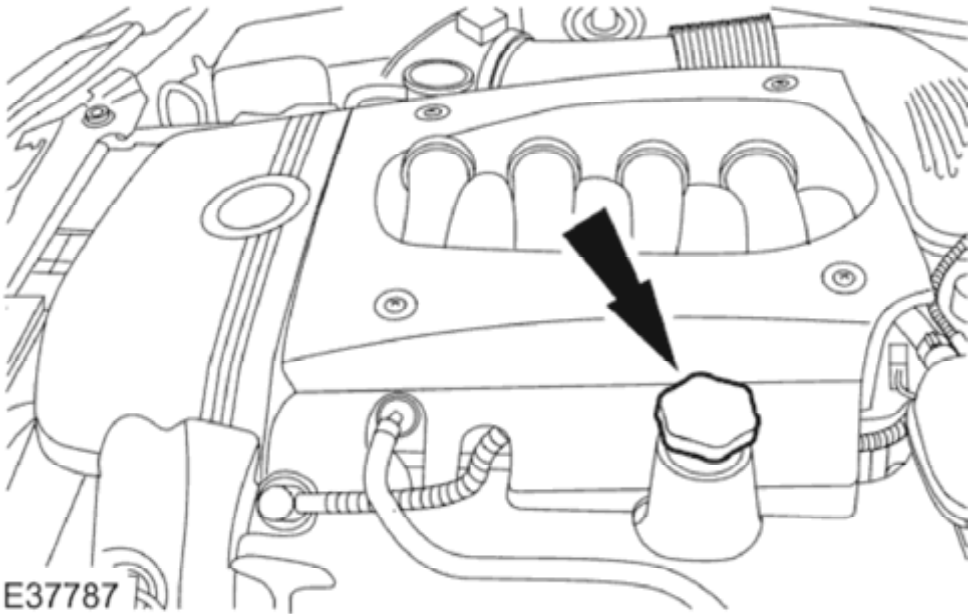


2004 XK RANGE - Engine - 303-01

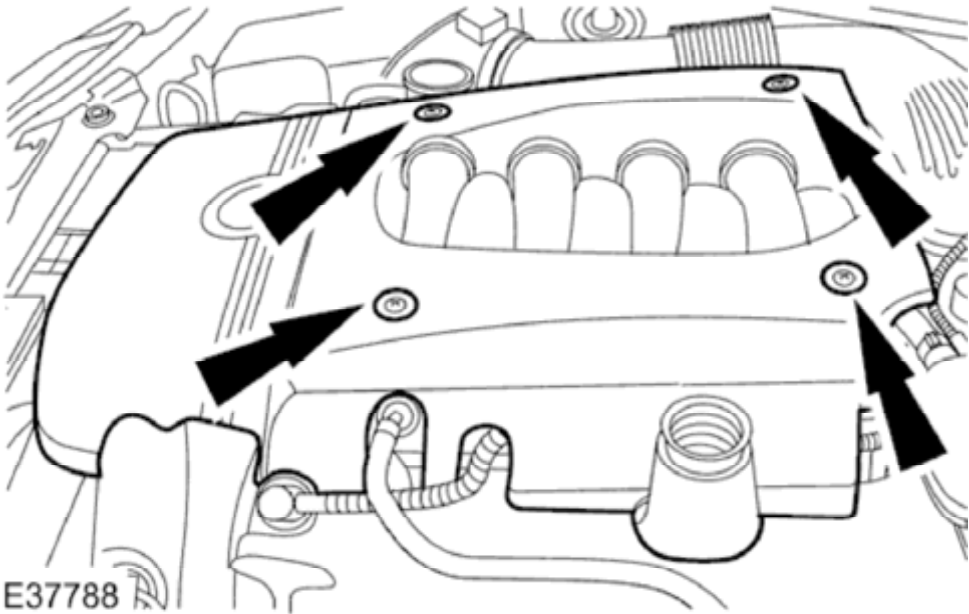
Valve Cover LH 12.29.43

Removal

Vehicles without supercharger



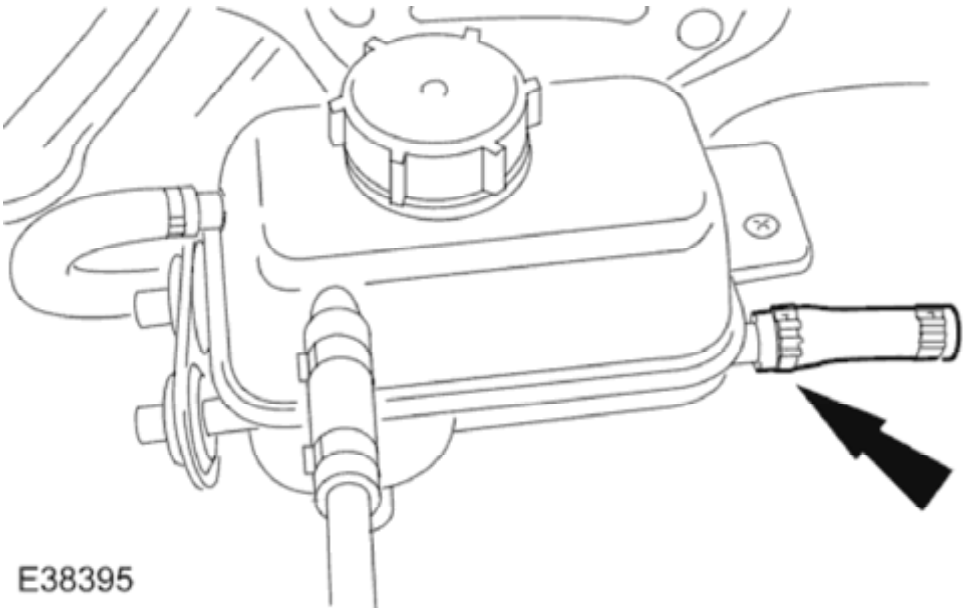
1. Remove the oil filler cap.



2. Remove the engine cover.

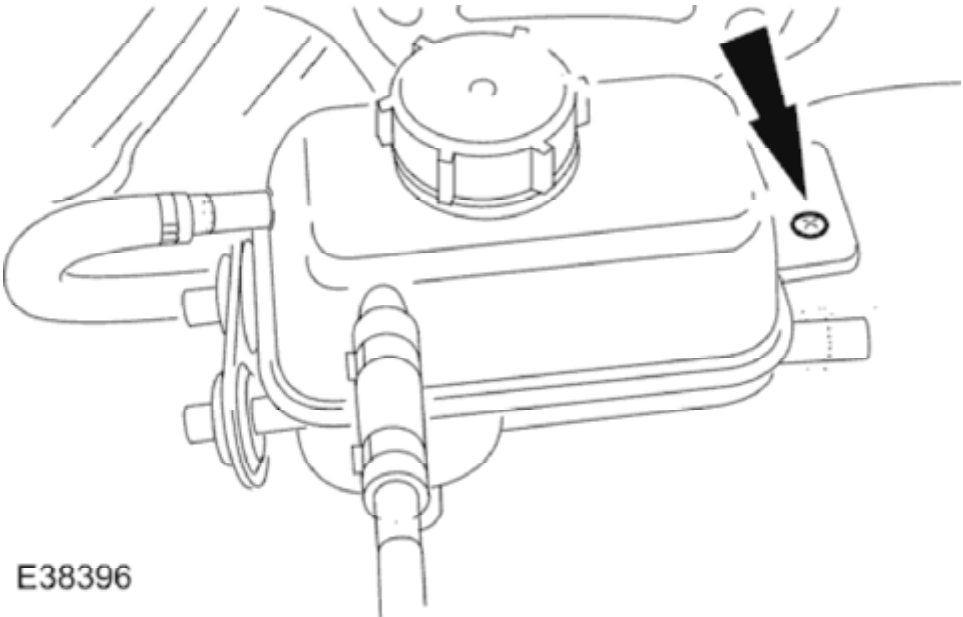
Vehicles with supercharger

2004 XK RANGE - Engine - 303-01



E38395

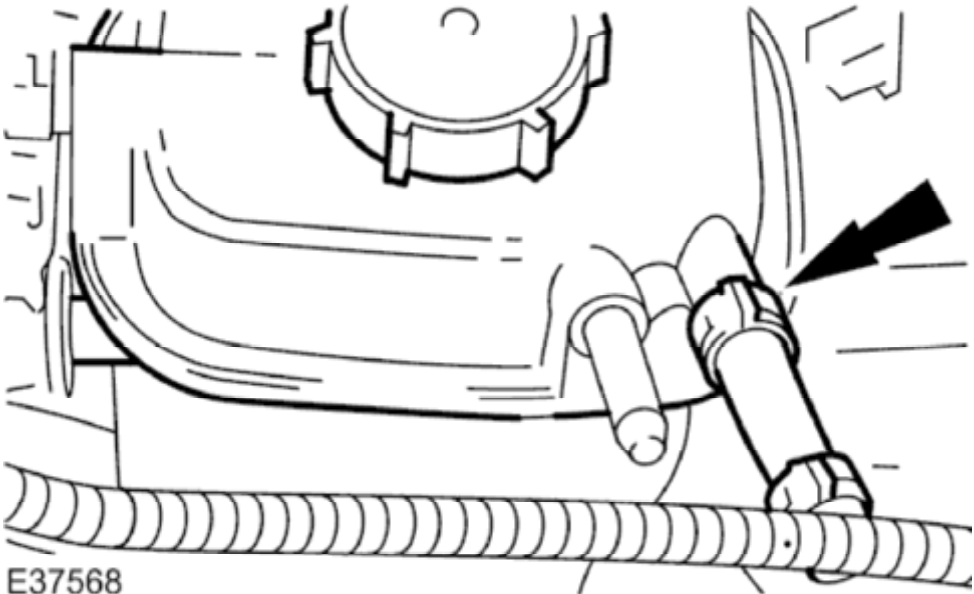
3. Disconnect the hose.



