

# Cooling System

## Did you know:

- That the cooling system of a water-cooled engine consists of:
  - The engine's water jacket
  - A water pump
  - A cooling fan
  - The heater core
  - A thermostat
  - A radiator and radiator cap
  - A set of hoses
  - An expansion (overflow) tank
- That the radiator cap on your vehicle keeps the system between 8-12 pounds of pressure. This pressure is what keeps the fluid in the cooling system from boiling.
- That the cooling system in your vehicle only removes one-third of the heat produced by the running engine, and another one-third is removed from the system through the exhaust system.
- That the cooling system in your vehicle is designed to keep your engine operating in a specific temperature range. Below are some examples of problems that can occur if your engine is running outside of this range:

### **Engine running COLD**

Oil gets DIRTY faster  
Deposits can form inside engine  
Parts wear faster  
Lower engine performance

### **Engine running HOT**

Oil viscosity decreases  
Increased wear on parts  
Increase risk of warped heads

- That a coolant system pressure test can help identify the source of slow leaks
- That you should have your engine's coolant changed every 2-3 years, and your coolant system should be flushed every 5 years.