

TECHNICAL BULLETIN



MODEL/DERIVATIVE:

**Discovery Series II
Range Rover
Defender**

Bulletin N°: **0028**
CDS. ref: **L8726bu**
Issue: **1**
Date: **12.12.01**

AFFECTED RANGE:

All V8 derivatives

PROBLEM:

OIL LEAKAGE FROM REAR OF ENGINE

CAUSE:

- Leak from the rear main bearing cap side seals.
- Leak from the rear main bearing cap sealant area.
- Leak from the crankshaft rear oil seal.

ACTION:

Where a complaint of the above is confirmed, replace the rear main bearing cap side seals with the modified rear main bearing cap side seals now available from Land Rover Parts. As part of this repair the crankshaft rear oil seal should also be replaced.

Repair procedure

On manual gearbox derivatives, remove the flywheel, refer to Workshop Manual, repair number 12.53.07.


On automatic gearbox derivatives, remove the torque converter drive plate, refer to Workshop Manual, repair number 12.53.13.

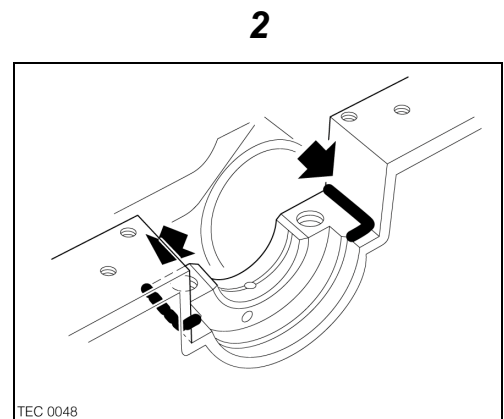
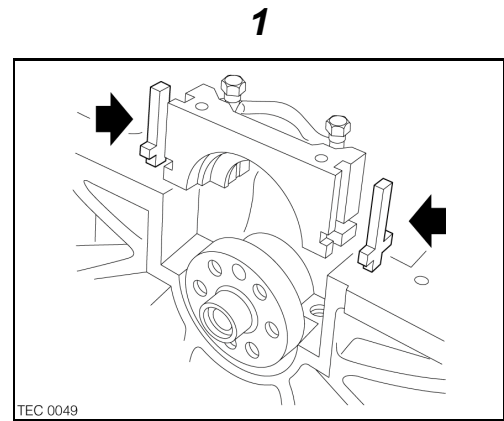
- 1. Remove the sump, refer to Workshop Manual, Engines, repair number 12.60.38.**
- 2. Remove the starter motor, refer to Workshop Manual, repair number 86.60.01.**
- 3. Remove Allen side bolts from the rear main bearing cap.**
- 4. Remove the rear main bearing cap bolts, main bearing cap and crankshaft oil seal.**
- 5. Remove the side seals from the main bearing cap.**
- 6. Carefully remove any residue sealant from the main bearing cap to cylinder block mating faces.**
- 7. Ensure seal locations and mating faces in the main bearing cap / cylinder block are clean.**

Caution: Ensure main bearing cap bolt holes in the cylinder block are clean and dry

8. Fit new side seals detailed in *PARTS INFORMATION* to the main bearing cap, (arrowed in illustration 1).
9. Apply a 3mm wide bead of sealant detailed in *PARTS INFORMATION* to the main bearing cap rear mating faces on the cylinder block, (arrowed in illustration 2).

Caution: Ensure sealant does not enter the cylinder block bolt holes.

10. Carefully locate main bearing cap into position.
11. Fit but do not tighten side bolts.
12. Initial torque - main bearing cap bolts and side bolts to 13.5 Nm.
13. Final torque - main bearing cap bolts to 92 Nm.
14. Final torque - main bearing cap side bolts to 45 Nm.
15. Fit new crankshaft rear oil seal to crankshaft, refer to Workshop Manual, repair number 12.21.20.
16. For information on camshaft oil gallery plugs and the camshaft bore cup plug, refer to Technical Bulletin  0024.
17. Refit starter motor and sump.
Refit flywheel or torque converter drive plate.



PARTS INFORMATION:

LUN000010 - Side seals - main bearing cap rear

ERR2640 - Oil seal - crankshaft rear

STC50550 - Sealant

Gasket - crankcase oil sump - refer to the Parts Microfiche / Electronic Parts Catalogue to confirm correct part number detail.

WARRANTY CLAIMS:

Use Complaint Code: 1Q4N

Discovery Series II

**Use S.R.O.: 12.21.89/33 - Crankshaft seal / side seals renew and apply sealant
Time allowance: 0.50 Hrs**

Range Rover

**Use S.R.O.: 12.21.89/33 - Crankshaft seal / side seals renew and apply sealant
Time allowance: 0.70 Hrs**

Defender

**Use S.R.O.: 12.21.89/33 - Crankshaft seal / side seals renew and apply sealant
Time allowance: 0.30 Hrs**

Camshaft oil gallery plugs

Use Complaint Code: 1A3N

**Use SRO: 12.21.89/26 Reseal both camshaft oil gallery plugs
Time allowance: 0.10Hrs**

Camshaft bore cup plug

Use Complaint Code: 1A5N

**Use SRO: 12.21.89/27 Renew camshaft bore cup plug
Time allowance: 0.10Hrs**

Use the appropriate SRO from above in addition to:

SRO 12.53.07 Flywheel renew - manual derivatives

SRO 12.53.13 Drive plate renew - automatic derivatives

Refer to Repair Times Searcher (RTS) for repair times on individual models.

Please do not return discarded parts to Land Rover.