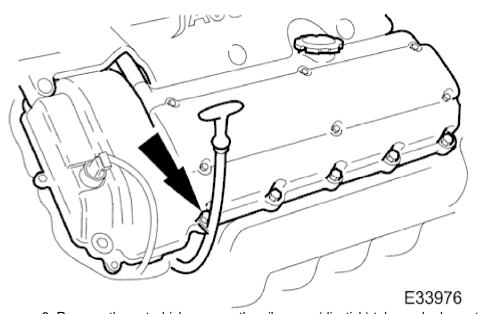
Valve Cover LH 12.29.43

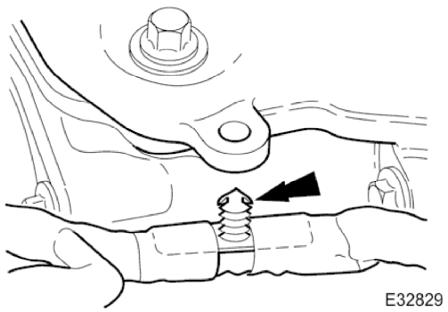
Removal

- 1. Open the engine compartment and fit paintwork protection sheets.
- 2. Carefully remove the left hand engine cover, taking care not to damage the plastic fixings or the rubber inserts.

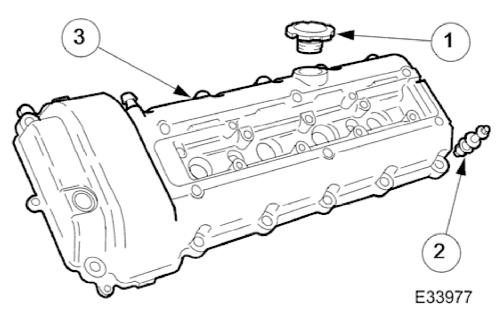


- 3. Remove the nut which secures the oil gauge (dipstick) tube and release the tube from the stud.
- 4. Remove the on-plug ignition coils from Bank 2. Refer to Operation 18.20.42.
- 5. Remove the purge valve, from the evaporative control system. Refer to Operation 17.15.47.

1

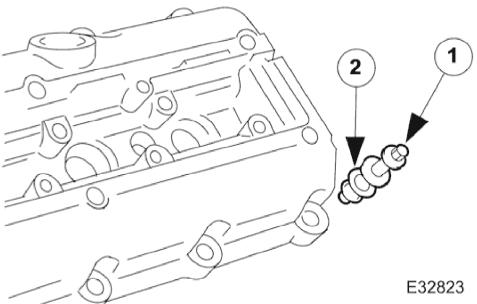


6. Release the clips which secure the engine harness to the cam cover.

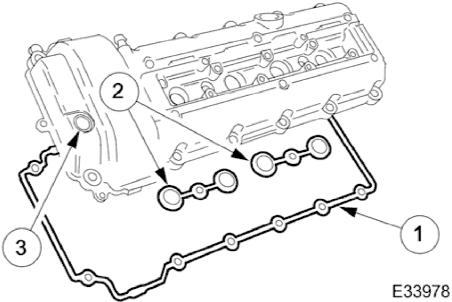


- 7. Remove the cam cover assembly.
 - 1. Remove the oil filler cap.
 - 2. Release the fourteen screws which secure the cam cover. The screws stay in place within the cover, held by the seals.
 - 3. Remove the cam cover, screws and seals, as an assembly.

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- 8. Separate the screws and seals from the cam cover.
 - 1. One at a time, remove each securing screw from the cam cover.
 - 2. Remove the rubber sealing ring from each securing screw.

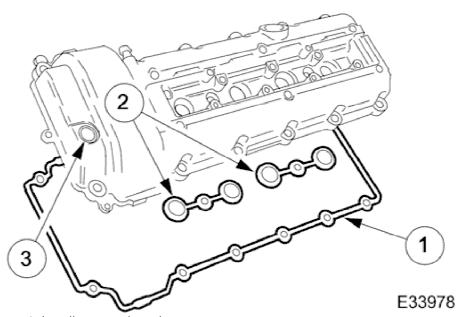


- 9. Remove the main seals from the cam cover.
 - 1. Remove and discard the outer seal.
 - 2. Remove and discard the two seals from around the spark plug apertures.