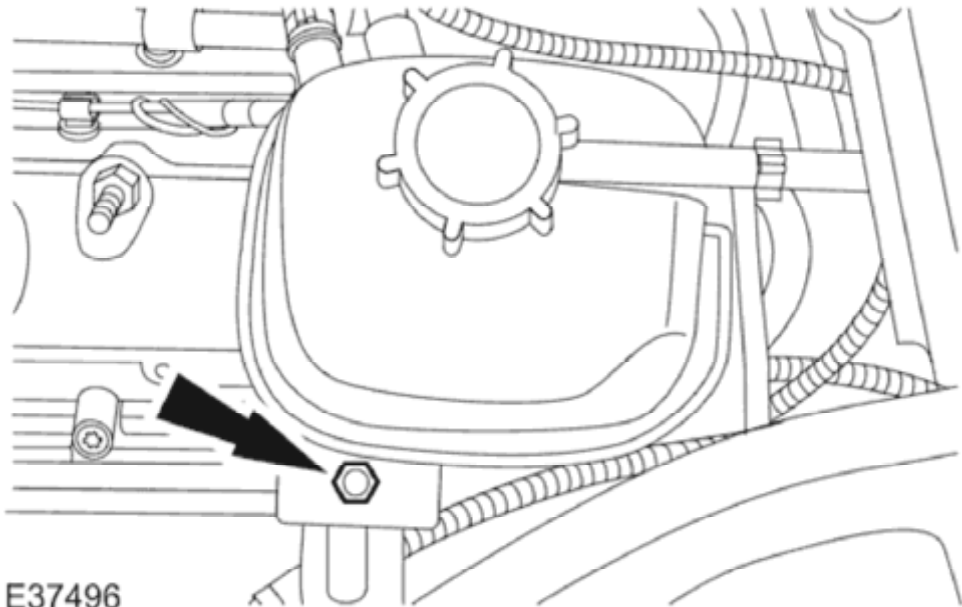
E38396

4. Remove the retaining bolt.

Vehicles without supercharger

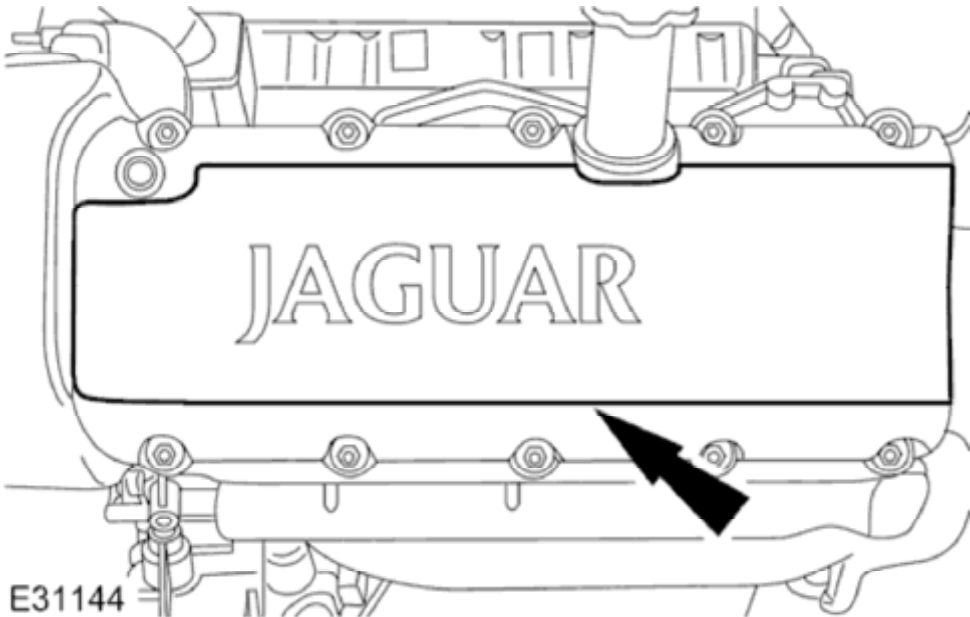


5. Disconnect the hose.

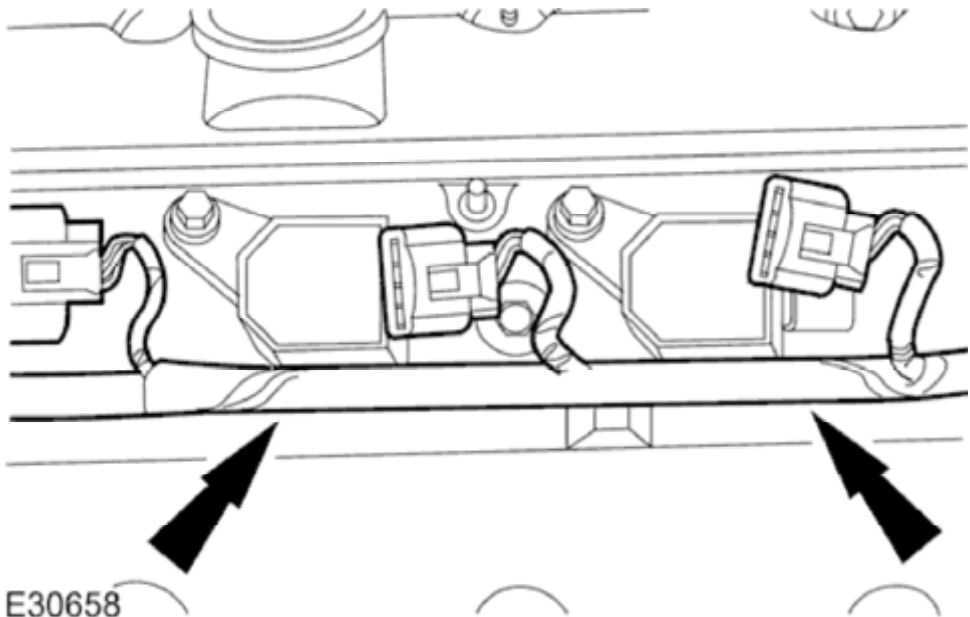


6. Remove the retaining bolt.

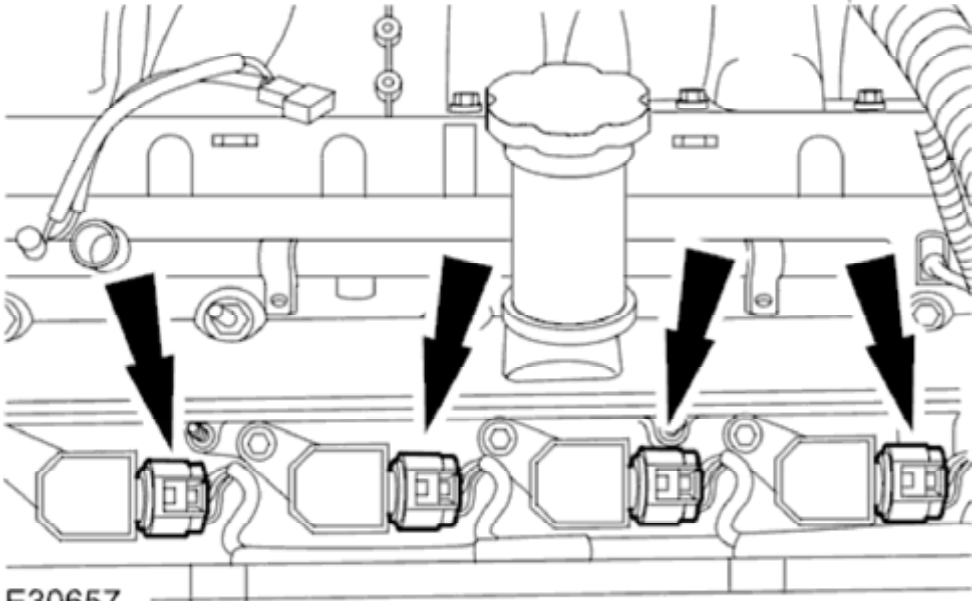
All vehicles



7. Remove the ignition coil-on-plug cover.

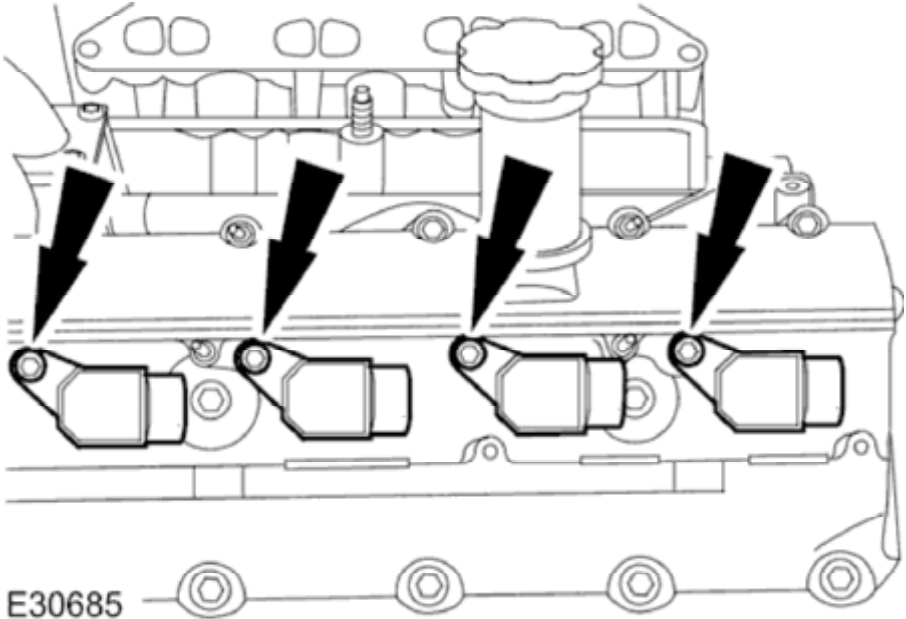


8. Detach the wiring harness.



E30657

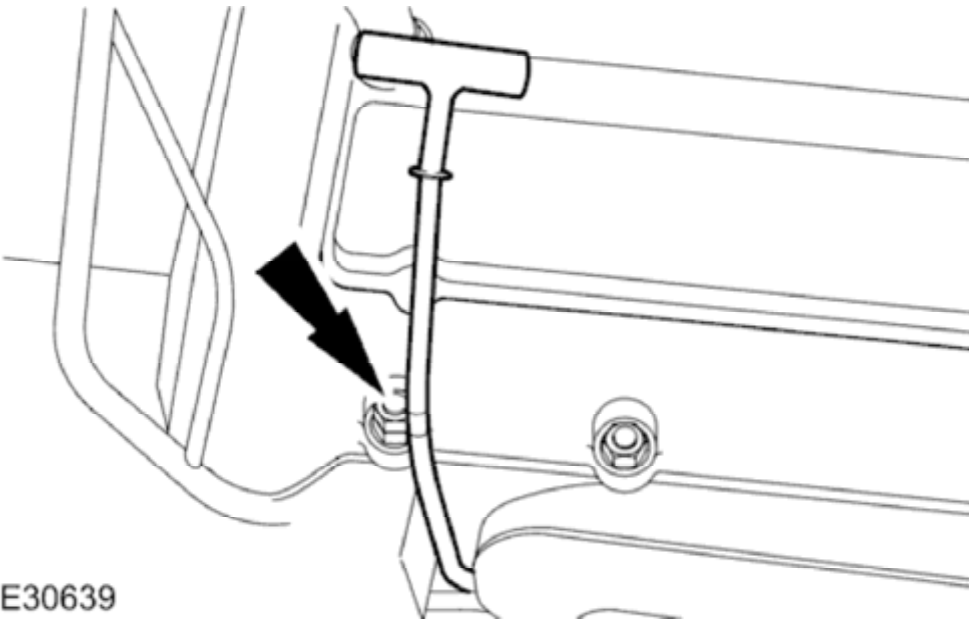
9. Disconnect the ignition coil-on-plug electrical connectors.



E30685

10. Remove the ignition coil on-plugs.

