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NRF WEEKLY TECHNICAL POST

NRF INTRODUCES AWP – AUXILIARY WATER PUMPS >

Since 1927, NRF is the leading manufacturer of cooling systems for the automotive aftermarket, industrial and marine sector. NRF is well known for the production of radiators, intercoolers, oil coolers, heaters, fans and fan clutches. NRF also produces a wide range of air conditioning components, such as condensers, compressors, evaporators and receiver driers. The product line of more than 8.000 quality products is now expanded with AWP - Auxiliary water pumps for passenger cars.

(After-) Cooling >

Many modern cars with charged combustion engines require continuous cooling during a stop (#Start/Stop system), or after turning off the engine (2-3 minutes). The AWP secures after-cooling of the cylinder head and/or the liquid-cooled turbocharger (#Turbo). On EV and Hybrid cars it secures the constant temperature of the batteries and cooling the inverter (#Hybrids).



Pre- and after heating >

The AWP is also used as part of the electronic climate control system (ECC) to provide warm coolant to the (rear) heater during low RPM or engine stop (#Start/Stop system), but also to pre-heat the interior before the engine is started or after the ignition/engine has been switched off (#Parking heater). NOTE: Some vehicles have up to 3 AWP's to control the thermal system.

AWP facts >

It's a (auxiliary) pump and it works electrically/electronically. The advantages are: Variable delivery rate (low during warm-up phase/high for quick cooling). Appropriate use has a positive impact on engine performance, fuel consumption and emissions. The electronic AWP is diagnosable via OBD and can be located anywhere in the engine compartment. The main reasons for failure of these pumps are aging and wear of the electric motor and/or malfunction of the control unit.

Important: Reset your ECU >

Modern cars utilizing engine control units (ECU), multiple control inputs, and (by PWM signal) electronically controlled Auxiliary water pumps, typically improve performance and efficiency. A faulty or disabled AWP might cause overheating and the ECU to display a check engine light and the vehicle to fail on periodic inspection. After replacement of the AWP the check engine light must be remedied by ECU remapping.



NRF validation >

As every new product, also NRF AWP's are extensively validated and tested in our TECHcenter on correct fitment, high performance and long durability.



NRF new range >

The NRF AWP product range currently consists of 18 popular SKU's. More SKU's are in preparation and will follow soon. For more information ask your (local) supplier or visit the NRF website.

