LTB00445V3

# TECHNICAL BULLETIN

15 AUG 2012



## INFORMATION

This reissue replaces all previous versions. Please destroy all previous versions.

This bulletin supersedes TSB LTB00445v2/2012 dated 09 JUL 2012, which should either be destroyed or clearly marked to show it is no longer valid (e.g. with a line across the page).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.

## SECTION:

303-00

## SUBJECT/CONCERN:

3.0L TDV6 P1247-00 Turbocharger Boost Pressure Low

## AFFECTED VEHICLE RANGE:

| MODEL: | | MODEL YEAR: | VIN: |
|---|---|---|---|
| Discovery 4 / LR4 (LA) | 3.0L TDV6 Only | 2010 Onwards | AA513326 Onwards |
| Range Rover Sport (LS) | 3.0L TDV6 Only | 2010 Onwards | AA215623 Onwards |

## MARKETS:

Diesel Markets Only

## CONDITION SUMMARY:

SITUATION:

**This bulletin is for information only to aid in diagnosing turbocharger boost pressure issues. Any repairs are to be carried out as a separate Warranty Claim.** If the boost pressure cannot achieve the requested threshold (boost pressure set point) for a pre-defined period of time, then a P1247-00 code will be raised and the vehicle will be put into restricted performance.

**This version has been issued to add step 17 to the Service Instruction.**

CAUSE:

This can only be caused by leaks in any part of the induction system, air path component part failures or blockages in the exhaust.

ACTION:

If a customer reports a concern of a vehicle put into restricted performance, carry out the Service Instruction outlined below.

## WARRANTY:

Appendix 1

| DTC | DESCRIPTION |
|---|---|
| P00BC-00 | Mass or Volume Air Flow A Circuit Range/Performance - Air Flow Too Low - No sub type information |
| P00BD-07 | Mass or Volume Air Flow A Circuit Range/Performance - Air Flow Too High - Mechanical Failures |
| P00BE-00 | Mass or Volume Air Flow B Circuit Range/Performance - Air Flow Too Low - No sub type information |
| P00BE-07 | Mass or Volume Air Flow B Circuit Range/Performance - Air Flow Too Low - Mechanical Failures |
| P00BF-07 | Mass or Volume Air Flow B Circuit Range/Performance - Air Flow Too High - Mechanical Failures |
| P0235-94 | Turbocharger/Supercharger Boost Sensor A Circuit - Unexpected operation |
| P22D2-77 | Turbocharger Turbine Inlet Valve Stuck Open - Commanded position not reachable |
| P22D3-77 | Turbocharger Turbine Inlet Valve Stuck Closed - Commanded position not reachable |
| P22CF-71 | Turbocharger Turbine Inlet Valve Control Circuit / Open - Actuator stuck |
| | MAP - Mass or Volume Air Flow Correlation - No sub type information |

| DTC | DESCRIPTION |
| --- | --- |
| P006A-00 | |
| P0402-00 | Exhaust Gas Re-circulation A Flow Excessive Detected - No sub type information |

SERVICE INSTRUCTION:

1. Connect the Land Rover approved battery conditioner/power supply.

2. Connect SDD to the vehicle and begin a new diagnostic session, by reading the VIN for the current vehicle and initiating the data collect sequence.

3. Select the Diagnosis Session Type.

4. Select the Symptoms tab and enter any of the following Symptom (s).
    - Electrical/Instruments/Warning lamps/Red primary warning lamp/Lamp illuminated .
    - Electrical/Instruments/Warning lamps/Engine malfunction lamp/Lamp illuminated .
    - Electrical/Instruments/Information and message center/Message display area/Powertrain

5. Select the Recommendations Tab.

6. Read fault codes.
    -

If DTC P1247-00 has been logged along with any of the DTCs listed in Appendix 1 or any other air path related DTC, then refer to the relevant DTC and carry out the appropriate action, and also carry out the boost leak check procedure - see steps 7 to 16

**Boost leak check procedure - Carry out the procedure below and rectify any faults found**

---

7

**NOTE:**

**Where appropriate, use a suitable smoke tester to help identify leaks.**

Conduct thorough boost leak and exhaust restriction tests. Check for blockages in induction system. Check for blockages in exhaust system, in particular at the catalysts.

---

8 Check the induction hoses.

- Make sure that all induction hoses are correctly installed.
- Make sure that all induction hoses are securely installed.
- Check for any obvious signs of damage.

