

## First Line offer Electric Water Pump replacement advice

**G**arages are starting to see an increase of Electric Water Pump replacements, as the popularity of using auxiliary and secondary electric pumps grows amongst vehicle manufacturers. First Line point out that modern, low-emission, high-output engines are designed to run within a very small temperature window, in order to maintain optimum efficiency. This is controlled through the Electric Water Pump, which regulates the coolant flow dictated by the electronic control unit. When it comes to forced induction engines, additional cooling of the turbo/supercharger after the engine is shutdown is required in order to prevent premature wear, particularly to the turbo bearing.

First Line has gathered considerable market intelligence on many of the issues that can cause problems with the Electric Water Pump, and can advise on successful replacement.

For example, the N51, N52, N53, N54, N55 and N63 engines in several BMW models, have a tendency to experience water pump failure from as early as 60,000 miles, which is often related to the electric motor in the pump not running at the correct speed and eventually stopping. This potential failure should be detected by the primary vehicle control module during its system scan. However, if undetected, the only warning to the driver will be the yellow dashboard light illuminating, followed shortly by a red light, indicating the engine overheating.

Some VW T4 drivers have complained that the water pump continues to run long after the



engine has been switched off, running down the battery. In this instance, First Line recommend checking the coolant temperature sensor, which could have failed and locked open, causing the pump to operate continuously.

Range Rover also have an inherent problem, which is experienced on the Range Rover III/IV and Range Rover Sport I, where during the vehicles production, the Electric Water Pump connector may have been wired incorrectly. As a result, the auxiliary coolant pump that cools the supercharger runs backwards. This will cause the pump to fail prematurely, so when identifying the cause of the original failure, it's worth checking the connector is wired correctly to avoid further problems.

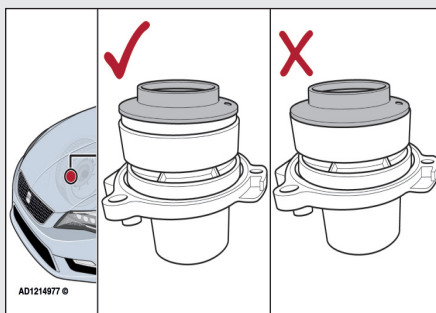
First Line says it is also important to note, that when carrying out any water pump repairs, it is imperative that the old coolant is thoroughly flushed through and the system refilled with fresh coolant of the correct specification.

**First Line offers a comprehensive range of replacement pumps covering a multitude of references with every product coming with a 24-month/24,000 mile warranty. These are available from stockist nationwide.**

## Seat Leon ST: Engine overheating with warning message on instrument panel

**Question:** We are experiencing a problem with a 2014 Seat Leon ST 1.6 TDi. The engine coolant temperature (ECT) gauge goes to full hot, and a warning message requesting the driver to switch the engine off is displayed on the instrument panel. We have carried out a pressure test on the cooling system, but no leaks where found. We have also checked for internal engine coolant loss from the cylinder head gasket, but no leaks where found. Do you have any ideas?

**Answer:** Yes, this has been reported to us before and it affects Leon ST models with CXXA/CXXB engine codes. The fault is due to a failure of the engine coolant pump impeller control actuator. Remove the engine coolant pump. Check if the engine coolant pump



impeller control actuator is stuck in the closed position (see figure above), then fit a new engine coolant pump. This should rectify the fault.



## Vehicle specific fluids from febi



**T**he smooth running of a vehicle requires many different fluids and febi offers a wide range of products that are matched to the vehicle manufacturers' specific requirements. The company says all of these fluids are of OE matching quality.

febi antifreeze delivers reliable protection against frost, corrosion and cavitation damage. In many cases, febi says its antifreeze even exceeds the vehicle manufacturers' requirements and helps to promote the longevity of moving parts such as water pumps, thermostats or heating valves. For example, febi's antifreeze (37400) is a state-of-the-art premium long-term antifreeze concentrate based on monoethylene glycol with cutting-edge OAT (Organic Additive Technology).

febi also supplies a range of different Automatic Transmission Fluids which are resistant to a high torque. The high-performance ATF (febi 29934) is characterised by a constantly high friction-coefficient and high level of wear protection.

febi greases are have been formulated for all types of cars and commercial vehicles and cover all areas of application on the vehicle. They meet the manufacturers' highest requirements and are especially suitable for use in constant velocity joints or central lubrication systems.

febi is renowned for its hydraulic fluids which are consistently one of its fluid best sellers and are always in demand from garages. The fluids offer excellent low-temperature properties. Especially popular is febi hydraulic fluid 06161 which has extensive coverage of vehicle models, including applications for Audi, BMW, MINI, Opel, Skoda, Seat, and Volkswagen.

**Full range of febi essential fluids on the febi Live! online catalogue at [www.febilive.com](http://www.febilive.com).**