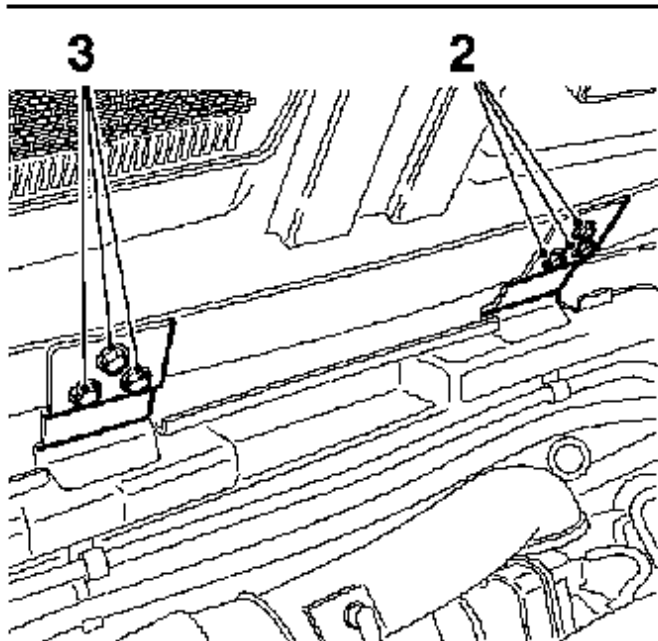
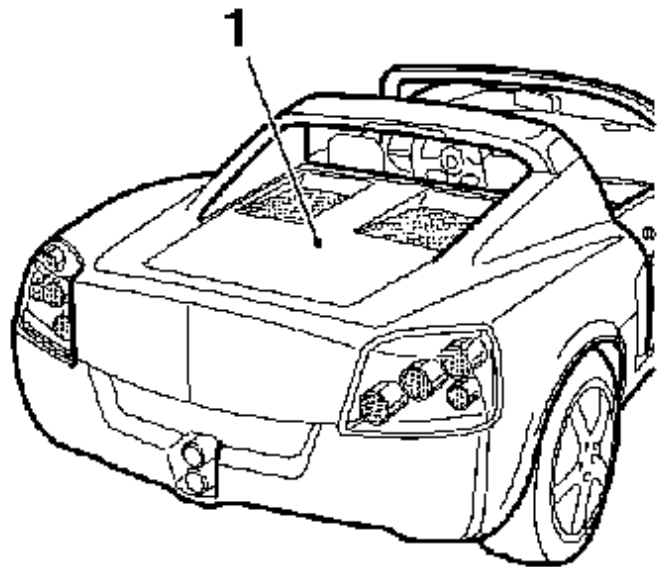


