

Rev. 22/9/66. AM  
C.D. BOLGER



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. 11**

July 1966

**Item 37** SUBJECT: **RECOMMENDED LUBRICANTS (Policy item)**

MODELS: Land-Rover Petrol models

REMARKS: Castrol XL is officially recommended by the Rover Company for use in their products in lieu of Castrolite, as detailed in our Service literature.  
Castrol XL is a multigrade oil suitable for all countries and all temperature ranges. Reference to the new oil will be incorporated in the various publications affected as and when they are reprinted.  
**IMPORTANT.** Castrol XL applies only to Petrol models. Use Castrol CR oils as listed in our current publication for Diesel models.

**Item 38** SUBJECT: **APPROVED LUBRICANT (Policy item)**

MODELS: Land-Rover Petrol models.

REMARKS: BP Super Visco-static Oil is officially approved as an alternative to the BP oils already recommended or approved by the Rover Company.  
It should be noted that the BP Super Visco-static Oil will only be available in the United Kingdom for the time being.  
**IMPORTANT.** BP Super Visco-static Oil applies only to Petrol models. Use the BP grades as listed in our current publications for Diesel models.

**Item 39** SUBJECT: **PISTON RINGS**

MODEL: Land-Rover Series IIA Diesel.

PART NUMBER: Three-piece oil control ring .. .. . 4 601703

REMARKS: Three-piece oil control rings are approved by the Rover Company for the purpose of fitting to the Land-Rover 2½ litre diesel engine. This applies where a complaint of excessive oil consumption is received, in a vehicle that has registered a relatively low mileage.  
This ring should be fitted on the top oil control ring groove, whereas the bottom ring groove should remain empty.  
Before assuming that the piston rings are at fault, it would be advisable to conduct the checks (A), (B) and (C) as detailed in Land-Rover News Letter Vol. 1 No. 34, Item 172.

**Item 40 SUBJECT: STARTER MOTOR**

MODELS: All Land-Rovers.

REMARKS: In cases where failure of the starter motor or starter solenoid occurs, due to water entry or high humidity, it is recommended that the units should be coated with Neoprene N700A before refitting to the engine.

Preventative maintenance may be taken by coating the starter units of new vehicles by the same process. The following instructions cover the application of liquid Neoprene N700A maintenance coating to metals. The surfaces should be cleaned free of all rust or other corrosion products and then one coat of primer should be applied by brush as soon as possible. No thinning of the primer is required and an even coat is easily applied. The primer should be allowed to dry for at least two hours before the application of Liquid Neoprene N700A. Liquid Neoprene N700A can be applied by brush. The material should be used as supplied with no extra thinning. A wet brush should be used at all times and brushing out after application should be reduced to a minimum. The aim should be to lay on the coating and avoid any further 'scrubbing action' on the freshly applied film.

A minimum thickness of 0.005 in. should be used for all applications; this should be achieved with primer plus two coats of N700A.

A drying time of 30 minutes between coats of N700A is all that is required. It is essential not to leave more than 16 hours between coats to ensure maximum bonding and fusion of the entire coating.

All equipment should be cleaned with the solvent, N450/11. The coated surfaces can be put into use after 24 hours' air-drying. The coating will, however, continue to cure for about two weeks, during which time its resistance to corrosion and abrasion increases to its maximum.

Liquid Neoprene is a self-vulcanising product and, as such, has a limited storage life of nine to twelve months. No attempts should be made to thin with solvents any N700A which has gelled or unduly thickened due to prolonged storage.

If difficulty is experienced in obtaining Prodorite Neoprene N700A, then one of the offices of the Company listed below should be contacted, or Technical Service Department, Solihull.

**Head Office**

Eagle Works  
Wednesbury, Staffs

**New Zealand**

J. H. M. Carpenter Ltd  
Newmarket, Auckland SE1

**Australia**

Prodorite (Australia) (Pty) Ltd  
Melbourne C1

**South Africa**

Prodorite (South Africa) (Pty) Ltd  
Johannesburg

**France**

Societe L'Anti-Corrosion  
Paris 8e

**India**

Coromandel-Prodorite Pte Limited  
Madras

**Japan**

The Kawakami Trading Co Ltd  
Chiyoda-ku-Tokyo

**Argentina**

Schori Argentina FA1C  
Chascornus 5975, Buenos Aires

**Item 41 SUBJECT: CLUTCH PIPING**

MODELS: Land-Rover 88, 109 and Station Wagon. Petrol and Diesel LHD only.

