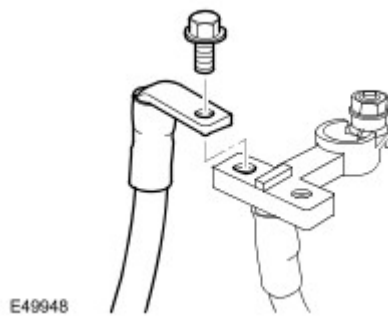


Engine Wiring Harness - 4.0L (86.70.17)

Removal

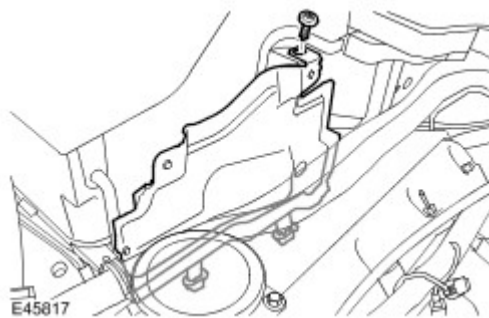
- 1 . Disconnect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)
- 2 . Remove the engine undershield. For additional information, refer to [Engine Undershield \(76.10.50\)](#) (Section 501-02)
- 3 . Remove the intake manifold. For additional information, refer to [Intake Manifold \(30.15.02\)](#) (Section 303-01)
- 4 . Remove the battery. For additional information, refer to [Battery \(86.15.01\)](#) (Section 414-01)
- 5 . Remove the engine compartment fuse box main feed cable.

- Remove the bolt.



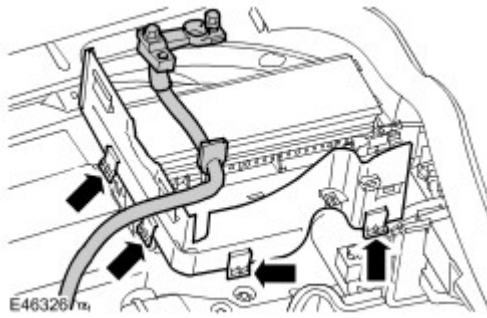
- 6 . Remove the engine compartment upper heat shield.

- Remove the screw.
- Release the 2 mounting clips.

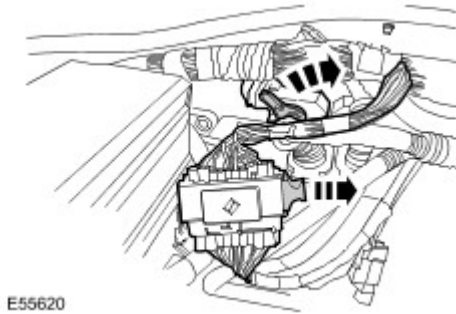


- 7 . Remove the battery compartment side wall.

- Release the battery positive cable and grommet.
- Release the 4 clips.



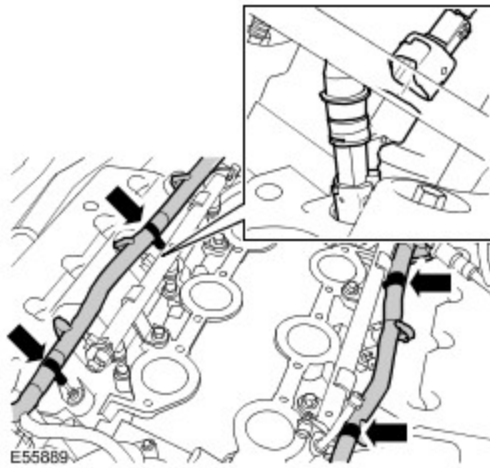
- 8 . Release the engine harness from the battery compartment.
▶ Disconnect the 2 electrical connectors.



- 9 . Release the 2 clips on the harness protective cover.

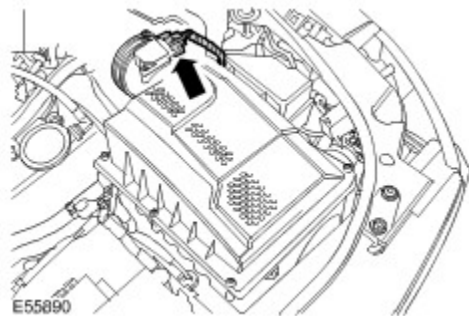


- 10 . Disconnect the fuel injector electrical connectors.
▶ Release the 4 clips.



