

Land-Rover Service Newsletter Vol. 3 No. 15



August 1970

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 104A SUBJECT: ROVER EXCHANGE PARTS AND UNITS (Policy item. U.K. Market only)**
- REMARKS: The demand for some rebuilt units no longer justifies their being retained in the Rover Exchange Parts scheme.
- The part numbers concerned are shown below and, with effect from 1st September 1970, these units will not be accepted by the Parts Department for reconditioning.
- Engines:**
- | | | |
|--------|---------|------------|
| 245581 | 1950-51 | Land-Rover |
| 245583 | 1952-53 | Land-Rover |
- Gearbox:**
- | | | |
|--------|---------|------------|
| 522775 | 1951-53 | Land-Rover |
|--------|---------|------------|
- Item 105 SUBJECT: FROST PRECAUTION (Policy Item)**
- MODELS: All Land-Rover.
- MODIFICATION: Introduction of revised anti-freeze procedure.
- REMARKS: Company policy with regards to the use of anti-freeze has been revised. Full details of the new procedure are given below.
- (a) **Home Market**
- The cooling system will be filled with a 33 $\frac{1}{3}$ % solution of anti-freeze and, where applicable, the windscreen washer reservoir with 25% alcohol. This procedure commences on the assembly line on the 1st September and continues until the following 31st March.
- (b) **Export Market**
- The cooling system and windscreen washer reservoir are filled with anti-freeze and alcohol respectively, as detailed under (a) throughout the year. Vehicles destined for the U.S.A. and Canada have a 50% anti-freeze solution added to the cooling system.
- Item 106 SUBJECT: CORE PLUGS**
- MODELS: Land-Rover 2.6 litre, 2 $\frac{1}{4}$ litre Petrol and Diesel.
- REMARKS: Distributors and Dealers are reminded that the correct grades of Loctite for sealing core plugs are:
- Threaded types—Loctite No. 41 applied to thread.
Press-in types—Loctite No. 75.
- Should a core plug change be necessary, it is most important that mating faces and threads are clean and free from grease or oil before applying Loctite.

Item 107 SUBJECT: DIFFERENTIAL TO CROWN WHEEL CARRIER BOLTS
MODELS: Land-Rover with Rover differential.
MODIFICATION: Alteration to the torque requirement of the differential to crown wheel carrier bolts.
LITERATURE AFFECTED: Land-Rover Workshop Manual, Part Two, Part No. 605408, Operation E1-14, Page 32-E.
REMARKS: In order to eliminate the possibility of the differential to crown wheel carrier bolts loosening, ALL the carrier bolts, including the two fitted bolts, should be tightened to a torque figure of 4,8 mkg (35 lb/ft).
 The two fitted bolts must be fitted diametrically opposite.

Item 108 SUBJECT: GEARBOX
MODELS: Land-Rover Bonneted Control models.
MODIFICATION: Re-introduction of plain splined (non-stepped) output shaft.
LITERATURE AFFECTED: Land-Rover Parts Catalogue, Part No. 605957, Page 241.
PART NUMBERS:

Output shaft, rear drive, stepped type	1	235935	
Gearbox complete assembly } With stepped	1	591443	4 cylinder models
Gearbox complete assembly } output shaft	1	591444	6 cylinder models
Output shaft, rear drive, plain type	1	591429	
Gearbox complete assembly } With plain	1	591438	4 cylinder models
Gearbox complete assembly } output shaft	1	591439	6 cylinder models

REMARKS: The stepped spline output shaft was introduced to prevent jumping out of gear. The modification successfully resolved this problem, but it has resulted in a higher gearbox noise level.
 As the problem of jumping out of gear only appears to affect a small number of vehicles in certain parts of the world and is not a consistent problem, it is considered that the increased noise level is of more importance. It has therefore been decided to revert back to the plain output shaft as a standard fitment.
 However, the stepped type will be retained for the appropriate markets and will be stocked for service requirements to resolve complaints of jumping out of gear. Full details on gearbox applicability will be found in Item 109 in this News Letter.

Item 109 SUBJECT: GEARBOX ASSEMBLIES
MODELS: All Land-Rover.
MODIFICATION: Introduction of gearbox applicability chart.
REMARKS: Owing to the large number of different gearbox assemblies fitted to the various Land-Rover models, it has sometimes been found difficult to identify the correct gearbox for any particular model. The chart below has been compiled to overcome this problem.
 The summary following this chart provides full details of the modifications made at each suffix letter change.

	Bonneted Control		Bonneted Control Front End Sealed		Forward Control Series IIA		Forward Control Series IIB, Suffix 'A'		Forward Control Series IIB, Suffix 'B'	
	New	Rebuilt	New	Rebuilt	New	Rebuilt	New	Rebuilt	New	Rebuilt
4 cylinder models	591438† replaces 533161 539850 576216 528732 277914 275772	} 600917† No Rebuilt 535880† } 522780†	591440† replaces 538389	No Rebuilt	553162** replaces 539831	} 600918**	553499**	601756**	565014**	606208**
6 cylinder models	591439† replaces 556461	} 605911†	591441†	No Rebuilt	553163** replaces 539910	} 600919**	553501**	601757**	565010**	606209**