## Oil Spray Nozzle, Timing Chain, Replace (Z 22 SE)



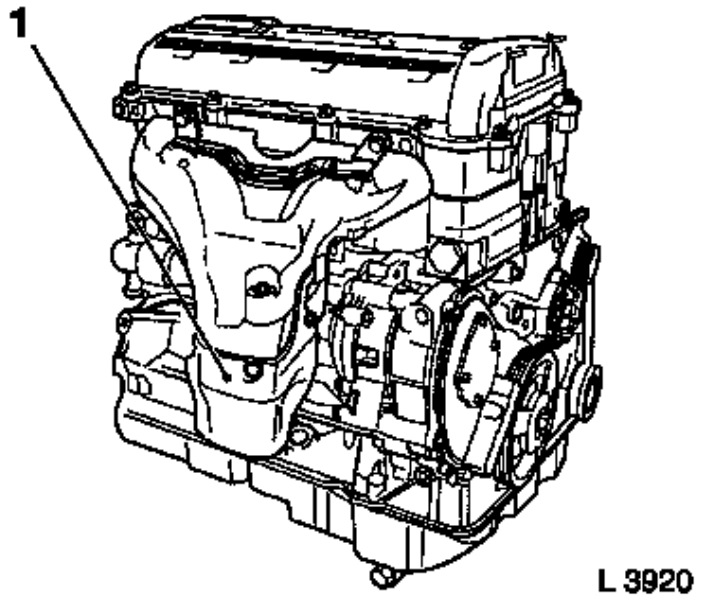
Remove

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

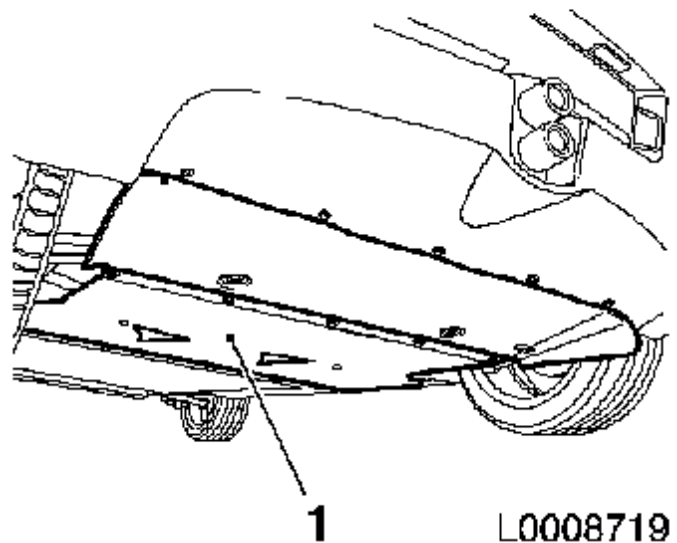


L0008715

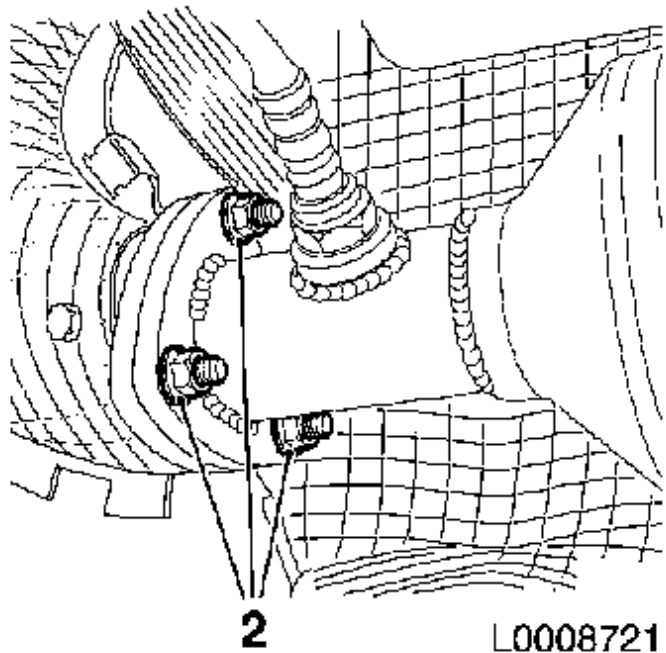
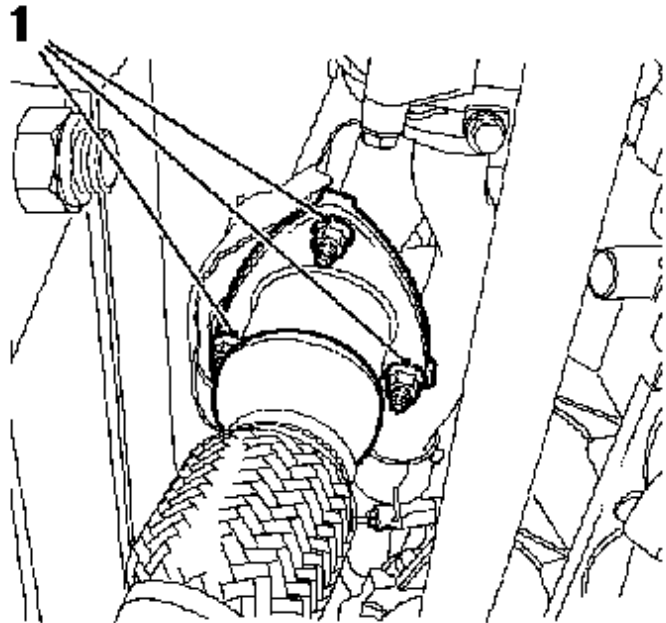
5. Remove the lower heat shield (1).
  - 3 bolts



