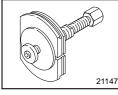
Seal – Crankshaft Front – Renew (21 467 0)

Special Tools



21-147 Remover for vibration damper

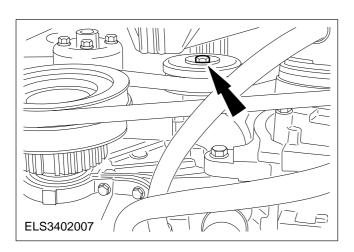
21540	21-540 Angle gauge
21168	21-168 Crankshaft immobilising tool

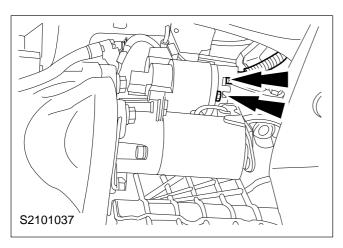
Remove

CAUTION: Disconnect the battery earth lead.

1. Standard preparatory operations

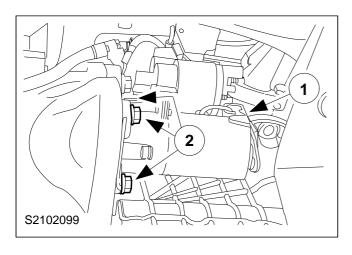
- Make a note of the radio keycode.
- Make a note of the preset radio stations.
- Detach the battery cover.
- 2. Release the tensioning pulley and remove the multi-groove belt.

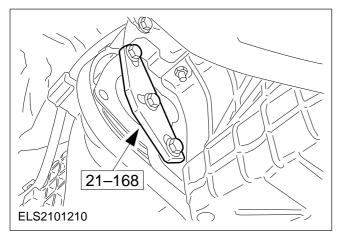


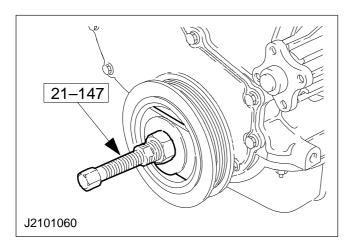


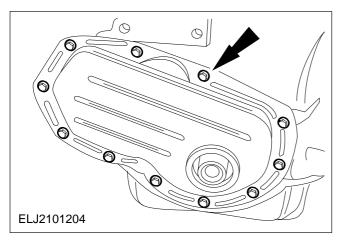
3. Remove the starter motor.

Disconnect the wiring from the solenoid.







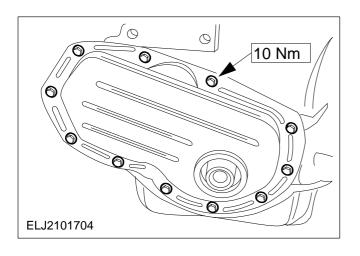


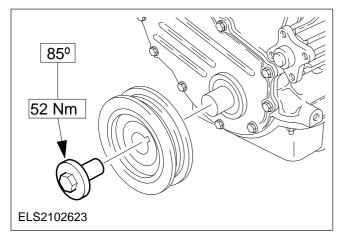
- 4. Remove the starter motor (continued).
- 1 Detach the starter motor bracket from the engine block.
- 2 Unscrew the bolts.

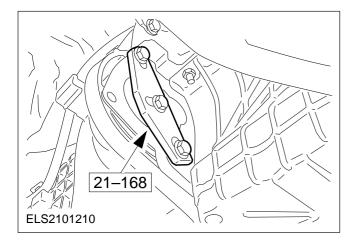
5. Fit the locking tool.

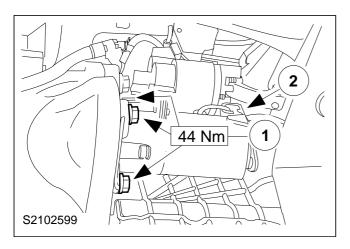
- 6. Detach the crankshaft belt pulley/vibration damper.
- Unscrew and remove the pulley bolt.
- Fit the special tool and pull out the pulley.

7. Remove the lower timing chain cover.









Install

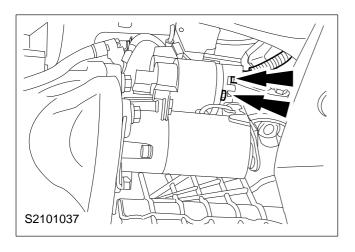
NOTE: The radial oil seal is integrated into the cover.

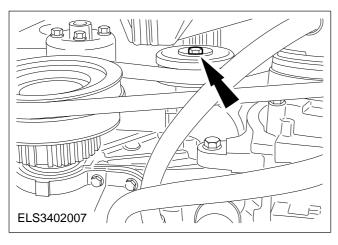
NOTE: Do not remove the centring cap until the bolts have been tightened.

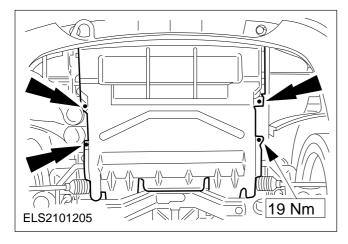
- 8. Fit a new lower timing chain cover.
- **CAUTION:** The tightening torque must be strictly adhered to. Use Special Tool 21-540.
- 9. Fit the crankshaft pulley/vibration damper.

10. Remove the immobilising tool.

- 11. Install the starter motor.
- 1 Tighten the three bolts.
- 2 Fit the starter motor bracket to the cylinder block.







12. Fit the starter motor (continued).

Attach the wire to the solenoid.

13. Release the tensioning pulley and lay the multi-groove belt in place.

- 14. Attach the engine undershield.
- 15. Lower the vehicle.

16. Standard finishing operations.

- Connect the battery earth lead.
- Fit the battery cover.
- Enter the radio keycode.
- Reprogramme the preset radio stations.
- Reset the clock.
- Carry out a road test to enable the PCM to gather data.
- Check the fluid levels and correct as necessary.