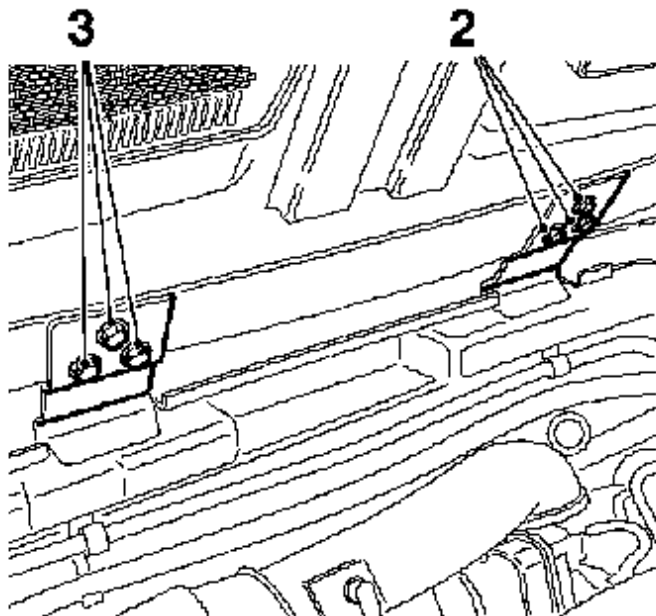
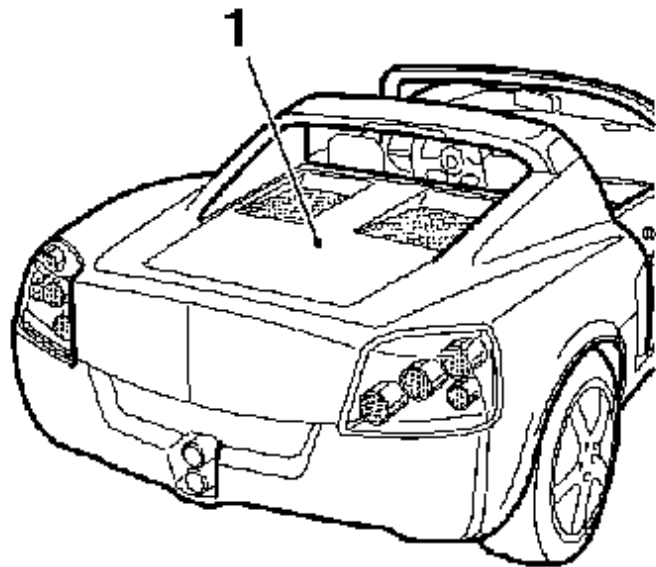


Valve Timing, Check (Z 22 SE)



