

# Land-Rover Service Newsletter Vol. 3 No. 1



November 1968

The Rover Company Limited      Service Department: Solihull, Warwickshire, England

By Appointment to  
Her Majesty  
Queen Elizabeth II



Manufacturers  
of Motor Cars and  
Land-Rovers

- Item 1**    SUBJECT:                    **NEWS LETTER NUMBERING (Policy item)**
- REMARKS:                    News Letters issued in Vol. 2 cover a three-year period, during which a great deal of information has been circulated.
- It has therefore been decided to introduce Volume 3, commencing with item 1. The headings will be more descriptive than those used in Vol. 2, which will facilitate the use of the alphabetical index.
- Distributors and Dealers are requested to remove News Letters Vol. 2 from the plastic folder and retain them in a suitable manilla or cardboard cover.
- Alternatively, additional copies of the plastic folder, Part No. 4358, to accommodate the latest volume of Service News Letters, can be obtained from our Parts Department.
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- Item 2**    SUBJECT:                    **FROST PRECAUTIONS (Policy item)**
- MODELS:                    Land-Rover Bonneted and Forward Control models.
- MODIFICATION:            Introduction of frost precaution instructions for the winter 1968/69.
- REMARKS:                    With effect from 1st October, 1968 and for the duration of the winter months until the end of March, 1969, all Land-Rovers destined for the home market will be despatched with the cooling system filled with a 33 $\frac{1}{3}$ % solution of anti-freeze mixture, giving frost protection down to  $-25^{\circ}\text{F}$  ( $-32^{\circ}\text{C}$ ).
- At the same time a 25% solution of methylated spirit or industrial alcohol is added to the windscreen washer reservoir, where fitted.
- Each Land-Rover so treated can be identified by a blue disc which is attached to the engine, and a blue sticker which is fixed on to the inside of the windscreen at the right-hand side.
- Export Land-Rovers, with the exception of those for the North American Dollar Area, are drained at the docks before despatch.
- In the case of N.A.D.A. vehicles, a 50% solution is used, and these Land-Rovers are identified by a red disc and label in place of the blue ones.
- The 50% solution affords frost precaution down to  $-33^{\circ}\text{F}$  ( $-36^{\circ}\text{C}$ ).
- Distributors and Dealers are requested to add the appropriate amount of anti-freeze to the cooling system of vehicles held in stock, to ensure that the necessary frost precaution is afforded.

At a percentage of 33 $\frac{1}{3}$ % the following quantities of anti-freeze and water are required.

Model	Cooling system capacity		Anti-freeze required	
	Pints	Litres	Pints	Litres
<b>Bonneted Control Models</b>				
2 $\frac{1}{4}$ litre Petrol .. .. .	18	10.2	6	3.5
2 $\frac{1}{4}$ litre Diesel .. .. .	17 $\frac{1}{2}$	10.0	5 $\frac{3}{4}$	3.4
109 in. with 2.6 litre 6 cylinder petrol engine .. .. .	20	11.2	6 $\frac{2}{3}$	3.7
<b>Forward Control Models</b>				
2 $\frac{1}{4}$ litre Petrol .. .. .	19	10.8	6 $\frac{1}{3}$	3.6
2 $\frac{1}{4}$ litre Diesel .. .. .	18	10.2	6	3.5
2.6 litre 6 cylinder Petrol Engine ..	23	13.0	7 $\frac{2}{3}$	4.3

The quantities required to bring a 33 $\frac{1}{3}$ % solution up to 50% are detailed in the chart below.

Model	Anti-freeze required for 50% solution		Anti-freeze required to raise 33 $\frac{1}{3}$ % solution to 50%	
	Pints	Litres	Pints	Litres
<b>Bonneted Control Models:</b>				
2 $\frac{1}{4}$ litre Petrol .. .. .	9	5.1	4 $\frac{1}{2}$	2.5
2 $\frac{1}{4}$ litre Diesel .. .. .	8 $\frac{3}{4}$	5	4 $\frac{1}{2}$	2.5
109 in. with 2.6 litre 6 cylinder Petrol Engine .. .. .	10	5.6	5	2.8
<b>Forward Control Models:</b>				
2 $\frac{1}{4}$ litre Petrol .. .. .	9 $\frac{1}{2}$	5.4	4 $\frac{3}{4}$	2.6
2 $\frac{1}{4}$ litre Diesel .. .. .	9	5.1	4 $\frac{1}{2}$	2.5
2.6 litre 6 cylinder Petrol Engine ..	11 $\frac{1}{2}$	6.5	5 $\frac{3}{4}$	3.2

It is important that only anti-freeze solutions conforming to British Standards BS 3151 or 3152 are used.

The following solutions conforming to the above Standards have been approved for use in Land-Rover cooling systems:

Super Bluecol  
 B.P. Anti-frost  
 Castrol Anti-freeze  
 Duckham's 'Standard' Anti-freeze  
 Esso Anti-freeze  
 Mobil Permazone  
 Regent Texaco/Caltex P.T. Anti-freeze  
 Shell Anti-freeze.

