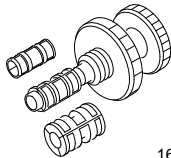
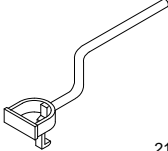
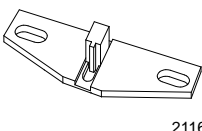
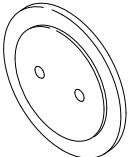
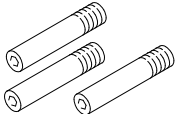
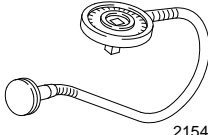


Seal – Crankshaft Rear – Renew (21 468 4)

(engine or transmission removed)

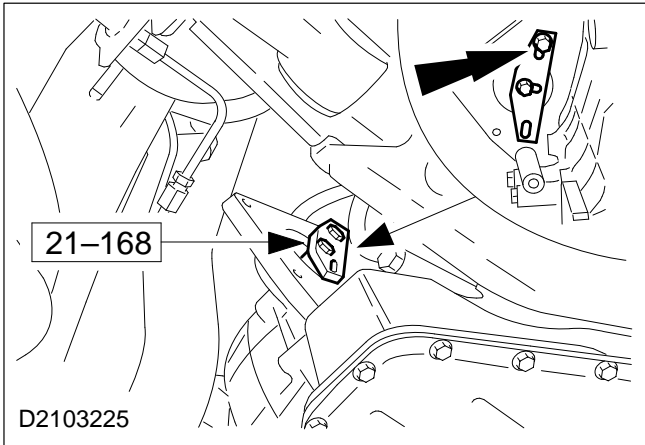
Special Tools

 16067	16-067 Locator for clutch disc
 21051	21-051 Oil seal remover
 21168	21-168 Crankshaft immobilising tool
 21176	21-176 Installer, radial oil seal

 21177	21-177 Flywheel locating studs
 21540	21-540 Bolt tightening angle gauge

Materials

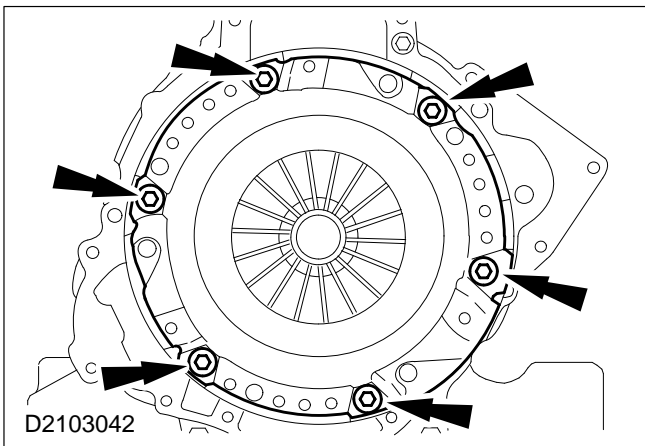
Description	
Engine Oil	SAE 15W40
Lubricant	ESD-M1C220-A



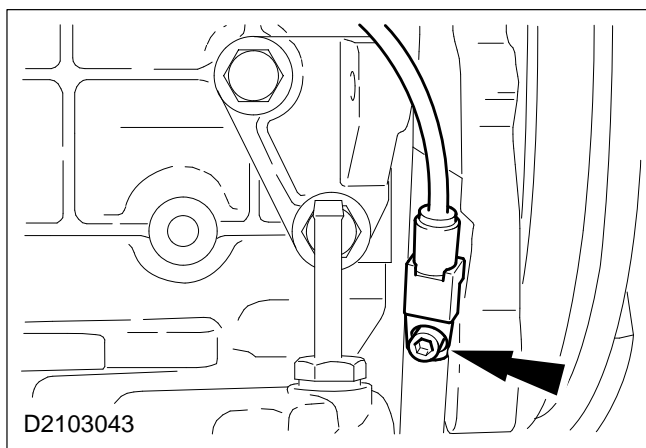
Remove

1. **Lock the crankshaft using the special tool.**

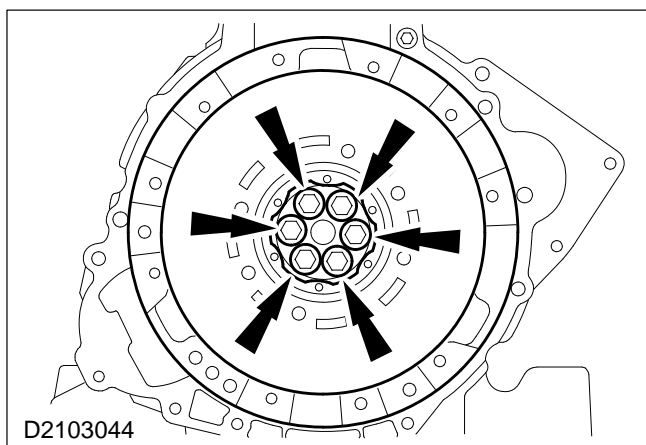
Attach the special tool at the transmission flange using a bolt.