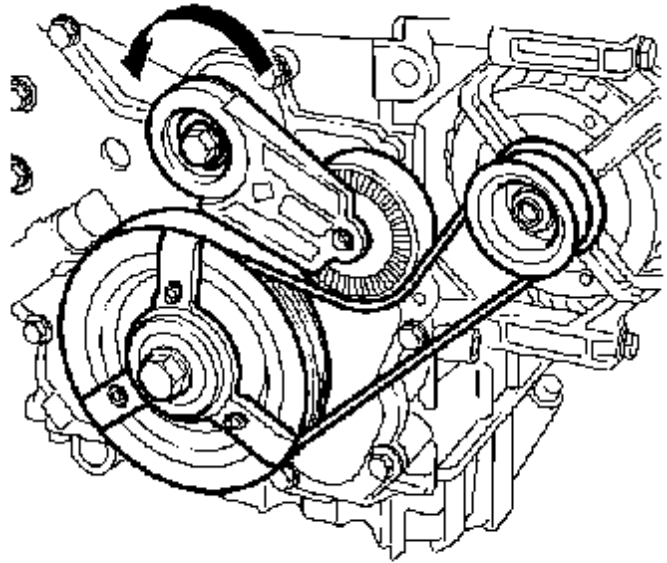
6. Raise the lifting ramp.
7. Remove the lower engine splash shield (1).
  - 13 bolts



8. Place a drip tray underneath.
9. Drain the engine oil.
  - Open the oil drain plug.
  - Install the oil drain plug using a new oil seal.
    - Tightening torque **25 Nm**
10. Detach the front exhaust pipe.
  - 6 nuts (1) and (2), 3 bolts
  - Unhook the exhaust pipe from its mountings.
  - Remove the gaskets.

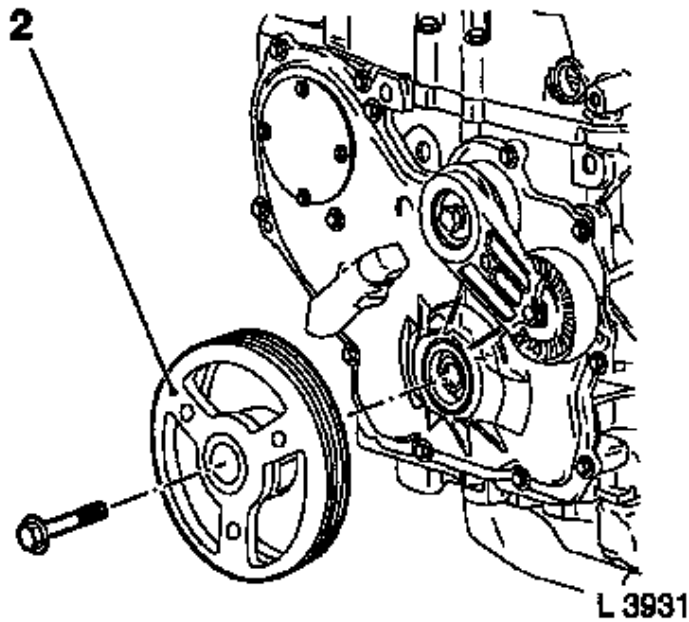
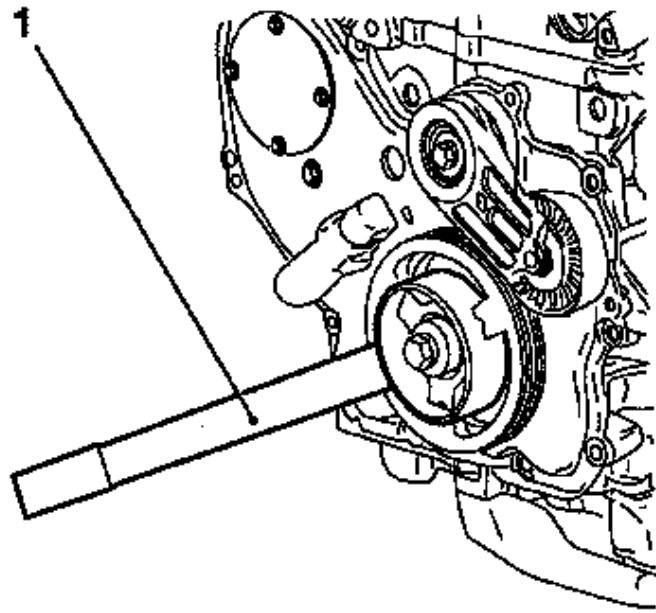


