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Nissens[®]

RADIATORS
CORES
INTERCOOLERS
OIL COOLERS
CONDENSERS
HEATERS
FANS

Nissens[®]

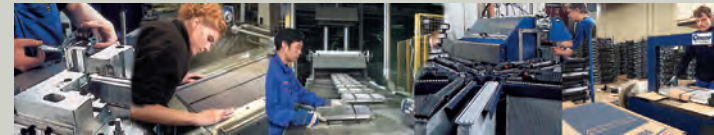
DELIVERING THE DIFFERENCE

In connection with claims, it is essential to remember that all Nissens radiators are pressure-tested before they leave our production. Our radiators are made from the best raw materials and constructed with superefficient fins - thus assuring a long service life, high cooling capacity, as well as high resistance to pressure, corrosion and blows.

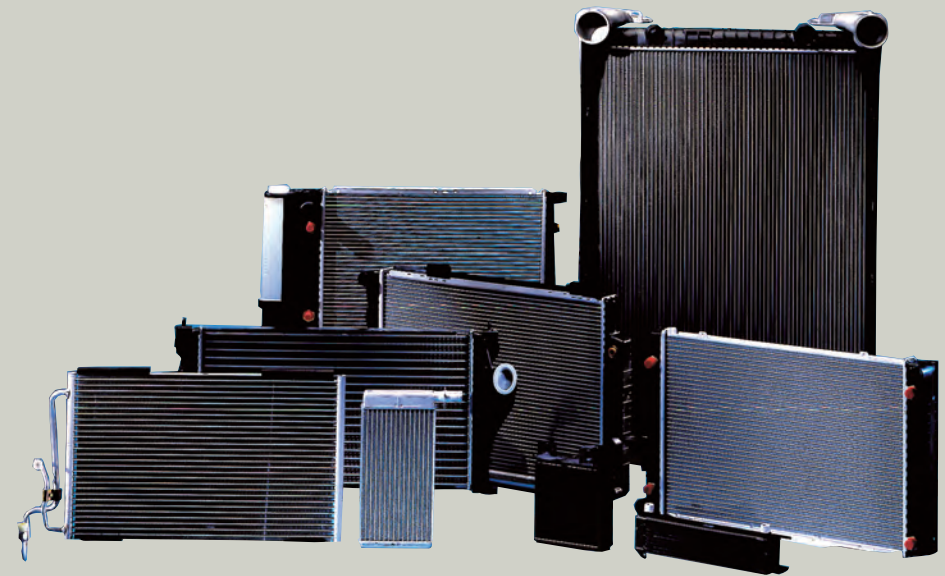
The key word for a long lifetime for the cooling system is thus due care in connection with installation and current maintenance. This has become even more important now that most of the radiators are manufactured in aluminium. The aluminium radiators have some very special properties and make quite special demands on installation and maintenance when we are talking of antifreeze.

We consider ourselves your partner in the fields of radiators and radiator technology. So we hope that you will contact us whenever you need technical advice or testing of a radiator with a view to clarifying a question in connection with a claim. We will at any time guarantee a professional and technically well-founded estimate of each specific case, in order that you know how to deal with your customers' claims.

Besides we refer to Nissens' general warranty conditions.



DIAGNOSING COOLING PROBLEMS



DIAGNOSING COOLING PROBLEMS

As supplier of quality radiator solutions, we consider it our task to help our customers obtain the technical knowledge which is necessary to prevent radiator problems from arising and to reject unwarranted claims if a problem should arise after all.

That is why we have made this folder to illustrate a number of cases which Nissens' warranty does not cover. We hope that the folder will be used - partly preventive: you teach your installer customers how to handle a radiator - and partly as basis for rejecting unwarranted claims: you teach your employees to reject a claim if it is caused by improper handling of the radiator in question.

Improper Use of Antifreeze

It is absolutely necessary to use the antifreeze recommended by the car manufacturer (see the car manufacturer's book of instructions) - and in the correct mixture with distilled water. Tap water, dirty water, reuse of antifreeze or mixing of different kinds of antifreeze etc. are banned and will cause chemical corrosion and destroy the radiator in no time. Signs of having used the wrong antifreeze are white aluminium powder and rust deposits at the header plate and in the bosses whereas an incorrect mixture, ie. too much antifreeze, will often appear as a jelly-like mass blocking the radiator (tubes and header plates).

Corrosion may also be caused by external conditions, such as saline air in coast areas or road salt.



Inadequate Flushing of the Cooling System

In connection with installing a new radiator, the entire cooling system must be flushed in order not to pollute the new radiator by harmful remnants of the old antifreeze which would cause a chemical corrosion and destroy the radiator (holes and cracks in tubes). This damage would result in leaks (lost antifreeze) as well as a reduced cooling capacity, causing superheating.



Electrolysis

After installing a new radiator and filling in the proper anti-freeze, you will have to check that there is no fault current in the cooling system seeing that this might cause early corrosion damage due to an electrochemical reaction which will systematically destroy the corrosion protection layer inside the tubes and cause these to leak. The signs of this are white powder in the bosses and at header plates as well as greenish fins and tubes. Also the oil cooler is very much exposed to electrolysis which in this case will appear as a greenish layer.



Blown Tanks

This phenomenon is most often due to an overpressure caused by a defective radiator cap or a leaking top gasket. The resulting damage is often wrongly ascribed to the radiator even though it was actually the engine that ruined the radiator. We are quite prepared to help clarify cause and effect in such cases.



Broken Threads

In case of leaks in oil cooler fittings, sensor connections, drain cocks etc., the thread should be checked. Leaks are often caused by incorrect handling of threads (stripping them and thus breaking them).



Physical Damage

This would be damage caused by collisions, inappropriate handling or storage of the radiator as well as transport damage. You should also be on your guard against cases where the radiator has been damaged on purpose, ie. the damage is not due to defective materials or lacking workmanship.



Poor Repairs

Here we are talking of poor workmanship in connection with repairs which will influence the durability of the radiator. This category also includes improper installation and maintenance.