2. **Remove the clutch.**

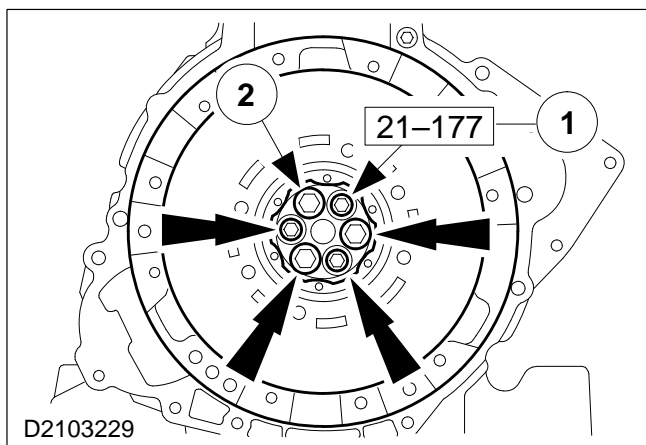


3. Remove the crankshaft position (CKP) sensor.



NOTE: Only unscrew three bolts.

4. Undo the flywheel bolts.

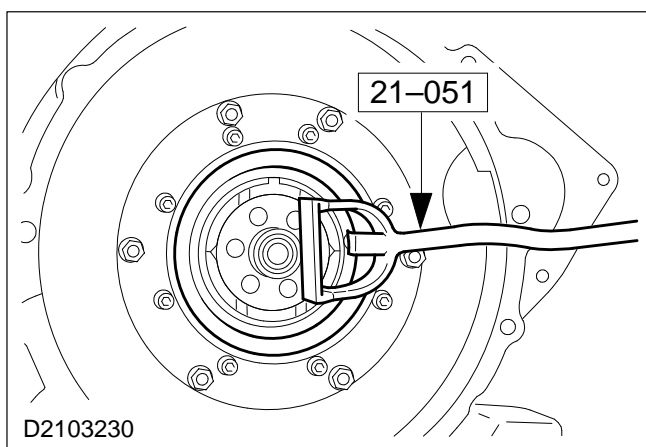


5. Remove the flywheel.

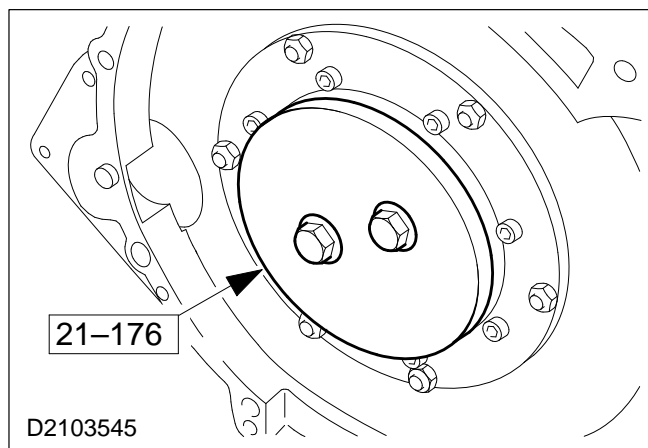
1 Screw in the guide studs.

2 Remove the three bolts.

- Take off the flywheel over the guide studs.
- Take out the guide studs.



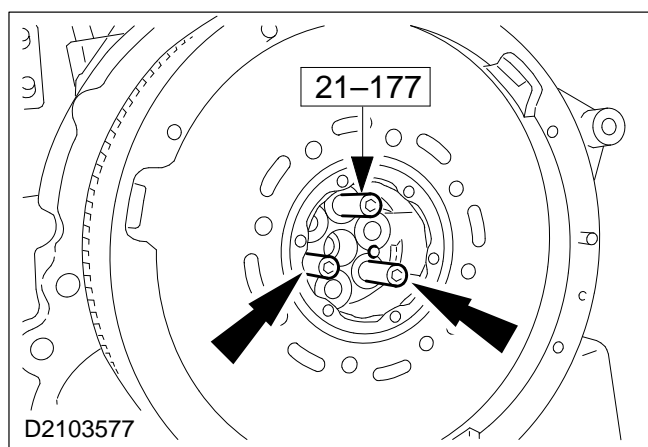
6. Remove crankshaft rear oil seal



Install

NOTE: Apply engine oil SAE 15W40 to the outer edge of the oil seal. The sealing lip must remain dry.

7. Pull the oil seal in evenly using the special tool and two flywheel bolts.

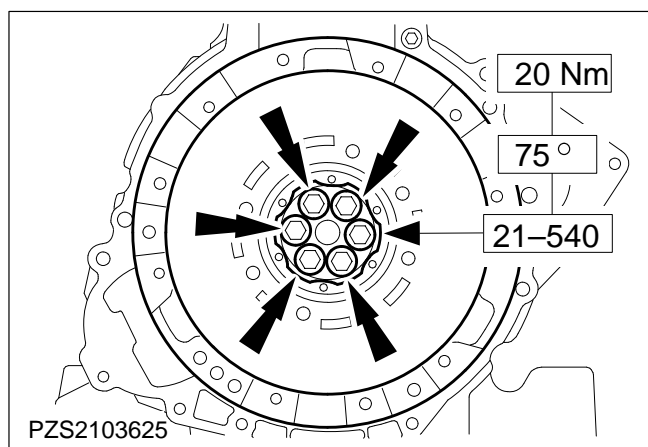


8. Install the flywheel.

- Apply lubricant (ESD-M1C220-A) to the thrust washers and lay them in the oil seal/main bearing housing with the lubricating groove facing outwards.
- Screw in the guide studs.