11. Disconnect the mass air flow (MAF) sensor electrical connector.

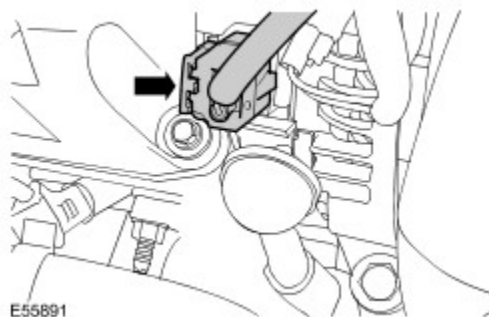
▶ Release the clip.



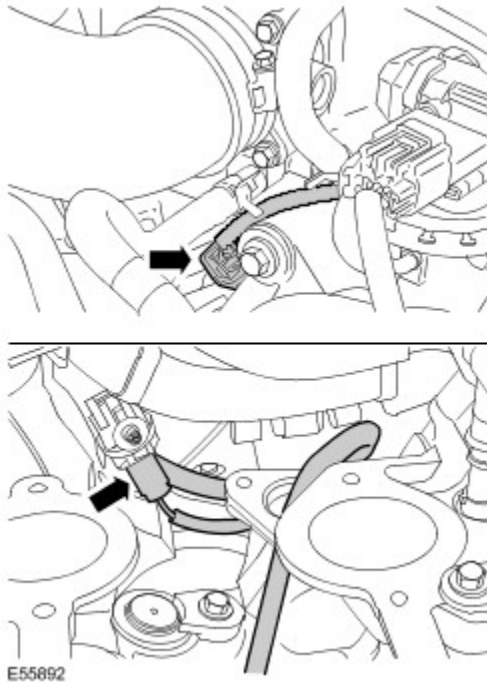
12. Disconnect the engine coolant temperature (ECT) sensor electrical connector.



13. Disconnect the generator connector.

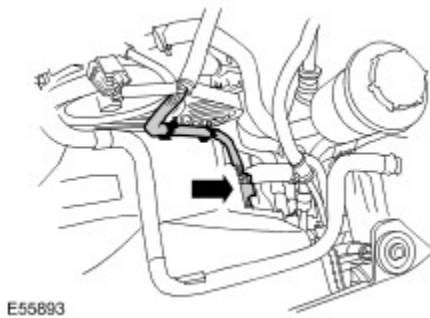


- 14 . Disconnect the knock sensor (KS) electrical connectors.



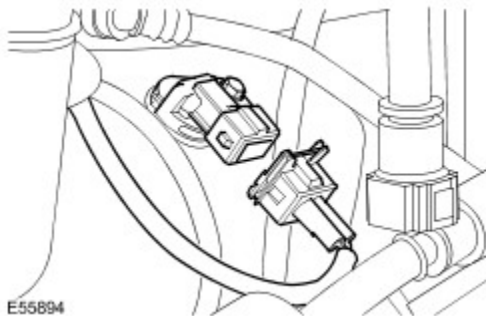
- 15 . Disconnect the cooling fan control electrical connector.

▶ Release the 2 clips.

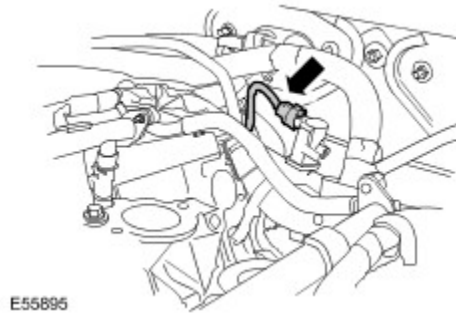


- 16 . Disconnect the camshaft position (CMP) sensor electrical connector.

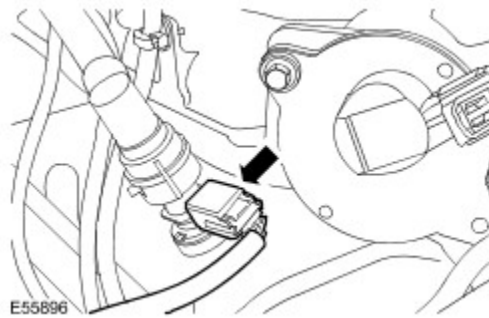
▶ Release the clip.



- 17 . Disconnect the purge control valve (PCV) electrical connector.