---

9 Check the boost hoses.

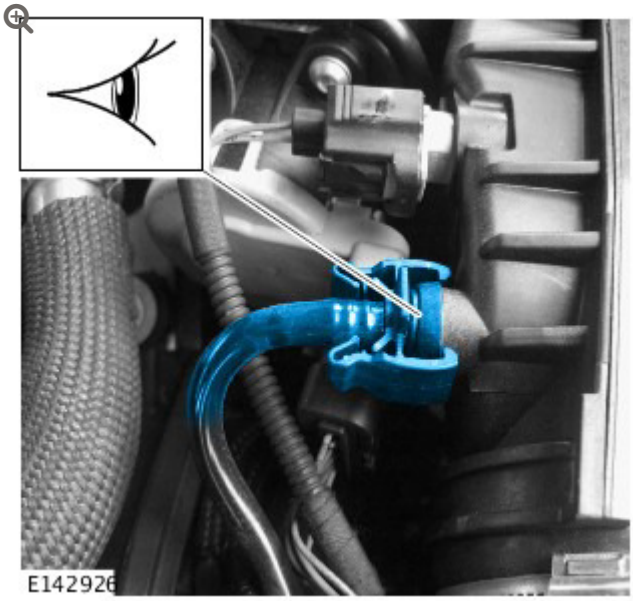
- Make sure that all boost hoses are correctly installed.
- Make sure that all boost hoses are securely installed.

- Check for any signs of oil leaks or misting.
- Check for any splits or other signs of damage.

10 Check the exhaust system.

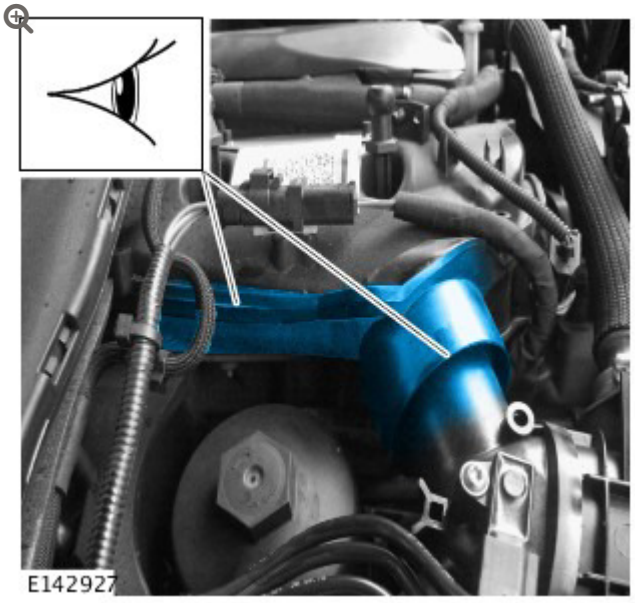
- Check for any holes, damage or split seams.
- Check for any kinks or dents.
- Check for any dis-colouration or rust.
- Check for any broken or missing hangers.
- Check for any loose tail-pipes or other components.
- Check for signs of catalytic converter overheating.
- Check for signs of oil leakage from the pre-diesel particulate filter (DPF) exhaust clamp.

11




Check the secondary turbocharger vent pipe is secure and for signs of oil leakage around the seal area.

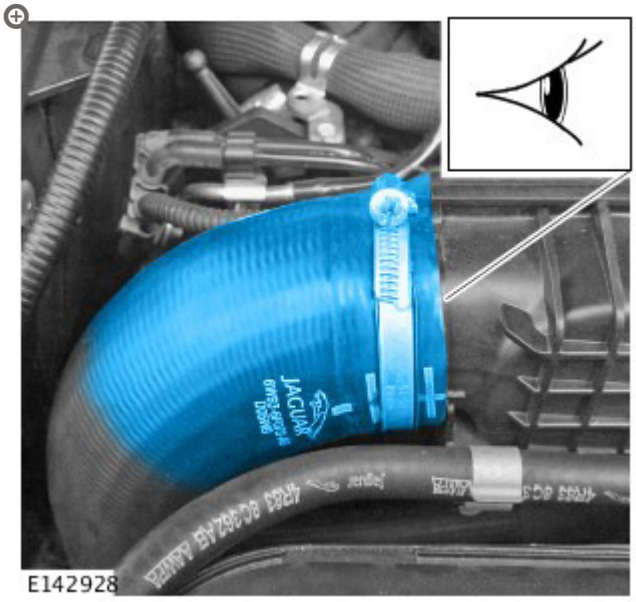
12




Check the intake manifold for signs of oil leakage around the seals and the seam.

- The o-ring seals are available separately.
- Signs of oil leakage around the seam could indicate a seam issue.

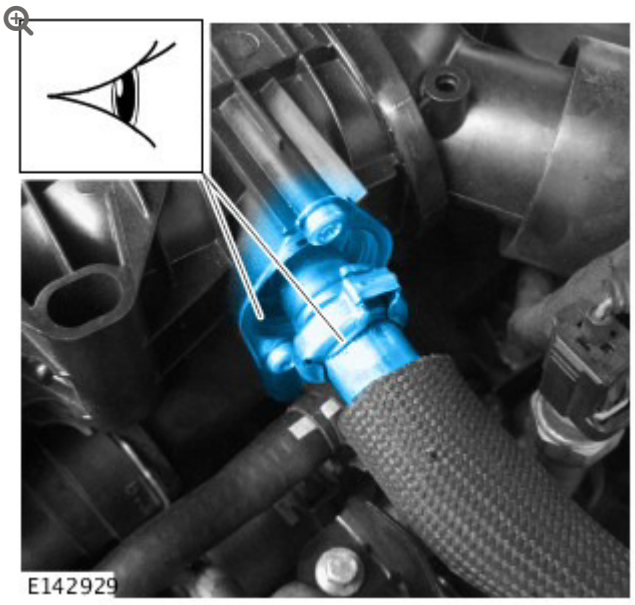
13



Check the charge air cooler to cannister pipe for signs of oil leakage.

