



Service Department:

THE ROVER COMPANY LIMITED

SOLIHULL
WARWICKSHIRE
ENGLAND

**LAND-ROVER SERVICE NEWS LETTER
No. 22**

May, 1962

Item 108 SUBJECT: APPROVED LUBRICANTS (Policy Item)

MODEL: Land-Rover.

REMARKS: Tractor Oil Universal, which is a special 20W/30 multigrade oil marketed by both Shell and B.P., is approved for use in the Land-Rover, under temperate conditions, that is where operational temperatures vary between approximately 10°F (minus 12°C) and 90°F (32°C) in the following applications.

Engine, petrol and Diesel models

Gearbox

Front axle

Rear axle

This approval is given primarily for those fleet owners who may already be using Tractor Oil Universal in other applications and will thus have an opportunity to further rationalise their oil stocking commitments.

Item 109 SUBJECT: SERVICE SCHOOL FACILITIES (Policy Item)

MODELS: Land-Rover Series II and IIA.

REMARKS: Courses are operated throughout the year and cover the following subjects:

1. Land-Rover Vehicle Course (includes Petrol Engine)
2. Land-Rover Diesel Engine Course
3. Sales Course

The courses operate from 9 a.m. Monday to mid-day Friday (with the exception of the Sales Course, which operates from 9 a.m. Monday to 5.0 p.m. Wednesday, also the Diesel Course which commences 9 a.m. Tuesday).

Special Note.—If a combined Car and Land-Rover Sales Course is required, this continues until mid-day on Friday.

Application Forms and a complete syllabus can be obtained from the Service School, The Rover Company Ltd., Solihull, Warwickshire, England.

We would remind Distributors and Dealers that adequate training of Service Personnel is a requirement of the Trading Agreement.

Item 110 SUBJECT: DRAINING OF OILS FROM UNITS RETURNED TO WORKS (Policy Item)

REMARKS: All concerned are asked to make a special point of ensuring that Engines, Gear-boxes, etc., are drained of oil before being sent back to us. Several incidents have occurred where employee's clothing has been damaged due to oil being left in the units.

Whenever it is desirable for technical reasons to have lubricant returned for examination it should be drawn off, put in a suitable container and properly labelled.

Item 111 SUBJECT: STUDS FOR CYLINDER HEAD

MODEL: Land-Rover 2 litre Diesel.

PART NUMBER: Stud for cylinder head 2 518466

REMARKS: It has been found that where trouble has been experienced with leaks from the cylinder head gasket on Land-Rover 2 litre Diesel engines, a cure can usually be effected by tightening the cylinder head bolts and nuts to a torque figure of 80 lb ft. (11 mkg).

This tightening torque figure can only be used providing the existing cylinder head studs are removed and replaced by the rolled thread type of stud, part number 518466, as used on the 2½ litre Diesel engine.

The latest type stud, part number 518466, can be identified by the drill point at each end.

Item 112 SUBJECT: AUTOMATIC ALTITUDE CORRECTOR

MODELS: Land-Rover Series II and Series IIA.

PART NUMBER: Automatic altitude corrector Solex B 13759/130 1 531984

REMARKS: Stocks of an automatic altitude corrector for use on Land-Rover Series II and Series IIA models are now available from our Parts Department. The altitude corrector, which is fitted in place of the main jet and main jet carrier, see Fig. 1 below, gives improved performance and fuel economy, when the Land-Rover is being used at high altitudes. This is particularly so when operating at greatly varying altitudes.

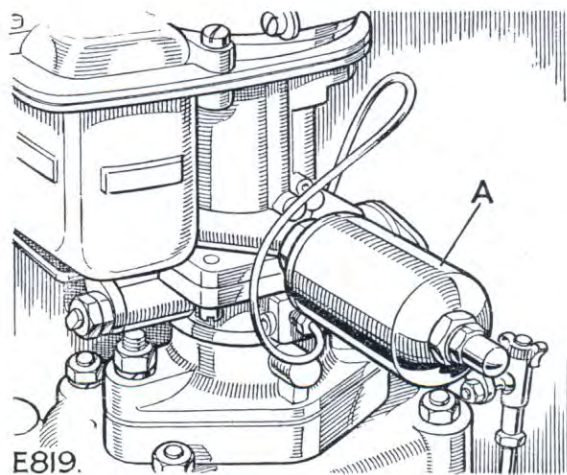


Fig. 1—Altitude corrector in position.

A—Altitude corrector

- Item 113** SUBJECT: **STEERING RELAY LEVER, LOWER**
 MODELS: Land-Rover Series IIA.
 MODIFICATION: Re-introduction of a steering relay lever, lower, with the ball joint in the pendant position.
 PART NUMBER: Steering relay lever, lower 1 535286
 REMARKS: The effect of this change is to reduce the angle of the steering drag link, which gives improved geometry and reduces any tendency to steering wheel "kick".
 The latest type steering relay lever can be used as a service replacement on all Land-Rover models from 1954 onwards.

