



COOLING SYSTEM MAINTENANCE & WARNING SIGNS

Regular Cooling System Maintenance

Cooling systems in today's vehicles are prone to problems if not properly maintained. Saving a penny or two today will end up costing you dollars tomorrow if preventative maintenance is not performed on your cooling system. Plus, it can be done in three easy steps...Flush, Fill, Replace!

Step 1: Flush the System

Before you install your water pump, or at least every 30,000 miles, you should flush the cooling system completely. A thorough system flush will remove rust, scale and corrosive deposits that are abrasive and harmful to your cooling system, as well as impair your system's performance. A flush/fill kit will make flushing the system easier. Follow the directions on the flush/fill kit. Be sure to drain and flush the system thoroughly and dispose of the old coolant properly.

Step 2: Refill with Fresh Coolant

Replace your coolant/antifreeze with a quality coolant designed for your specific engine and application. Refer to your vehicle's manufacturer's handbook for coolant recommendations. Add the specified amount of coolant and water. Attention should be given to the proper mixture of coolant and water – too much of one or the other can harm your system. If applicable, drain and flush the coolant system recovery tank and add the required amount of antifreeze/water mixture. Distilled water is recommended due to its low mineral content.

Step 3: Replace the Radiator Cap *(Don't overlook this important step!)*

To run clean and efficiently, today's engines need to operate at 220 to 230 degrees which is the temperature that the coolant must reach to activate many vehicles' cooling fans. To maintain that temperature level, it is recommended to replace your radiator cap with a new one when changing engine coolant. Failure to replace your radiator cap can adversely affect the performance and life expectancy of your water pump. Improper pressure in the cooling system can cause damage to the water pump seal, resulting in premature water pump failure.

Results of poor cooling system maintenance can include:

- Overheating and/or improper system temperatures
- Premature water pump, radiator, heater core and hose failure due to system corrosives
- Engine damage

Suggested Tools to do the job right

- Cooling System Flush/Fill Kit
- Garden or similar hose
- Hydrometer

Cooling System Warning Signs

Be sure to inspect your cooling system right away should your vehicle experience any of the following:

- Engine overheating and/or steam rising from radiator.
- Coolant leaks or excessive seepage onto other engine components.
- A wobble or vibration of the engine fan. Bent or broken fan blades.
- Cracks in hoses or hoses that are spongy to the touch.
- Frayed, cracked, glazed or oil-soaked belts.