11. Remove the ribbed V-belt.
- Mark the running direction of the ribbed V-belt.
  - Tension the ribbed V-belt tensioner in the direction of the arrow with **KM-6151**.
    - Take out the ribbed V-belt.

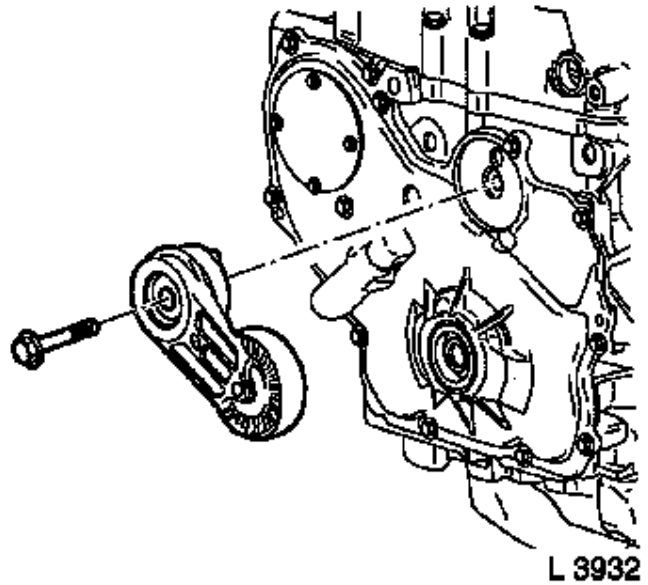


L0008730

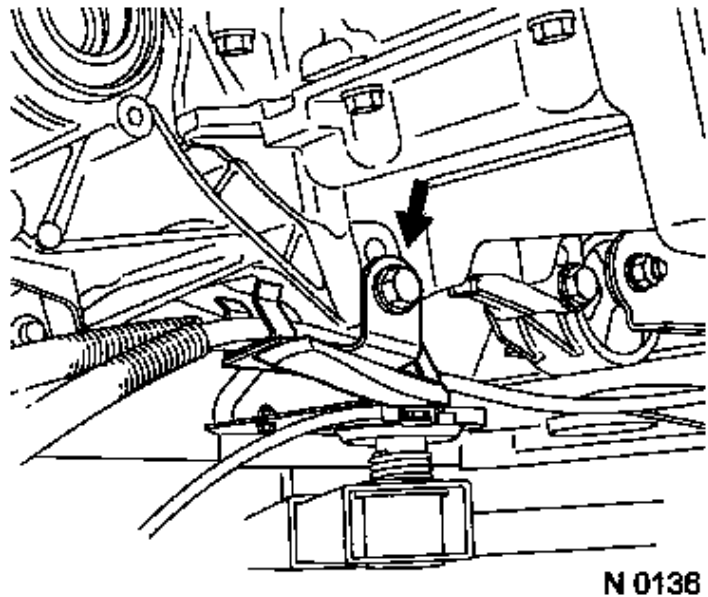
12. Detach the rotational vibration damper (2).
  - Use holding adapter **KM-J-38122-A** in conjunction with **KM-956-1** (1) to hold.