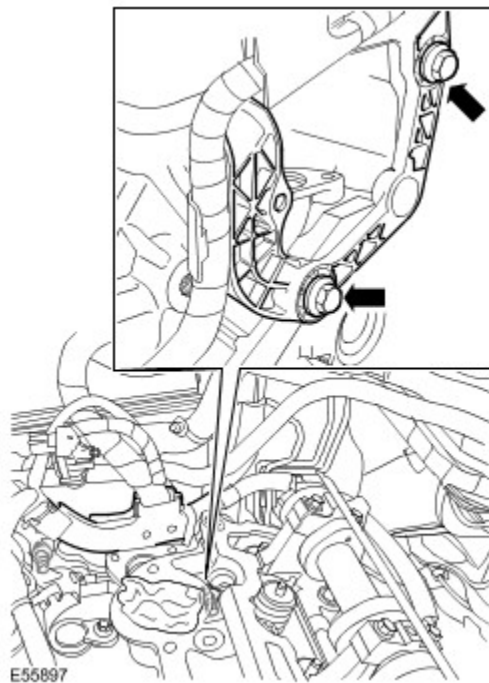


- 18 . Disconnect the LH breather electrical connector.

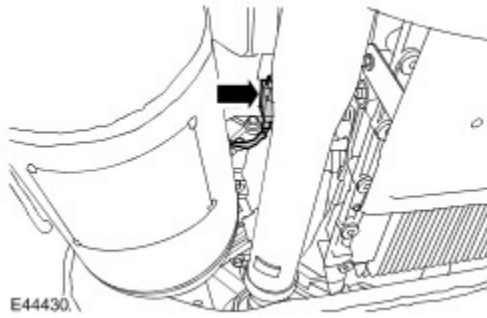


- 19 . Release the wiring harness bridge.

➤ Remove the 2 bolts.



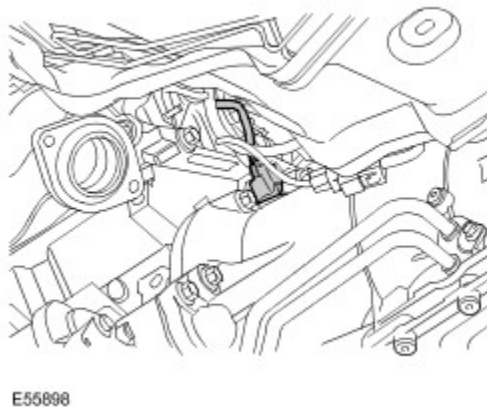
- 20 . Disconnect the LH HO2S and release the clip.



- 21 . Disconnect the RH HO2S and release the clip.















- 22 . Disconnect the crankshaft position (CKP) sensor electrical connector.



- 23 . **NOTE :**
Note the fitted position.
Remove the engine wiring harness.

Installation

- 1 . **NOTE :**
Align to the position noted on removal.
Install the engine wiring harness.
- 2 . Connect the CKP sensor electrical connector.

- 3 . Connect the HO2S electrical connectors.
- 4 . Install the electrical harness bridge.
 -  Tighten the bolts to 45 Nm (33 lb.ft).
- 5 . Connect the breather electrical connector.
- 6 . Connect the PCV electrical connector.
- 7 . Connect the CMP sensor electrical connector.
 -  Secure the clip.
- 8 . Connect the cooling fan electrical connector.
 -  Carefully secure the clips.
- 9 . Connect the KS electrical connectors.
- 10 . Connect the generator.
- 11 . Connect the ECT sensor electrical connector.
- 12 . Connect the MAF sensor electrical connector.
 -  Secure the clip.
- 13 . Connect the fuel injector electrical connectors.
 -  Carefully secure the clips.
- 14 . Connect the engine wiring harness.
 -  Install the clips on the harness protective cover.
 -  Connect and secure the electrical connectors.
- 15 . Install the battery compartment side wall.
 -  Secure the clips.
 -  Install the battery positive cable and grommet.
- 16 . Install the engine compartment upper heat shield.
 -  Secure the clips.
 -  Tighten the screw.
- 17 . Install the fusebox main feed cable.
 -  Install the bolt and tighten to 10 Nm (7 lb.ft).
- 18 . Install the battery. For additional information, refer to [Battery \(86.15.01\)](#) (Section 414-01)

- 19 . Install the intake manifold. For additional information, refer to [Intake Manifold \(30.15.02\)](#) (Section 303-01)
- 20 . Install the engine undershield. For additional information, refer to [Engine Undershield \(76.10.50\)](#) (Section 501-02)
- 21 . Connect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)