TECHNICAL BULLETIN 04 DEC 2019



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NOTE: The information in Technical Bulletins is intended for use by trained, professional Technicians with the knowledge, tools, and equipment required to do the job properly and safely. It informs these Technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by 'do-it-yourselfers'. If you are not a Retailer, do not assume that a condition described affects your vehicle. Contact an authorized Land Rover service facility to determine whether this bulletin applies to a specific vehicle.

INFORMATION

This bulletin supersedes TSB LTB01204NAS2/2018 dated 20 DEC 2018, which should either be destroyed or clearly marked to show it is no longer valid (e.g. with a line across the page). Only refer to the electronic version of this Technical Bulletin in TOPIx.

Changes are highlighted in blue

SECTION:

303-04A

SUBJECT/CONCERN:

Malfunction Indicator Lamp (MIL) Illuminated On The Instrument Panel Cluster (IPC) With Diagnostic Trouble Code (DTC) P0234-77 Stored

AFFECTED VEHICLE RANGE:

MODEL YEAR:

VIN:

APPLICABILITY:

https://www.odyssey.jlrint.com/odyssey/WorkflowHtmlComposition.do?wid=1575294552636

MODEL:	MODEL YEAR:	VIN:	APPLICABILITY:
Discovery (LR)	2017-2018	000001-090164	TDV6 3.0L Diesel
Range Rover Sport (LW)	2016-2018	519971-831586	TDV6 3.0L Diesel
Range Rover (LG)	2016-2018	216967-533162	TDV6 3.0L Diesel

MARKETS:

NORTH AMERICA

CONDITION SUMMARY:

SITUATION:

The MIL is illuminated on the IPC with Diagnostic Trouble Code(s) (DTC) P0234-77 stored in the Powertrain Control Module (PCM) which may be accompanied with <u>DTC</u>s P2463-00 and P246B-00.

CAUSE:

Component failure.

ACTION:

Follow the instructions below.

PARTS:

PART NUMBER	DESCRIPTION	QUANTITY	
LR078546	Intake air shutoff throttle	1	
LR063121	Inlet hose clamp	1	

TOOLS:









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
Leakage test using smoke test equipment	01.01.28	0.4	41	LR078546
Read and clear <u>DTC</u> s	12.90.16	0.2	41	LR078546
Intake air shutoff throttle - Renew - Range Rover Sport and Discovery	19.70.32	0.2	41	LR078546
Intake air shutoff throttle - Renew - Range Rover	19.70.32	0.5	41	LR078546
Perform road test	10.41.17	0.3	10	-
Diesel Particulate Filter (DPF) - Dynamic regeneration	17.50.45	0.5	41	LR078546

NOTE:

Normal Warranty procedures apply.

DIAGNOSTIC INSTRUCTION A

16 Model Year (MY) vehicles and earlier

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CAUTION:

This procedure requires a minimum of SDD 158.04 and Software Management Pack 329 loaded or later.

NOTES:

- The JLR approved diagnostic equipment will read the Vehicle Identification Number (VIN) for the vehicle and automatically take the vehicle out of 'Transportation mode' if required.
- All ignition ON/OFF instructions must be followed. Failure to complete these instructions may cause damage to the vehicle control modules.

Connect the JLR approved battery support unit.

- ^{2.} Connect the JLR approved diagnostic equipment to the vehicle and begin a new session.
- ^{3.} Follow the JLR approved diagnostic equipment prompts.
- ⁴ Using the JLR approved diagnostic equipment read the <u>DTC</u>s.
 - If DTC P0234-77 is stored, continue to the 'Service Instruction A'.
 - If DTC P0234-77 is not stored, do not continue with this technical bulletin, continue diagnosis the concern (see TOPIx Workshop Manual section 100-00: General Information -Description and Operation).
- ^{5.} When all of the tasks are complete, exit the session.

17 MY vehicles and later

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CAUTION:

This procedure requires Pathfinder version 259 loaded or a later version.

NOTES:

- The JLR approved diagnostic equipment will read the <u>VIN</u> for the vehicle and automatically take the vehicle out of 'Transportation Mode' if required.
- All ignition ON/OFF instructions must be followed. Failure to complete these instructions may cause damage to the vehicle control modules.

Connect the JLR approved battery support unit.

- Connect the JLR approved diagnostic equipment to the vehicle and begin a new diagnostic session.
- ^{8.} Follow the JLR approved diagnostic equipment prompts.
- ^{9.} Select 'ECU Diagnostics'.
- ^{10.} Select 'All DTCs'.
 - If DTC P0234-77 is stored, continue to the 'Service Instruction A'.
 - If DTC P0234-77 is not stored, do not continue with this technical bulletin, continue to diagnose the concern (see TOPIx Workshop Manual section 100-00: General Information -Description and Operation).
- ^{11.} When all of the tasks are complete, exit the current session.

SERVICE INSTRUCTION A

NOTE:

The <u>DTC</u> P0234-77 can be attributed to a leak in the air intake system.

- Complete a leakage test on the intake system using smoke test equipment (see TOPIx Workshop Manual section 303-12: Engine system general information -General procedures - Leakage test using smoke test equipment).
- ^{2.} If any leaks are found, repair as required referring to TOPIx Workshop Manual and submit a separate warranty claim.
 - If no leaks are found, continue to 'Service Instruction B'.
- ^{3.} If any leaks have been rectified complete <u>DTC</u> read and clear, **continue to step 4** for 16 MY vehicles and earlier or step 13 for 17 MY vehicles and later.

