

Rover Service News Letter No. 53

March, 1955

TO ALL DISTRIBUTORS AND DEALERS

Dear Sirs,

During the past month the changes and developments set out below have taken place.

With this issue we are also including copies of Amendment No. 3 to the Land-Rover and Car Spare Parts Catalogues and Cumulative Amendment No. 6 to the Master Spare Parts Price List.

SECTION I. POLICY

Item No. 98 SUBJECT:

IDENTIFICATION OF PARTS RETURNED UNDER GUARANTEE CLAIM OR RETURNED FOR SPECIAL EXAMINATION AND REPORT.

REMARKS:

To Distributors and Dealers on Home Market Only. It has been brought to our notice that in some instances parts returned under Guarantee Claim or for special examination and report have been sent in without identification labels attached. On occasions such items have been included in consignments of parts of the same description and part number which have been sent to us for normal credit allowances and it will be appreciated that this causes confusion and delay in clearing the material through proper channels.

Will you please ensure that all items of material sent to us for special examination are carefully checked and securely labelled before despatch.

Arthur

SECTION II. WORKSHOP AND SPARE PARTS INFORMATION

Item No. 99 SUBJECT:

L.H. FRONT ENGINE MOUNTING BRACKET ON CHASSIS.

MODELS:

1954 Land-Rover.

COMPLAINT:

Fracture of engine mounting bracket under severe service conditions.

CURE.

Weld in an additional support bracket as detailed below.

REMARKS:

Some cases have been reported of the L.H. front engine mounting bracket on the chassis frame fracturing when the vehicle is used under adverse conditions. It is recommended therefore, that when a vehicle is being used under conditions which may cause the above complaint, that a suitable support bracket is welded on to the existing bracket at the first opportunity.

This work can be carried out with the engine in position. The vehicle should be on a ramp, or jacked up high enough for the operator to weld from underneath.

Proceed as follows:—

1. Drain cooling system.
2. Remove bottom hose, pump elbow to radiator.
3. Remove oil filter.
4. Remove nut, spring and plain washer from top and bottom of engine suspension rubber (on both sides of engine to ensure there is no stress put on the R.H. suspension rubber).
5. Support engine under sump and lift engine slightly.
6. Remove bolts and lock washers from L.H. engine support foot and lift out engine foot complete with rubber.
7. Make the support bracket reinforcement from mild steel to the dimensions shown at Fig. 1.

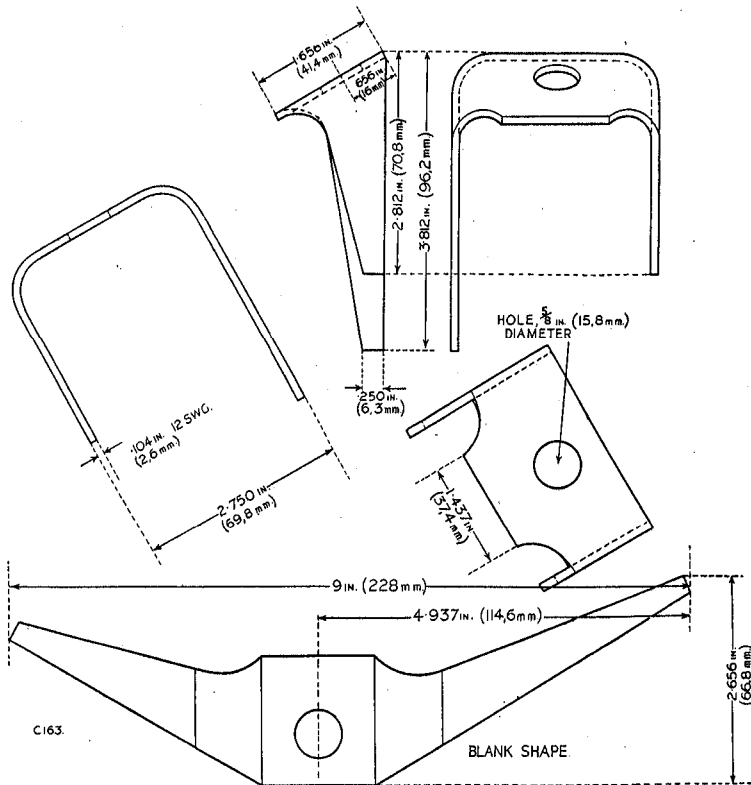


Fig. 1. Dimensions of support bracket.