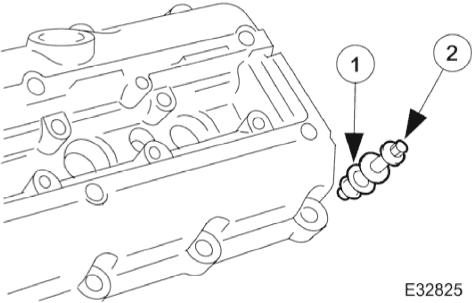
3

- 3. Remove the seal for the VVT solenoid.
- 10. Clean all relevant parts and mating faces.

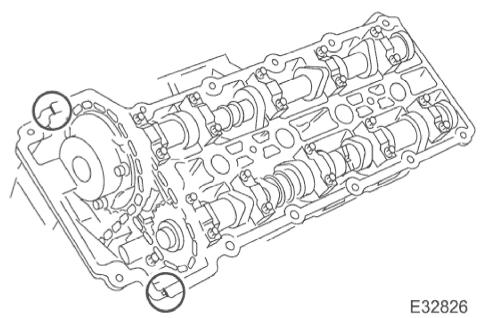
Installation



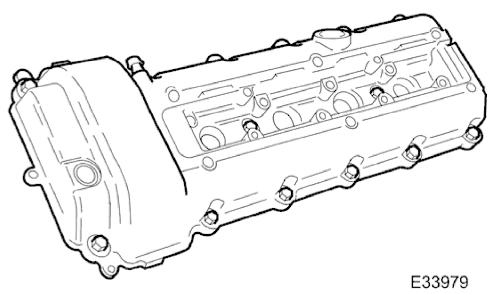
- 1. Install new seals to the cam cover.
 - 1. Install the new outer seal.
 - 2. Install the two new spark plug aperture seals.
 - 3. Install the seal to the VVT solenoid apertrure.



- 2. Install the securing screws to the cam covers.
 - 1. Install a new sealing ring to each screw assembly.
 - 2. Install the screws to the cam covers. Each screw is retained by the cam cover gasket.
 - Refer to the tigtening sequence diagram for details of where to install the studs.

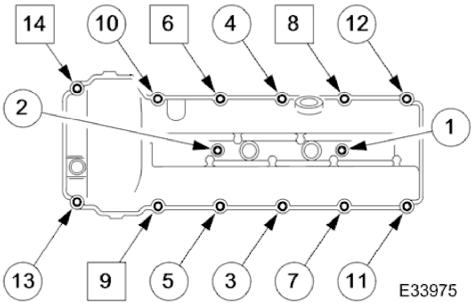


- 3. Apply RTV sealant WSS-M4G320-A3 to two places on the joint between the timing cover and the cylinder head.
 - The application of sealant must be 3mm diameter by 12mm long. Install the cam cover immediately after applying the sealant.
 - The cover should be installed directly to the head without smearing the sealant.

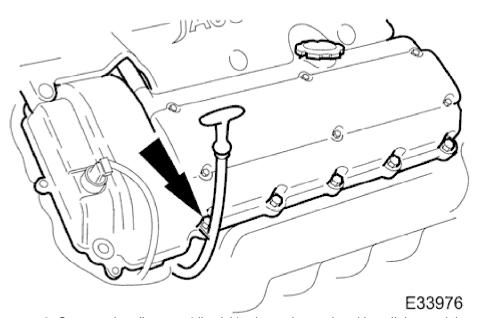


- 4. Install the cam cover.
 - Position the cam cover onto the cylinder head without smearing the sealant and start the threads of each securing screw.

5

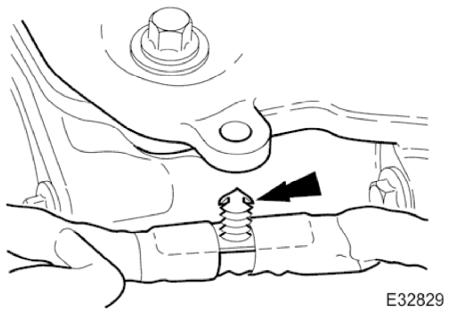


- 5. Tighten the securing screws to 9-11 Nm. Tighten in the sequence indicated.
 - Screws annotated in a square have studs to install other components onto, and must be installed in the positions shown.
- 6. Install the oil filler cap.
- 7. Install the on-plug ignition coils and the coil cover. Refer to Operation 18.20.42.
- 8. Install the purge valve. Refer to Operation 17.15.47.



9. Connect the oil gauge (dipstick) tube to the stud and install the retaining nut. Tighten to 5-7 Nm.

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- 10. Reposition the clips which secure the engine harness to the cam cover.
- 11. Install the left hand engine cover.
- 12. Remove the paintwork protection sheets and close the engine compartment.

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