2004 XK RANGE - Engine - 303-01

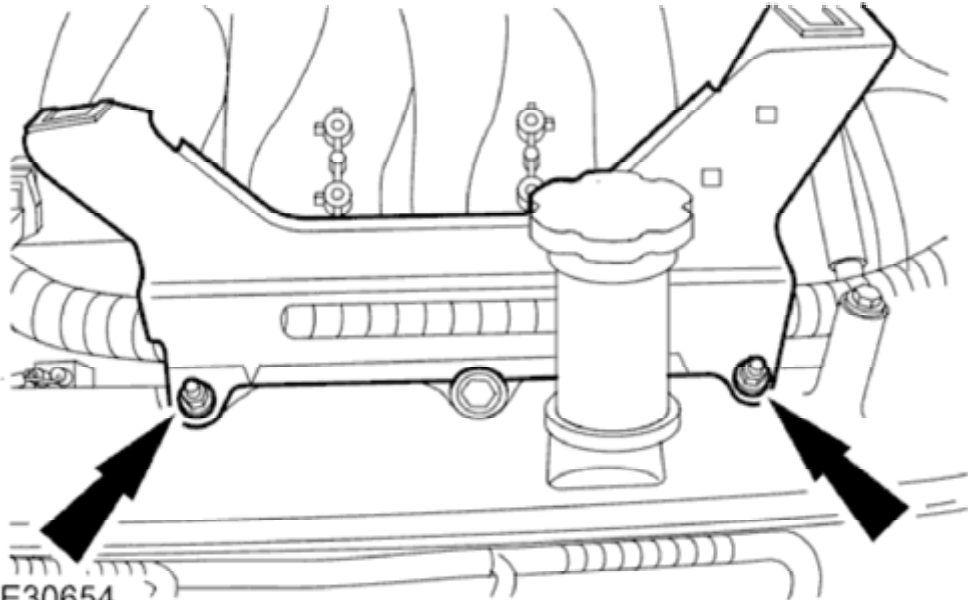


E30639

11. Remove the oil level indicator and tube.
• Remove and discard the O-ring seal.

12. Detach the fuel line. <<310-00>>

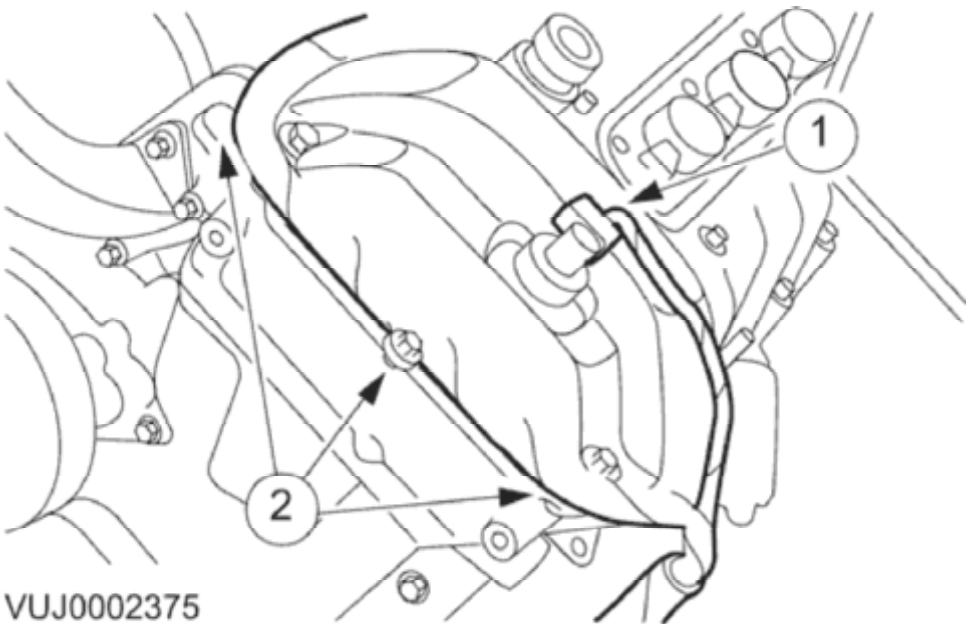
Vehicles without supercharger



E30654

13. Remove the left-hand engine cover bracket.

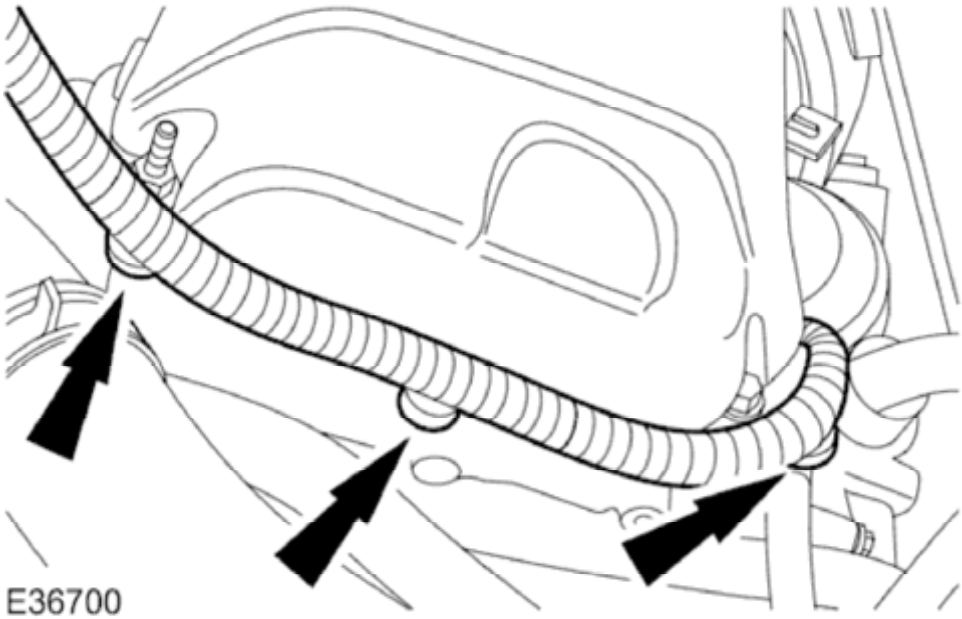
2004 XK RANGE - Engine - 303-01



VUJ0002375

- 14. Detach the engine wiring harness.
 - 1. Disconnect the variable camshaft timing oil control solenoid electrical connector.
 - 2. Detach the engine wiring harness.

