



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 Vol. 2 No. 6

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Item 16 SUBJECT: **ENGINE FEET**

MODELS: Land-Rover 2¼ litre petrol and diesel.

MODIFICATION: Introduction of spring washers replacing the lock washers previously used to fix the engine mounting feet to the cylinder block.

PART NUMBERS: Spring washer, fixing engine feet to cylinder block 4 3078

REMARKS: When the spring washers are used to fix the engine mounting feet to the cylinder block, it is important that the bolts are tightened to a torque figure of 80 lb/ft (11,0 mkg).

Item 17 SUBJECT: **THERMOSTAT**

MODELS: Land-Rover petrol and diesel.

REMARKS: It is most important, in the interests of fuel economy and the avoidance of cylinder bore wear, not to remove the thermostat from Rover engines. When starting from cold with the thermostat removed, the water flows freely through the radiator - this allows cold water to circulate through the engine; the results are:

1. With low ambient air temperatures the engine will never get really warm.
2. Excessive use of the choke will be necessary, which of course, leads to oil dilution and cylinder bore wear.
3. A cold running engine is prone to condensation in the cylinders which again leads to cylinder bore wear.

Item 18 SUBJECT: **FUEL SYSTEM**

MODEL: Land-Rover diesel.

REMARKS: Messrs. Shell-Mex and BP Ltd. advise us that a new oil known as Shell Calibration Fluid has been introduced for use when testing fuel injection equipment. The new oil replaces Shell Fusus 'A', which has been commonly used for this purpose for many years in controlled viscosity form.

Shell Calibration Fluid has been specially prepared for use with fuel injection equipment. It contains corrosion and oxidation inhibitors and its viscosity characteristics are identical with those of the special Fusus 'A' previously supplied. Fusus 'A' will continue to be supplied as a burning oil, but as it will no longer be supplied in controlled viscosity form it must not in any circumstances be used when testing fuel injection equipment.

Distributors and Dealers are requested to ensure that all personnel concerned in fuel injection pump testing are aware of this change.

Item 19 SUBJECT: AXLE SHAFTS

MODELS: Land-Rover Series I, II and IIA. Regular, Long and Forward Control.

REMARKS: The identification chart detailed below has been prepared to assist Distributors and Dealers in the correct ordering and stocking of the various fully-floating type rear axle shafts currently used on Land-Rover models.

Superseded part numbers are shown for reference.

In every case the current and superseded part numbers are completely interchangeable.

Current Part No.	Location	Superseded Part Nos.	Models	Identification	Overall length	Remarks
556110	RH rear	273385	Series I 109 from axles numbered 121704770 and 131701305 onwards. Optional equipment on 88	EN 24 material Stamped '375' on splined end of shaft	RH shaft $27\frac{7}{32}$ in. (640 mm) LH shaft $34\frac{1}{8}$ in. (866 mm)	
556111	LH rear	273386				
556108	RH rear	276318 507681 512821	Series II and IIA. Up to and including axles with serial suffix letter 'A'	Stamped '375' on splined end of shaft	RH shaft $25\frac{63}{64}$ in. (660 mm) LH shaft $34\frac{55}{64}$ in. (885 mm)	Standard type axle shafts for use with standard type differential unit
556109	LH rear	276319 507681 512822				
549495	RH rear	522568 533775 539736	Series IIA basic models from axle serial suffix letter 'B' onwards and all Forward Control models with Rover type axle	EN 24 material Stamped '415' on splined end of shaft Outer end of shaft threaded	RH shaft $25\frac{63}{64}$ in. (660 mm) LH shaft $34\frac{55}{64}$ in. (885 mm)	25% strengthened axle shafts for use with 35% strengthened differential unit. For identification of Rover and ENV axles see illustration below
549496	LH rear	522569 533776 539737				
533579	RH rear	—	Forward Control with ENV axles	Circlip groove on outer end of shaft	RH shaft $26\frac{9}{16}$ in. (674 mm) LH shaft $32\frac{1}{8}$ in. (736 mm)	For identification of Rover and ENV axles see illustration below
533580	LH rear	—				

Special Note: The 25% strengthened axle shafts, Part Numbers 549495/6, must not be used to replace axle shafts, Part Numbers 556108/9, unless it is known that a differential unit of 35% increased capacity has been fitted. See Land-Rover Service News Letter, Vol. 1, No. 42, Item 207.

