



Service Department:

THE ROVER COMPANY LIMITED

SOLIHULL
WARWICKSHIRE
ENGLAND

LAND-ROVER SERVICE NEWS LETTER

No. 1

August, 1960

- Item 1** **SUBJECT:** **NEWS LETTER. NEW SERIES (Policy Item)**
REMARKS: As from this issue Rover Service News Letters are being divided into two parts. One will contain all Service and Parts information relating to the Car range, the other will similarly deal exclusively with the Land-Rover. The Land-Rover News Letters should be filed in the new green-plastic folder which is being despatched to you under separate cover.
- Item 2** **SUBJECT:** **ENGINE MOUNTING**
MODEL: Land-Rover 2½ litre Petrol.
MODIFICATION: Introduction of new engine feet and clutch slave cylinder mounting bracket to offset the engine to the right-hand side of the vehicle by $\frac{3}{8}$ in. (9.5 mm) in order to facilitate the assembly of the exhaust manifold heat shield.
PART NUMBERS: Engine foot assembly, front, L.H. 1 516136
 Engine foot assembly, front, R.H. 1 516133
 Support bracket for clutch slave cylinder 1 509856
COMMENCING NUMBERS: Engines numbered:
 Engine feet
 88 and 109 Petrol models from 151023740 onwards.
 Support bracket
 88 and 109 Petrol models from 151023273 onwards.
 88 Diesel models from 146002358 onwards.
 109 Diesel models from 156002148 onwards.
REMARKS: The new type engine foot assembly is not interchangeable with the previous one. When replacing engine foot assemblies, care must be taken to ensure that the correct type is fitted. The new clutch slave cylinder support bracket, however, can be used as a replacement on all Land-Rover models, both Petrol and Diesel.
- Item 3** **SUBJECT:** **CRANKSHAFT**
MODEL: Land-Rover Diesel.
PART NUMBER: Crankshaft assembly, Std. 1 247508
 or 514526
REMARKS: Pending deliveries of crankshaft assemblies Part No. 514526, crankshafts Part No. 247508 have been supplied in lieu. These crankshafts marked with a yellow band and the letter D, are suitable for use in Diesel engines and may be fitted in these models until crankshaft Part No. 514526 becomes available. They are of course also suitable for the 2½ litre Petrol models.

Item 4	SUBJECT:	CRANKSHAFT REAR MAIN BEARING OIL SEAL			
	MODELS:	Land-Rover 1955 onwards.			
	MODIFICATION:	Improved method of fitting two-piece crankshaft rear main bearing oil seal.			
	PART NUMBERS:	Molybdenum disulphide and butyl acetate	1 522648
		Silicone MS4 compound	1 270656
		Heldite jointing compound	1 522952

REMARKS: **Preparatory work.** This preparatory work is essential when fitting the seal to a new crankshaft and desirable when fitting to a crankshaft which has been in service.

To ensure efficient lubrication during the initial running-in period of the oil seal, the crankshaft oil seal journal must be treated with a mixture of molybdenum disulphide and Butyl acetate as detailed below:

1. **Thoroughly stir** the mixture immediately prior to use.
2. Degrease the crankshaft oil seal journal.
3. Paint mixture evenly on to the surface of the oil seal journal with a fine brush; alternatively, if a quantity of crankshafts are being done, it can be sprayed on with a gravity feed spray gun using 40 lb./sq. in. (2,8 kg./cm²) air-line pressure. This solution, which **must be dry** before the seal is fitted, takes approximately 10 minutes to dry, and the surface must not be scratched after treatment. On crankshafts which have been previously run the solution will take 15 minutes to dry thoroughly. A warm air stream may be used to reduce these times if necessary.

Procedure

1. Bolt the cylinder block half of the oil seal firmly on to the block by the three bolts. With five bolt fixing seals leave the two bolts adjacent to the split line loose.

Bolt the other half of the oil seal to the rear main bearing cap in the same manner.

The cap must be off the cylinder block for this assembly.

2. The groove in each half of the oil seal is to be half filled with Silicone MS4 compound, ensuring no grease reaches the split line face.
3. Apply "Heldite" jointing compound to both split line joint faces on each half of the seal. **This instruction does not apply to the three-piece type oil seal.**

The compound should be spread thinly over the surface, ensuring it reaches across the sealing lips, but must not be allowed to get onto the lips themselves. See Fig. 1. This compound must be allowed to become tacky before assembly.

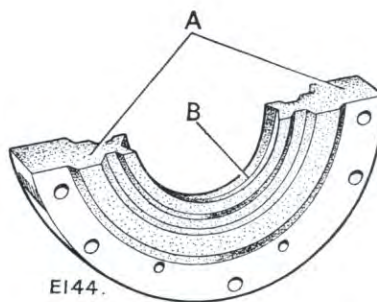


Fig. 1—Rear crankshaft oil seals.