Vehicles with supercharger

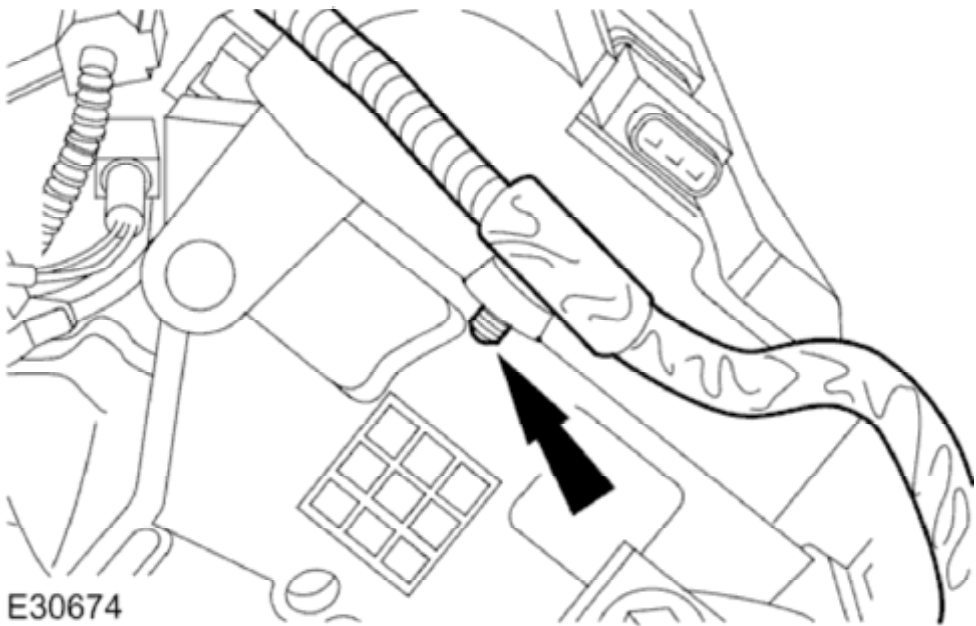


E36700

- 15. Detach the engine wiring harness.

All vehicles

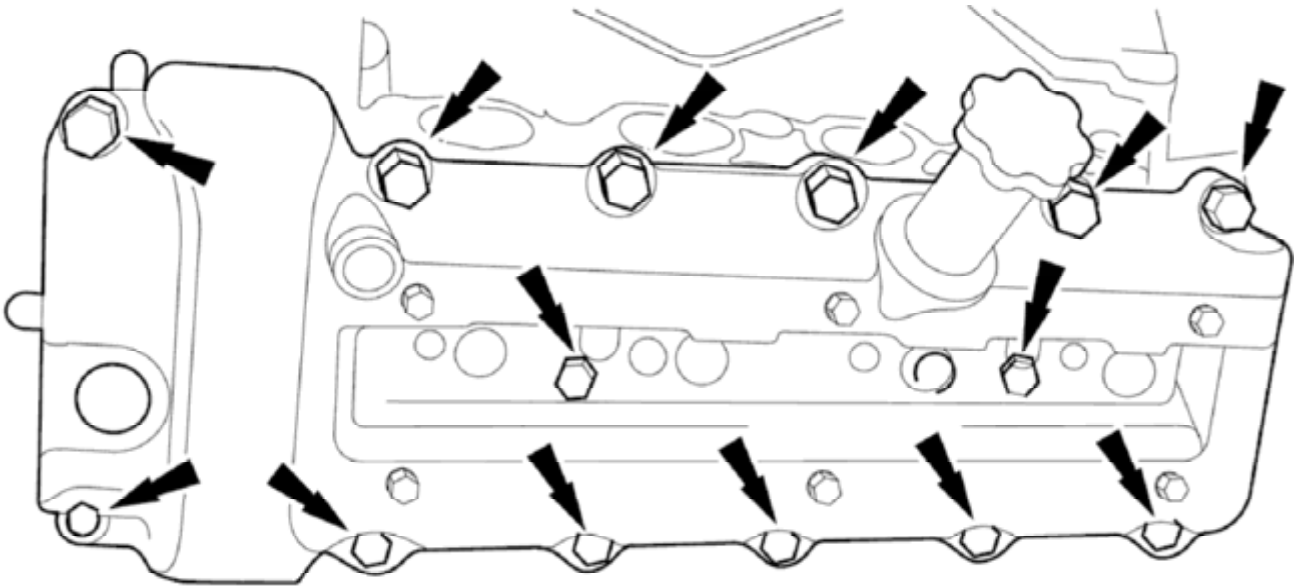
2004 XK RANGE - Engine - 303-01



E30674

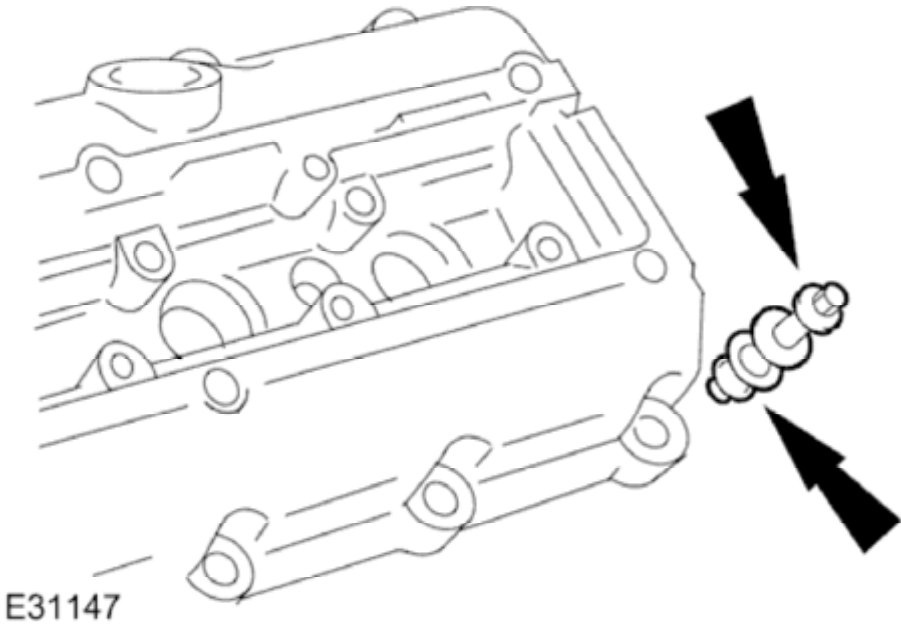
16. **NOTE:**
Right hand shown, left hand similar.

Detach the engine wiring harness.



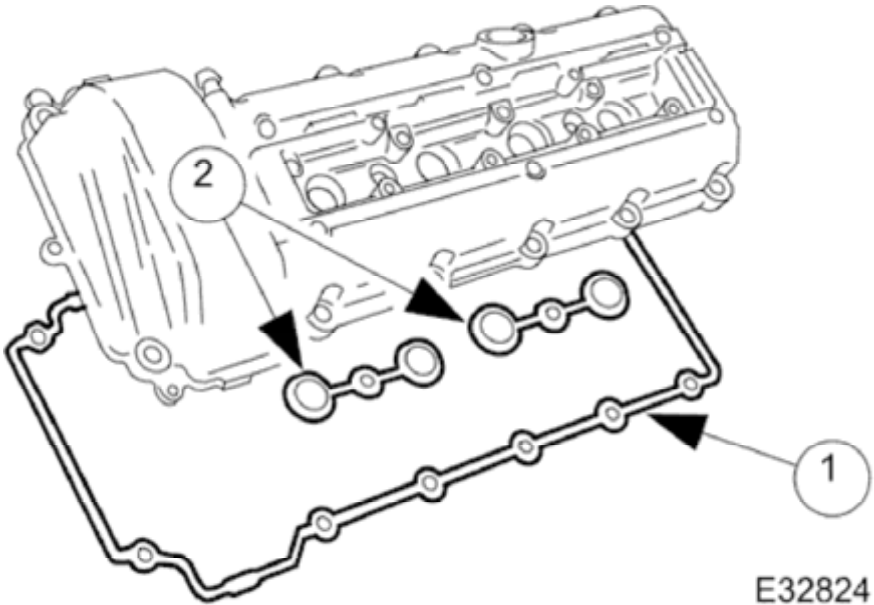
E30697

17. Remove the valve cover assembly.
• Remove and discard valve cover gaskets.



18. **NOTE:**
On removal of the valve cover retaining bolts note their positions in the valve cover.

- Remove the valve cover retaining bolts.
- Remove and discard the valve cover retaining bolt O-ring seals.

