



DRAIN THAT ANTIFREEZE

Farm Machinery Fact Sheet FM-09

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All cooling systems should be maintained by changing antifreeze each year. The cooling system needs protection in the fall and spring as the temperatures change drastically.

Penalties of Reuse

A farmer or motorist will say, "I've used the same antifreeze for years without difficulty." This means that there's never been a freeze up or traceable trouble to the cooling system. However, there is probably a layer of rust-scale inside the engine. Rust-scale seals the heat inside the combustion chamber and may cause the following:

- 1. engine "ping"
- 2. loss of power
- 3. increased oil consumption
- 4. poorer fuel mileage
- 5. poorer performance
- 6. clogged radiator cores
- 7. engine overheating
- 8. extensive engine repairs

Adding Inhibitors Not Practical

There is no simple, dependable way to determine the condition of rust inhibitors used in antifreeze. This requires a complicated laboratory test. Also such a test does not tell you how much longer the rust and corrosion protection will last. Different rust preventative formulas are used in various type antifreeze brands. Some commercial water rust preventatives are harmful when added to antifreeze.

Antifreeze Is Not Cooler than Water

High-boiling point antifreeze does not make an engine run cooler than fresh water. Also, rust tends to form much more rapidly during high temperature summer driving than in winter. If you have a prob-lem with overheating, drain antifreeze, flush and clean cooling system with water and refill with clean distilled water and a rust inhibitor. Some cars are equipped with air conditioners that have the cooling coil next to the car radiator core. For these cars the manufacturers recommend antifreeze pro-tection of at least 20 degrees (16%) be maintained in the cooling system during the summer. This pre-vents the car heater from freezing when the air con-ditioner is in use. Antifreeze manufacturers recom-mend that a 25% (10°F)

solution of fresh antifreeze and water be installed to provide effective inhibi-tion against rust and corrosion during the summer months. A very weak solution may not contain sufficient inhibitor to do the job adequately.

A Word to the Wise

A fresh fill of antifreeze in the fall is good insurance against trouble and costly repairs. It results in better performance, freedom from engine failure due to over heating, better mileage, longer, trouble-free service, and more efficient operation.

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