

TECHNICAL BULLETIN

LTB00504v3

18 FEB 2013



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This bulletin supersedes TSB LTB00504v2/2013 dated 14 JAN 2013, which should either be destroyed or clearly marked to show it is no longer valid (e.g. with a line across the page).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

Compressor Shut Off Valve (CSOV) Lower Level Repair

AFFECTED VEHICLE RANGE:

| | | |
|-------------------------------|--------------------|---------------------------|
| Discovery 4 / LR4 (LA) | Model Year: | 2010-2012 |
| | VIN: | AA510178-CA610844 |
| | Engine: | 3.0L (TDV6) Diesel |
| Range Rover (LM) | Model Year: | 2011-2012 |
| | VIN: | BA334433-CA371629 |
| | Engine: | 4.4L V8 Diesel |
| Range Rover Sport (LS) | Model Year: | 2010-2012 |
| | VIN: | AA212145-CA734009 |
| | Engine: | 3.0L (TDV6) Diesel |

MARKETS:

All

CONDITION SUMMARY:

Situation:



NOTE: Before proceeding with this Bulletin please identify the level of CSOV fitted to determine whether this Bulletin is applicable (Ref graphic E151866 in step 1 of the Service Instruction).



NOTE: If only DTC P1247 is stored refer to Technical Bulletin LTB00445.



NOTE: DTC's indicated in this Bulletin refer to generic air path leaks so do not necessarily mean it is the CSOV at fault. Normal diagnostic checks must be carried out to determine correct root cause, i.e. a smoke test of the entire induction system, a dynamic engine test using SDD (refer to SSM 55077). If it is suspected that a problem does exist with the CSOV then its operation should be checked with a hand vacuum pump and gauge (see step 7 of the service procedure for guidance). Initial vacuum checks can be done with the valve still on the vehicle. When the vacuum is vented the valve should quickly close with an audible clunk. When full vacuum is applied the valve actuator arm should fully retract. Only if the arm does not fully retract and corrosion is evident on the pin then replace the actuator arm assembly using the repair kit.

A customer may report of a lack of engine power with engine system fault displayed in the instrument cluster message centre. DTC's relevant to an air path leak maybe stored in the PCM, i.e. P0235-94, P00BD-07, P006A-00 and P2263-22 (if C35 software ID) and P1247 (if C36 software ID). If required further definition of C35 and C36 software ID's can be found on Technical Bulletin LTB00279.

This version has been issued for a change to Section number.

Cause:

Inadequate corrosion resistance of a nitrided stainless steel pin on the actuator link arm. **Suggested Customer Concern Code - D42.**

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

PARTS:

LR033284

CSOV Actuator Arm Repair Kit

Quantity: 1

TOOLS:

No Tools Required

WARRANTY:

 **NOTE: Repair procedures are under constant review, and therefore times are subject to change; those quoted here must be taken as guidance only. Always refer to TOPIx to obtain the latest repair time.**

 **NOTE: DDW requires the use of causal part numbers. Labor only claims must show the causal part number with a quantity of zero.**