MODIFICATION: Introduction of larger diameter hydraulic piping to reduce hydraulic drag during operation in very low temperature conditions.

PART NUMBERS:	Clutch jump box mounting bracket	..	..	..	..	..	..	1	552092
	Pipe complete, clutch master cylinder to hose	..	..	..	..	..	..	1	552026
	Hose, clutch slave cylinder	..	..	..	..	..	..	1	552057
	Gasket, adaptor to master cylinder	..	..	..	..	..	..	1	233220
	Adaptor, pipe to master cylinder	..	..	..	..	..	..	1	512650
	Shakeproof washer	..	..	..	..	..	..	1	512651
	Bulkhead nut	..	..	..	..	..	..	1	216912
	Gasket, banjo to hose and to slave cylinder	..	..	..	..	..	..	2	216914
	Banjo, hose to slave cylinder	..	..	..	..	..	..	1	538068
	Gasket, banjo to slave cylinder	..	..	..	..	..	..	1	233220
	Banjo bolt, banjo to slave cylinder	..	..	..	..	..	..	1	512235
	Clip for clutch and brake pipe	..	..	..	..	..	..	2	50639

REMARKS: Where vehicles are operating in extremely cold conditions the hydraulic fluid in the pipelines becomes viscous and this condition, combined with a small diameter pipe, has the effect of slowing down the clutch re-engagement period, after the pedal has been released, thereby reducing the life of the clutch centre plate. To ensure a more rapid flow of the hydraulic fluid, the pipe connecting the clutch master cylinder to hose is now  $\frac{1}{4}$  in. (6,0 mm) outside diameter in place of the  $\frac{3}{16}$  in. (4,0 mm) diameter pipe used previously.

**Item 42 SUBJECT: CLUTCH LINKAGE**

MODEL: Land-Rover.

PART NUMBER:	Link tube pin	..	..	..	..	..	..	..	1	536803
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REMARKS: Instances have occurred where the locating pins between the clutch operating cross-shafts and the linking tube have sheared, so rendering the clutch inoperative. A contributory factor to this failure is misalignment of the holes between the two shafts and the connecting tube. Careful attention to alignment of the pin holes before insertion of the pins will considerably increase the life of these cross pins.

**Item 43 SUBJECT: EXHAUST SILENCER**

MODELS: Land-Rover 88 and 109 Series II and IIA RHD.

MODIFICATION: Strengthened silencer to eliminate breakage between exhaust pipe and silencer.

PART NUMBER:	Exhaust silencer	..	..	..	..	..	..	..	1	552482
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REMARKS: The silencers are produced by three different Manufacturers and they will be supplied in either round or oval sectional formation. Both types bear the same part number and are completely interchangeable with earlier silencers, and with each other.

- Item 44** SUBJECT: **FREEWHEELING HUB**
- MODELS: Land-Rover Series II and IIA.
- MODIFICATION: Introduction of Dualmatic freewheeling front hubs, Type B80, manufactured by Winguard Limited, of Chichester, Sussex, as Service optional equipment.
- PART NUMBER: Freewheeling hub, manual type conversion kit, comprising two free-wheeling hub assemblies .. .. . 1 601671
- REMARKS: The Dualmatic hub can be fitted to the RH and LH front hubs without special tools. When fitted, lubrication is supplied from the axle shafts.
- With the locking control levers in the 'Free' position, there is no drive to the wheels, thereby introducing a saving in fuel consumption, and easy-turn-control on the steering.
- With the locking control levers in the 'Lock' position, a positive drive from axle to wheels is obtained.
- The Dualmatic hub assembly has been approved by The Rover Company and is offered as an alternative to that supplied by Mayflower Automotive Products, details of which are supplied in News Letter No. 23, Item 120.
- Stocks of the freewheeling front hubs conversion kit complete with detailed fitting instructions will be available from our Parts Department.

