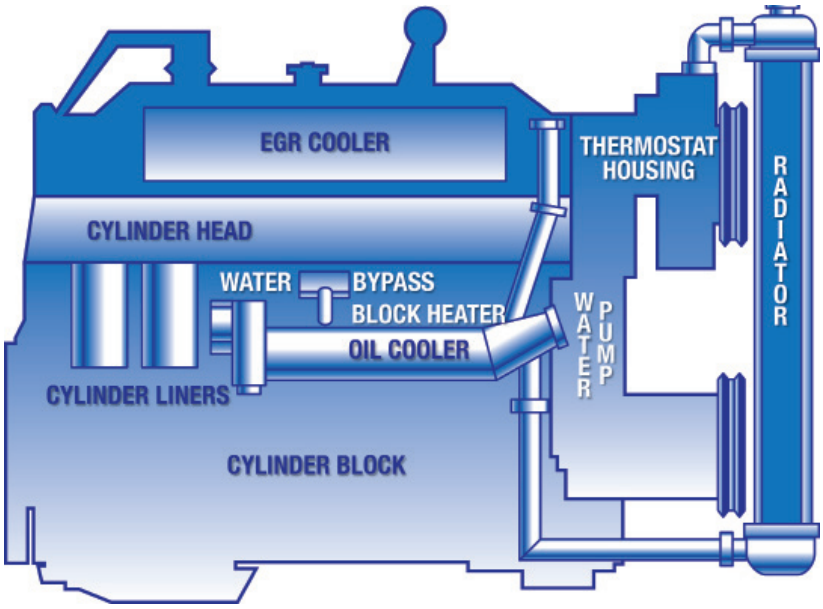
PENRAY™

40% OF DOWNTIME IS COOLING SYSTEM RELATED...

What Happens If A Diesel Engine Cooling System Is *NOT* Treated Properly With Chemicals?

- Corrosion of the steel and cast iron surfaces
- Hard water scale buildup on the cold side of the liner, creating an insulating effect and leading to hot spots
- Fouling of the heater core with silica gel and phosphate sludge, resulting in reduced heat to the cab and bunk heaters
- Corrosion of the water pump impellers
- Thermostat malfunctions
- Scale insulates on-off fan temperature sensors causing improper fan operation resulting in overheating
- Fouling of the heat exchangers with silica gel or phosphate sludge from the antifreeze
- Severe pitting of the wet sleeve liners
- Malfunction in block heater due to phosphate scale buildup



- Water pump cavitation due to foaming
- Water pump seal failure due to excess dissolved solids and/or high phosphate levels
- Hoses can become soft and brittle without proper protection
- Corrosion of the copper or aluminum radiator cores
- Solder corrosion and consequent solder bloom fouling

Cooling Solutions EXPERTS™