NOTE: The locating sleeve and hole must line up.

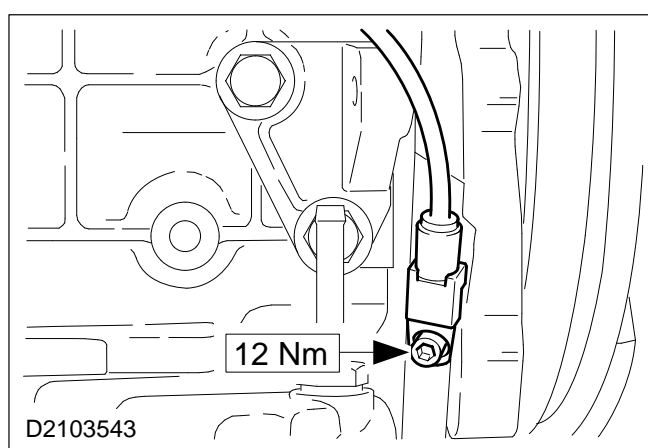
- Fit the flywheel in place using a new O-ring.
- Take out the guide studs.



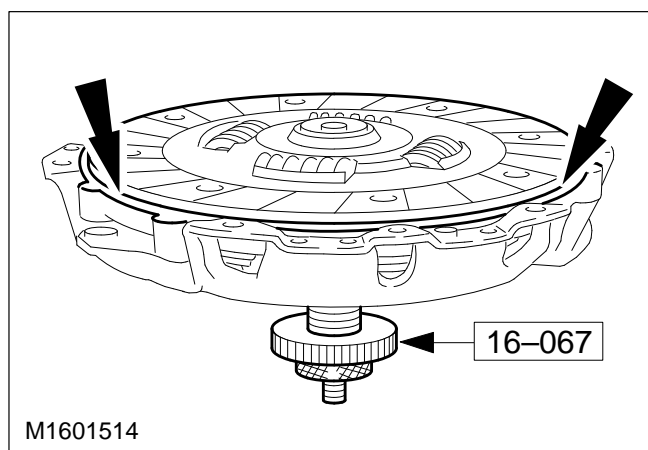
NOTE: The crankshaft is immobilised.

9. Tighten the flywheel bolts.

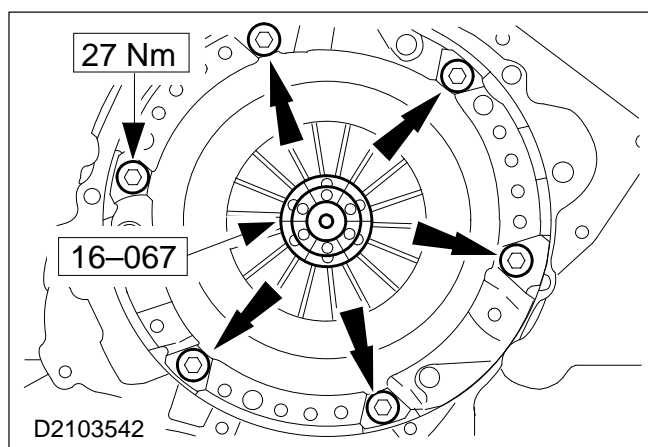
- Coat the bolts with engine oil SAE 15W40 and screw them in working diagonally.
- Tighten the bolts in two stages working diagonally.



10. Fit the CKP sensor with a new O-ring.

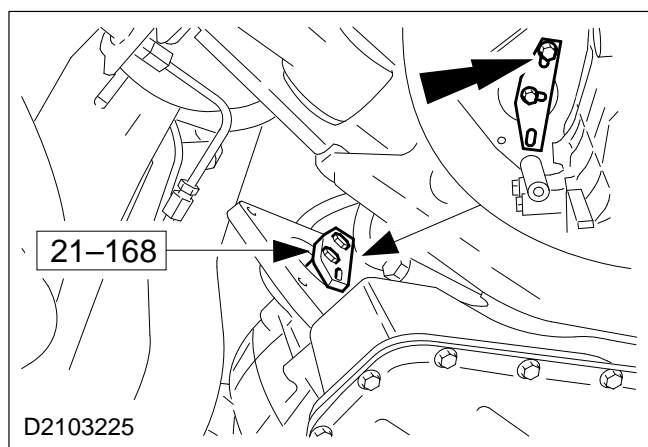


11. Centre the clutch disc on the pressure plate.



12. Fit the clutch.

- Fit the clutch pressure plate with the centred clutch disc and tighten the six bolts evenly, working diagonally.
- Remove the centring tool.



13. Remove the locking tool.