- Item 45** SUBJECT: **WATER ENTRY**
- MODEL: Land-Rover Station Wagon.
- REMARKS: To assist in tracing and eliminating cases of water entry, the most common points are listed below, together with suggested remedial action.
- Roof ventilator**
- Because of occasional water entry through the black sealing strip where the hinge leaf abuts against this strip, a wider seal and four extra drive screws are now incorporated.
- Action: Either modify or reseal with Bostik 692 or similar sealer.
- Roof to cant rail**
- Water sometimes penetrates at the front and rear corners of the joint between the roof and cant rail.
- Action: Reseal with Bostik 692 or similar sealer.
- Roof panel stiffeners**
- The stiffeners on the roof top have a transverse drain hole at the front end and in some cases this becomes blocked so that water builds up inside the stiffener and, when capillary action starts, water penetrates the transverse roof joints.
- Action: Unblock and clean out the drain holes.
- Windscreen wiper spindle and blanking plate**
- In cases where the metal escutcheon effects a bad sealing surface with the windscreen frame and water penetrates into the frame.
- Action: Remove escutcheon and fit one or two extra gaskets between it and the frame. Use Bostik 692 if water still penetrates.
- Front ventilator lids**
- The front ventilator lids sometimes tend to bow against the rubber seal, so allowing water into the cab.
- Action: Remove the lid and slacken the hinge by opening out the hinge eye, which allows the lid to tighten more squarely on to the rubber seal.

**Sliding windows**

The drain holes from the sliding window sometimes become blocked, allowing rainwater to build up and overflow into the interior of the vehicle.

Action: Unblock and clean out drain holes.

**Door lock housings**

If water collects in the trough of the door lock housing, it may be found to seep through the spot welded seam and down the inside of the door.

Action: Seal the joint on the inside of the door with Bostik 692 or similar sealer.

**Door waist seals**

If the joints in the door sealing rubber have not been overlapped sufficiently, water may find its way into the vehicle through the gap. This also applies to the rear door.

Action: Check that there is an overlap of  $\frac{1}{2}$  in. at the join of two rubbers. If there is, and a leak still occurs, then use adhesive to secure the two strips together. If there is a gap, then glue a small strip of sealing rubber to the joint, making sure that it fits under the top strip and over the lower strip.

**Clutch and brake pedal mounting housing**

In cases where the cross bracing strip on the base of the housing effects a bad seal at its welded joint with the housing flange, more care is now being taken in smoothing down the welded joint to give a flat sealing surface for the gasket.

Action: Reseal with Bostik 692 or similar sealer from inside the car by applying with the finger through the pedal aperture.

**Wheelarch**

Water spraying up from rear road wheels may penetrate through the front corner joint of the wheelarch.

Action: Reseal from underneath the vehicle with Bostik 692 or similar sealer.

**Item 46**    **SUBJECT:**            **HEATED WINDSCREEN**

**MODELS:**                    Land-Rover Series II and IIA, all models.

**PART NUMBER:**    Heated windscreen conversion kit    ..    ..    ..    ..    ..    1    601766

**REMARKS:**                    A heated windscreen conversion kit will be available from our Parts Department and is suitable for all Series II and IIA Land-Rovers.

The heated windscreens are made of laminated glass with an element in between the laminations; each element consumes a maximum of 6.5 amps. The operation of the windscreen heater elements is controlled by the ignition switch on Petrol models or the electrical services switch on Diesel vehicles, in conjunction with two auxiliary panel switches mounted on the dash, enabling the right and/or left-hand screens to be heated.

Full details of the conversion are described in the Fitting Instruction supplied with each kit. The Fitting Instructions are available in English only.

Item 47 SUBJECT: **TOWING JAW**

MODEL: Land-Rover.

MODIFICATIONS: Introduction of an anti-rattle spring for the pintle pin, having reduced number of coils, and the repositioning of the locating cross hole, for insertion of the chain locking ring to unit.

PART NUMBER: Towing jaw assembly .. .. . 1 559636

REMARKS: The latest type towing jaw can be used as a replacement for all earlier Land-Rover Series II and IIA models.