

Reference	SSM76020
Models	F-PACE / X761 XE / X760 XF / X260
Title	Auxiliary Coolant Pump And Turbocharger Diagnosis
Category	Engine
Last modified	06-Jul-2023 00:00:00
Symptom	Cooling System Concerns
Content	<p>Issue: Where a turbocharger has been diagnosed as requiring renewal, complete the additional diagnostic steps listed below to check that the auxiliary coolant pump is operating as expected. If the auxiliary coolant pump is not operating as expected this may have been a contributing factor to the failure of the turbocharger.</p> <p>Cause: If the auxiliary coolant pump is not operating after the engine has been switched OFF in high ambient conditions it may affect the coolant temperature within the turbocharger.</p> <p>Action: Complete the following diagnostic steps to determine if the auxiliary coolant pump is operating correctly:</p> <ol style="list-style-type: none"> 1. Make sure the ignition is switched OFF. 2. Disconnect electrical connector from the auxiliary coolant pump and inspect the 3 pins within the electrical connector and auxiliary coolant pump. Make sure there are no signs of damage or corrosion present before continuing. Where necessary, refer to the TOPIx Workshop Manual, (see TOPIx Workshop Manual section 418-02: Wiring Harnesses - Description and Operation – Wiring Harness). 3. Check the continuity of the ground connection at pin 1, if there is poor or no continuity, rectify as necessary before continuing. 4. Check the continuity of the positive connection at pin 2, if there is poor or no continuity, rectify as necessary before continuing. 5. Release pin 3 from electrical connector and use suitable electrical tape to temporarily secure pin 3 to the wiring harness. 6. Connect electrical connector to the auxiliary coolant pump. 7. With electrical connector in place, touch and hold the auxiliary coolant pump. A vibration should be felt. 8. If a vibration cannot be felt, this suggests the auxiliary coolant pump is not operating and requires renewal. <p>If a vibration can be felt, this suggests the auxiliary coolant pump is operating correctly and is not the root cause of the turbocharger failure and further investigation is required to determine the root cause.</p> <p>- Disconnect electrical connector from the auxiliary coolant pump, install pin 3 and connect electrical connector to the auxiliary coolant pump.</p> <p>Note: 24MY vehicles only affected for the following engine derivatives - Ingenium I6 3.0L petrol / Ingenium I6 3.0L diesel / Ingenium I4 2.0L petrol / Ingenium I3 1.5L petrol.</p>

anBhdHRlcnM7MjAyMy0wNy0wN1QxMj00DoyNi4zNjdaOzEzNi4yMjYyNDguOTY7