# TECHNICAL BULLETIN



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 $S \to C \to I O$  :

303-04

S U B J E C T / C O N C E R N:

5.0L Engine Misfires /Check Engine Light On With Coolant Temperature 75 Degrees C Or Below

M A R K E T S :

All Except USA and Canada

CONDITION SUMMARY:

#### SITUATION:

#### NOTE:

This condition will only appear when the engine is started from cold.

A customer may report a concern of a poor engine running, hard starting, rough idle, misfires. The check engine lamp could be illuminated with Diagnostic trouble code (DTC) P0316 stored in the Engine Control Module (ECM) also know as the Powertrain Control Module (PCM) and one or more of misfire code(s) P0300, P0301, P0302, P0303, P0304,P0305, P0306, P0307, P0308.

This version has been issued for a change to the Service Instructions.

#### CAUSE:

Fuel injection calibration. Suggested Customer Concern Code MD1.

# NOTE:

Only follow this technical bulletin if DTC P0316 and a misfire code (P0300 to P0308) are stored. If there are any other DTC logged, investigate the cause and carry out the repair as a separate warranty claim.

#### **ACTION:**

Should a customer express concern, follow the Service Instruction outlined below.

PARTS:

# No Parts Required

WARRANTY:

#### NOTES:

- Repair procedures are under constant review, and therefore times are subject to change; those quoted here must be taken as guidance only. Use TOPIx to obtain the latest repair time.
- The JLR claims submission system requires the use of causal part numbers.
  Labor only claims must show the causal part number with a quantity of zero.

DESCRIPTION	SRO	TIME (HOURS)	CONDITION CODE	CAUSAL PART
Reconfigure Existing ECM	12.90.13	0.2	42	LR037088

# NOTE:

Normal Warranty procedures apply.

#### NOTES:

1.

2.

- This bulletin only applies where DTC P0316 and one or more of DTC P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, or P0308, are stored. No other DTC must be present.
- If the engine control module already has the latest calibration loaded then refer to TOPIx section 303-00 to diagnose the cause of the misfire. This must be done as a separate warranty claim.

View the Freeze frame data for DTC P0316 or one of the other misfire codes (P0300-P0308), and read the engine coolant temperature.

- If the engine coolant temperature is 76 degrees C or more refer to TOPIx section 303-00 to diagnose the cause of the misfire. This must be done as a separate warranty claim.
- If the engine coolant temperature is 75 degrees C or less continue with the procedure from step 2.

#### **CAUTION:**

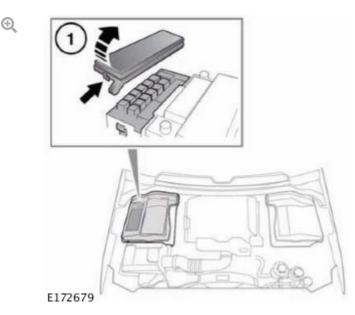
This procedure requires SDD DVD139.08 and Calibration File 191 loaded or later.

Connect the approved battery support unit/power supply.

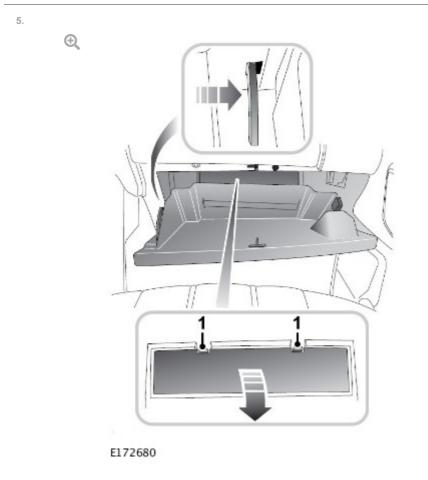
- <sup>3.</sup> Connect SDD to the vehicle and begin a new diagnostic session, by reading the vehicle identification number (VIN) for the current vehicle and initiating the data collect sequence.
- <sup>4.</sup> Follow the SDD prompts.