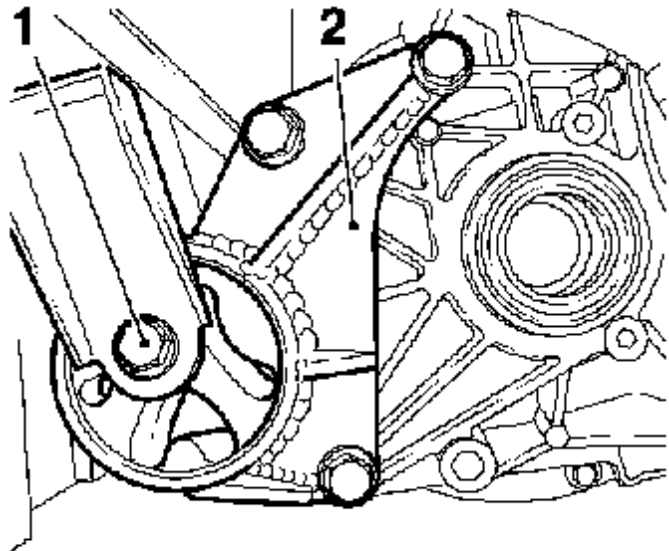
13. Detach the ribbed V-belt tensioner.



14. Detach the bracket for the gearshift cables.
  - From the transmission
  - 1 bolt (arrow)

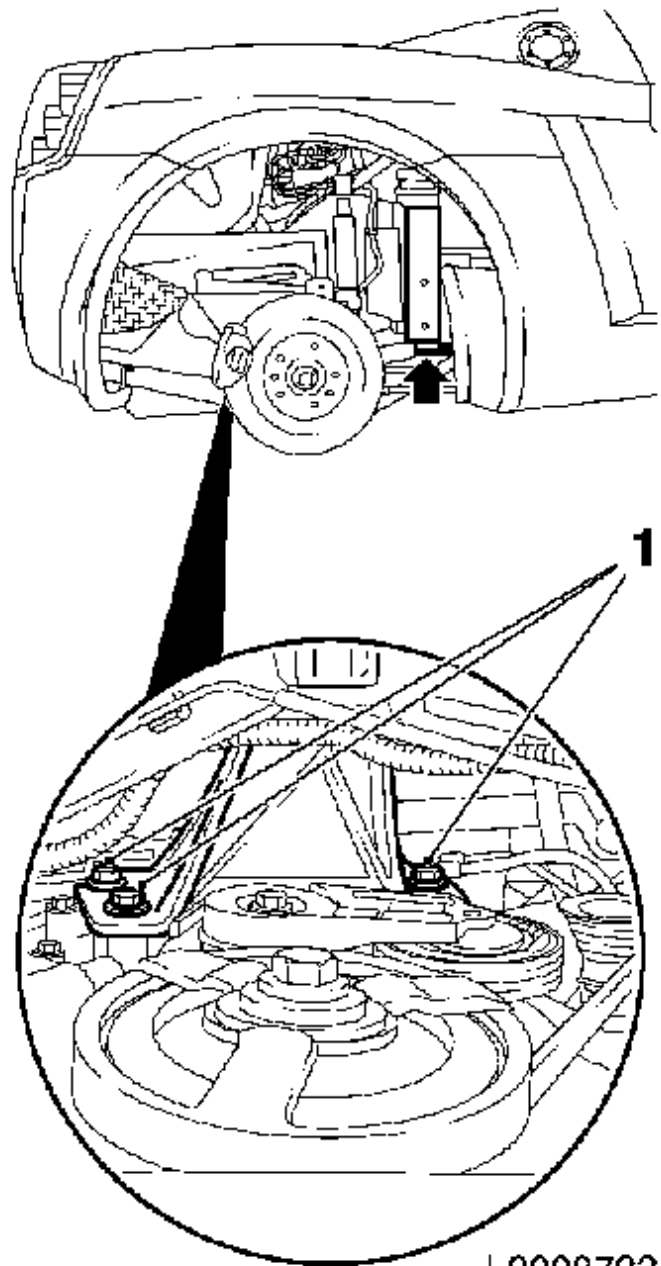


15. Support the engine from underneath with **KM-904** together with **KM-6054**.
16. Release the rear engine damping block (2).
  - 1 bolt (1), 1 nut



L0008722

17. Undo the bolts on the right-hand engine damping block bracket (1).
  - 3 bolts (1)
18. Undo the bolts on the right-hand engine damping block.
  - 1 nut (arrow)
19. Take out the engine damping block bracket together with the right-hand engine damping block.



20. Undo the bolts on the timing case (5).
  - 11 bolts (1), (2) and (6)
21. Lower the engine.

**Note:** It must be possible to guide the long bolt (2) of the timing case past the longitudinal member.
22. Remove the timing case.
  - Remove the gasket (3).