8. Offer up new support bracket and temporarily bolt into position.
9. Precautions prior to welding; insert asbestos sheeting between chassis and engine and between chassis and shock absorber.
10. Weld support bracket *on outside edges only*. This gives sufficient support to the bracket and minimises any tendency to distort the chassis frame.

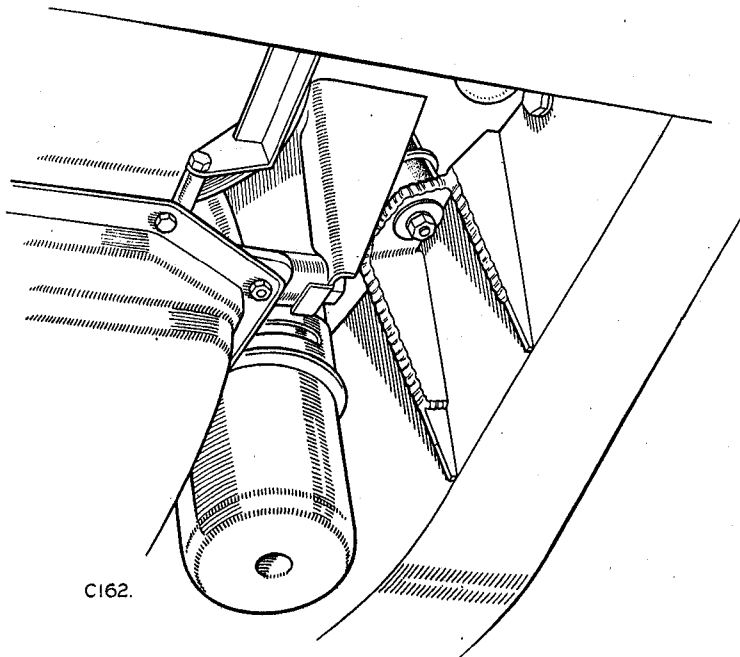


Fig. 2. Support bracket welded in position and parts reassembled.

11. Remove temporary fixing bolt.

12. Reverse removal procedure.

NOTE.—New lock washers, Part No. 212430, should be used when replacing the engine support bracket, and $\frac{1}{2}$ in. spring washers fitted between lock washers and bolts to give greater bolt security.

Item No. 100 SUBJECT: **INLET VALVE GUIDE OIL SEAL.**
 MODELS: All Cars and Land-Rovers 1948-55 inclusive.
 COMPLAINT: Increased oil consumption after decarbonising.
 CAUSE: Failure to renew inlet valve guide sealing ring.
 CURE: Always fit a new inlet valve guide oil seal if the valve has been removed for any reason.
 REMARKS: When decarbonising or fitting new inlet valve guides it is essential to renew the rubber oil seal, Part No. 233419. This should be done *after* grinding in the valve as withdrawing the valve for checking and cleaning etc. tends to damage the rubber seal.
 Any vehicle in the above range with the early type oil seal in the valve collar should also have a new sealing ring, Part No. 210517, fitted when the inlet valve has been removed for any reason.
 It is essential that genuine Rover seals be used.

Item No. 101 SUBJECT: **TIMING CHAIN TENSIONER CYLINDER.**
 MODELS: 1955 '60', '75' and '90'.
 1955 Land-Rover.
 COMPLAINT: Rattle from timing chain at tick-over speed.
 CAUSE: Blow-off pressure of cylinder assembly too high.
 CURE: Fit new cylinder with modified spring groove to reduce load on ball valve.
 PART NUMBER: Cylinder for timing chain tensioner 1 265331
 COMMENCING NUMBERS: *Car*
 '60' All models from Engines numbered 53300326 onwards.
 '75' All models from Engines numbered 54300834 onwards.
 '90' All models from Engines numbered 55301980 onwards.
Land-Rover:
 86 and 107 R.H.D. models from Engines numbered 57106010 onwards.
 86 and 107 L.H.D. models from Engines numbered 57132694 onwards.
 REMARKS: The latest Cylinder for timing chain Part No. 265331 will be supplied for all Service replacements and can be fitted to any earlier Car or Land-Rover in the range from 1948 onwards.

