



Service Department:

**THE ROVER COMPANY LIMITED**

By Appointment to  
Her Majesty  
Queen Elizabeth II



Manufacturers  
of Motor Cars and  
Land-Rovers

SOLIHULL  
WARWICKSHIRE  
ENGLAND

## LAND-ROVER SERVICE NEWS LETTER No 44.

June, 1964

Item 213 SUBJECT: **CYLINDER HEAD FREE SERVICE MAINTENANCE ATTENTION**  
(Policy item)

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

REMARKS: Tests have shown that if only moderate amounts of air are injected into the water system of the Land-Rover Diesel engine it is possible to air lock the cooling system. In service such conditions can be obtained should the cylinder head gasket blow to water through the triangular water passages adjacent to the hot plug. In order to reduce the chances of this occurrence it is most important that cylinder head bolt tightness should be checked at the Free Service Maintenance inspection after the vehicle has been run for approximately 1,500 miles (2,500 km).

Proceed as follows:

1. Ensure engine temperature is really hot.
2. Remove top rocker cover.
3. Disconnect feed pipe to each injector and slacken pipe at distributor pump end. Then swing pipes clear of injectors.
4. Disconnect spill pipe at rear of engine.
5. Remove injector clamping bars and lift injectors out as a complete set.
6. Check the cylinder head bolt tightness in the order indicated at Fig. 1, ensuring that all the  $\frac{1}{2}$  in. nuts and bolts are pulled down to 90 lb/ft. (12.5 mkg).

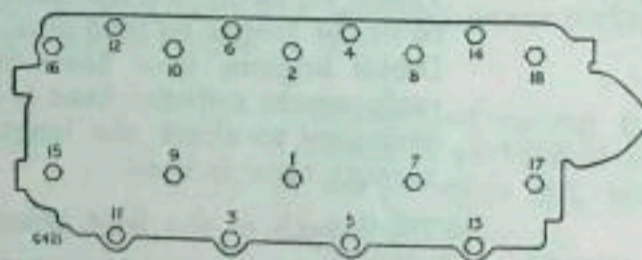


Fig. 1. Order of tightening cylinder head bolts

7. Check injectors as required.
8. Smear new injector copper joint washers with grease and fit one to each injector. Insert a new corrugated sealing washer into each injector nozzle recess in cylinder head with the raised portion upwards, then locate the injector nozzles; do not tighten the clamping bar fully at this stage. Ensure that the bottom seal washer (corrugated) is replaced correctly when refitting the injectors. See Fig. 2.

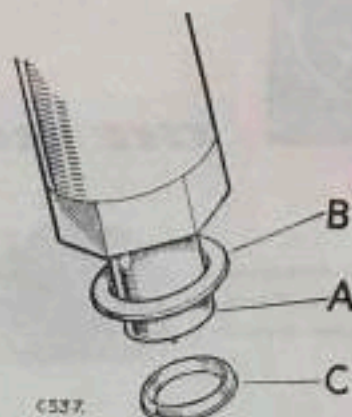


Fig. 2. Position of injector nozzle washers

A—Nozzle

B—Copper washer

C—Steel washer

9. Turn the injectors to align with the pipe, connect and tighten.
10. Tighten each clamp bar alternatively an equal amount to ensure that the injector goes into position evenly. Nuts must be tightened only to a torque figure of 6-8 lbs/ft. (0,8-1,1 mkg). Alternatively a  $\frac{1}{2}$  in. A.F. open-ended spanner of not more than 4 in. (100 mm) in length can be used. Failure to carry out the above precautions when replacing injector nozzles may result in nozzle distortion giving rise to rough and uneven running.
11. Replace top rocker cover.

It is most important that the above procedure takes effect immediately. The revised time for the free service at 1,500 miles (2,500 km) is 6 hours, 35 minutes. The various Service Publications affected by this additional work at the Free Service Maintenance attention will be modified as and when they are re-printed.

## Item 214 SUBJECT:

**CYLINDER HEAD AND OIL FEED PIPE**

## MODELS:

Land-Rover 2 and 2½ litre Diesel.

## MODIFICATION:

The oil feed boss on the current cylinder head has been repositioned to facilitate production.

## PART NUMBER:

Oil feed pipe

## REMARKS:

When replacing the cylinder head on 2 litre Diesel engines it is also necessary to fit the longer oil feed pipe, Part No. 275679. From May 1963 onwards 2½ litre Diesel engines have been fitted with the modified cylinder head. When a replacement cylinder head is fitted to early 2½ litre Diesel models it is therefore necessary to check the length of the original oil feed pipe to ensure that the correct type is used.

The length of the feed pipes are as follows:

Oil feed pipe, Part No. 274500, overall length 10 in. (25 cm).

Oil feed pipe, Part No. 275679, overall length 10½ in. (26,2 cm).

1 275679

## Item 215 SUBJECT:

**GEARBOX AND AXLES**

## MODELS:

Land-Rover Series II and IIA, Regular and Long.

## REMARKS:

In view of the number of modifications which have taken place on various major assemblies we feel that some advice may be necessary concerning the replacements required for the various parts involved.

Major changes to the gearbox and axles are detailed below:

**AXLE, FRONT**

**Changes**

**Remarks**

1. From pendant type ball joints to non-pendant type.

See Land-Rover News Letter No. 11.

Pendant type ball joints applicable to all 1958-60 models inclusive and early 1961 up to axles numbered

141107338	88 R.H.D.	} Series II
144104519	88 L.H.D.	
151108874	109 R.H.D.	
154103274	109 L.H.D.	