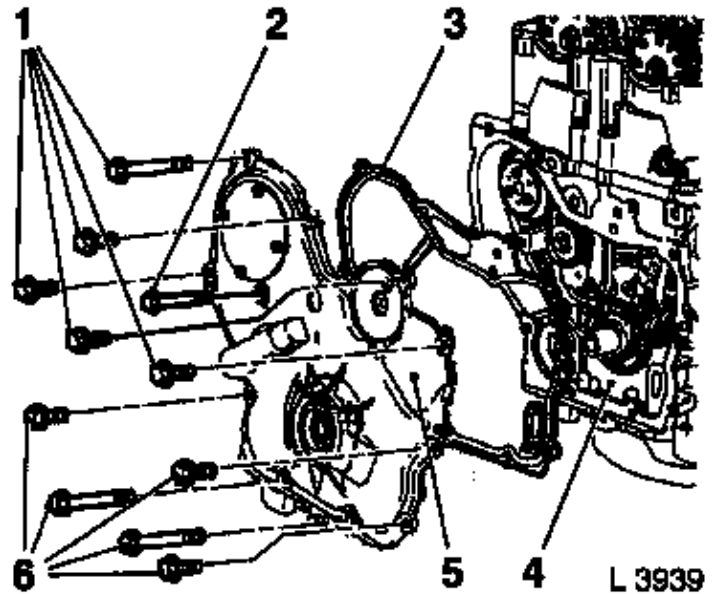
**Note:** Cover the opening (4) in the timing case with a cloth.
  - Use a suitable tool to remove the oil seal.

**Important:** Do not damage the sealing

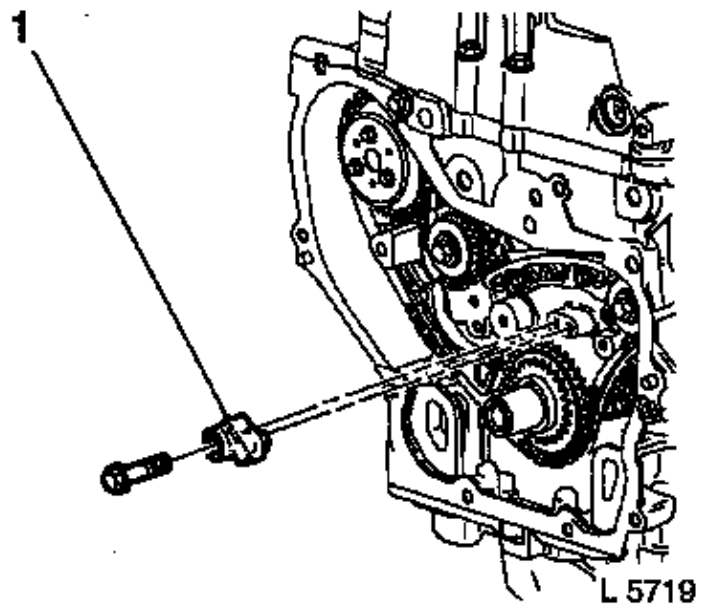


surfaces.

- Clean the sealing surfaces.



23. Remove the oil splash nozzle (1).

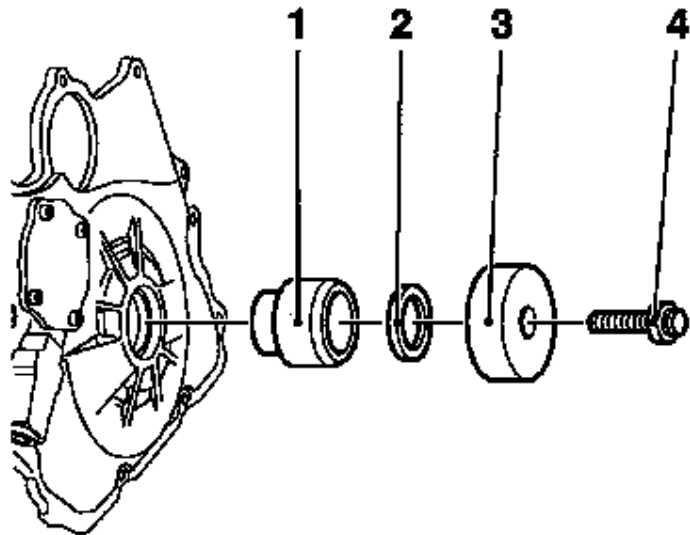


**Install**

24. Install the oil splash nozzle.
- Tightening torque **10 Nm**
25. Install the timing case.
- Note:** Remove the cloth from the opening in the timing case.
- Use a new gasket.
  - Tightening torque **21 Nm**
  - Install a new crankshaft front oil seal

