Radiator

Heat exchanger - essential for the engine thermal control

The radiator is placed frontally in the vehicle and typically, other heat exchangers in the engine compartment, such as the intercooler or condenser, are attached to it.

The role of the radiator is essential for the cooling of combustion engines. In such engines, there may be as many as 6,000 fuel explosions per minute, each generating 1,500 °C temperature. The cooling liquid circulates through a cooling jacket down to the engine block, down the engine block and the engine equipment such as pistons, valves, gaskets, rings, engine head etc. The circulating coolant receives the combustion heat, cools down again flowing throughout the radiator that exchanges its heat with the atmospheric air.

• Scale, which precipitates from water applied instead of a proper coolant, may block the radiator core, limiting the coolant flow. Sediment and grime from poor quality coolants, wrong coolant mixtures or residues of cooling system leak stops will also accumulate in the radiator tubes, limiting flow, thus deteriorating its operation.

• Thermostat failures are often the cause for improper cooling system operation.

• Due to the frontal placement, the radiator is particularly exposed to light mechanical damages (insects, stone chipping, high-pressure water cleaning), causing leakages.

• A leaking, or non-performing radiator, will expose the engine to an excessive thermal overload and in extreme cases cause it to seize.

OE Quality

Designed, manufactured and thoroughly tested 100% according to OE requirements. Packaging with easy handling and excellent protection against transport damages. Nissens radiators are submitted to corrosion, vibration, pressure-impulse, thermal expansion and thermal performance tests.

Perfect finish and product fit, enabling a quick and trouble-free installation.

Easy Installation

Supreme thermal performance and extended lifespan thanks to a number of special features, improving critical components of the radiator.

Competitive Range

Highly competitive product range, covering popular European trucks. The program includes +200 radiators, covering almost 1,000 OE numbers and +1,400 truck models.

Critical Components

Precision

Advanced technology and precision in welding of complex water tank elements, ensuring a long and trouble-free operation.

Enhanced Pressure Impulse Stress Resistance

Specially designed metal profile installed between mounting frame and the radiator core to ensure enhanced durability of the radiator construction.

Thermal Expansion Resistance

Specially designed side panels with cuts to lower the influence of thermal expansion on the core construction. Improved design of frame bolts. Nissens’ pin-bolts ensure much higher flexibility to the radiator construction when exposed to thermal expansion effects. Nissens’ pin-bolts are also delivered with no-frame radiators for selected models.

Thermal Stress Resistance

Reinforced plastic tanks enriched by fibreglass (PA66-GF30) and produced with no recycled plastics.

Important to know

• Scale, which precipitates from water applied instead of a proper coolant, may block the radiator core, limiting the coolant flow. Sediment and grime from poor quality coolants, wrong coolant mixtures or residues of cooling system leak stops will also accumulate in the radiator tubes, limiting flow, thus deteriorating its operation.

• Thermostat failures are often the cause for improper cooling system operation.

• Due to the frontal placement, the radiator is particularly exposed to light mechanical damages (insects, stone chipping, high-pressure water cleaning), causing leakages.

• A leaking, or non-performing radiator, will expose the engine to an excessive thermal overload and in extreme cases cause it to seize.

OE Quality

Designed, manufactured and thoroughly tested 100% according to OE requirements. Packaging with easy handling and excellent protection against transport damages. Nissens radiators are submitted to corrosion, vibration, pressure-impulse, thermal expansion and thermal performance tests.

Perfect finish and product fit, enabling a quick and trouble-free installation.

Easy Installation

Supreme thermal performance and extended lifespan thanks to a number of special features, improving critical components of the radiator.

Competitive Range

Highly competitive product range, covering popular European trucks. The program includes +200 radiators, covering almost 1,000 OE numbers and +1,400 truck models.

Critical Components

Precision

Advanced technology and precision in welding of complex water tank elements, ensuring a long and trouble-free operation.

Enhanced Pressure Impulse Stress Resistance

Specially designed metal profile installed between mounting frame and the radiator core to ensure enhanced durability of the radiator construction.

Thermal Expansion Resistance

Specially designed side panels with cuts to lower the influence of thermal expansion on the core construction. Improved design of frame bolts. Nissens’ pin-bolts ensure much higher flexibility to the radiator construction when exposed to thermal expansion effects. Nissens’ pin-bolts are also delivered with no-frame radiators for selected models.

Thermal Stress Resistance

Reinforced plastic tanks enriched by fibreglass (PA66-GF30) and produced with no recycled plastics.

Important to know

• Scale, which precipitates from water applied instead of a proper coolant, may block the radiator core, limiting the coolant flow. Sediment and grime from poor quality coolants, wrong coolant mixtures or residues of cooling system leak stops will also accumulate in the radiator tubes, limiting flow, thus deteriorating its operation.

• Thermostat failures are often the cause for improper cooling system operation.

• Due to the frontal placement, the radiator is particularly exposed to light mechanical damages (insects, stone chipping, high-pressure water cleaning), causing leakages.

• A leaking, or non-performing radiator, will expose the engine to an excessive thermal overload and in extreme cases cause it to seize.