Remove

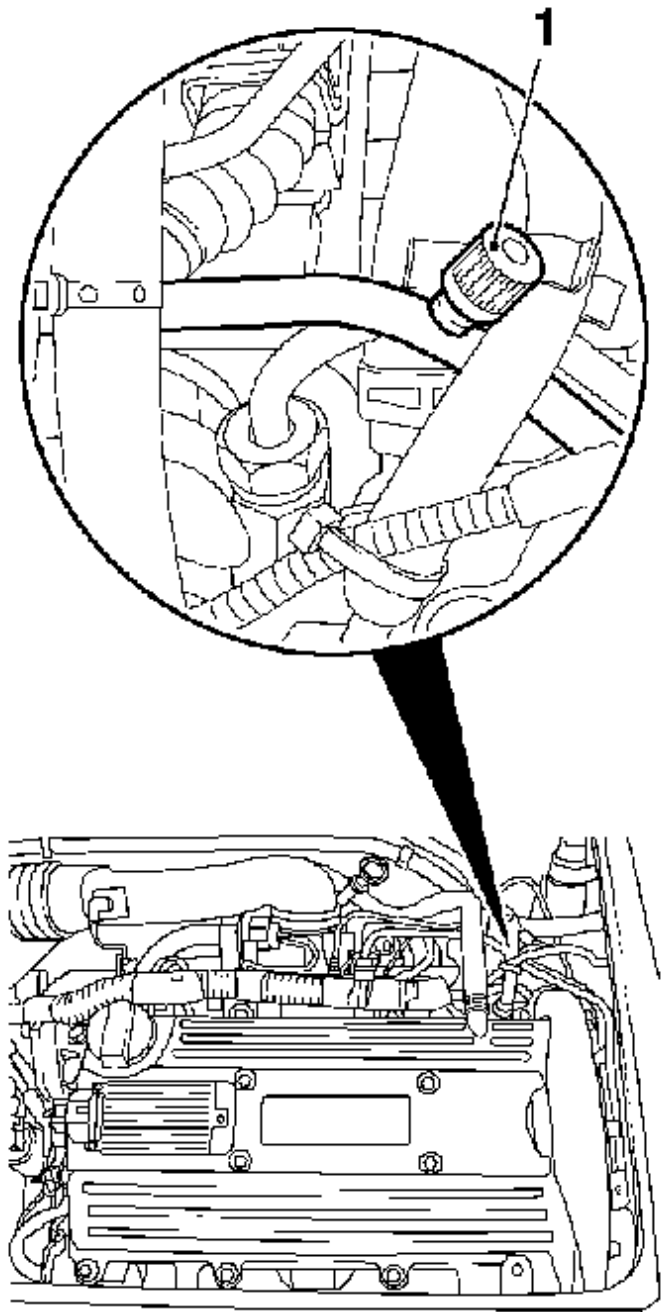
1. Open the bonnet.
2. Disconnect the battery.
3. Open the rear engine cover (1).
4. Detach the rear engine cover.
 - 6 bolts (2) and (3)



L0008715

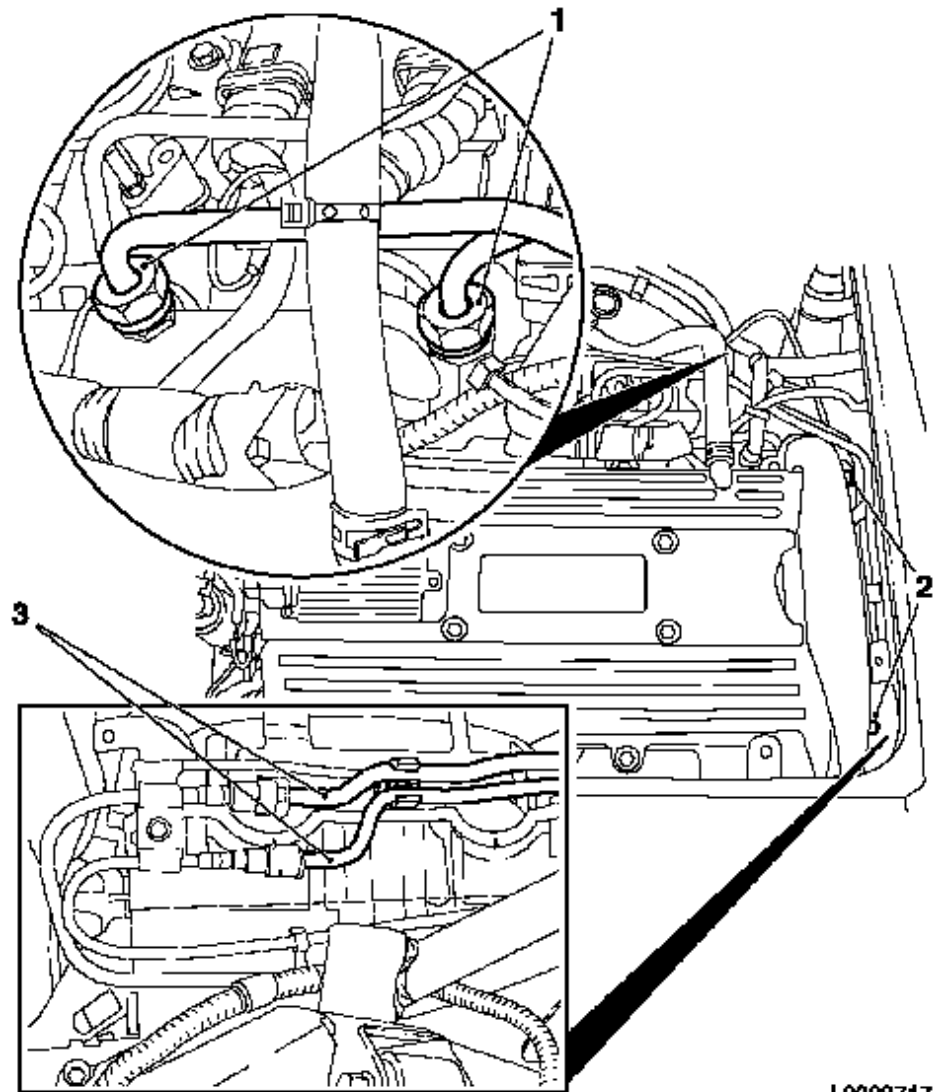
5. Release the fuel pressure.
 - Important:
Fuel may escape – observe the safety regulations and relevant national legislation.
 - Release the fuel pressure with the pressure tester **KM-J-34730-91** via test connection (1).

