



Technical Bulletin

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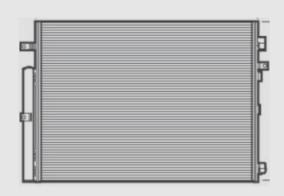
TIPS & TRICKS

Radiator

Application for

All vehicles

Radiator function



- 1. The radiator is heat exchanger which release some of engine's heat at the front of engine.
- 2. The main function of the radiator is to redistribute heat created by the engine so that it doesn't seize up or overheat.

Radiator cap operation

Normally Closed Status	Open Status
Spring pressed Vacuum Valve Radiator Cap	Open Vacuum Valve Radiator Cap
Lower sealing gasket Vacuum valve spring Vacuum valve spring	Lower sealing gasket Pressure valve spring Pressure valve Weight Vacuum valve



The radiator cap should never be removed when the cap or radiator are hot to the touch. There is sufficient pressure in the system at this point that serious burn injury may occur.









Faulty radiator symptoms

S	Symptom	Possible cause
1	Engine overheating	Damaged finsBlocked radiator core
2	 Engine coolant leaking/ low level 	Damaged radiatorFaulty radiator capBroken inlet radiator hoses
3	Coolant color change	 Rust inside the radiator Contamination due to oil leak or ATF

Radiator leaking test



- 1. Wait until engine is cold, then remove the radiator cap carefully and fill the radiator with engine coolant, then install it on the pressure tester.
- 2. Apply a pressure tester to the radiator and apply a pressure of 93 -122 kpa.
- 3. Inspect for engine coolant leaks and a drop in pressure.









Radiator cap test



- 1. Remove the radiator cap, wet its seal with engine coolant, and then install it on a pressure tester.
- 2. Apply a pressure of 125 154 kPa.
- 3. Check for a drop in pressure.
- 4. If the pressure drops, replace the cap.