Item No. 102 SUBJECT: **GEARBOX COVER.**
 MODELS: 1955 '60', '75' and '90'.
 MODIFICATION: Provision made for front to rear adjustment of gear lever to take up manufacturing tolerances.
 PART NUMBER: Gearbox cover 1 314524
 COMMENCING NUMBERS: Cars numbered:
 '60' Home R.H.D. from 53300233 onwards.
 '60' Export L.H.D. from 53330004 onwards.
 '60' Export R.H.D. from 53360029 onwards.
 '75' Home R.H.D. from 54300403 onwards.
 '75' Export L.H.D. from 54330102 onwards.
 '75' Export R.H.D. from 54360044 onwards.
 '90' Home R.H.D. from 55300692 onwards.
 '90' Export L.H.D. from 55330146 onwards.
 '90' Export R.H.D. from 55360570 onwards.

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REMARKS: The latest type gearbox cover can be identified by the four studs on top of the cover retaining the gear lever support; these studs replace the cage nuts previously used. When fitting the latest type cover to earlier 1955 and 1954 '60', '75' and '90' models, four $\frac{1}{8}$ " B.S.F. nuts are also required.

IMPORTANT.—The gear lever support must be adjusted front to rear so that the gear lever does not foul the heater controls or the front seat.

Item No. 103 SUBJECT: **WIPER MOTOR.**
 MODELS 1950-55 Car.
 1949-50 Land-Rover Station Wagon.
 PART NUMBERS: Wiper motor, 76034 1949-50 Land-Rover Station Wagon.
 Wiper motor, 311902 1950-51 Car.
 Wiper motor, 312271 1952-55 Car.
 REMARKS: As from March 1st, 1955 all Wiper motors in the above range will be supplied *less the flexible drive cable*. Will Distributors and Dealers please note this fact and ensure that wiper motors returned for reconditioning have the flexible drive cable removed before despatch.

Item No. 104 SUBJECT: **TOUCHING UP AND RE-SPRAYING WITH HALF-HOUR AIR DRYING ENAMEL.**
 MODELS: 1948-55 Land-Rover.
 1950-55 Car.
 PART NUMBERS. Land-Rover half-hour air drying enamel.

Colour	Part Number	To match up with Synthetic Stoving Enamel
Land-Rover "Viton".		
Bronze	262069 1 pint (0,5 litre)	} Bergers SA 4225
Green	262072 1 gallon (4,5 litre)	
Red	244276 1 pint (0,5 litre)	} Bergers SA 4568
	244279 1 gallon (4,5 litre)	
RAF Blue	244272 1 pint (0,5 litre)	} Bergers SA 4500
	244275 1 gallon (4,5 litre)	
Light Grey	244284 1 pint (0,5 litre)	} Bergers SB 310
	244287 1 gallon (4,5 litre)	
Beige	244280 1 pint (0,5 litre)	} Bergers SB 197
	244283 1 gallon (4,5 litre)	