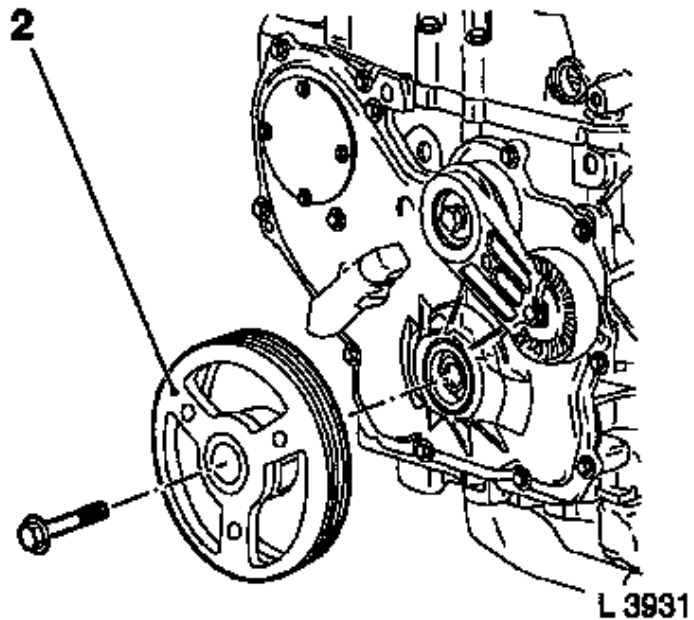
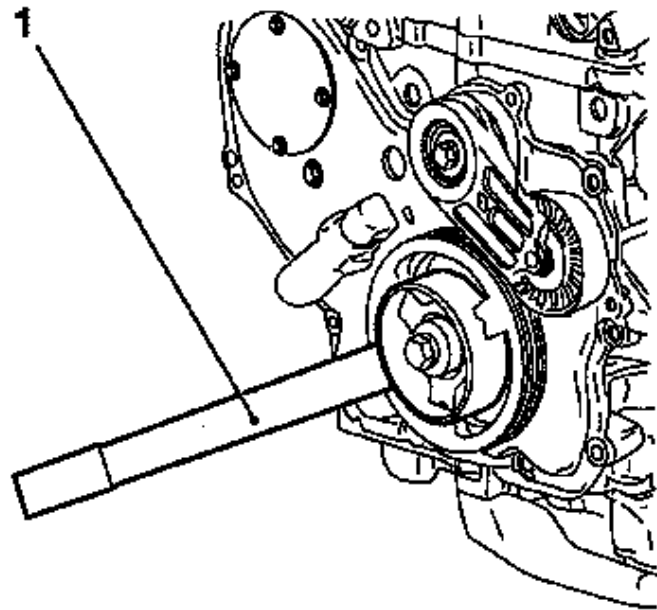
(2).

- Slide protective sleeve (1) from **KM-6105** (3) onto the connecting rod journal.
- Coat the sealing lips with silicone grease (white).
- Slide the oil seal over the protective sleeve onto the connecting rod journal.
- Use **KM-6105** to press the oil seal into the timing case.
- Use bolt (4) of the rotational vibration damper.
- Take out **KM-6105**.



