

# TECHNICAL BULLETIN

LTB00502NAS1  
12-DEC-12



## **SECTION: 303-01B**

### Continual Unexplained Low Engine Coolant Level

#### **AFFECTED VEHICLE RANGE:**

LR2 (LF)

VIN: DH281046-Onwards  
Model Year: 2013-Onwards

Range Rover Evoque (LV)

VIN: CH000447-Onwards  
Model Year: 2012-Onwards

#### **CONDITION SUMMARY:**

**Situation:** A continual unexplained low engine coolant level may be evident, with no leak evident from the engine coolant system.

**Cause:** This may be caused by coolant loss through the threaded core plugs in the engine cylinder head.

**Action:** In the event of a customer concern of the above, refer to the Repair Procedure outlined below.

#### **PARTS:**

STC50552 .....	Loctite 243	Qty: 1
LR025306 .....	Oil Filter	Qty: 1
LR025048 .....	Oil Drain Plug	Qty: 1
LRN2279 .....	Coolant 1L	Qty: 2

#### **TOOLS:**

Refer to Workshop Manual for any required special tools

#### **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 DDW to obtain the latest repair time.

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
Re-seal core plug(s)	26.35.89/28	2.30	51	LR025389

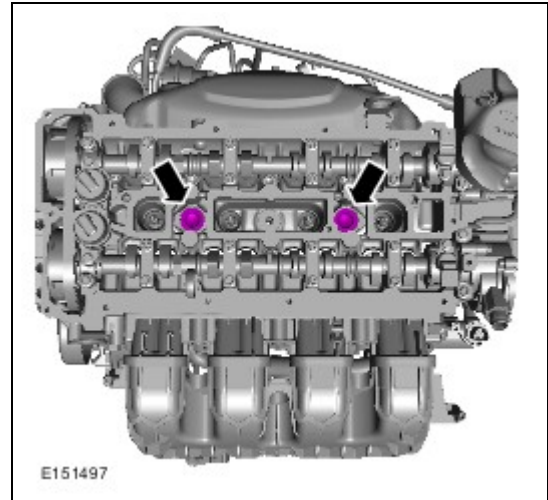
*Normal Warranty policies and procedures apply*

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.

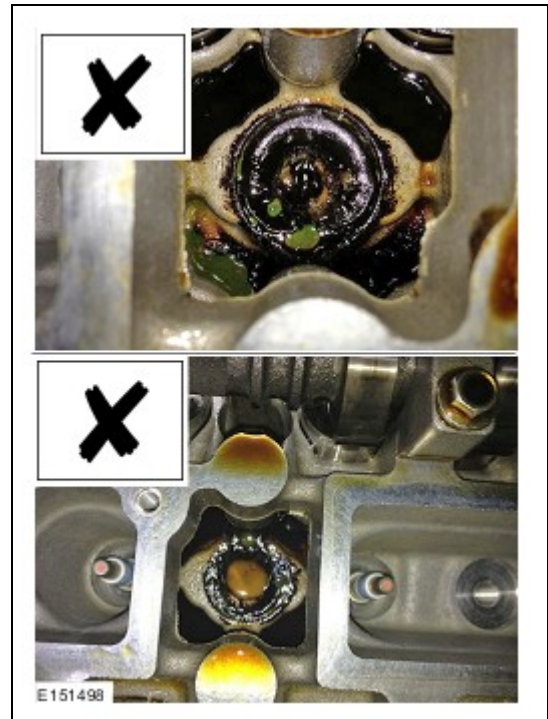
## **REPAIR PROCEDURE**

△ **NOTE:** This procedure should only be carried out after a thorough inspection has shown no other causes of coolant loss. For further information refer to TOPlx Workshop Manual, section 303-03B Engine Cooling - GTDi 2.0L Petrol - Engine Cooling Diagnosis and Testing.

1. Refer to Workshop Manual section 303-01B and remove the valve cover.
2. Using a suitable coolant system pressure tester, pressurize the coolant system.
3. △ **NOTE: Do not remove the core plug(s) at this stage.**  
Inspect both core plugs for signs of coolant leakage and/or congealed oil.