- Collect any escaping fuel in a suitable container.



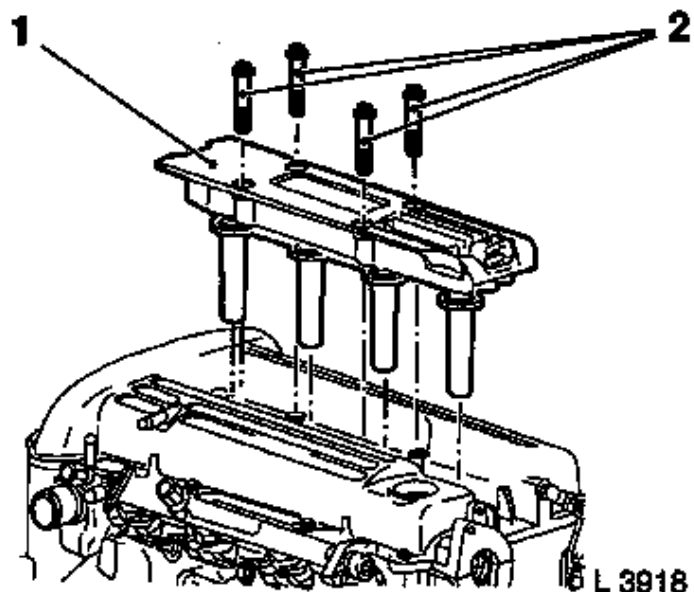
L0008716

6. Disconnect the fuel lines (3).
 - 2 union nuts (1)
 - Fuel line bracket
 - 2 bolts (2)
 - Reposition the fuel lines with the fuel line bracket to one side.