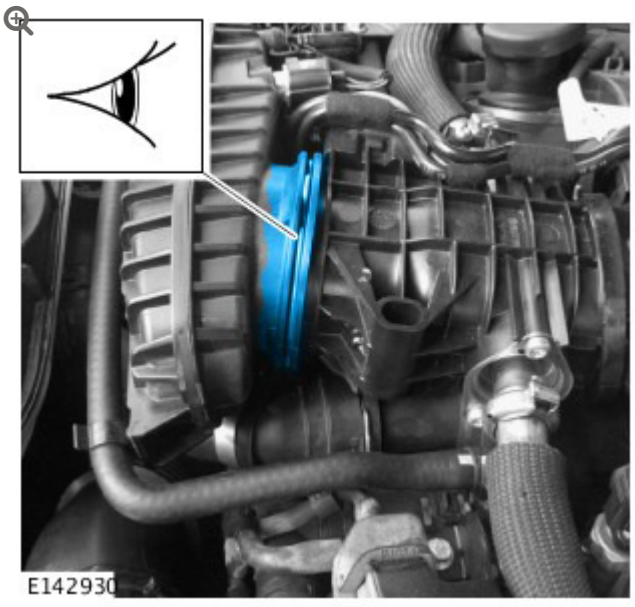
- If evidence of oil leakage is found, remove the pipe and clean off the oil.
- Inspect the pipe for damage.
- If no damage is found, install the pipe and secure the clips.

14




Check the throttle intake manifold to EGR pipe for signs of oil leakage and soot in both areas shown.

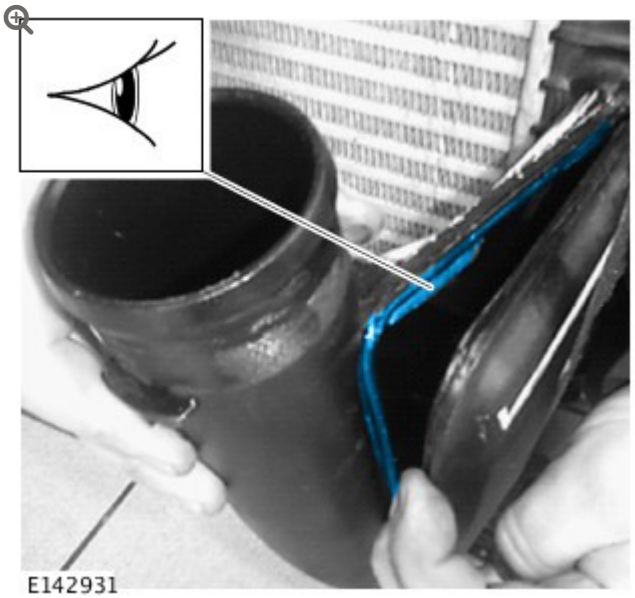
15




Check the throttle intake manifold to cannister seal for signs of oil leakage from the o-ring seal.

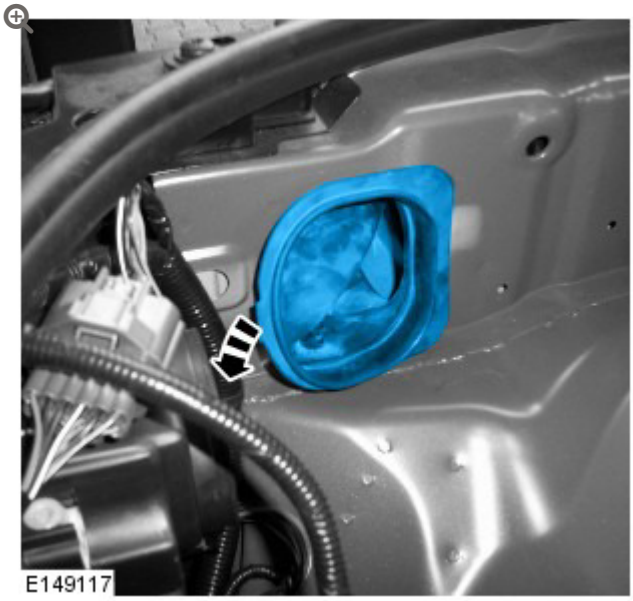
- The o-ring seal is available separately.

16




Check the charge air cooler plastic end caps for signs of oil leakage or damage. This will be more evident at the joining seams.

17




Check the air intake rubber to see if it is deformed. This restricts the air flow causing DTC P1247-00 to be stored.