	Forward Control Series IIB Suffix 'B' Front End Sealed		UNICEF Forward Control Gear Ratios Easy Change		WD Top Filling		WD Top Filling Front End Sealed		4 x 2 Rear Wheel Drive	
	New	Rebuilt	New	Rebuilt	New	Rebuilt	New	Rebuilt	New	Rebuilt
4 cylinder models	576621**	No Rebuilt	553164** replaces 540297. Early models 606945** Front end sealed. Late models	No Rebuilt	605501* replaces 600993 600593 542269 513834	Rebuilt to existing number i.e. 605501	606488* replaces 576213	Rebuilt to existing number i.e. 606488	591455† replaces 565075 520071	No Rebuilt
6 cylinder models	576622**	No Rebuilt								
	Swiss Army Swiss Postal Front End Sealed		One Ton and Armoured Car Forward Control Gear Ratios Easy Change Top Filling		RAF Crash Tender Forward Control Gear Ratios Easy Change Top Filling					
	New	Rebuilt	New	Rebuilt	New	Rebuilt				
4 cylinder models	591443*	No Rebuilt	553164** Early models 606945** Front end sealed. Late models	No Rebuilt	553164** Early models 606945** Front end sealed. Late models	No Rebuilt				
6 cylinder models	591444*	No Rebuilt	576302** Early models 606597** Front end sealed. Late models	No Rebuilt	—	—				

†Fitted with 'plain spline' rear output shaft, Part No. 591429.

*Fitted with 'stepped spline' rear output shaft, Part No. 235985.

**Fitted with rear output shaft, Part No. 515851.

Details of modifications carried out at each suffix letter change:

Land-Rover Bonneted Control Series IIA models.

Suffix 'A' is the basic gearbox, modifications in respect of suffix letters are as follows. The suffix letter is located on the top cover after the gearbox number.

Suffix 'B' Larger bearing fitted to front end of layshaft resulting in the following parts being changed:

	New Part Numbers					
Bell housing (2¼ litre only)	556039
Clutch withdrawal housing	528707
Layshaft bearing (front)	528701
Layshaft bearing retaining plates, etc.						

(See Parts Catalogue, Part No. 605957, Page 239).

Layshaft (gears remain interchangeable)	528703
Larger bearing and shaft for the intermediate gear in transfer box.						

Parts changed:

	New Part Numbers
Transfer box casing	539787
Intermediate gear	521330
Bearing for intermediate gear	521329
Shaft for intermediate gear	521326
Thrust washers for intermediate gear	521328

Suffix 'C' Ratio of 1st gear changed from 3.0:1 to 3.6:1, at the same time ratio of low range gears in transfer case changed in order to retain the same overall ratio in 1st gear low change. Parts changed:

	New Part Numbers
Main gearbox casing assembly	605933
Primary pinion and constant mesh gear	542231
1st gear mainshaft	511205
1st gear layshaft	511189
Reverse wheel assembly	561960
Intermediate gear in transfer box	533080
Low gear in transfer box	532979

Suffix 'D' Modified layshaft for extra strength. This shaft may also be fitted in Suffix 'B' and 'C' gearboxes with the necessary parts.

	New Part Numbers
Layshaft	556040
2nd gear layshaft and mainshaft	600916

Suffix 'E' Retaining plate for primary pinion bearing changed. This can be used to modify all previous gearboxes. Mainshaft bearing housing changed to eliminate locating peg, refer to Land-Rover News Letter, Vol. 3, No. 2, Item 11. Dust cover for clutch withdrawal shaft changed. Introduction of bell housing to adapt gearbox for 6 cylinder models.

	New Part Numbers
Bell housing (6 cylinder only)	556044
Grommet clutch withdrawal shaft	553262
Housing for mainshaft bearing	561877

Item 110 SUBJECT: LAMP GUARD

MODELS: Land-Rover Bonneted Control, Series IIA with headlamp in front wings.

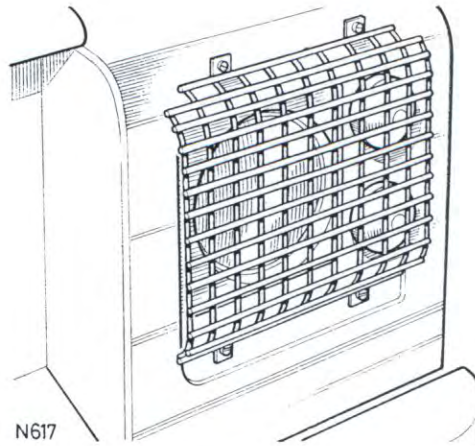
MODIFICATION: Introduction of wire mesh guard for the protection of side, stop and flasher lamps.

LITERATURE AFFECTED: Land-Rover Optional Equipment Parts Catalogue, Part No. 605159, Page 244.

PART NUMBERS:	Wire mesh guard for front lamps	2	345985	} Series IIA. All Bonneted Control models from vehicle suffix 'G' onwards
	Screw (2 BA x 1/2 in. long)	8	77869	
	Plain washer	8	3816	
	Spring washer	8	3073	
	Nut (2 BA)	8	3823	
	Wire mesh guard for rear lamps	2	320626	
	Screw (2 BA x 1/2 in. long)	4	77869	
	Plain washer	4	3816	
	Spring washer	4	3073	
	Nut (2 BA)	4	3823	

REMARKS: The above components are now available from our Parts Department.

It should be noted that the rear wire mesh guards are not affected and are the same as specified for vehicles prior to chassis suffix letter 'G'.



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Fig. 1. Wire mesh guard, front illustrated