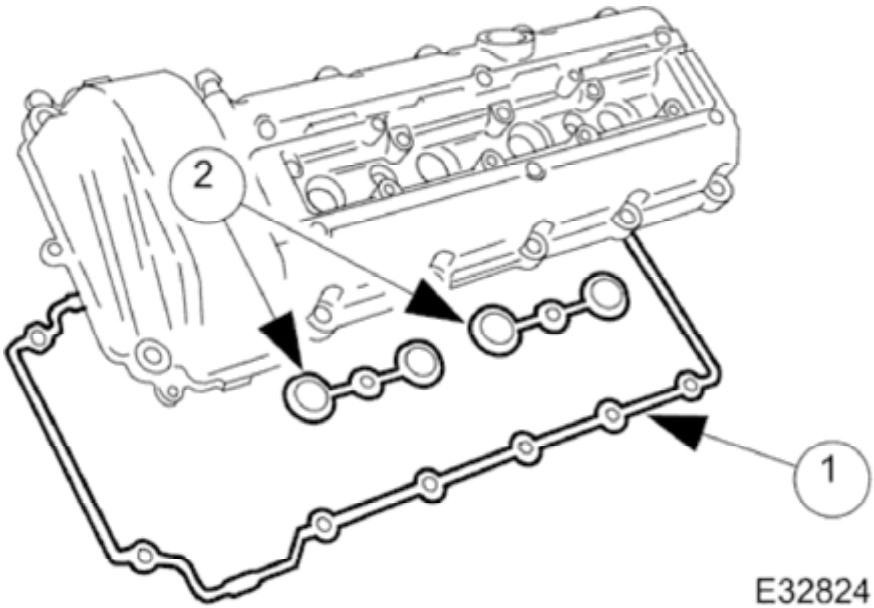


19. Remove the seals from the valve cover.

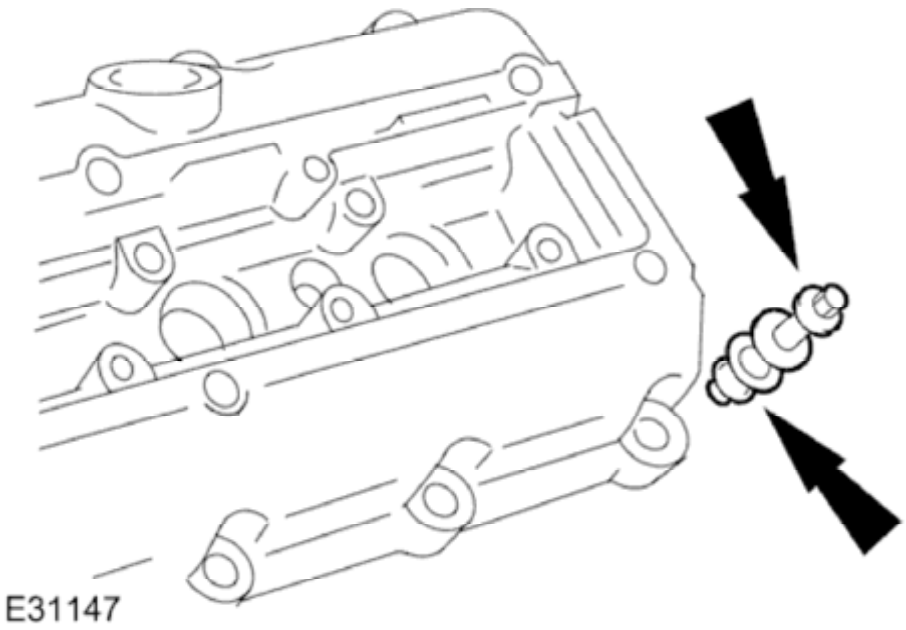
1. Remove and discard the outer seal.
2. Remove and discard the two seals from around the spark plug apertures.
3. Remove the seal for the variable camshaft timing oil control solenoid.

Installation
All vehicles

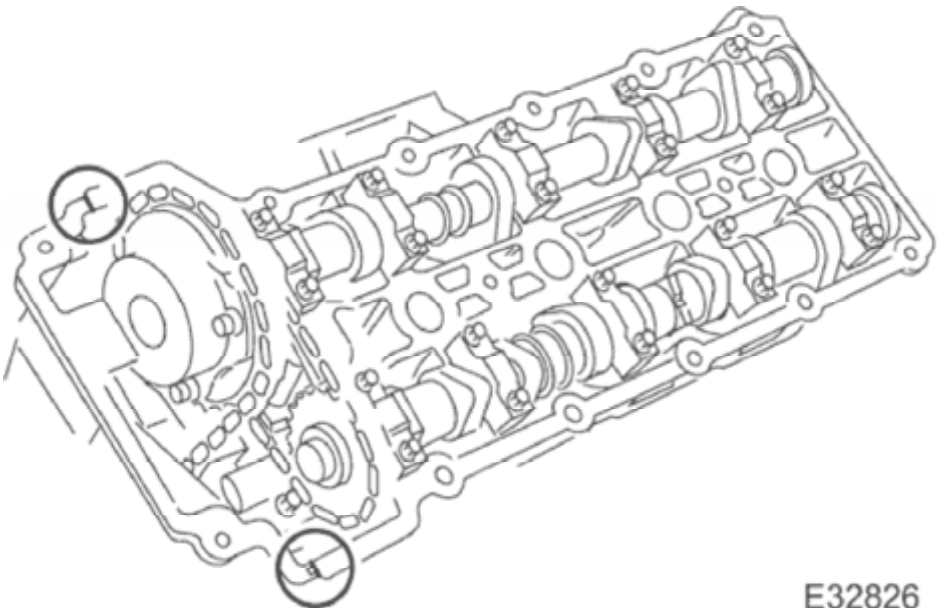
2004 XK RANGE - Engine - 303-01



- 1. Install the new main seals to the valve cover.
 - 1. Install the new outer seal.
 - 2. Install the two new spark plug aperture seals.
 - 3. Install the seal to the variable camshaft timing oil control solenoid.

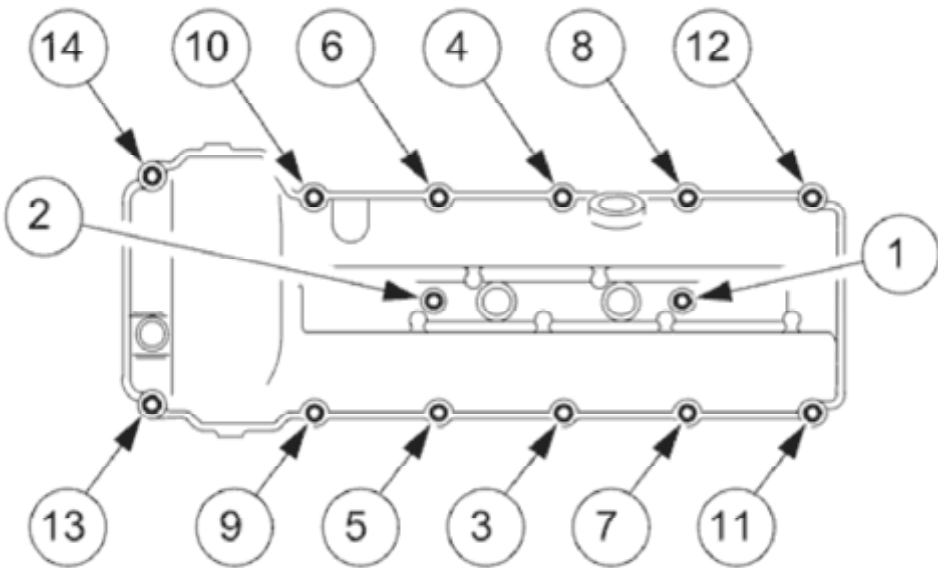


- 2. **NOTE:**
 - Install the valve cover retaining bolts to their positions previously noted.
- Install the valve cover retaining bolts.
- Install new valve cover retaining bolt O-ring seals.



E32826

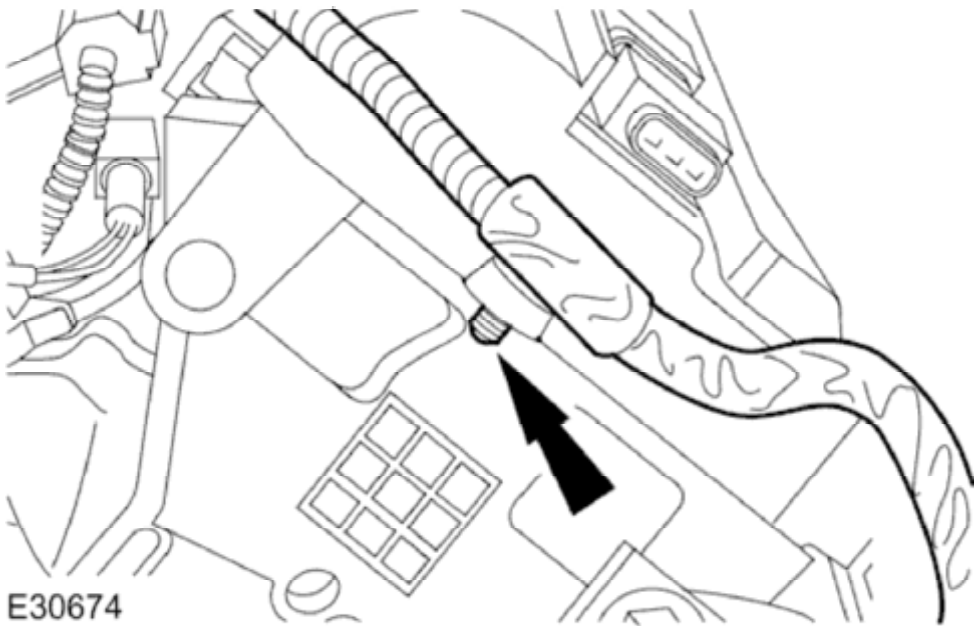
3. Apply bead of silicone gasket sealant or equivalent meeting Jaguar specification on the two places where the cylinder head and front cover join.
- The application of sealant must be 3mm diameter by 12mm long. Install the valve cover immediately after applying the sealant.
 - The cover should be fitted directly to the head without smearing the sealant or the seals.