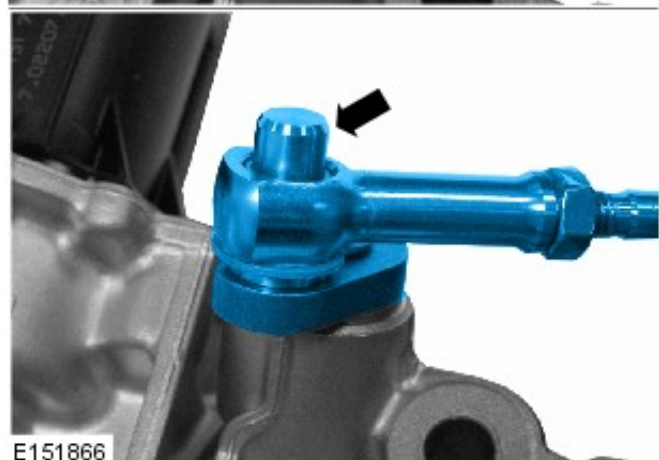
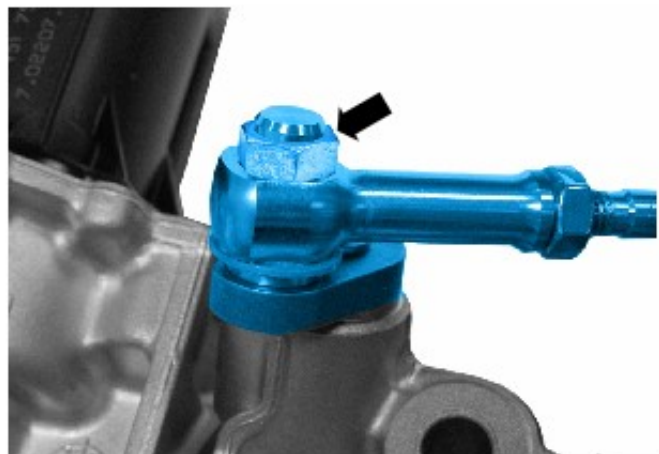
| DESCRIPTION | SRO | TIME (HOURS) | CONDITION CODE | CAUSAL PART |
|-------------------|-----------------|--------------|----------------|-------------|
| Discovery 4/LR4 | 19.44.01 | 0.4 | 41 | LR023415 |
| Range Rover | 19.44.01 | 1.1 | 41 | LR022795 |
| Range Rover Sport | 19.44.01 | 0.4 | 41 | LR023415 |

 **NOTE: Normal Warranty procedures apply.**

SERVICE INSTRUCTION:

1. Carry out a visual check, this check can be carried out without the need to take the part off the vehicle. This inspection will help identify if the vehicle is already fitted with the latest CSOV/ had a previous repair. If this is the case this TSB would not apply.

1. In addition to the bush, the pin is now plain without the retention nut, if no retention nut is fitted as per lower graphic in E151866 the vehicle has the latest csov fitted with the latest level linkage arm and this TSB does not apply. This TSB only applies to CSOV assemblies with a retaining nut fitted on the link arm as shown in the upper graphic.