L0008717

7. Detach the ignition module (1).
- Release and detach the wiring harness connector.
 - 4 bolts (2)

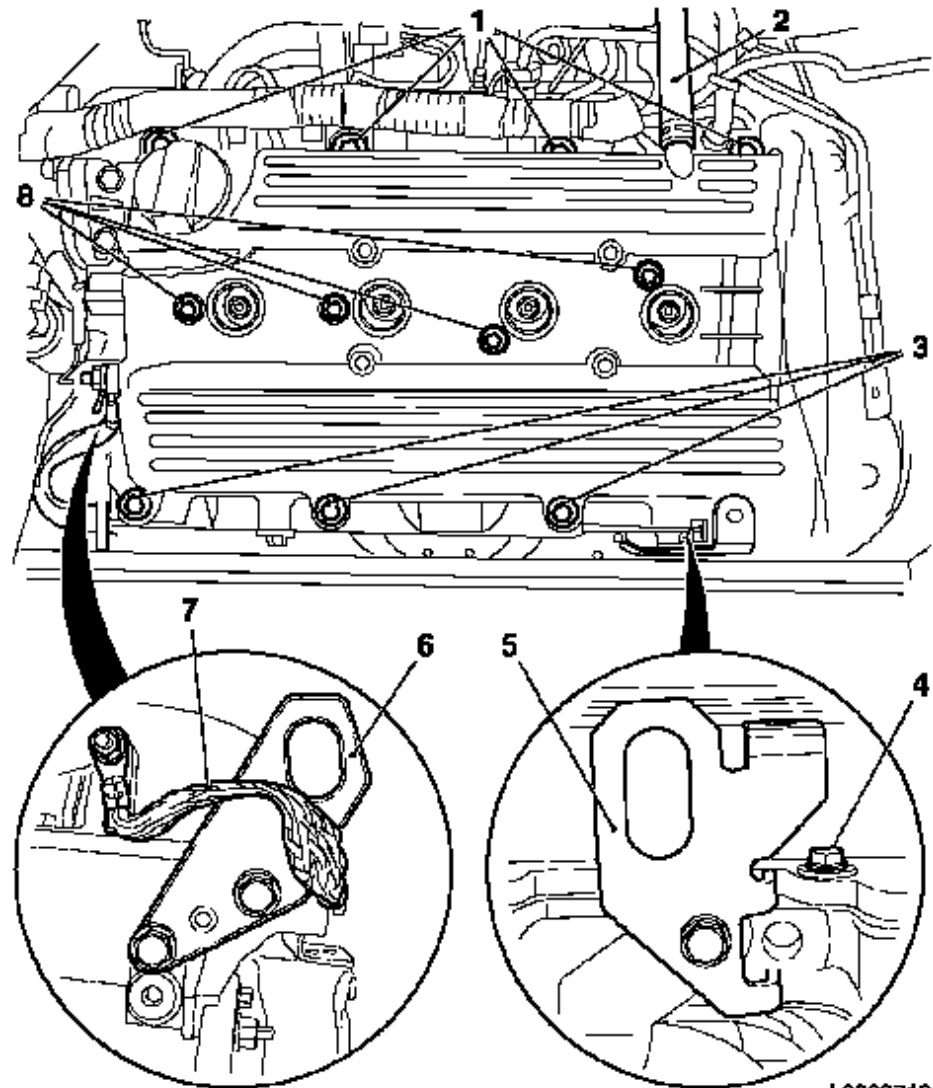


L 3918

8. Remove the cylinder head cover.

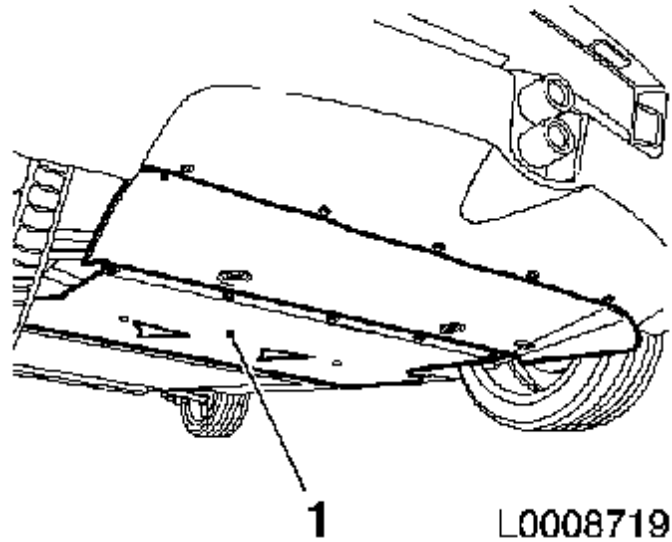
- Detach the engine breather hose (2).
- Detach the engine lifting eyes (5) and (6).
 - 2 bolts, 1 nut
- Detach the ground cable (7).
 - 1 bolt
- 12 bolts (1), (3), (4) and (8)

