



Exhaust Manifold LH (30.15.10)

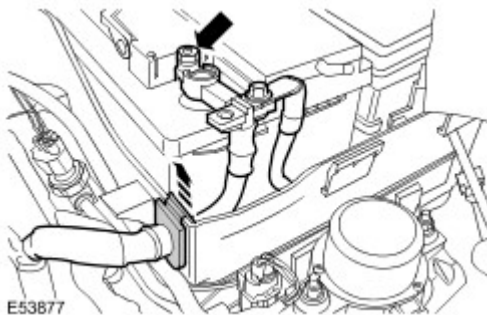
Removal

All vehicles

1. Disconnect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)
2. Remove the engine cover. For additional information, refer to [Engine Cover - 4.0L \(12.30.50\)](#) (Section 501-05)

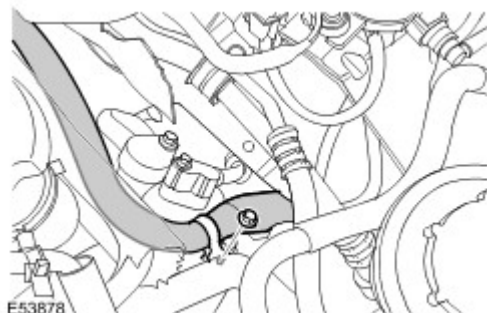
Right-hand drive vehicles

1. Release the battery positive cable.
 - ▶ Loosen the clamp.
 - ▶ Release the grommet.



Right-hand drive vehicles

1. Release the wiring harness clip.
 - ▶ Remove the bolt.



All vehicles

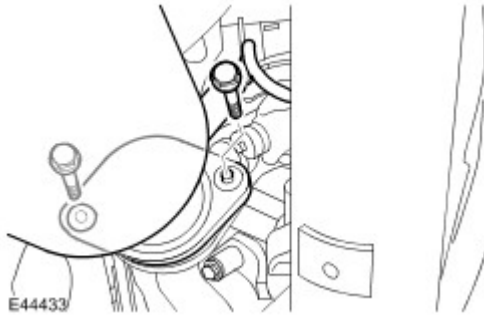
- 1.



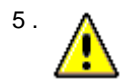
WARNING: Do not work on or under a vehicle supported only by a jack. Always support the vehicle on safety stands.

Raise and support the vehicle.

2. Remove the engine undershield. For additional information, refer to [Engine Undershield \(76.10.50\)](#) (Section 501-02)
3. Release the exhaust system from the exhaust manifold.
 - ▶ Remove and discard the 2 bolts.



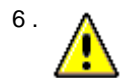
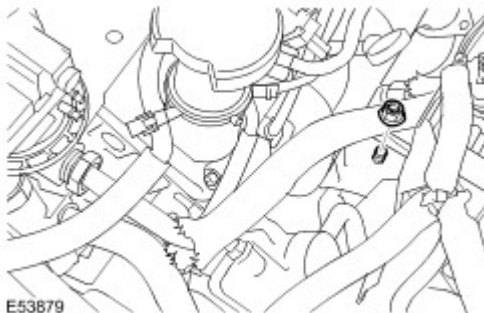
4. Lower the vehicle.



CAUTION: Protect the engine during this operation.

Raise the engine clear of its LH mount.

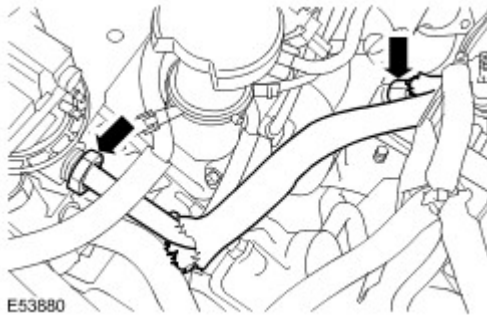
- ▶ Remove the nut.



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 EGR pipe.

- ▶ Release the 2 union nuts.



7. Disconnect the high tension (HT) electrical connectors.

➤ Move the leads aside for access.



- 8.



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

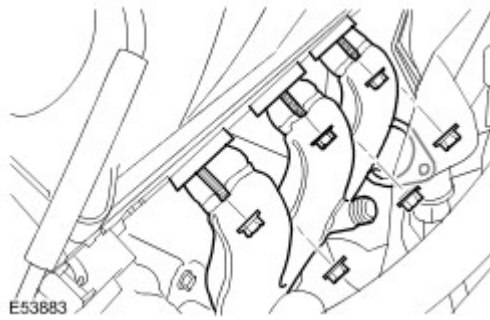
Remove the dipstick tube.

- Remove the dipstick.
- Remove the bolt.
- Discard the O-ring seal.



9. Remove the exhaust manifold.

- Remove the 6 nuts.
- Remove and discard the gasket.



Installation

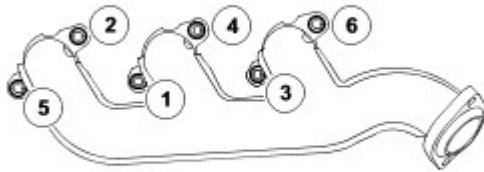
All vehicles

1 .

NOTE :

The exhaust manifold gasket connecting links must be positioned to the lower edge of the manifold.
Install the exhaust manifold.

- Install a new gasket.
- Clean the component mating faces.
- Tighten the nuts evenly in the sequence shown to 25 Nm (18 lb.ft).



2 .

Install the dipstick tube.

- Clean the component mating faces.
- Install a new O-ring seal.
- Lubricate the seal with clean engine oil.
- Tighten the bolt to 10 Nm (7 lb.ft).
- Install the dipstick.

3 .

Connect the HT electrical connectors.

4 .

Install the EGR pipe.

- Clean the component mating faces.
- Initially, finger tighten the nuts.
- Finally, tighten the nuts to 40 Nm (30 lb.ft).

5 .

Lower the engine onto its mount.

- ▶ Tighten the nut to 90 Nm (66 lb.ft).

6 . Raise the vehicle.

7 . Install the exhaust system.

- ▶ Clean the component mating faces.
- ▶ Install new bolts and tighten to 40 Nm (30 lb.ft).

8 . Install the engine undershield. For additional information, refer to [Engine Undershield \(76.10.50\)](#) (Section 501-02)

9 . Lower the vehicle.

Right-hand drive vehicles

- 1 . **NOTE :**
Apply petroleum jelly to the battery terminals.
Connect the battery positive cable.
- ▶ Clean the component mating faces.
 - ▶ Install the grommet.
 - ▶ Tighten the clamp nut to 10 Nm (7 lb.ft).

Right-hand drive vehicles

- 1 . Secure the wiring harness clip.
- ▶ Tighten the bolt to 10 Nm (7 lb.ft).

All vehicles

- 1 . Install the engine cover. For additional information, refer to [Engine Cover - 4.0L \(12.30.50\)](#) (Section 501-05)
- 2 . Connect the battery ground cable. For additional information, refer to [Specifications](#) (Section 414-00)