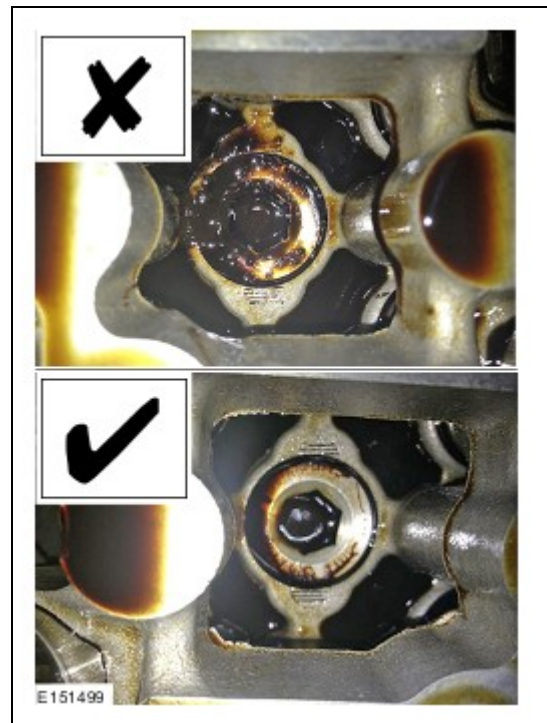
4. Inspect the core plugs for signs of coolant leakage.
  - If signs of coolant leakage are evident, carry on to step 6.
  - If signs of congealed oil and coolant leakage are evident, carry on to step 6.



5. **△ NOTE: Fresh engine oil may be evident due to spillage when the valve cover is removed.**

Inspect the core plugs for signs of coolant leakage.

- If signs of congealed oil are evident, carry on to step 6.
- If no signs of congealed oil or coolant leakage are evident, carry on to step 13.

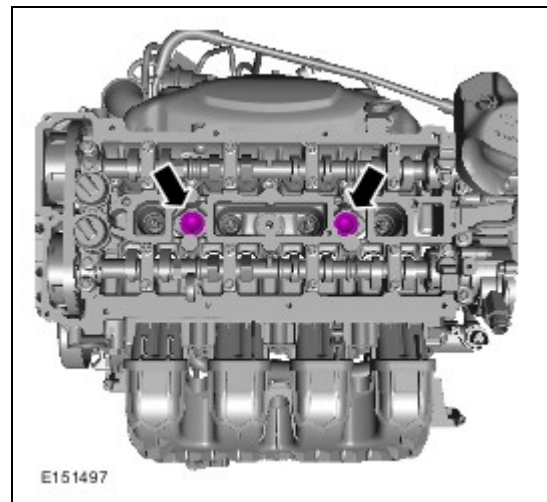


6. De-pressurize the coolant system.
7. Refer to Workshop Manual, section 303-03B and carry out a coolant system partial drain.
8. Using a suitable cleaning fluid and cloth, clean any excess oil and/or coolant from around the core plugs and the spark plugs.

9. **△ NOTE: The core plug can be re-used if no signs of damage are evident.**

Reseal the leaking core plug.

- Remove the core plug.
- Clean and dry both threads.
- Inspect the threads for signs of damage.
- Apply a continuous bead of Loctite 243 to the core plug thread.
- Install the core plug and tighten to 75 Nm.
- If required, repeat steps a-e to the other core plug.



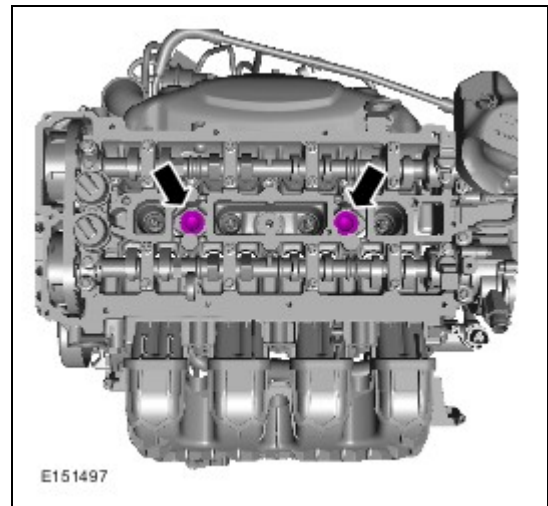
10. **▲ WARNING: Do not start the engine.**

Refer to Workshop Manual section 303-03B and carry out steps 2-4 of the coolant filling procedure to fill the engine with coolant.

11. **⚠ CAUTION: Allow the Loctite 243 to cure for at least one (1) hour before pressurizing the coolant system.**

Using a suitable coolant system pressure tester, pressurize the coolant system.

12. Inspect both core plugs for signs of coolant leakage.
- If there are signs of coolant leakage from the core plug(s), carry out the necessary rectification procedure.
  - If there are no signs of coolant leakage from the core plug(s), carry on to step 13.



13. De-pressurize the coolant system and remove the coolant system pressure tester.

14. **△ NOTE: Make sure that the area around the core plugs and spark plugs is clean and free from coolant, oil and debris.**

15. Refer to Workshop Manual section 303-01B and install the valve cover.

16. **△ NOTE: Only carry out this step if the coolant has been drained previously.**

**△ NOTE: Do not install the engine undershield until after the engine oil and filter has been renewed.**

Refer to Workshop Manual section 303-03B and carry out steps 5-13 of the coolant filling procedure.

17. **△ NOTE: Only carry out this step if the core plug(s) required re-sealing.**

Refer to Workshop Manual, section 303-01B and renew the engine oil and filter.