VUJ0001977

4. Install the valve cover.
- Install new valve cover gaskets.
 - Complete the tightening sequence.
 - Tighten to 12 Nm.

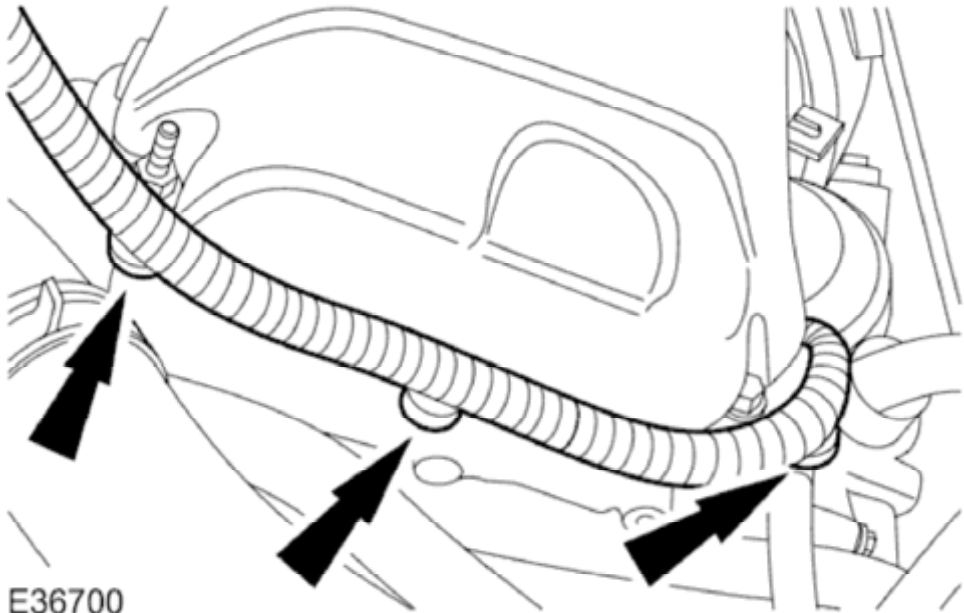
2004 XK RANGE - Engine - 303-01



5. **NOTE:**
Right hand shown, left hand similar.

Detach the engine wiring harness.

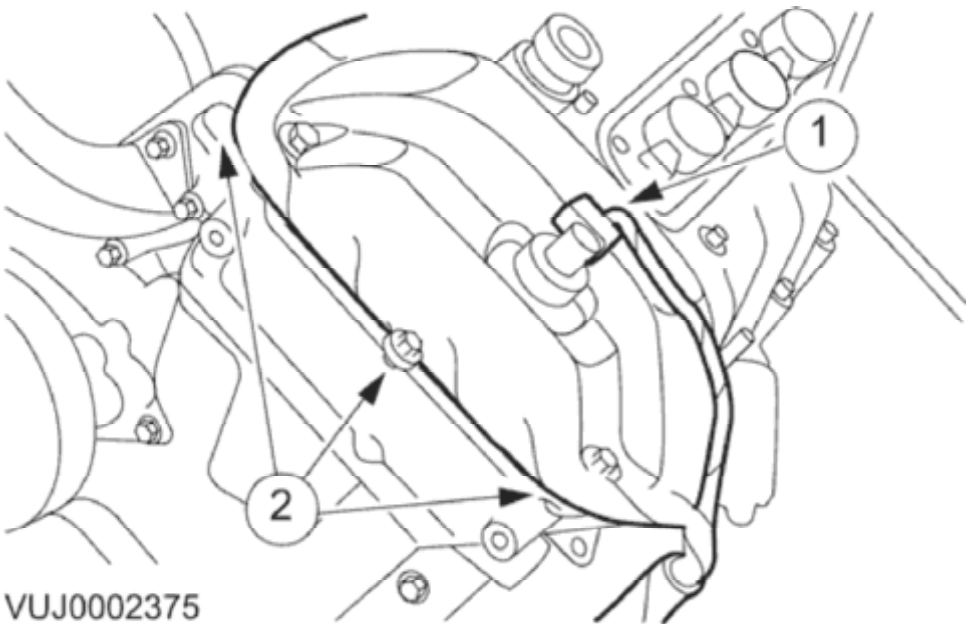
Vehicles with supercharger



6. Detach the engine wiring harness.

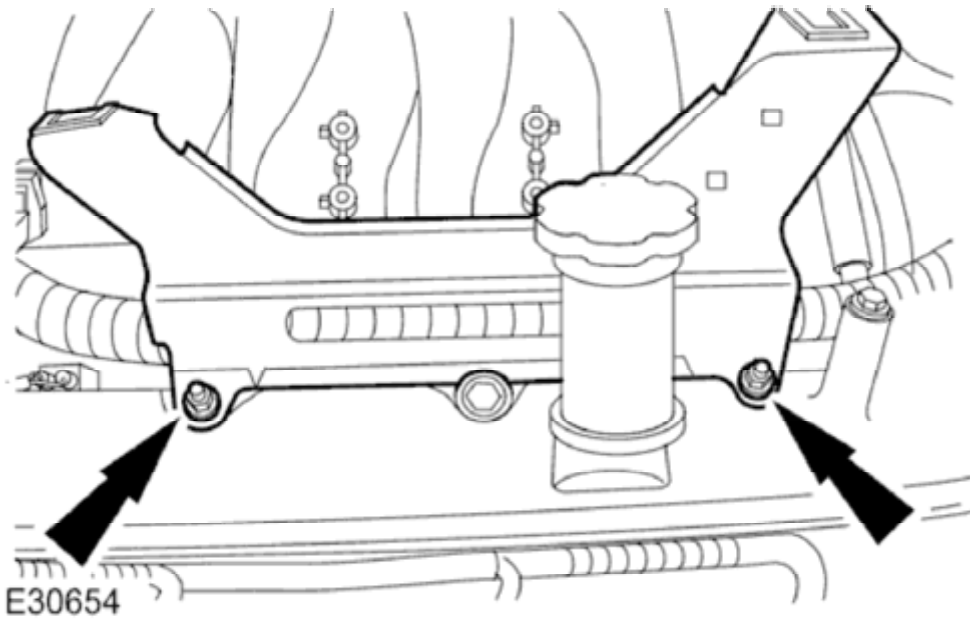
Vehicles without supercharger

2004 XK RANGE - Engine - 303-01



VUJ0002375

- 7. Attach the engine wiring harness.
 - 1. Connect the variable camshaft timing oil control solenoid electrical connector.
 - 2. Attach the engine wiring harness.

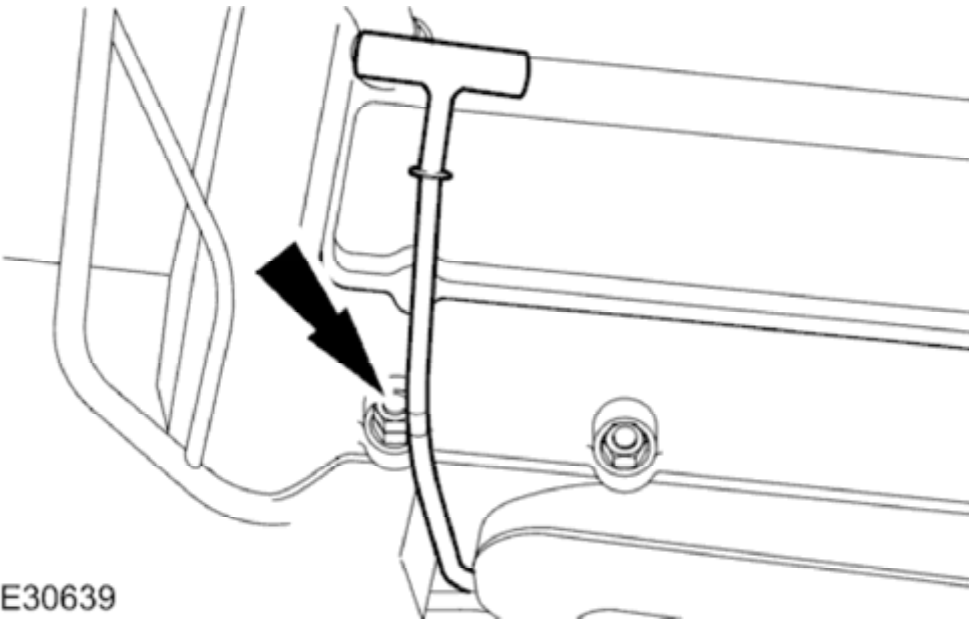


E30654

- 8. Install the left-hand engine cover bracket.
 - Tighten to 6 Nm.

