

Reference	SSM73378
Models	Discovery Sport / L550 Range Rover Evoque / L538
Title	2.0 Gasoline misfire from cold start. DTC P0316-00
Category	Engine
Last modified	18-May-2017 00:00:00
Symptom	499000 Basic Engine
Content	<p><u>Issue:</u> Evoque or Discovery Sport 2.0L gasoline engines - the customer reports Check Engine Lamp. DTC P0316-00 is present, Misfire detected on start-up (First 1000 revolutions)</p> <p><u>Cause:</u> Under investigation.</p> <p><u>Action:</u> If DTC P0316-00 is present, follow Topix instructions for code P0316-00. These instructions are also available in Topix: -</p> <ul style="list-style-type: none">• Electronic Engine Controls (303-14B Electronic Engine Controls - GTDi 2.0L Petrol/GTDi 2.0L Petrol - SULEV, Diagnosis and Testing). <p>Establish which components are faulty. If the faulty components are spark plugs, ignition coils or any electrical wiring, do not proceed with this SSM.</p> <p>If the issue is due to one or more faulty injectors (except electrical injector faults), or if there is No Fault Found, then carry out the retailer checks listed in this SSM with the injectors in the original locations - see below.</p> <p>If the retailer checks are positive, remove all the injectors, mark with their original cylinder positions and raise an EPQR quoting this SSM number, JLR will then have the injectors collected and returned for investigation using the Priority Return Request (PRR) process.</p> <p><u>Retailer checks</u></p> <ol style="list-style-type: none">1. Allow car to soak overnight for at least 8hrs in a work shop.2. Connect SDD tool, switch ignition on and use misfire analysis application to read3. individual cylinder misfire counts. This is accessed via the SDD menus for engine performance, engine misfire.

4. Start the engine and allow to idle for 300s with the gearbox remaining in park position and no other driver inputs
5. Monitor the individual cylinder misfire counts using the "current" misfire values displayed on SDD, not "average" values.
6. If any individual cylinder causes more than 25 misfire counts in the current misfire values the tests is positive. Remove all injectors for return. Note which cylinders the injectors have been removed from and which cylinder(s) reported misfire, if possible with the values reported by text or by taking a screen shot of the SDD misfire tool.
7. If the result of the checks are negative, please do not proceed with replacing the fuel injectors at this time. Continue diagnosis the issue as per normal process for an intermittent fault.

Note: it may be necessary to pressurise the engine cooling system and let the vehicle sit with the engine off for several hours to test for coolant ingress into the cylinders as a potential cause.

Technicians - Please rate this SSM and provide comments so that future communications can be improved.

1 = Poor – Basic information provided – The SSM does not help me resolve the customer concern.

3 = Average – Adequate information provided – The SSM partially helps me resolve the customer concern.

5 = Excellent – All required information provided to resolve the customer concern.