9. Raise the lifting ramp.

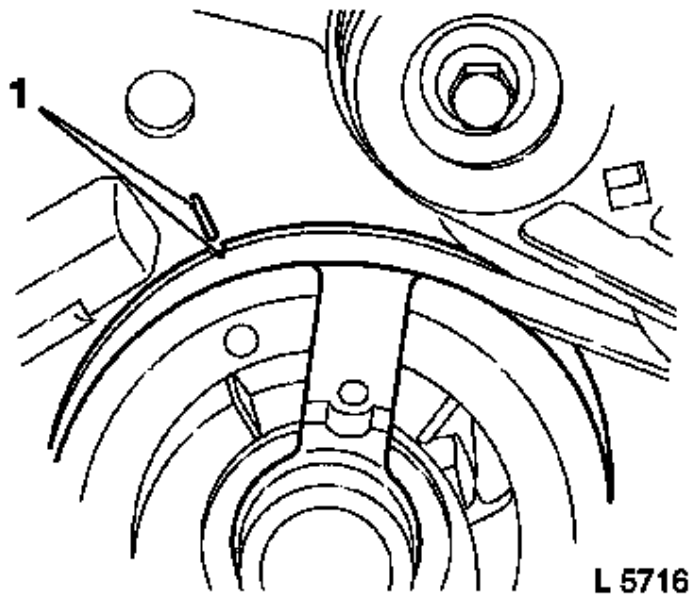


10. Remove the lower engine splash shield (1).

- 13 bolts

**Install**

11. Align the crankshaft.
 - Rotate the crankshaft in the normal direction of rotation to TDC on cylinder no. 4 (marking 1).
12. Install the lower engine splash shield
 - 13 bolts
13. Lower the lifting ramp.



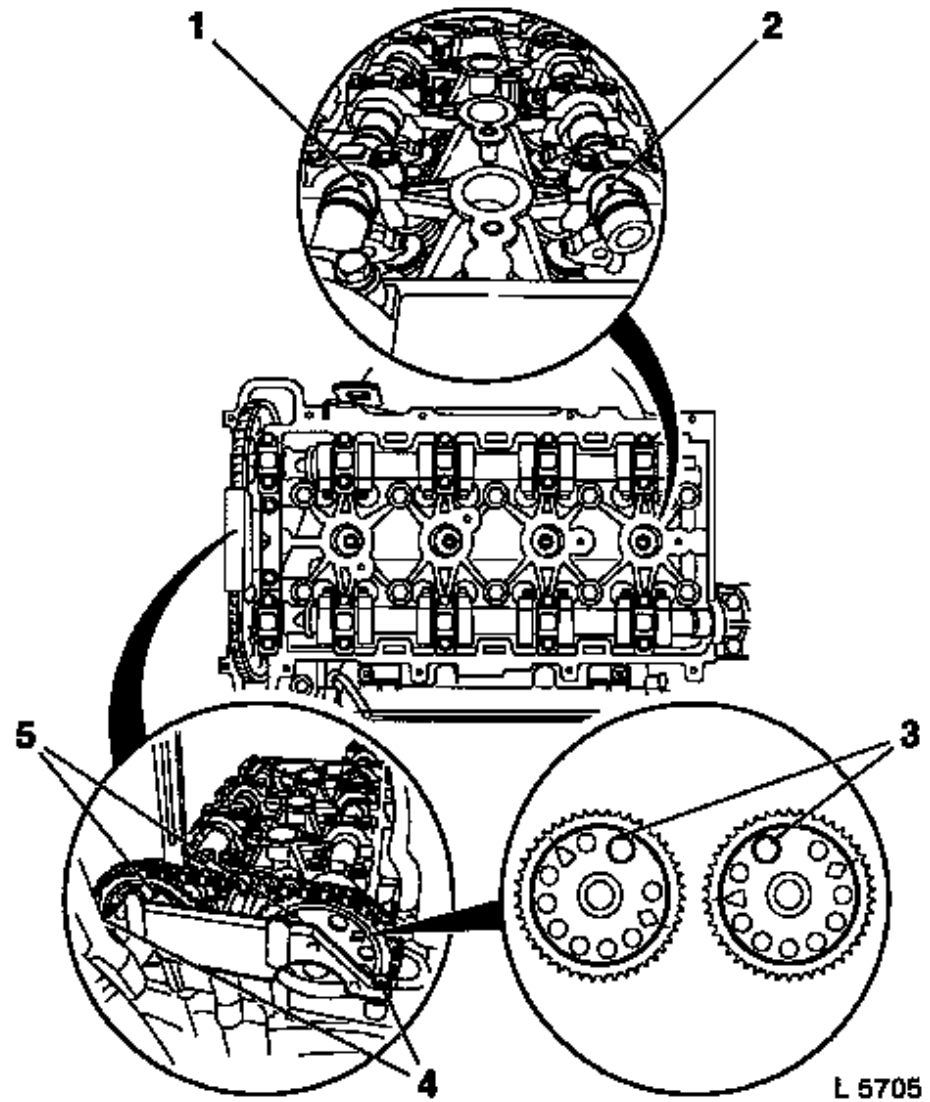
14. Attach **KM-6148**.