Colour	Part Number	I.C.I. Reference
Car half-hour air drying enamel.		
Black	261886 1 pint (0,5 litre)	} 300 line 122
	261901 1 gallon (4,5 litre)	
Ivory	261887 1 pint (0,5 litre)	} 300 line 2155
	Also used for L.R. 261902 1 gallon (4,5 litre)	
Pastel Blue	262216 1 pint (0,5 litre)	} 300 line 2157
	262219 1 gallon (4,5 litre)	
Connaught Green	261889 1 pint (0,5 litre)	} 300 line 2152
	261904 1 gallon (4,5 litre)	
Lakeside Green	261890 1 pint (0,5 litre)	} 300 line 2154
	261905 1 gallon (4,5 litre)	
Light Grey	263060 1 pint (0,5 litre)	} 300 line 2564
	263063 1 gallon (4,5 litre)	
Dark Grey	263078 1 pint (0,5 litre)	} 300 line 2603
	263081 1 gallon (4,5 litre)	
Light Green	263082 1 pint (0,5 litre)	} 300 line 2602
	263085 1 gallon (4,5 litre)	
Sage Green	262897 1 pint (0,5 litre)	} 300 line 2464
	262900 1 gallon (4,5 litre)	
Smoke Blue	265043 1 pint (0,5 litre)	} 300 line 2863
	265046 1 gallon (4,5 litre)	

Thinners etc., Car and Land-Rover.

Thinners for Car	261906	1 pint (0,5 litre)	} I.C.I. 227-601
and Land-Rover	261909	1 gallon (4,5 litre)	

ACP Deoxidene			
No. 125	261883	½ gallon (2,25 litre)	I.C.I. 154-29
Primer	261884	1 pint (0,5 litre)	I.C.I. 145-734
Filler	261885	1 pint (0,5 litre)	I.C.I. 299-415

All the above can be obtained from the Rover Service Department.

I.C.I. "Belco" Basic Colours.

Black	300 line	021	} Not stocked by Rover.
White	300 line	02590	
Prussian Blue	300 line	053	
Turkey Amber	300 line	0103	
Light Brunswick Green	300 line	0141	
Middle " "	300 line	0142	
Dark " "	300 line	0143	
Deep Indian Red	300 line	0195	
Turkey Red Oxide	300 line	0196	
Scarlet	300 line	0212	
Yellow Oxide	300 line	0340	
Chrome Orange	300 line	0354	
Monastral Blue	300 line	0472	
Veridian	300 line	02359	
Maroon	300 line	02436	
Maroon Lake	300 line	07439	
Crimson	300 line	07460	
Crimson Malder	300 line	07466	
Chrome Yellow	300 line	07632	
Middle Chrome Yellow	300 line	07633	
Garnet Maroon	300 line	07910	

REMARKS:

Satisfactory results can be obtained when using the synthetic half-hour air drying enamels if the procedure detailed below is used as a guide when touching up or re-spraying. However, it must be emphasized that the results are largely determined by the skill of the operator. Also included is some advice on colour matching and tinting for the Car only. The information and advice given is based on the experience and technical knowledge of the manufacturers of the products involved.

Bergers "Viton", Sherlacquer and I.C.I. 300 line can be used either for touching up or for a complete re-spray. It should also be noted that when our existing stocks of quart (1 litre) and half-gallon (2,25 litre) tins of enamel are exhausted, only pint (0,5 litre) and gallon (4,5 litre) tins will be supplied.

PROCEDURE:

LAND-ROVER 1948-55.

Touching up or complete re-spray.

1. Pre-treatment of bare metal. The panel to be treated should be degreased, or if it cannot be removed from the vehicle, thoroughly cleaned with a suitable solvent such as White Spirit.
2. There are two methods in use for spraying on bare metal.
 - (a) Apply an etching primer mixed 50/50 with the correct thinners and allow to dry. When dry apply two coats of enamel.
 - (b) Apply a cleansing acid (A.C.P. Deoxidene 125) and leave for 15 minutes, thoroughly swill off with water and allow to dry, apply an oil-based primer (oil primer brown Belco 145-734) and air dry over night or four hours at minimum. Face with wet and dry paper. Finally apply two coats of enamel.
3. Where only slight damage to the paintwork is concerned it is sufficient to overspray direct without any preparation other than ensuring that the part to be sprayed is thoroughly clean.

4. Always spray complete panels. On the Land-Rover body there are so many break lines that rather than risk a patchy job by only spraying the part affected, it is just as convenient to spray in the complete panel and ensure a satisfactory result.

CAR 1950-55.

PROCEDURE:

Touching up and complete re-spray.

