

Reference	SSM74404
Models	Discovery Sport / L550 Range Rover Evoque / L538
Title	Discovery Sport and RR Evoque equipped with 2.0L Petrol GTDi Check Engine Lamps with DTC P0420-00
Category	Engine
Last modified	30-Apr-2019 00:00:00
Symptom	403000 Exhaust System Concerns
Content	<p><u>Issue:</u> Degradation of the primary catalytic converter. The DTC P0420-00 stored in the PCM indicates the primary catalyst is not operating at an optimal level.</p> <p><u>Cause:</u> Fueling strategy when the engine is operated in overrun excessively and repeatedly during the warm up phase.</p> <p><u>Action:</u> The DTC is monitored by the PCM, comparing O2 sensor readings from the front and mid oxygen sensors to determine the efficiency of the primary catalyst. While other components can impact the operation of the primary catalytic converter, the DTC P0420-00 will only be set based on the catalytic converter efficiency. Additional DTCs would likely be stored if other components are not operating as specified. Reference TOPIx workshop manual section 100-00: General Information > Diagnostic Trouble Code Index GTDi 2.0L Petrol/GDTi 2.0L Petrol – SULEV, DTC: Engine Control Module (ECM) for diagnostic guidance:</p> <ul style="list-style-type: none"> • Diagnose and repair any related DTC stored. • Inspect for and repair any leaks in the exhaust system. • Inspect for and repair any intake system unmetered air leaks. • Inspect for and repair any causes of misfire in the ignition system. • Carry out oil consumption checks. <p>If other components pass testing (e.g. O2 sensors, secondary catalyst, etc.) do not replace. Replace only the primary catalytic converter. Reference TOPIx workshop manual section 309-00A: Exhaust System – GTDi 2.0L Petrol/GDTi 2.0L Petrol – SULEV > Removal and Installation > Catalytic Converter for repair procedures. Inquire with the vehicle owner to determine if the vehicle is often operated in an overrun during warm up, i.e. driven downhill during warm up as part of a daily commute. Raise an EPQR and include information on normal driving patterns. This condition is currently under investigation.</p>