

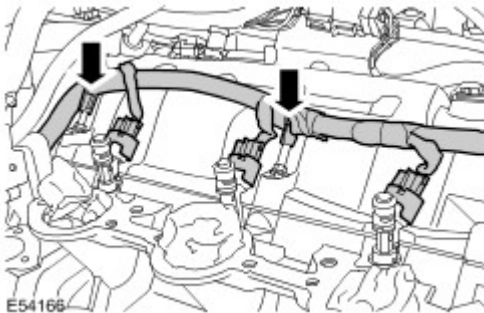


## Valve Cover LH (12.29.43)

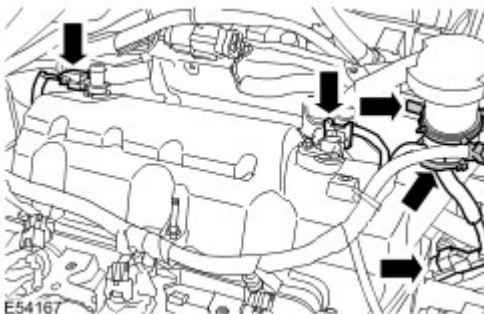
### Removal


1. Disconnect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)
2. Remove the fuel rail. For additional information, refer to [Fuel Rail \(19.60.04\)](#) (Section 303-04)
3. Position the injector harness aside.

- Release the 2 clips.
- Disconnect the 3 fuel injector electrical connectors.



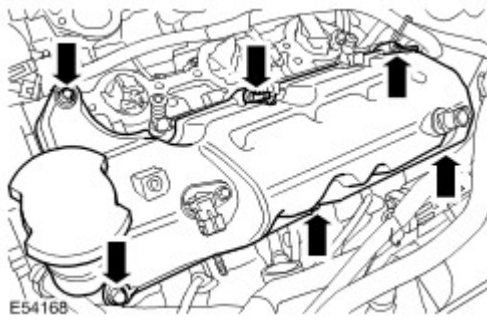
4. Disconnect the 3 electrical connectors.
  - Release the harness clip from the filler neck.
  - Noting the installed position of the Knock sensor electrical harness in relation to the oil filler tube, remove and discard the cable tie.



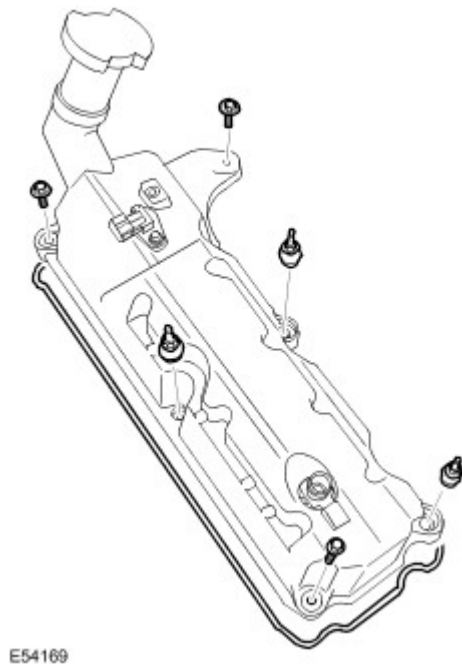
5.  **CAUTION:** Before disconnecting or removing the components, ensure the area around the joint faces and connections are clean. Plug open connections to prevent contamination.

Remove the valve cover.

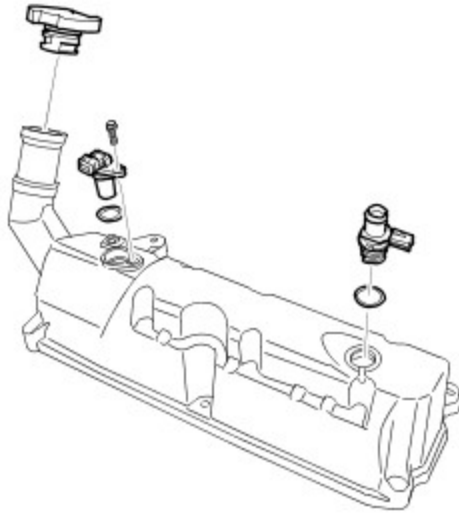
- Remove the 3 bolts.
- Remove the 3 studs.



6. **NOTE :**  
Do not disassemble further if the component is removed for access only.  
Remove and discard the gasket.
7. **NOTE :**  
Note the fitted position.  
Remove the bolts and studs. Remove and discard the seals.




8. Remove the camshaft position (CMP) sensor.  
➤ Remove the bolt.  
➤ Remove and discard the O-ring seal.
9. Remove the engine breather valve.  
➤ Remove and discard the O-ring seal.
10. Remove the oil filler cap.



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## Installation

- 1 . Install the oil filler cap.
- 2 . Install the engine breather valve.
  - Install a new O-ring seal.
- 3 . Install the CMP sensor.
  - Install a new O-ring seal.
  - Tighten the bolt to 6 Nm (4 lb.ft).
- 4 . Install the bolts and studs.
  - Install the new O-ring seals.
  - Install the new gasket.
- 5 . Install the valve cover.
  - Clean the component mating faces.
  - Evenly and progressively tighten the bolts and studs, in the sequence shown, to 10 Nm (7 lb.ft).
  - Secure the electrical harness with the clip.

- 6 .  **CAUTION: Make sure the knock sensor electrical harness is returned to the original fitted position.**

Install the injector harness.

- ▶ Secure with the clips.
- ▶ Connect the fuel injector electrical connectors.
- ▶ Connect the 3 electrical connectors.
- ▶ Install a new cable tie.

- 7 . Install the fuel rail. For additional information, refer to [Fuel Rail \(19.60.04\)](#) (Section 303-04)
- 8 . Connect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)