Note: In this position the cams (1) and (2) of cylinder no. 4 point upwards.

 - Attach **KM-6148** with the enclosed bolts (4).
 - Slide the

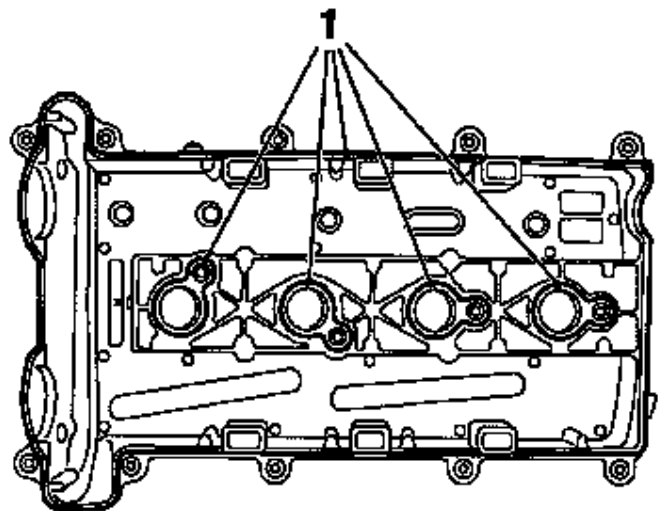
positioning bolts
(5) into the
designated bores
(3) on the
camshaft
sprockets.

15. Detach **KM-6148**.



16. Attach the cylinder head cover

- Clean the sealing surfaces.
- Use new gaskets.
- **Note:** The sealing lips of the seals (1) must be inserted into the groove on the cylinder head cover.
 - Tightening torque **9 Nm**
- Attach the ground cable
 - Tightening torque **9 Nm**
- Attach the wiring harness bracket
 - 1 nut, 1 bolt
- Attach the cable duct.
 - 2 nuts, 1 clip
- Clip the coolant hose in place.
 - 2 clips
- Clip the engine breather hose in place.
- Attach the fuel line bracket.
 - Tightening torque **8 Nm**



L 5706

17. Attach the ignition module.
 - Tightening torque **9 Nm**
 - Attach and secure the wiring harness connector.
18. Connect the fuel lines.
 - Insert the fuel lines into the clip.
 - Tightening torque **10 Nm**
 - Secure the clip.
19. Install the engine cover.
 - Check the alignment.
 - 6 bolts, tightening torque **14 Nm**
20. Connect the battery.
21. Reprogram the volatile memories.
22. Close the bonnet.