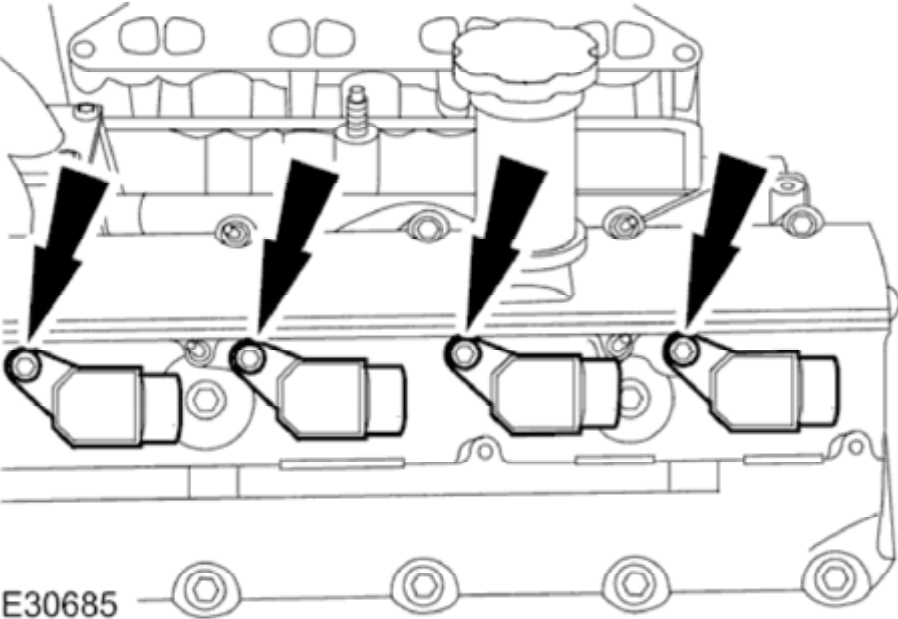
All vehicles

2004 XK RANGE - Engine - 303-01



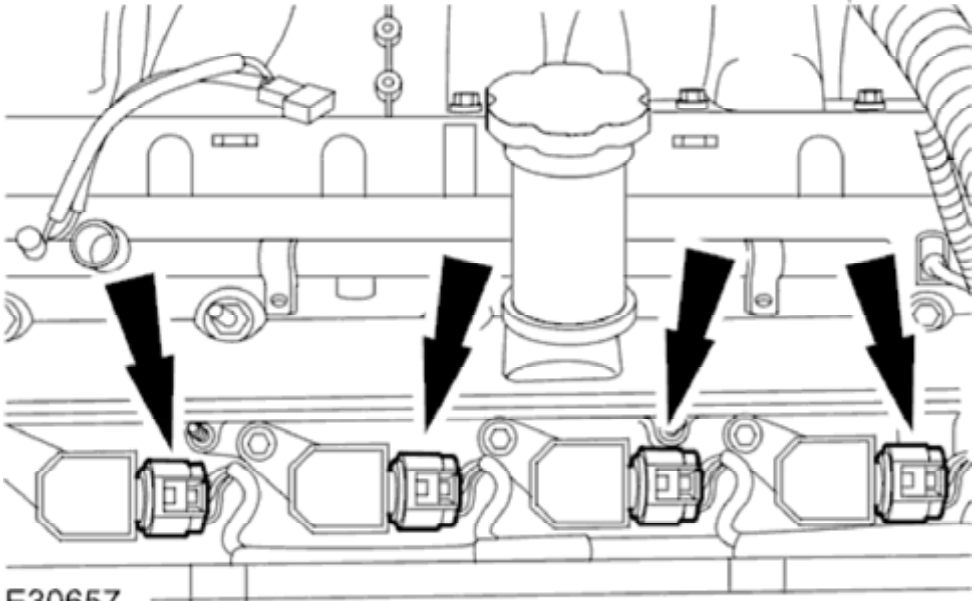
E30639

- 9. Install the oil level indicator and tube.
 - Install a new O-ring seal.
 - Tighten to 6 Nm.

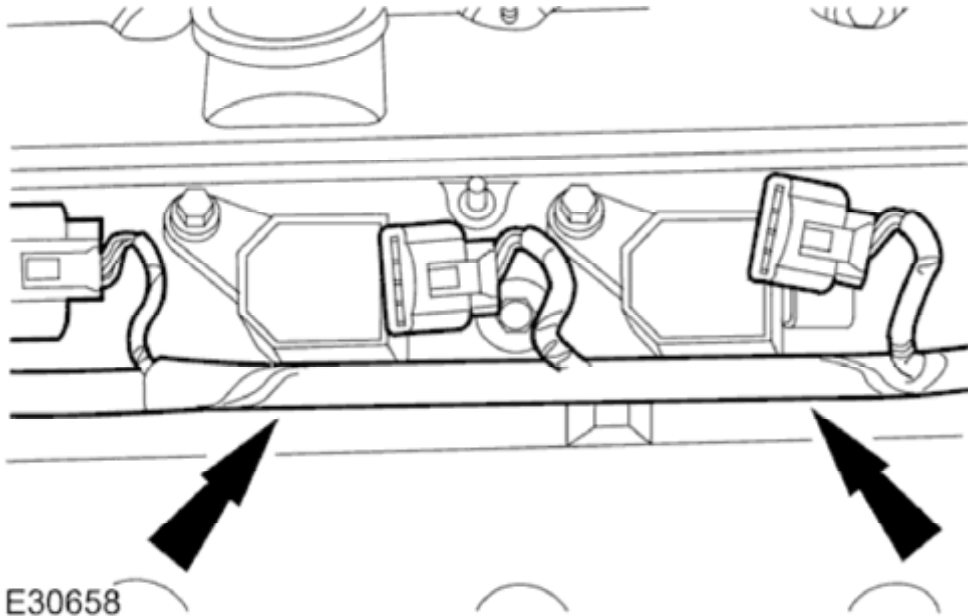


E30685

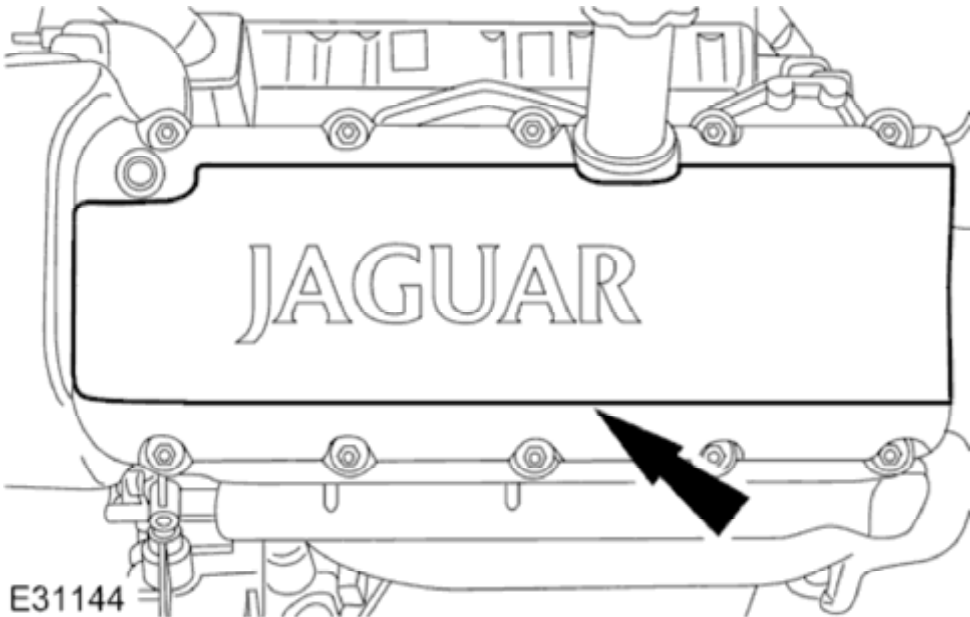
- 10. Install the ignition coil on-plugs.
 - Tighten to 5 Nm.



11. Disconnect the ignition coil-on-plug electrical connectors.

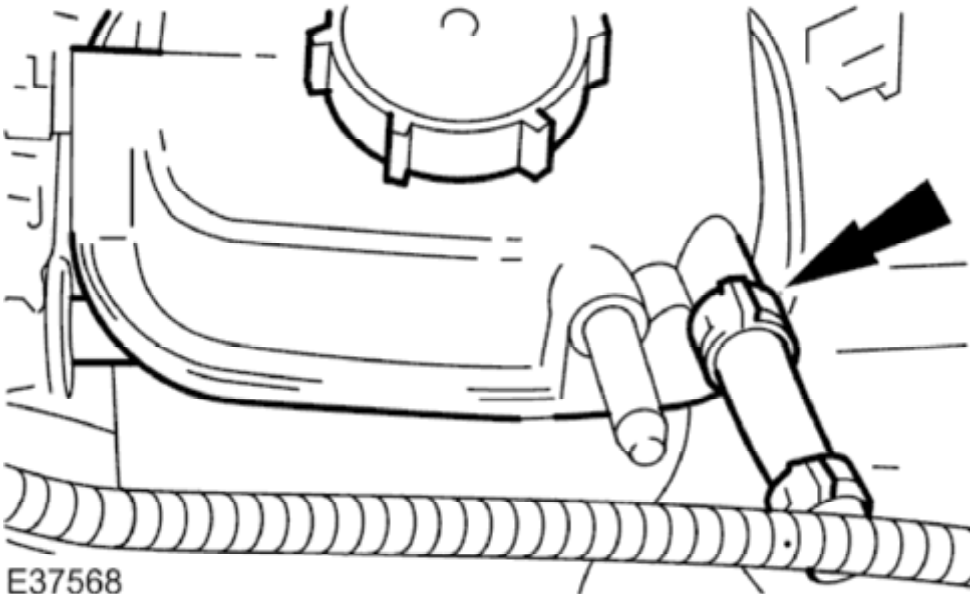


12. Detach the wiring harness.



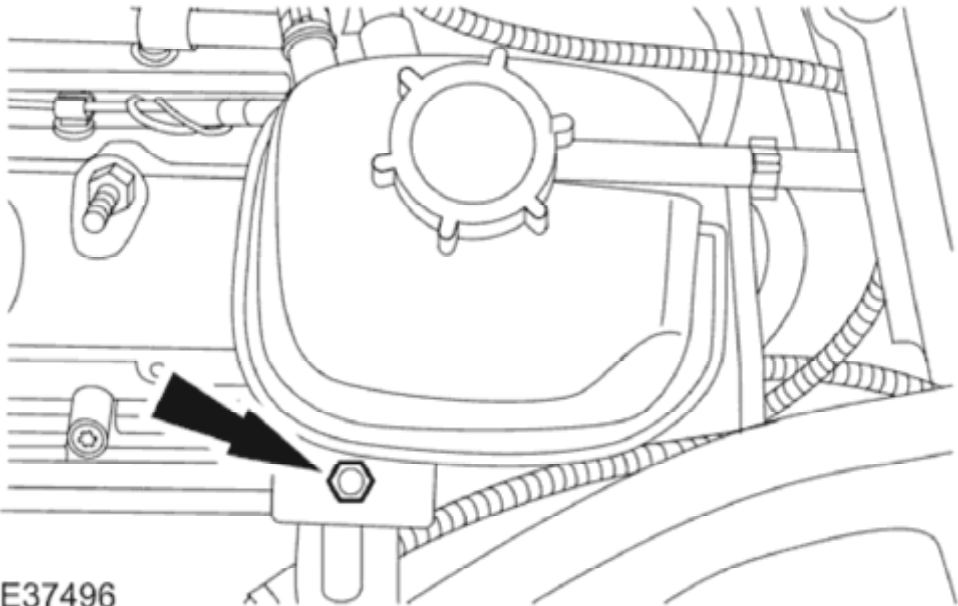
E31144
13. Install the ignition coil-on-plug cover.

