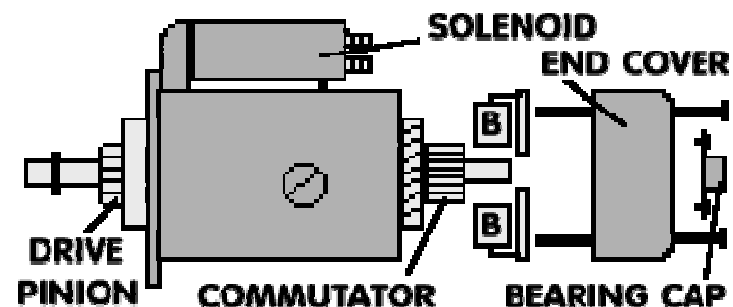
Cost Analysis - Fuel Savings

- Cost of diesel fuel \$3 /Gal
- Fuel usage per truck 20,000 Gal/Yr
- Oil usage per truck 60 Gal/Yr
- 2% fuel efficiency reduces fuel cost \$1,200 /Yr
- Additional cost for Syndurance 5W-40 versus conventional 15W-40 at same oil change interval \$500 /Yr
- **\$700 /Yr net savings per truck**



Additional Benefits of Syndurance 5W-40

- Engine wear rates reduced 25% vs conventional 15W-40
- 30% longer starter life
 - Starters cost \$400
- 2 to 3 times longer battery life
- Block heaters eliminated
- Oil drain interval extended



Real World Results

- 3000+ School Bus Fleet in greater Chicago Area
- Eliminated or reduced the use of energy demanding block heaters for winter starting.
- Avoided out of service penalties with contracted school districts.
- Longer starter life
- Safely extended oil drain interval. Fleet manager claims they do not have the shop personnel or the budget to change oil as they once did with 15W-40 non-synthetic oil.
- Improved fuel economy based on periodic evaluation.
- Buses are rebuilt, so extended engine life is also a benefit.



Real World Results

Fleet Cost Analysis - Case Report

- 2.5% fuel savings
- 200 buses use 4,000,000 gallons diesel annually
- Total fuel cost @ \$2.70/gal = \$10,800,000
2.5% fuel savings = \$270,000
- Annual savings
\$270,000
 - 60,000 (includes increased oil cost, oil drain interval extension, cold weather improvements and oil analysis costs)

\$210,000 Net Annual Savings

Question Time?



Caterpillar only recommends the use of a 15W-40 oil down to

? ° F,

but Caterpillar recommends that a 5W-40 can be used down to what temperature...

? ° F

15W-40 = +15 ° F

5W-40 = -22 ° F

....and

they also recommend both 15W-40 and

5W-40 up to **122 ° F**