



Service Department:

THE ROVER COMPANY LIMITED

SOLIHULL
WARWICKSHIRE
ENGLAND

By Appointment to
Her Majesty
Queen Elizabeth II



Manufacturers
of Motor Cars and
Land-Rovers

LAND-ROVER SERVICE NEWS LETTER No. 49

June 1965

Item 241 SUBJECT: RECOMMENDED LUBRICANTS (Policy item)

MODELS: Land-Rover.

REMARKS: Shell Super Motor Oil is officially approved as an alternative to the Shell Oils already recommended or approved by the Rover Company. Shell Super Motor Oil covers the SAE range 10W-40.

Item 242 SUBJECT: VERTICAL DRIVE SHAFT

MODELS: Land-Rover basic and Forward Control models with 2½ litre petrol engine.

MODIFICATION: Introduction of a simplified distributor drive coupling with straight blade drive between distributor drive shaft and vertical drive shaft, replacing the splined coupling previously used.

PART NUMBERS:

Vertical drive shaft gear and bush assembly	....	1	541181
Adaptor for distributor	....	1	549610 12 volt models
Adaptor for distributor	....	1	554898 24 volt models
Distributor drive coupling	....	1	549611

COMMENCING NUMBERS: Basic models: Engines from suffix letter 'G' onwards.
Forward Control models: Engines from suffix letter 'E' onwards.

REMARKS: The parts detailed above can be used on earlier 2½ litre petrol engines in complete sets only.

Item 243 SUBJECT: INJECTION EQUIPMENT

MODELS: Land-Rover 2 litre and 2½ litre Diesel.

REMARKS: In Land-Rover News Letter No. 20, Item 104, we detailed information concerning the identification of the injectors on the Land-Rover 2 litre and 2½ litre models. The method detailed in News Letter No. 20 is rather complicated and a much easier way to identify between 2 litre and 2½ litre injectors is as follows:

- (a) Rover Part No. 273452 suitable for 2 litre models may be identified by the letter 'D' which will be found somewhere in the main numbering system.
- (b) Rover Part No. 515552 suitable for 2½ litre models may be identified by the fact that the main numbering system does not contain the letter 'D'.

It should be noted that the 2 litre and 2½ litre injectors are not interchangeable.

Item 244 SUBJECT: **CLUTCH PLATE**

MODELS: Land-Rover 88 and 109 Diesel.

PART NUMBER: Clutch plate 1 601294

REMARKS: The new clutch plate which embodies strengthened torque reaction springs to prevent centre hub disintegration, is offered in the main to Fleet Operators who are working Land-Rover Diesel models under arduous conditions.

The known disadvantages which to some extent offset the advantages to be gained by using this plate for general replacement, are as follows:

- (a) It will cause a pronounced gearbox rattle in top gear at part throttle from 14 to 16 mph (22 to 25 kph).
- (b) It will also cause a rattle in top gear at full throttle from 15 to 17 mph (24 to 27 kph).

For these reasons it is advisable to limit the use of the new clutch plate to Land-Rover Diesel vehicles on which a clutch hub failure has occurred.

Item 245 SUBJECT: **CLUTCH ASSEMBLY, DIAPHRAGM SPRING TYPE**

MODELS: Land-Rover 2½ litre Petrol and Diesel models, basic vehicles.

MODIFICATION: Introduction of 9½ in. diameter diaphragm spring type clutch as optional equipment. Full details of this type of clutch, together with its advantages, were given in Land-Rover Service News Letter No. 32, Item 156.

PART NUMBERS:	Engine and clutch assembly, new	1	600974	} Petrol
	Engine and clutch assembly, rebuilt	.....	1	600975
	Engine and clutch assembly, new	1	556831	} Diesel
	Engine and clutch assembly, rebuilt	.....	1	600978
	Flywheel complete assembly	1	600243	} Petrol models only
	Dowel for clutch	.....	3	502116
	Bush for primary pinion	.....	1	08566
	Flywheel complete assembly	1	546518	} Diesel models only
	Dowels for clutch	.....	3	502116
	Bush for primary pinion	.....	1	08566
	Fitting bolt for clutch	6	247166	} Diesel models only
	Clutch cover assembly	.....	1	540700
	Clutch driven plate complete	1	539827	} Petrol models only
	Set bolt ($\frac{5}{16}$ in. UNF x $\frac{1}{4}$ in. long)	} Fixing clutch to flywheel	6	255427	
	Locker		6	546197	
	Self-locking nut ($\frac{5}{16}$ in. UNF), fixing clutch to flywheel	6	252211	} Diesel models only
	Clutch slave cylinder	.....	1	266694
	Support bracket for clutch slave cylinder	1	531363	} Fixing clutch slave cylinder and anchor plate to support bracket
	Bolt ($\frac{5}{16}$ in. UNF x $1\frac{1}{4}$ in. long)	.....	2	255030
	Spring washer	.....	2	3075
	Nut ($\frac{3}{16}$ in. UNF)	.....	2	254811
	Packing piece	.....	1	544686
	Push rod complete for clutch slave cylinder	.....	1	537601
	Locknut for push rod ($\frac{5}{16}$ in. UNF)	.....	1	254811
	Clevis fork end	.....	1	275199
	Clutch operating lever and shaft assembly	.....	1	537603
	Spherical bearing	.....	1	217984
	Housing for spherical bearing	.....	2	217983
	Felt ring for spherical bearing	.....	2	217985