1. The entire surface of the panel or body must be thoroughly cleaned; all traces of polish etc., should be removed with a suitable solvent such as White Spirit. Thoroughly flat wet the panel with grade 280 wet and dry paper and feather edge any damaged portions; wipe clean with solvent, such as White Spirit. Apply a cleansing acid (A.C.P. Deoxidene 125) to bare metal patches, allow to dry for 15 minutes and swill off with water.

NOTE.—The preparatory work listed above is particularly important when touching up surfaces that have been protected by Silicone polishes.

2. Aluminium panels only. Apply one coat of an oil-based primer (oil primer brown Belco 145-734) and air dry over night, or for a minimum of four hours.

NOTE.—Aluminium panels on the 1950-55 Rover Car are:—Bonnet, Doors and Boot lid.

3. Aluminium and Steel panels. Apply one thin coat of primer surfacer (Belco 299-434) thinned 50/50 with thinners and air dry for 30 minutes.
4. Build up any damaged areas using ordinary cellulose stopper. Knock back stopper using grade 280 wet and dry paper.
5. Apply two or three coats of primer surfacer and dry over night or for a minimum of four hours. Flat down using grade 280 wet and dry paper.
6. Apply one coat of sealer (Belco 297-48) thinned with (227/601) thinners and air dry for two hours. Flat down with grade 400 wet and dry paper.

NOTE.—If sealer is not available, 300 line enamel may be used. Air drying and flatting as with sealer.

7. Apply two or three coats of air drying enamel wet on wet thinned approximately 60 parts enamel 40 parts thinners. Air dry for four hours or force dry for 20 minutes at 180°F. (82°C.) and polish as required.
8. Always spray complete panels to ensure a satisfactory result. The difficult parts are the rear wings, which are not detachable, and the rear quarter where there is no break line. The best method here is to spray the part affected and continue up and over the rear quarter, feathering out on top of the roof, where the blending will not be so noticeable. The reason for this is that synthetic enamels are not soluble and do not easily bond together as would cellulose which is soluble.

NOTE.—In many cases of touch-up work, flatting, sealing and re-spraying is all that is required. Each job should be judged on its merits before finally deciding on the method.

9. *Some individual cases of failure.*

(a) *Blistering.*

In most cases, rectification must start from the bare metal, but in the affected areas only. It is sufficient to flat, seal and recolour the remainder of the work.

(b) *Checking or crazing.*

Rub down finish until *all traces of crazing are removed*. Follow up with surfacer, sealer and colour.

(c) *Cracking or alligating.*

Strip affected parts to bare metal and refinish.

(d) *Flaking.*

As for (c) above.

- (e) *Chalking, loss of gloss, bronzing.*
Flat and polish. If fresh colour has to be applied it is usually satisfactory to re-spray direct on to the cleaned and flatted finish.
- (f) *Rain spotting.*
As for (e) above.
- (g) *Colour change, fading.*
Flat, seal and re-spray with colour.
- (h) *Corrosion.*
Strip affected areas to bare metal.

CAR COLOUR MATCHING AND TINTING.

1. GENERAL RULES:

- (a) Always ensure that basic colours are properly stirred before use.
- (b) Select the nearest basic colour to the shade being matched and then tint.
- (c) Keep the number of tinters to a minimum. Most shades can be matched from two colours with adjustments of tone by adding appropriate quantities of black and/or white. The simpler the blend the better because:
 - (i) the shade will have better light-fastness.
 - (ii) there will be less risk of application troubles such as 'ringing' after spotting-in, or 'sheariness' after polishing.
- (d) Match colours in natural daylight where possible, but avoid direct sunlight.
- (e) If there are several colour-matching jobs in hand, leave the very bright colours until the last, as it will be easier to pick out fine differences in shade before the eyes become fatigued by viewing brighter colours.
- (f) Small quantities of Prussian Blue or Brunswick Green will fade from a final tint on exposure.
- (g) The use of Chrome Yellow and Orange for tinting will result in darkening on exposure. It is preferable to use Yellow Oxide wherever possible.
- (h) Special care is needed in tinting pastel shades since it is easy to exceed the small amounts of tinting colours required. This warning applies to the addition of any tinters in quantities of 5% or less.