A—Apply "Heldite" jointing compound at this face. B—Fill groove with Silicone MS4 compound.

4. Fit rear main bearing cap and tighten to the required torque.
5. Where applicable, tighten the four bolts adjacent to the split line.

- Rotate crankshaft through a small arc to prevent the jointing compound from adhering to the crankshaft.

Item 5 **SUBJECT:** **DOWEL FOR REAR MAIN BEARING OIL SEAL**

MODELS: Land-Rover 2 $\frac{1}{4}$ litre Petrol.

MODIFICATION: Introduction of longer dowels to prevent incorrect assembly of the bottom half of the rear main bearing oil seal.

PART NUMBER: Dowel, lower, fixing seal to rear main bearing cap 2 519064

COMMENCING NUMBERS: Engines numbered:
88 and 109 Petrol models from 151023331 onwards.
88 Diesel models from 146002430 onwards.
109 Diesel models from 156002234 onwards.

REMARKS: The latest type dowel can be used in any earlier 2 $\frac{1}{4}$ litre Petrol Land-Rover.

Item 6 **SUBJECT:** **O RING FOR TRANSFER GEAR CHANGE SHAFT**

MODELS: Land-Rover 88 and 109.

MODIFICATION: Introduction of a new type 'O' ring on the transfer gear change shaft to improve sealing.

PART NUMBER: 'O' ring for transfer gear change shaft 1 515572

COMMENCING NUMBERS: Gearboxes numbered:
88 and 109 Petrol models from 151024409 onwards.
88 Diesel models from 146002521 onwards.
109 Diesel models from 151024409 onwards.

REMARKS: The new type sealing ring can be used on any earlier Land-Rover model.

Item 7 **SUBJECT:** **DRIVER'S SEAT CUSHION ADJUSTMENT**

MODEL: Land-Rover Series II 88.

REMARKS: An adjustment for the driver's seat cushion inclination on Land-Rover Series II 88 models can easily be made; proceed as follows:

- Cut two triangular corner plates, using 16 SWG (1,6 mm) steel. See Fig. 2.

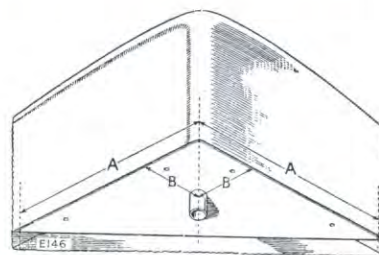


Fig. 2—Fitting corner plate to bottom front corners of seat cushion.

A—5 in. (127 mm). B—1 $\frac{1}{2}$ in. (38 mm).

- Drill four .204 in. (5 mm) diameter holes (drill No 6) and one $\frac{3}{16}$ in. (8,5 mm) diameter hole as shown at Fig. 2.
- Insert a clevis pin or bolt $\frac{5}{16}$ in. x $\frac{11}{16}$ in. (8 mm x 17 mm) in the centre hole and weld it in position.

4. Using the plate as a template, drill four .204 in. dia. (5 mm) holes (drill No. 6) in the seat cushion frame at both front corners.
5. Fix one plate to each front corner of the cushion and secure with pop rivets or drive screws.
6. Obtain a suitable block of black rubber and drill three holes $\frac{9}{32}$ in. (7,0 mm) diameter and $\frac{3}{4}$ in. (19 mm) deep as shown at Fig. 3.

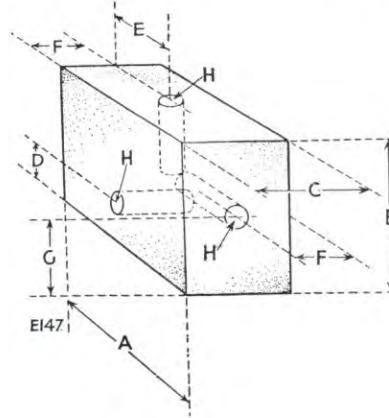


Fig. 3—Drilling rubber block.

A— $2\frac{1}{8}$ in. (54 mm).	E— $1\frac{1}{8}$ in. (27 mm).
B— $1\frac{3}{8}$ in. (41 mm).	F— $\frac{9}{16}$ in. (14 mm).
C— $1\frac{1}{8}$ in. (28,5 mm).	G— $\frac{1}{8}$ in. (21 mm).
D— $\frac{9}{16}$ in. (14 mm).	

7. Push rubber blocks over the pin on the corner plates, using one of the three holes to give the required inclination of the seat cushion.