- Item 114** SUBJECT: **COOLING SYSTEM**
 MODELS: Land-Rover.
 REMARKS: We feel that in many instances the reason for the use of a pressurized cooling system is insufficiently understood. It is not unknown for Land-Rovers to be run with the radiator cap off, under the mistaken impression that this procedure will increase cooling efficiency.
 The cooling system on the Land-Rover is pressurized to 9 lb./sq.in. (0,6 kg/cm²) to increase the boiling point of the water; 9 lb. pressure increases the boiling point of water at sea level by about 36 degrees Fahrenheit; this higher boiling point prevents excessive water loss due to evaporation and gives a wider range of running temperature for the engine.
It cannot, therefore, be emphasized too strongly that under all operating conditions the radiator cap must be firmly secured; also ensure that the sealing washer is in good condition and making an efficient seal, thus preventing any water loss at this point.
 Always remember when removing the filler cap from a pressurized system, first turn it anti-clockwise to the stop and allow all pressure to escape, before pressing it down and turning further in the same direction to lift it off.
 The correct water level on the Land-Rover is approximately $\frac{1}{2}$ to $\frac{3}{4}$ in. (12 to 19 mm) below the bottom of the filler neck.

- Item 115** SUBJECT: **FAN COWL**
 MODELS: Land-Rover Series IIA 2 $\frac{1}{4}$ litre Petrol.
 MODIFICATION: Introduction of a steady strip for the fan cowl to eliminate vibration of the cowl against the engine front cover on Land-Rover petrol models only.

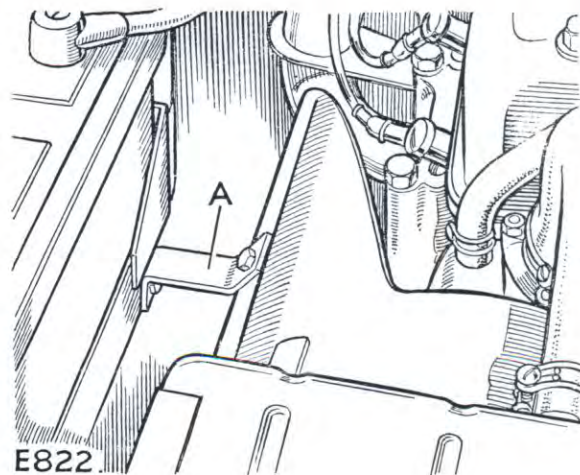


Fig. 2—Location of fan cowl steady strip.

| | | | | |
|---------------|--|-------------------|---|--------|
| PART NUMBERS: | Steady strip for fan cowl | | 1 | 531332 |
| | Bolt ($\frac{1}{4}$ in. UNF x $\frac{5}{8}$ in. long) | | 1 | 255206 |
| | Spring washer | | 1 | 3074 |
| | Nut ($\frac{1}{4}$ in. UNF) | | 1 | 254810 |
| | | } Fixing | | |
| | | } steady strip to | | |
| | | } fan cowl shroud | | |

REMARKS: The steady strip can be fitted to any earlier Land-Rover Series IIA petrol model as shown in Fig. 2.

Item 116 SUBJECT: SHACKLE PIN, REAR END OF REAR SPRING

MODEL: Land-Rover Series II and IIA.

PART NUMBER: Shackle pin, rear end of rear spring 4 236969

REMARKS: Shackle pins, Part Number 236969, are supplied by two different manufacturers. One manufacturer identifies the bolts by the letters "TWL" embossed on the head, and the bolts from the other manufacturer are not identified in any way.

It has been found that the bolts which are not identified in any way will give a satisfactory service life under normal conditions, but are liable to failure under arduous conditions of service.

Will Distributors and Dealers therefore, please arrange to check all stock of shackle pin, part number 236969, and scrap out any which are not identified by the letters "TWL".

Future supplies of the shackle pin will be of the type which have proved to be satisfactory under all operating conditions and will be identified by the letters "TWL" embossed on the head of the bolt.

Item 117 SUBJECT: HIGH RATE SUSPENSION

MODELS: Land-Rover Series II and IIA '109'

REMARKS: There appears to be some misunderstanding concerning the information given in Land-Rover News Letter No. 17, Item 90, on the subject of heavy duty suspension as applicable to the Land-Rover '109' models.

We feel that in this application a better description would be "High Rate Suspension." The reason is that the high rate suspension used on the '109' allows the Land-Rover to be operated under adverse conditions without the same danger of spring breakage and shock absorber failure that may be troublesome with the standard suspension under these conditions. However, because of other considerations on the '109', that is bump rubber position, etc., the high rate suspension does not allow an increase of the load carrying capacity for these models as it does with the '88' model.

Item 118 SUBJECT: ENGINE SPEED GOVERNOR

MODELS: Land-Rover Series IIA $2\frac{1}{4}$ litre petrol

MODIFICATION: Introduction of an engine speed governor which is suitable for Land-Rover Series IIA petrol models with raised water pump and C.40 dynamo.

PART NUMBERS: Engine speed governor conversion kit 1 534031 Series IIA $2\frac{1}{4}$ litre petrol
Quote E1219 on Sales Order when Engine speed governor is required as original equipment on a new vehicle.

REMARKS: The engine speed governor conversion kit, which is complete with detailed fitting instructions, is now available from our Parts Department. It should be noted that this kit is applicable only to Series IIA $2\frac{1}{4}$ litre petrol models.