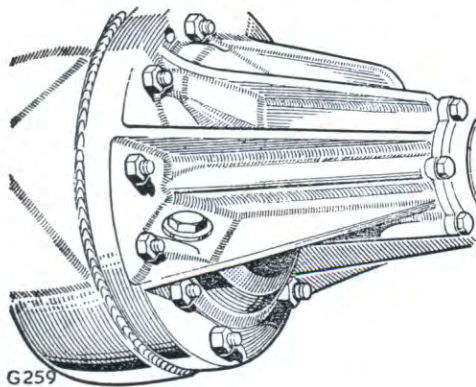


Fig. 1. Rover type pinion housing

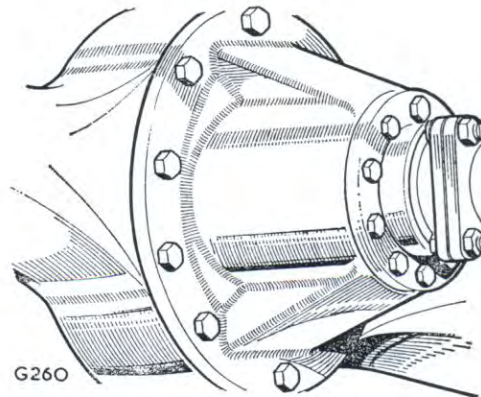


Fig. 2. ENV type pinion housing

Item 20 **SUBJECT:** **BRAKE SYSTEM**

MODEL: Land-Rover Forward Control.

REMARKS: Difficulty has been experienced in the past, when bleeding the brake system on Forward Control models.

 The following procedure has been found to give the best and most consistent results, and supersedes the instructions given in the Owner's Manual.

 When pumping fluid through the system, the pedal should be depressed smartly and released slowly, at all times.

1. Slacken the adjustment fully off all brake shoes.
2. Commence bleeding in the normal manner, beginning with the servo unit.
3. Bleed the wheel cylinders in the following order:
 - (a) Left hand rear.
 - (b) Right hand rear.
 - (c) Left hand front.
 - (d) Right hand front.
4. Re-bleed the servo unit.
5. Pump brake pedal until rear shoes are in firm contact with the brake drums.
6. While holding pedal depressed, adjust rear cam adjusters up to the shoes.
7. Release pedal and slacken rear adjusters until shoes just clear the drums.
8. Adjust front shoes in the normal manner.

Item 21 **SUBJECT:** **VOLTAGE REGULATOR**

MODELS: All.

REMARKS: Your attention is drawn to the importance of correct earthing of the voltage regulator; a great deal of the trouble that exists with the charging system can be attributed to poor earthing and this should therefore be one of the first points to check. Cases of poor earthing of the regulator box can often be due to the shake-proof washer on the earthing terminal being fitted in the wrong position.

 This washer should be fitted between the terminal eyelet and the head of the drive screw and NOT between the terminal and the engine bulkhead.

Item 22 **SUBJECT:** **REVERSE LAMP**

MODELS: Land-Rover Series II and IIA, except Forward Control.

PART NUMBERS: Reverse lamp kit 1 601581

REMARKS: A reverse lamp kit for the Land-Rover, comprising two lamps, an illuminated knob-type switch, wiring and a detailed Fitting Instruction is now available from our Parts Department.

 The twin lamps give excellent rearward illumination and we feel this optional equipment will be of particular interest to many Land-Rover Owners.