# NOTE:

**IMPORTANT:** When the technician is instructed to select the 'tick' to configure the powertrain control module, the technician **MUST** remove the ECM fuse before selecting the 'tick'. For L319 and L320 the fuse box is located in the engine compartment (see Step 5), the ECM fuse number is 27 (27E) - fuse rating 5A. For L322 the fuse box is located in the passenger compartment (see Step 6), the ECM fuse number is 14 (14P) - fuse rating 5A. When the software download is complete, and SDD states to set the ignition switch to 'off' (position 0), switch the ignition 'off', and then wait **10 seconds** before installing the previously removed ECM fuse. Once the fuse has been refitted continue with the SDD command prompts.

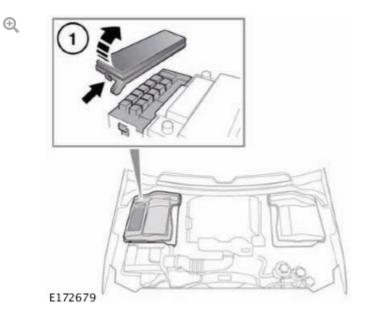


Fuse box location in the engine compartment for L319 and L320.

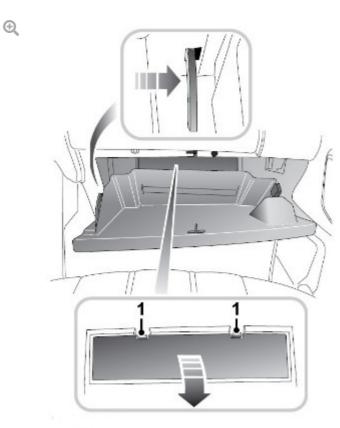


Fuse box location in the passenger compartment for L322.

- <sup>6.</sup> If the hyperlink is not available, the application can be found as follows:
  - Select the Symptoms tab and enter any of the following Symptom (s).
  - Powertrain Engine system Engine performance Engine misfire or
  - <sup>3.</sup> Electrical Instruments Warning lamps Engine malfunction lamp - Lamp illuminated or
  - Electrical Instruments Information and Message Centre -Message Display Area - Powertrain
  - <sup>5.</sup> Select the Recommendations tab.
  - 6. IMPORTANT: When the technician is instructed to select the 'tick' to configure the powertrain control module, the technician MUST remove the ECM fuse before selecting the 'tick'. For L319 and L320 the fuse box is located in the engine compartment (see Step 5), the ECM fuse number is 27 (27E) fuse rating 5A. For L322 the fuse box is located in the passenger compartment (see Step 6), the ECM fuse number is 14 (14P) fuse rating 5A.
  - <sup>7.</sup> Configure existing module Powertrain control module.
  - 8. When the software download is complete, and SDD states to set the ignition switch to 'off' (position 0), switch the ignition 'off', and then wait **10 seconds** before installing the previously removed ECM fuse. Once the fuse has been refitted continue with the SDD command prompts.
- When all tasks are complete, exit the current session by selecting the Session tab and then selecting the Close Session option.
- <sup>8.</sup> Disconnect SDD and the battery support unit/power supply.



Fuse box location in the engine compartment for L319 and L320.



E172680

Fuse box location in the passenger compartment for L322.

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If the hyperlink is not available, the application can be found as follows:

<sup>1.</sup> Select the Symptoms tab and enter any of the following Symptom (s).

- <sup>2.</sup> Powertrain Engine system Engine performance Engine misfire or
- <sup>3.</sup> Electrical Instruments Warning lamps Engine malfunction lamp Lamp illuminated or
- Electrical Instruments Information and Message Centre Message Display Area - Powertrain
- <sup>5.</sup> Select the Recommendations tab.
- IMPORTANT: When the technician is instructed to select the 'tick' to configure the powertrain control module, the technician MUST remove the ECM fuse before selecting the 'tick'. For L319 and L320 the fuse box is located in the engine compartment (see Step 5), the ECM fuse number is 27 (27E) - fuse rating 5A. For L322 the fuse box is located in the passenger compartment (see Step 6), the ECM fuse number is 14 (14P) - fuse rating 5A.
- <sup>7.</sup> Configure existing module Powertrain control module.
- 8. When the software download is complete, and SDD states to set the ignition switch to 'off' (position 0), switch the ignition 'off', and then wait **10 seconds** before installing the previously removed ECM fuse. Once the fuse has been refitted continue with the SDD command prompts.