Vehicles without supercharger



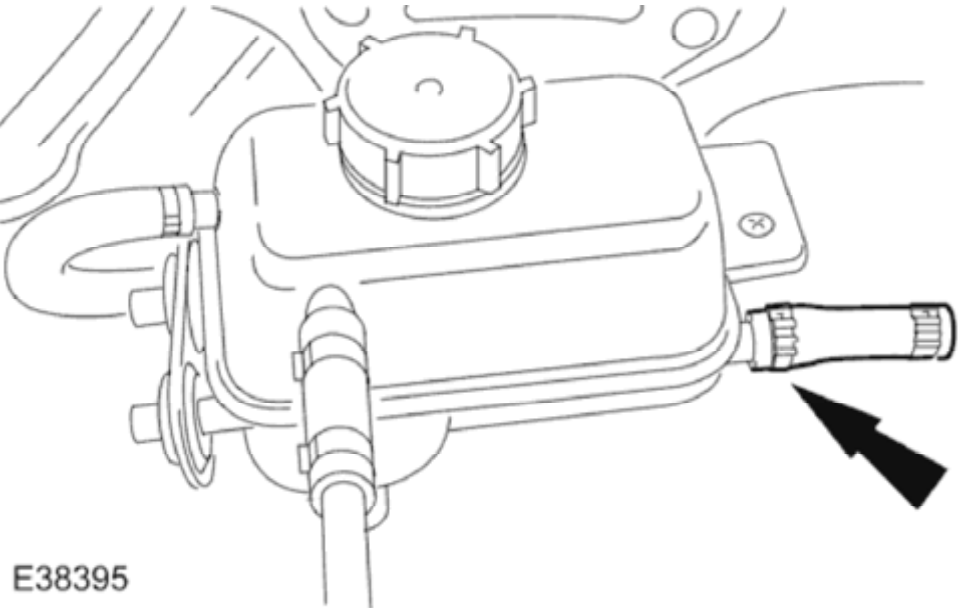
E37568
14. Connect the hose.

2004 XK RANGE - Engine - 303-01

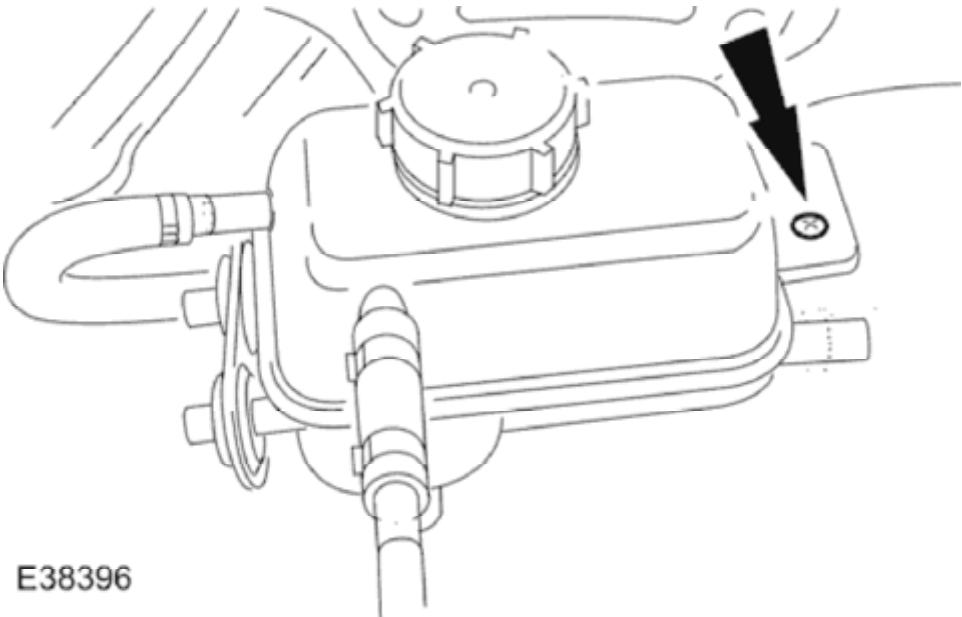


E37496
15. Install the retaining bolt.

Vehicles with supercharger



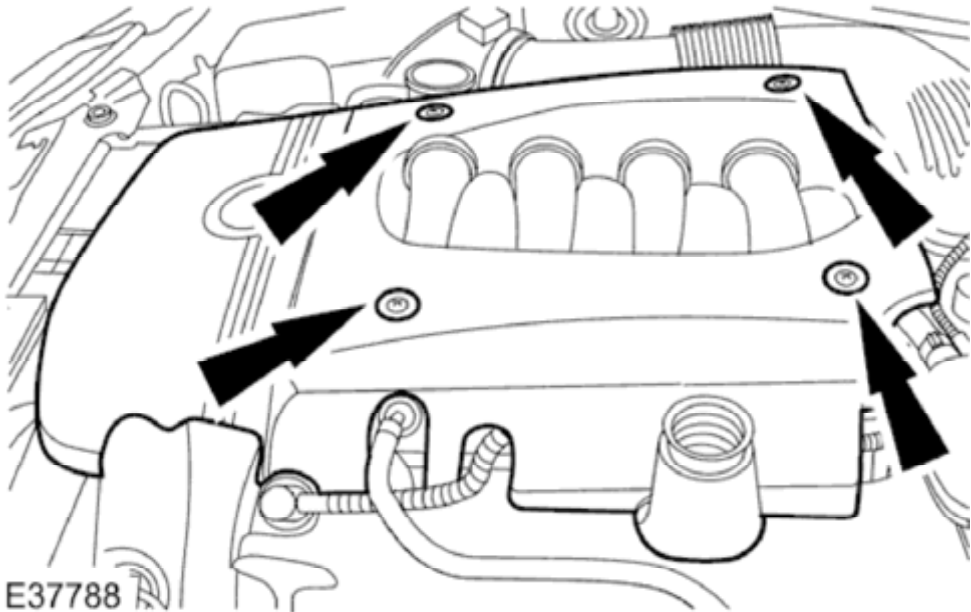
E38395
16. Connect the hose.



E38396

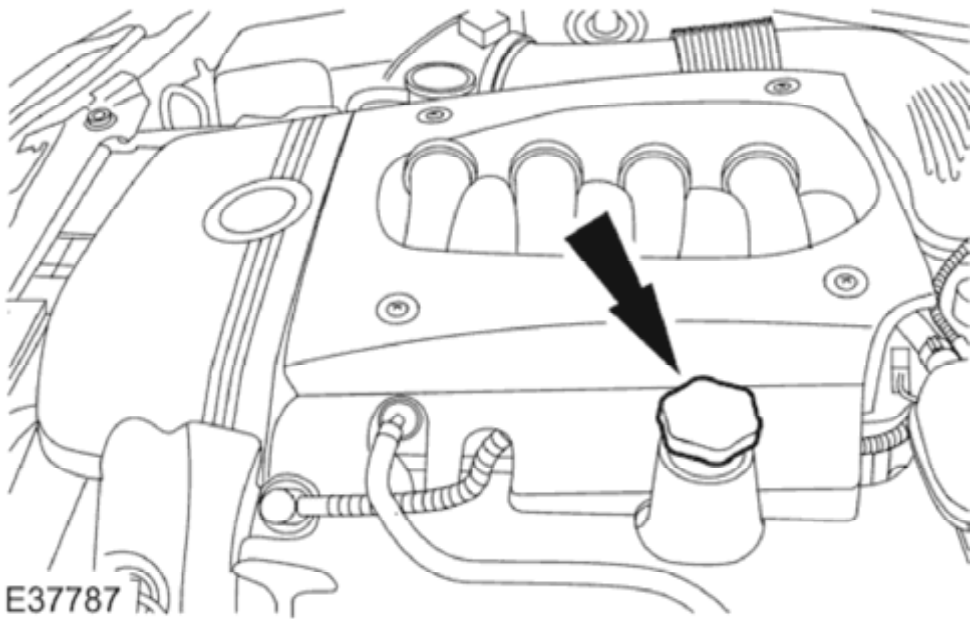
17. Install the retaining bolt.

Vehicles without supercharger



E37788

18. Install the engine cover.



E37787

19. Install the oil filler cap.