2. The colour pattern to be used should be checked against the colour of the vehicle to ensure it is the correct one. In this connection it must be remembered that all paint coatings undergo some colour change on exposure, the degree of change depending on the time the vehicle has been in service, the atmospheric conditions to which it has been exposed and the nature of the original shade.

Cleaning and polishing may remove any discrepancy between the colour pattern and the actual colour of the vehicle; if not, suitable adjustments can be made in the final stages of tinting.

When making additions take care to add less rather than more of the estimated quantity of each addition. Skill in making final adjustment will come with experience.

3. BLUES:

Pastel blues are best based on a blend of Monastral Blue and white. Not more than 15% of Monastral Blue should be used in any shade, otherwise bronzing may occur. If, however, the imposition of this limit prevents the attaining of the required depth of colour, then Prussian Blue should be used instead.

Pastel blues may be tinted to a greener shade by using Veridian or Yellow Oxide. Veridian gives a brighter tone than Yellow Oxide.

Red toned Pastel blues are best obtained by tinting the basic Monastral Blue/white blend with Deep Indian Red; other tinters should not be used.

Dark blues are all derived from Prussian Blue, which may be tinted with the same tinters as for Pastel Blues.

Black may be added to darken any shade and reduce brightness.

Chrome Yellow, Oranges, Reds (other than Deep Indian Red) or Maroons should NOT be used in tinting Dark Blues as they give poor light-fastness.

4. GREENS:

Pastel Greens are prepared in two ways:—

1. By blending white with Veridian.
2. By blending yellow oxide with Monastral Blue.

Veridian gives the brightest pastel shades. Varying the ratio of Yellow Oxide and Monastral Blue, either yellow-toned or blue-toned pastel greens can be produced. Any of the above greens can be made:—

1. Bluer in shade by tinting with Monastral Blue.
2. Yellower in shade by tinting with Yellow Oxide.

White or black may be used to vary the tone of any blend.

Brunswick Green, Prussian Blue or Chrome Yellow should NOT be used in Pastel Greens, as they give poor light-fastness. Tinters not recommended above should not be used.

Dark green shades should be obtained by tinting Light Brunswick Green, Middle Brunswick Green or Dark Brunswick Green. Select as the basic colour the one nearest to the final shade required.

Tint with:—

Middle chrome yellow to produce a yellow shade of green.

Monastral blue and black to produce a bluer or darker shade.

Turkey red oxide to produce a dull bronze shade.

Do NOT use reds (other than Turkey red oxide) or Maroons for tinting, since small amounts of these colours quickly fade out on exposure.

5. GREYS:

Greys are prepared by blending white and black.

Red-toned greys are obtained by tinting with Turkey red oxide.

Greenish-toned greys are obtained by tinting with yellow oxide.

Blue greys are obtained by tinting with Monastral Blue.

Do not use reds (other than Turkey red oxide) or maroons, chrome oranges or yellows or Prussian blue for tinting, otherwise poor light-fastness will result.

6. CREAMS AND LIGHT TINTS:

Creams are best produced by mixing white and yellow oxide. Chrome yellow may also be used in the case of 300 line ONLY, if the shade required cannot be obtained by the use of yellow oxide.

To obtain a green tone add Veridian.

Item No. 105 SUBJECT:
MODELS:
REMARKS:

FRONT WINGS AND BODY PANELS

1948-55 Land-Rover.

Owing to the number of different colours now in use on the Land-Rover it will be our policy in the future to supply all Front wings and body panels in *Black primer* only in place of the Green primer previously used. The black primer gives a more durable protective finish and cannot be regarded as a finish coat as has been the case in many instances with the green primer.

For details of spraying see Item No. 104 in this News Letter.

Yours faithfully,

For THE ROVER COMPANY LIMITED

M. Brewer.

*Publications Editor,
Technical Service Department.*