<b>Item 3</b>	<b>SUBJECT:</b>	<b>CYLINDER HEAD CORROSION (Policy item)</b>
	<b>MODELS:</b>	Land-Rover Bonneted and Forward Control models with 2.6 litre 6 cylinder engine.
	<b>MODIFICATION:</b>	Recommended use of Marston Lubricant SQ 36 inhibitor in mixed metal engines.
	<b>LITERATURE AFFECTED:</b>	Land-Rover Bonneted Control Parts Catalogue, Part No. 4656, page 435. Land-Rover Forward Control Parts Catalogue, Part No. 4862, page 334.



PART NUMBER: Coolant inhibitor, Marston Lubricant SQ 36, 18 oz .. .. 1 605765

REMARKS: Instances have been reported from certain areas of cylinder head corrosion caused by the aggressive nature of the local water supply. Where this occurs, 3 fluid ounces (0.8 dl) of inhibitor per gallon (4.5 litre) of water should be added to the cooling system.

To ensure that the solution is fully effective at all times the cooling system should be drained and refilled every twelve months.

Proceed as follows:—

1. Ensure that the cooling system is leak-proof.
2. Drain and flush the system.
3. Pour in approximately 1 gallon (4.5 litre) of water. Add 9 fluid ounces (2.4 dl) of inhibitor and top up with water.

Supplies of Marston Lubricant SQ 36 are available from our Parts Department.

**Item 4 SUBJECT: GEAR CHANGE PROCEDURE**

MODELS: Land-Rover Bonneted and Forward Control models.

MODIFICATION: Addition of gear changing procedure leaflet to range of Land-Rover publications.

PART NUMBERS: Gear changing procedure leaflet:

English	..	..	..	..	..	..	..	..	..	1	605577
French	..	..	..	..	..	..	..	..	..	1	605607
German	..	..	..	..	..	..	..	..	..	1	605608
Spanish	..	..	..	..	..	..	..	..	..	1	605609
Portuguese	..	..	..	..	..	..	..	..	..	1	605610

REMARKS: We have found from experience in the field that many drivers of Land-Rovers are not completely familiar with the gear changing procedure.

An illustrated gear change procedure leaflet has therefore been prepared. This publication gives full details on the correct use of the Land-Rover transmission and the selection of the appropriate combination of gears.

Copies of the gear change procedure leaflet in the appropriate language are being circulated together with this News Letter as follows:—

Distributors, 2 copies  
Dealers and Fleet Users, 1 copy.

Further copies are available on application to the Rover Company Ltd, Technical Service Department, Publications Section, Lode Lane, Solihull, Warwickshire.

**Item 5 SUBJECT: ROAD WHEELS**

MODELS: Land-Rover Bonneted Control models.

MODIFICATION: Introduction of a new well-base rim road wheel to standardise components used on civilian and military vehicles.

LITERATURE AFFECTED: Land-Rover Series II and IIA Parts Catalogue, Part No. 4656, page 239.

PART NUMBER: Road wheel, well-base type .. .. 5 568966

REMARKS: The offset of the disc from the rim centre line is as follows:—  
Early type wheel, Part No. 272309:  $1\frac{3}{16}$  in. (46 mm).  
Late type wheel, Part No. 568966:  $1\frac{5}{16}$  in. (33.2 mm).  
As a result of the different offset, early and late type wheels are not interchangeable. Both types will be supplied for Service replacements.

**Item 6 SUBJECT: TYRES—TRANSMISSION**

MODELS: Land-Rover Bonneted and Forward Control models.

REMARKS: Instances have been brought to our attention where the transmission remained locked in four-wheel drive after a period of hard pulling. Our investigations have shown that this was due to transmission wind-up caused by the difference in rolling circumference between front and rear tyres.

This difference in circumference is introduced either by fitting tyres of another make or type, or by using tyres with an appreciable different wear pattern on the front or rear axle only. It is therefore necessary to ensure that the circumference of all tyres is reasonably matched, paying particular attention to the following points:

- (a) Use same make and type of tyre on all wheels.
- (b) Ensure that all tyres are equally worn.

Where the transmission is locked in four-wheel drive for the above reason, normal operation can be restored by lifting the axle on which the tyres with the smaller circumference are fitted, to enable the transmission to unwind itself.

**Item 7 SUBJECT: OPTIONAL EQUIPMENT**

MODELS: Land-Rover Bonneted and Forward Control models.

MODIFICATION: Addition of Optional Equipment Folder to range of Land-Rover literature.

PART NUMBERS: Optional Equipment Folder, Land-Rover:

English	..	..	..	..	..	..	..	..	1	605635
French	..	..	..	..	..	..	..	..	1	605636
German	..	..	..	..	..	..	..	..	1	605637
Spanish	..	..	..	..	..	..	..	..	1	605638
Portuguese	..	..	..	..	..	..	..	..	1	605639

REMARKS: For some time now a copy of the Optional Equipment Folder has been included in the Literature Pack supplied with each new Land-Rover.

The purpose of this folder, which is available in English, French, German, Spanish and Portuguese, is to draw the owner's attention to the extensive range of accessories currently available, which should have a stimulating effect on the sale of accessories.

Copies of this Optional Equipment Folder in the appropriate language are being circulated together with this News Letter as follows:—

Distributors, 2 copies.

Dealers, Fleet Users, etc., 1 copy.

Further copies are available on application to the Rover Company Ltd, Technical Service Department, Publications Section, Lode Lane, Solihull, Warwickshire.