"Waterless" Coolant Extends Engine Life, Saves Fuel

Forget about overheating your cooling systems if you use Evans waterless coolant. With a boiling point of 375 degrees and a freezing point of -40 degrees, your engine operates more efficiently and reduces the cooling load on radiator and fan, says Mark Stone of Evans Cooling Systems, Inc.

"Water-based coolants run at or near their boiling point, while Evans waterless coolants, due to their high boiling point, have reserve cooling capacity to cool the engine even on the hottest day of the year," says Stone. "Cooling system pressure is lowered substantially with the use of a waterless coolant. Stress on seals, gaskets, & hoses are reduced and the life expectancy of the cooling system components is extended.

Stone points out that thousands of animals are killed each year to ethylene glycol in antifreeze and hundreds of children end up in the hospital each year as results of ingesting toxic antifreeze. Evans is a safer alternative for children and for pets.

He adds that water-based cooling systems also contribute to pump and cylinder liner cavitation and corrosion, as well as hot spots that can damage engines. Severe liner cavitation alone can require an engine rebuilds which can be very costly. When Southwest Research Institute (SWRI) tested

Evans waterless coolant in the John Deere Cavitation Test, along with multiple water-based coolants, the results were impressive. The John Deere Engine Cavitation Test, a 250 hour dynamometer test, is highly predictive of real-world cavitation erosion of cylinder liners. When Evans HDTC was tested, it proved superior to all other formulations and 75% better than than the previously best water based coolant.

He points out that a high boiling point can be important in heavy duty equipment running in dusty, dirty conditions. "Field conditions can clog a radiator which can reduce the air flow and cause a water-based cooling system to overheat," says Stone. With water based coolant, the radiator can be cleaned out less frequently which can reduce maintenance downtime and associated cost.

Waterless coolants can safely operate at higher temperatures when compared to water based coolants which enables the operator the opportunity to increase engine efficiencies. Independent evaluations on heavy duty trucks have shown fuel savings of as much as 8 percent due to reduced fan on time. When the fan-on temperature is elevated it reduces the overall fan operation time by upwards of 50% and because the fan consumes a lot of energy when it is

operating. Anytime you can keep the fan off, there is considerable amount of fuel that can be saved.

Evans offers its Heavy Duty Coolant, a formulation with special additives for heavy duty diesel engines. It's recommended for large tractors, combines and heavy trucks. It's currently priced at \$42.95/gal. High Performance Coolant (formerly NPG+) is designed for diesel and gas engines, such as cars, pickups and smaller tractors. It's priced at \$39.95 per gal.

"While the price for our waterless engine coolant may seem high at first, it quickly pays for itself in reduced engine wear and fuel saved, says Stone. "Plus, it's a lifetime coolant, if it doesn't become contaminated with water. Future replacement and disposal costs are eliminated. The coolant additives remain stable and in suspension during storage as well as use. Periodic supplemental additives are not required. It becomes the least expensive coolant you'll ever buy, because it's the last coolant you'll ever need."

Contact FARM SHOW Followup, Evans Cooling Systems, Inc., 1 Mountain Road, Suffield, Conn. 06078 (ph 860-668-1114; info@evanscooling.com; www.evanscooling.com).

Reader Inquiry No.79

Rebuild Batteries Better Than New

You don't have to toss your old cordless drill just because the battery's worn out and the company stopped making replacements. Primecell, a Bedford, Penn. company, has been rebuilding batteries for nearly 20 years.

"Battery technology changes so quickly that a lot of product today is made to be disposed of after 3 to 5 years," says Joel Cunard, owner of Primecell. "People can't find a replacement for their battery, so they have to throw out the tool."

Recent developments have resulted in huge improvements in cell performance. NiCd storage capacity has increased by as much as 50 percent. Rebuilding improves tool performance to state of the art technology. Not only are rebuilds less expensive than a replacement, but more than 97 percent end up with increased capacity.

Many rechargeable NiCd products can be upgraded to NiMh Cells. Original NiMh batteries normally have to be recharged with expensive NiMh chargers. Primecell is often able to install circuits that allow the rebuilt batteries to be charged with the original NiCd chargers, yet enjoy the greater NiMh cell capacity.

"The company works with orders of all sizes," says Cunard. He cites customers as diverse as AT&T and NASA to individual ham radio operators, paramedics and home handymen.

"We pride ourselves on single orders for individuals, but we also do large orders for companies," says Cunard. "A new battery might cost \$100. We can rebuild for \$40."

One battery the company hasn't developed a process for is lithium ion rechargeables. Popular for their energy density, they are

very expensive to replace, notes Cunard, and can be killed if undercharged or overcharged.

Visit Primecell's website for a long list of batteries that can be rebuilt and information on assessing your battery's health. Cunard suggests requesting an estimate before



Primecell has developed a way to open batteries to replace the cells, then reseal them without damage.

sending in a battery.

Contact: FARM SHOW Followup, Primecell, 9343 U.S. Rt. 220, Bedford, Penn. 15522 (ph 814 623-7000; email: info@ primecell.com; website: www. primecell. com). Reader Inquiry No. 80