



AUXILIARY WATER PUMP



ALL AUXILIARY WATER PUMPS

PROBLEM

BLOCKED IMPELLER

CAUSES FAILURE AS AMPS INCREASE, TEMPERATURE RISE AND WATER PUMP OVERHEATS

BACKGROUND

The automotive water pump ensures that coolant is pushed through the engine cooling system from the radiator. Without a proper working water pump, the coolant would linger in the system and no cooling effect would take place. If the water pump fails, it could lead to serious damages to the engine as a result of over heating.



If the impeller stuck, the resistance in the impeller will increase the tempearature of the water pump. This temperature increase can cause overheating in the waterpump, which in serious cases could cause a fire in the engine compartment.

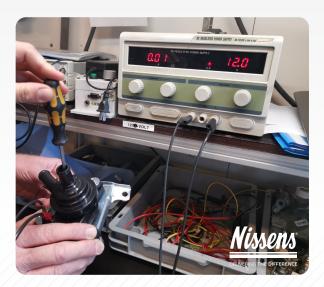
Other results could be a water pump that cannot push coolant through the engine cooling system. This will lead to engine overheating and serious damages to the car.

RECOMMENDED SOLUTION

To ensure that the water pump won't overheat, it is always encuraged to install a water pump that is equipped with a low power state fail safe. This means that, if the water pump detects that a current increase that is not part of the design specification, the water pump will automataclly enter low power state of les than 0.25 amps.



This state will reduce the temperature of the motor and ensure that the water pump motor won't overheat. In this state, the impeller should not reach temperatures above 30 C° (87 F°)



NISSENS When the impeller is blocked, the pump WATER goes into low power fails safe mode. This PUMP means that the will minimize the amps. In this case, the amps are at a constant 0.01.



WATER PUMP

The OE water pump is not equipped with a fail safe mode. This means that it will the amps will remain high and the temperature of the water pump will increase and in worst case overheat