Non-pendant ball joints applicable to 1961 models from axles numbered

141107339	88 R.H.D.	} Series II
144104520	88 L.H.D.	
151108875	109 R.H.D.	
154103275	109 L.H.D.	

and to all later models.

2. From  $\frac{3}{8}$  in. studs for swivel pin and steering lever to  $\frac{7}{16}$  in. studs

See Land-Rover News Letters No. 18 and 19.

$\frac{3}{8}$  in. studs applicable to all 1958-61 models inclusive and early Series IIA up to axles numbered

24101875	88 R.H.D.	} Series IIA
24403549	88 L.H.D.	
25101785	109 R.H.D.	
25400866	109 L.H.D.	

$\frac{7}{16}$  in. studs applicable to Series IIA models from axles numbered

24101876	88 R.H.D.	} Series IIA
24403550	88 L.H.D.	
25101786	109 R.H.D.	
25400867	109 L.H.D.	

and to all later models.

3. From cone and spring type damping to bush and thrust washer type.

See Land-Rover News Letters No. 21 and 25.

Cone and spring type damping applicable to all 1958-61 models inclusive and early Series IIA models up to axles numbered

24109240	88 R.H.D.	} Series II
24405088	88 L.H.D.	
25107785	109 R.H.D.	
25404199	109 L.H.D.	

Bush and thrust washer type damping applicable to Series IIA models from axles numbered

24109241	88 R.H.D.	} Series IIA
24405089	88 L.H.D.	
25107786	109 R.H.D.	
25404200	109 L.H.D.	

and to all later models.

4. From standard type differential to 35% strengthened type.

See Land-Rover News Letter No. 42. Forward Control models have been fitted with strengthened type differentials from commencement of production.

Standard type differential applicable to all Series II models and Series IIA models with

Axle serial number with suffix letter 'A'

35% type differential applicable to all Series IIA models with:

Axle serial number with suffix letter 'B'

## AXLE, REAR

### Changes

1. From standard type differential to 35% strengthened type.

### Remarks

See Land-Rover News Letter No. 42. Forward Control models have been fitted with strengthened type differentials from the commencement of production.

Standard type differential applicable to all Series II models and Series IIA models with

Axle serial number with suffix letter 'A'

35% type differential applicable to all Series IIA models with

Axle serial number with suffix letter 'B'

## GEARBOX

### Changes

1. Introduction of increased diameter layshaft and intermediate shaft for transfer box.

### Remarks

See Land-Rover News Letter No. 26. Forward Control models have been fitted with increased diameter layshaft and intermediate shaft from the commencement of production.

1¼ in. diameter intermediate shaft applicable to all Series II models and Series IIA models with

Gearbox serial number with suffix letter 'A'

1½ in. diameter intermediate shaft applicable to all Series IIA models with

Gearbox serial number with suffix letters 'B' and 'C'

2. Introduction of revised gear ratios to give improved performance

See Land-Rover News Letter No. 32 for Forward Control 2¼ litre models and News Letter No. 38 for Regular and Long models.

Forward Control 2.6 litre models have been fitted with revised ratio gearboxes from the commencement of production.

Early gear ratios applicable to all Series II models and Series IIA models with

Gearbox serial number with suffix letters 'A' and 'B'

Late gear ratios applicable to all Series IIA models with

Gearbox serial number with suffix letter 'C'

**Item 216 SUBJECT: FRONT PROPELLER SHAFT LUBRICATION**

MODELS: Land-Rover Series IIA.

MODIFICATION: Deletion of grease nipple and breather hole in end cover, to ensure increased life of the splined joint.

PART NUMBER: Propeller shaft, front ..... 1 540843

REMARKS: Lubricate the propeller shaft every 39,000 miles (65,000 km) as follows, using one of the recommended lubricants listed in the Owners' Instruction Manual.

1. Disconnect one end of the propeller shaft.
2. Remove plug and fit a suitable grease nipple.
3. IMPORTANT: Compress propeller shaft at sliding joint to avoid overfilling and apply grease.
4. Replace grease nipple with plug and reconnect propeller shaft.

The latest type propeller shaft can be fitted to all earlier Series II and IIA Land-Rovers.

NOTE. The rear and power take-off propeller shafts should still receive lubrication attention as detailed in the Maintenance Schedule Book.

**Item 217 SUBJECT: FRONT ROAD SPRINGS**

MODELS: Land-Rover Series IIA.

PART NUMBERS: Road spring, front ..... 2 241283 88 Petrol models  
Road spring, front ..... 2 265627 109 Petrol models and 88 Diesel  
Road spring, front ..... 2 276034 109 Diesel models

REMARKS: The driver's side higher camber front springs are now fitted for both driver's and passenger's side, to eliminate handed front springs. The driver's side spring can be used as a replacement for the passenger's side spring on all earlier Land-Rovers, as applicable, from 1954 onwards.

**Item 218 SUBJECT: BOTTOM POWER TAKE-OFF, MECHANICAL DRIVE**

MODELS: Land-Rover Series II and IIA.

PART NUMBER: Bottom power take-off complete assembly, mechanical drive .... 1 600485

REMARKS: Bottom power take-off kits with mechanical drive and complete with detailed fitting instructions are now available from our Parts Department.

The bottom power take-off has a separate engagement and can be used to drive a small compressor or alternator when the existing centre power take-off is in use for some other equipment. It is fitted to the underside of the transfer box and replaces the bottom cover plate of this unit.

For details of a bottom power take-off unit with hydraulic pump drive see Land-Rover News Letter No. 36, item 180.