16 MY vehicles and earlier

CAUTION:

This procedure requires a minimum of SDD 158.04 and Software Management Pack 329 loaded or later.

NOTES:

- The JLR approved diagnostic equipment will read the <u>VIN</u> for the vehicle and automatically take the vehicle out of 'Transportation mode' if required.
- All ignition ON/OFF instructions must be followed. Failure to complete these instructions may cause damage to the vehicle control modules.

Connect the JLR approved battery support unit.

- ^{5.} Connect the JLR approved diagnostic equipment to the vehicle and begin a new session.
- ^{6.} Follow the JLR approved diagnostic equipment prompts.
- ⁷ Using the JLR approved diagnostic equipment clear the <u>DTC</u>s.
- ^{8.} Complete a short vehicle road test.

- ^{9.} Using the JLR approved diagnostic equipment read the <u>DTC</u>s.
 - If DTC P0234-77 is stored, continue to the 'Service Instruction B'.
 - If DTC P0234-77 is no longer stored, complete a dynamic regeneration using the diagnostic procedures below.
- ^{10.} If required, reset the vehicle to 'Transportation mode'.
- ^{11.} When all of the tasks are complete, exit the session.
- ^{12.} Disconnect the JLR approved diagnostic equipment and the JLR approved battery support unit.

17 MY vehicles and later

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CAUTION:

This procedure requires Pathfinder version 259 loaded or a later version.

NOTES:

- The JLR approved diagnostic equipment will read the <u>VIN</u> for the vehicle and automatically take the vehicle out of 'Transportation Mode' if required.
- All ignition ON/OFF instructions must be followed. Failure to complete these instructions may cause damage to the vehicle control modules.

Connect the JLR approved battery support unit.

- ^{14.} Connect the JLR approved diagnostic equipment to the vehicle and begin a new diagnostic session.
- ^{15.} Follow the JLR approved diagnostic equipment prompts.
- ^{16.} Select 'ECU Diagnostics'.
- 17. Select 'All DTCs'.

^{18.} Select 'Clear all DTCs'.

- ^{19.} Complete a short vehicle road test.
- ^{20.} Select 'ECU Diagnostics'.
- ^{21.} Select 'All DTCs'.
 - If DTC P0234-77 is stored, continue to the 'Service Instruction B'.
 - If DTC P0234-77 is no longer stored, complete a dynamic regeneration using the diagnostic procedures below.
- ^{22.} Follow all on-screen instructions to complete this task.
- ^{23.} When all of the tasks are complete, exit the current session.
- ^{24.} Disconnect the JLR approved diagnostic equipment and the Jaguar Land Rover approved battery support unit.

SERVICE INSTRUCTION B

NOTE:

Vehicles affected by this technical bulletin are equipped with the Low Pressure (LP) Exhaust Gas Recirculation (EGR) system.

- Renew the intake air shutoff throttle (see TOPIx Workshop Manual section 303 04: Fuel Charging and Controls Removal and Installation Intake Air Shutoff
 Throttle).
- ^{2.} Complete a dynamic regeneration using the diagnostic procedures below.

DIAGNOSTIC PROCEDURE B

16 MY vehicles and earlier

CAUTION:

This procedure requires a minimum of SDD 158.04 and Software Management Pack 329 loaded or later.

NOTES:

- The JLR approved diagnostic equipment will read the <u>VIN</u> for the vehicle and automatically take the vehicle out of 'Transportation mode' if required.
- All ignition ON/OFF instructions must be followed. Failure to complete these instructions may cause damage to the vehicle control modules.

Connect the JLR approved battery support unit.

- ^{2.} Connect the JLR approved battery support unit.
- ^{3.} Connect the JLR approved diagnostic equipment to the vehicle and begin a new session.
- ^{4.} Follow the JLR approved diagnostic equipment prompts.

Click here to run: Diesel particulate filter dynamic regeneration (158.04 / 73670)

- ^{5.} If the hyperlink is not available, the application can be found as follows:
 - Select the 'Service Functions' Session Type
 - Run 'Diesel particulate filter dynamic regeneration'
- ^{6.} If required, reset the vehicle to 'Transportation mode'.
- ^{7.} When all of the tasks are complete, exit the session.
- ^{8.} Disconnect the JLR approved diagnostic equipment and the JLR approved battery support unit.

17 MY vehicles and later

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CAUTION:

This procedure requires Pathfinder version 259 loaded or a later version.

NOTES:

- The JLR approved diagnostic equipment will read the <u>VIN</u> for the vehicle and automatically take the vehicle out of 'Transportation Mode' if required.
- All ignition ON/OFF instructions must be followed. Failure to complete these instructions may cause damage to the vehicle control modules.

Connect the JLR approved battery support unit.

- ^{10.} Connect the JLR approved battery support unit.
- ^{11.} Connect the JLR approved diagnostic equipment to the vehicle and begin a new session.
- ^{12.} Follow the JLR approved diagnostic equipment prompts.
- ^{13.} Select 'Service'.
- ^{14.} Select 'Powertrain Control Module [PCM]: Diesel particulate filter dynamic regeneration'.
- ^{15.} Follow all on screen instructions to complete this task.
- ^{16.} If required, reset the vehicle to 'Transportation mode'.
- 17. When the task is completed, exit the session.
- ^{18.} Disconnect the JLR approved diagnostic equipment and the JLR approved battery support unit.