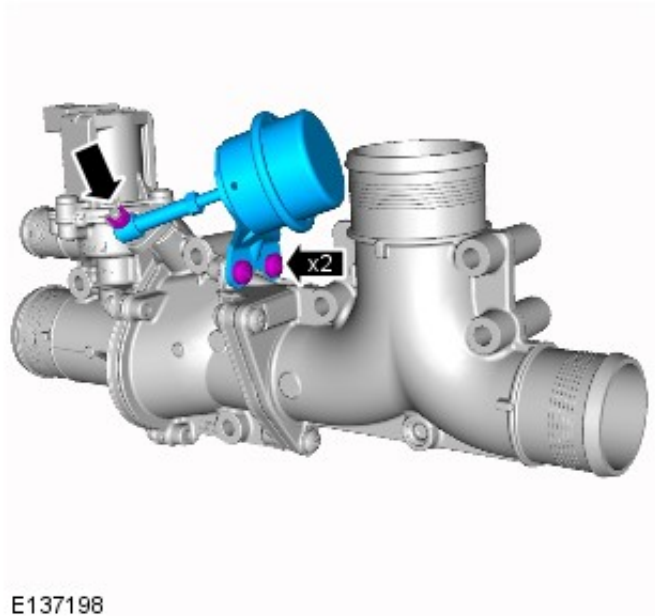


2. Remove the turbocharger bypass valve (see TOPIx Workshop Manual, Section 303-04).

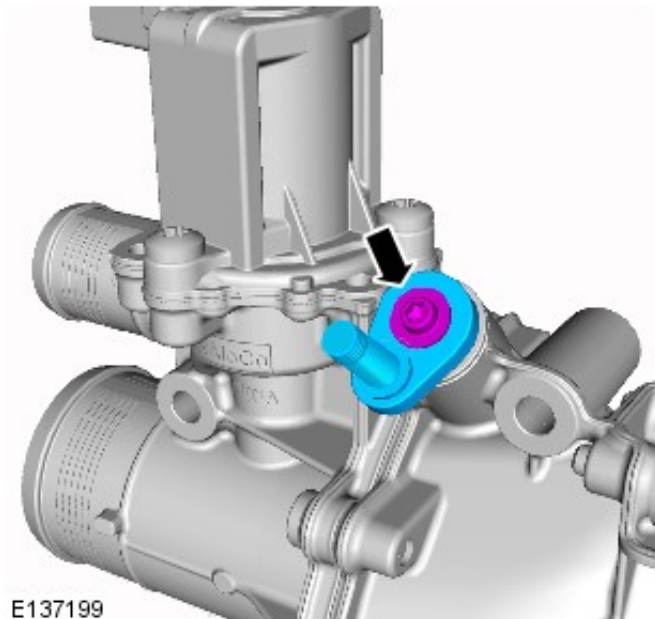
3.  **NOTE: Mark the orientation of the component prior to removal.**

 **NOTE: The actuator rod adjustment must not be disturbed.**

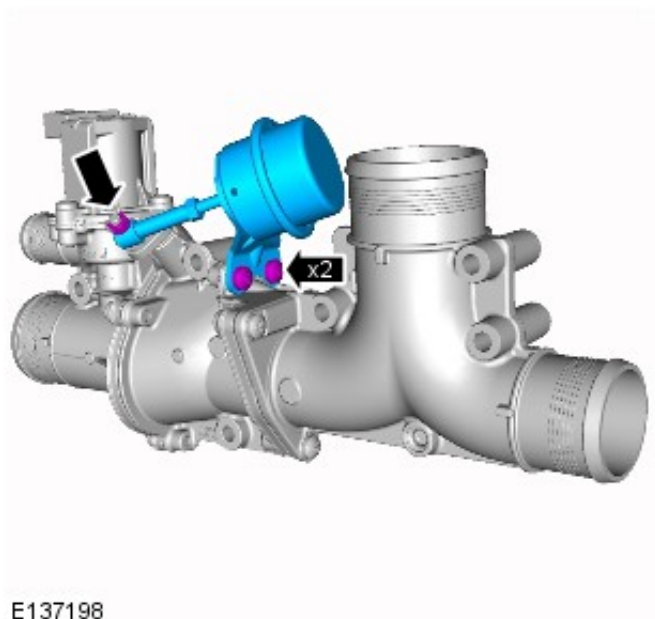
Remove and discard the CSOV Actuator.



4. Tighten new actuator arm to 5 Nm.



5. Tighten fixing to 16 Nm.



6.  **CAUTION: Make sure the new actuator**


arm is fitted in the correct orientation, failure to carry out this instruction may cause damage to the component.



NOTE: The new actuator arm has no nut fitted.



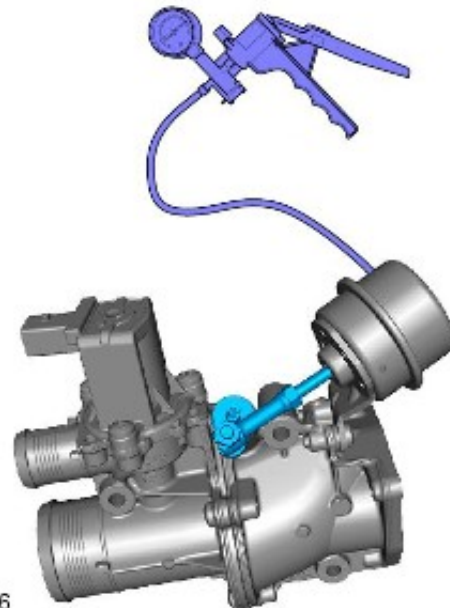
E 151535

7.  **NOTE: Check the vacuum gauge and any hoses to be used for leaks prior to using on the component.**



NOTE: Make sure the vacuum gauge is a secure fit to the actuator.

Using a vacuum gauge, make sure the valve arm fully and smoothly retracts when full vacuum is applied. when vented the valve should quickly close.



E 138286

8. Install the turbocharger bypass valve (see TOPIx Workshop Manual, Section 303-04).