L 3952

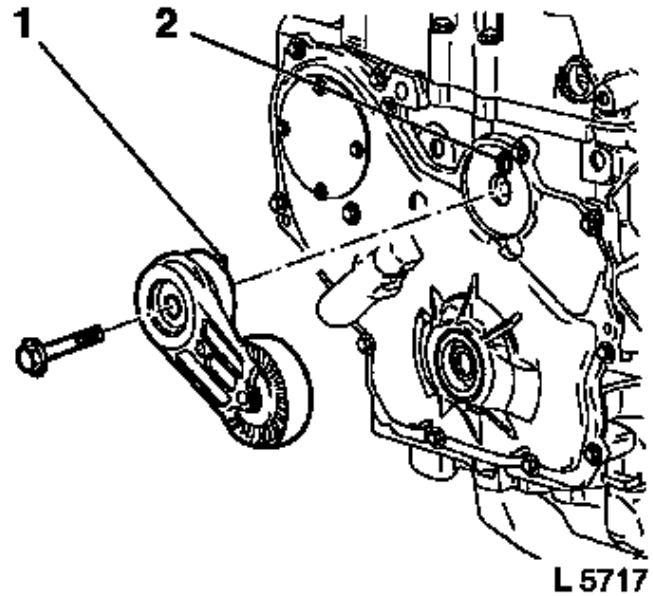
26. Raise the engine.
27. Insert the right-hand engine damping block together with the engine damping block bracket.
28. Attach the right-hand engine damping block.
  - 1 nut
    - Tightening torque **45 Nm**
29. Attach the right-hand engine damping block bracket.
  - 3 bolts
    - Tightening torque **85 Nm**
30. Attach the rear engine damping block.
  - 1 bolt, 1 nut
    - Tightening torque **86 Nm**
31. Lower the engine.
  - Take out **KM-904** with **KM-6054**.
32. Attach the bracket for the gearshift cables.
  - To the transmission
  - 1 bolt
    - Tightening torque **22 Nm**
33. Attach the rotational vibration damper (2).
  - Use holding adapter **KM-J-38122-A** in conjunction with **KM-956-1** (1) to hold.
  - Use a new bolt.
    - Tightening torque **100 Nm + 75° + 15°**



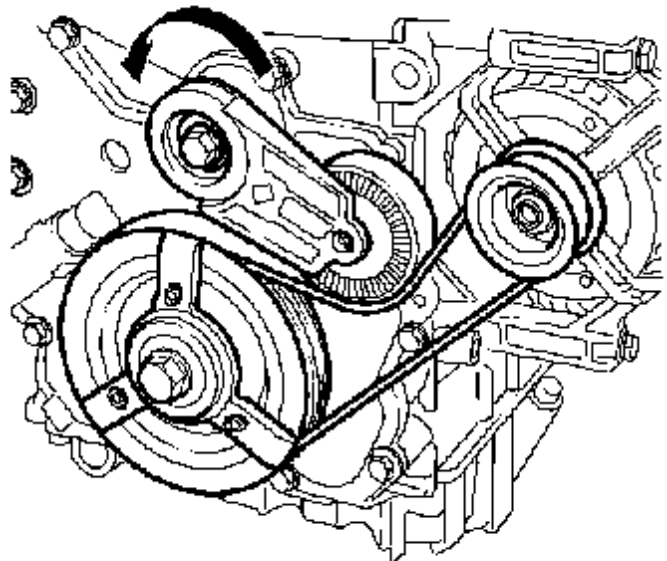
**34.** Attach the ribbed V-belt tensioner.

**Note:** The lug (1) of the ribbed V-belt tensioner engages into the bore in the timing case (2).

- Tightening torque **43 Nm**



35. Install the ribbed V-belt.
- Lay the ribbed V-belt in place.
  - **Note:** Note the running direction and installation position of the ribbed V-belt.
  - Tension the ribbed V-belt tensioner in the direction of the arrow with **KM-6151**.



36. Install the front exhaust pipe.
- Use new gaskets.
  - 6 nuts, 3 bolts
    - Tightening torque **16 Nm**
  - Hook into the mountings.
37. Install the lower engine splash shield
- 13 bolts
38. Lower the lifting ramp.
39. Install the lower heat shield.
- Tightening torque **8 Nm**

40. Fill up with engine oil and check the oil level.
41. Install the engine cover.
  - Check the alignment.
  - 6 bolts, tightening torque **14 Nm**
42. Close the engine cover.
43. Connect the battery.
44. Close the bonnet.
45. Reprogram the volatile memories.