RADIATOR FAILURE

The reasons for radiator failure are numerous – below we have listed some of the most common, which can't be included in the claim range :

Corrosion

Holes and cracks in the core due to mechani-Cal and chemical deterioration of tubes and header platcs

Result:

- Severely reduced corrosion protection.
- Loss of coolant.
- Tubes become weak and brittle and eventually develop holes and cracks.
- Typically causing a reduction in performance and efficiency and leading to overheating and engine damage.
- Fin and tubes are forced apart.

Cause:

- Inadequate preparation prior to fitting of a new radiator. The cooling system was not completely flushed out.
- Mixing of coolants. A chemical cock-tail which can strip metal away with amazing speed.
- In correct concentration of coolant a wrong or a wrongly dosed coolant can actually increase the corrosion rate to above that of plain water.
- Use of dirty water, bore or spring water. Demineralized water is best.
- Overpressure due to a defective cylinder head gasket, a defective thermostat or radiator cap.

Contamination

Foreign matter inside the radiator

Result:

- Deposits in tubes, header plates and water tanks.
- Blocking of tubes, header plates and water tanks leading to reduced cooling performance and overheating.
- Deterioration and failure of radiator compo-nents causing loss of coolant.

Cause:

- nadequate preparation prior to fitting of a new radiator.
- Perhaps the cooling system(cylinder block, heating system and overflow tank) was not completely flushed out prior to fitting of the new radiator.

Electrolysis

Chemical decomposition by electric action (commonly called stray current)

Result:

- Systematic removal of the corrosion protection layer on the inside of the radiator tubes through electrolysis.
- Corrosion of the tubes, i.e. holes.
- Build-up of aluminium hydroxide blocking.
- White aluminium hydroxide powder visible through the inlet and outlet pipes.

Cause:

- Failure to diagnose and correct a stray current problem prior to fitting a new radiator.
- Usually caused when a vehicle has been in an accident—or has an electrical after market accessory fitted – leading to inadequate grounding of components. Earthing wires are not connected, loose, corroded or insecure.

If the above mentioned problems are not considered and the defective part is replaced without finding the cause of the failure, the problem has actually not been solved.

The cause of the failure must be found and eliminated to ensure that the new item will operate in accordance with the purpose. Otherwise the failure will appear again and again···

Cosmic Logistics Corporation
5F, 1-32 KUO-CHIEN ROAD, KAOHSIUNG TAIWAN 806 R.O.C.
www.cosmic-parts.com E-mail: ycm806@ms13.hinet.net

＊Radiator warranty DOES NOT covers the following reasons that cause radiator burst/crack/leak:

1. Coolant— Not enough water for radiator and inferior, non-pure water.
2. Water lime scale— Scales causing obstruction.
3. Water pump—Water pump damaged.
4. Fan—Fan damaged.
5. Belt—Belt fracture.
6. Air bladder— Air indigestion.
7. Thermostat—Thermostat damaged.
8. Collision— Impacts caused the radiator damage.
9. Any external causes or human factors.
10. Any other factors that makes the temperature of the radiator too high, resulting in burst/crack/leak.

＊Warranty conditions for Radiators:

1. Under normal usage, warranty replacement requests within six months of purchase date.
2. Limited warranty does not cover damage to the product due to external causes or any human factors.
   (Please see the radiator manual.)

＊Please also note we won't accept warranty without providing clear photos, detailed descriptions and inspection reports.