Bolt ($\frac{5}{16}$ in. UNF x $\frac{3}{4}$ in. long)	} Fixing spherical bearing to support bracket	2	255226
Spring washer		2	3075
Nut ($\frac{5}{16}$ in. UNF)	} Fixing clutch operating shaft to connecting tube	2	254811
Clevis pin fixing spring lever to fork end		1	216421
Split pin for clevis pin	}	1	2392
Headed pin		1	536803
Plain washer		1	10882
Split pin		1	2422

REMARKS: The diaphragm spring type clutch is primarily intended for Fleet Users operating under arduous conditions. Where this type of clutch is required on new vehicles the following 'E' number should be quoted on the order.
 E 1323—Petrol models
 E 1324—Diesel models
 Existing vehicles may be modified by fitting the appropriate parts listed above.

Item 246 SUBJECT: REAR AXLE WITH 'POWR-LOK' DIFFERENTIAL UNIT

MODELS: Land-Rover 88 Regular and 109 Long.

MODIFICATION: Introduction of rear axle assembly with 'Powr-Lok' Limited slip differential unit. Vehicles with 'Powr-Lok' differential fitted to the rear axle may be ordered through Sales under E 1315 for the 88 Regular models and E 1316 for the 109 Long models.

PART NUMBERS:

Rear axle assembly with 'Powr-Lok' differential	....	1	549037	88 Regular
Rear axle assembly with 'Powr-Lok' differential	....	1	549043	109 Long
Differential assembly, 'Powr-Lok' type, 4.7 ratio	....	1	539900	

COMMENCING NUMBERS: Rear axles numbered
 Land-Rover 88 Regular models from 24200001B onwards.
 Land-Rover 109 Long models from 25200001B onwards.

REMARKS: Earlier Land-Rover Series IIA models can be modified by fitting the latest type differential unit.
 The 'Powr-Lok' differential must not be fitted to the front axle.

Important Special Instructions

Special axle lubricants are required for rear axle assemblies when the 'Powr-Lok' differential unit is fitted, as follows:

Shell Limited Slip Differential Oil S 6721A	} Available in the UK market
Mobilube 46	
Pure Oil TSS 90	} Available in the North America Dollar area
Texaco 3450	
Mobil 46	

Do not use ordinary EP oils in the rear axle of models fitted with the 'Powr-Lok' differential, as these will produce a 'squawking' noise from the friction clutches when they are in operation on turns.

Information concerning the availability of these special oils in other markets will be advised in due course.

A Workshop procedure leaflet covering the 'Powr-Lok' differential can be obtained from The Rover Co. Ltd, Technical Service Department, Solihull, Warwickshire, England under Part No. 4737. English version only available.

Item 247 SUBJECT: **PRIVATE LOCKS**

MODELS: Land-Rover.

REMARKS: Distributors and Dealers are advised that the key number for Land-Rover models fitted with private locks will be found stamped on the plate adjacent to the bonnet lock as shown in the illustration.

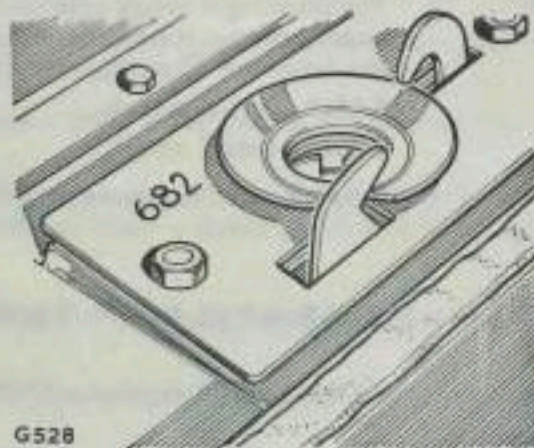


Fig. 1. Position of key number for private lock