VW Tiguan **hybrid coolant plus aircon problem**

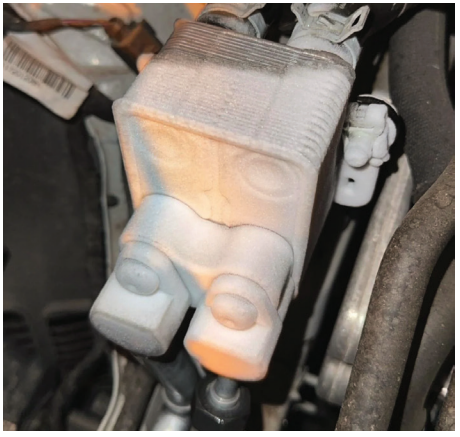
The Autobiz Helpline was contacted by a member garage about a Volkswagen Tiguan 1.4 eHybrid. The Tiguan was booked into the workshop for two problems.

The first problem was that the hybrid system had flagged an error P26B1 (Coolant Bypass Valve Stuck Closed). On investigation, it was evident that the hybrid cooling system was very low on coolant.

The technician tried to locate a leak on the hybrid system, but no leaks were evident. These types of leaks can be very difficult to trace. Autofrontal was checked to investigate the fault code, but there were no results on this Tiguan PHEV.

Checking on known issues with low coolant on these models came up with a possible culprit, the heat exchanger on these Tiguans is known to leak internally.

The second problem was that the climate control was inefficient. The refrigerant was removed, and found to be significantly low. Due to the high cost of a replacement heat exchanger, a test plan was needed to prove that it was leaking.



The expensive heat exchanger was tested and proved to be faulty before it was replaced

After calling the Helpline for advice, we came up with a different approach to test this issue. We asked for the climate system to be refilled with refrigerant, and explained that there are special precautions to take when filling these systems. You are required to open the valves using a scan tool, to ensure the whole system is filled. This is done before any draining. Vacuum for filling is done on systems that utilize a heat pump.

Once the process is completed, open the coolant expansion cap on the hybrid cooling system. Using a refrigerant leak detection tool, check for the presence of refrigerant.

As this cap was being removed, the technician observed the system was pressurised, even though it had not been run that day. The scan tool showed an extremely high concentration of refrigerant present. This proved without a doubt that the heat exchanger was leaking between the coolant and refrigerant circuits.

This problem will be the same on many models using the same heat pump climate/ battery thermal management system.