OWNER'S MAINTENANCE MANUAL

ROVER 3-LITRE MK III

PART No. 4716

ROVER
3 litre

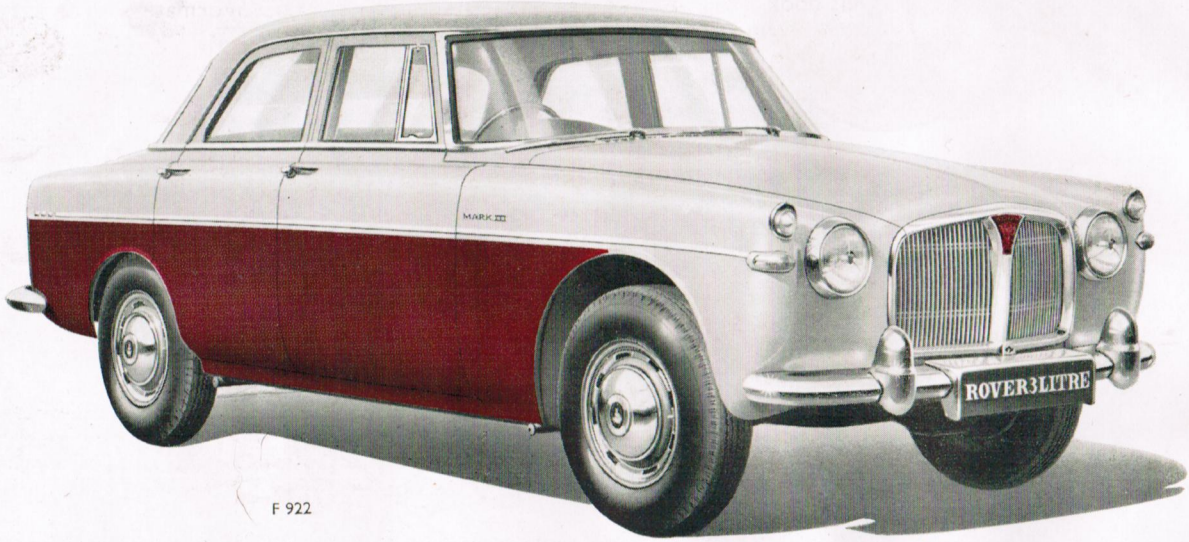
Mark III

Owner's Maintenance Manual

Saloon and Coupé

Incorporating Free Service and Maintenance Schedules

THE ROVER CO. LTD
SOLIHULL
WARWICKSHIRE
ENGLAND



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ROVER MK III 3 LITRE SALOON

Introduction . . . .

This book has been prepared to provide supplementary information to that contained in the Owners Instruction book. Its intention is to give clear and simple information necessary for the efficient care and maintenance of your car.

This book is divided into four sections:

Part 1. Routine maintenance and adjustments.

Part 2. Electrical equipment, body work, etc.

Part 3. General data and index to Parts 1 and 2.

Part 4. Free Service and Maintenance Schedules.

The new car pre-delivery check will have been carried out by the Distributor or Dealer responsible for the sale of the car, leaving a stub in the book to certify that the work has been done.

The routine maintenance of this car has been kept down to a minimum and can, if desired, be carried out by owners without special tools. Any work beyond that detailed in this book should be entrusted to Rover Distributors or Dealers who are equipped and prepared also to carry out the routine maintenance.

It should be noted that the sequence of normal maintenance repeats itself every 20,000 miles (32.000 km).

The Rover Company is always prepared to give advice on maintenance or other matters to individual owners, but any correspondence with the Company *must bear the chassis or car number* which will be found on a plate affixed to the left-hand front door pillar.

PART ONE

ROUTINE MAINTENANCE AND ADJUSTMENTS

Notes on general maintenance

Lubrication and maintenance are necessary to keep any car in good mechanical condition. All the items which require regular maintenance as detailed in the Maintenance Section are shown in Part One of this book in terms of mileage which would apply in a temperate climate. Climatic and operating conditions affect maintenance intervals to a large extent; in many cases, therefore, the determination of such intervals must be left to the good judgment of the owner or to advice from a Rover Distributor or Dealer, but the recommendations will serve as a firm basis for maintenance work.

Of particular importance in this connection are the undermentioned items:

IMPORTANT

1. Every 750 miles (1.000 km) check engine oil level, power steering oil level and water level in radiator and windscreen washer reservoir.
2. Drain and refill engine sump every 5,000 miles (8.000 km) or every four months, whichever comes first.
3. Every month check tyre pressures and inspect tyre treads; when high-speed touring the tyre pressures should be checked much more frequently, even to the extent of a daily check. If front wheel tread wear is uneven, check wheel alignment.
4. Every month check brake fluid level and battery acid level.

5. Owners are under a legal obligation to maintain all exterior lights in good working order, this also applies to headlamp beam setting, which should be checked at regular intervals by a Rover Distributor or Dealer.

Engine. Under adverse conditions, such as driving over dusty roads or where short stop-start runs are made, oil changes and attention to the engine breather gauze must be more frequent.

Air cleaner. When the car is driven over dusty roads the element should be changed more frequently.

Propeller shaft. Under tropical or sandy and dusty conditions, the sliding joint must be lubricated frequently to prevent ingress of abrasive materials.

Lubricants. The recommended lubricants have been found suitable for Rover cars and should be used whenever possible in the grades specified. When ordering oil, the correct grade, as well as the make, should be clearly stated.

The Rover Company attaches very great importance to the nature of the lubricants used in its products and therefore gives specific recommendations as detailed on the next page.

Should any of the recommended lubricants not be available in certain overseas territories, the Rover Distributor or Dealer for that territory will obtain specific guidance from The Rover Company, or owners may communicate with the Company where they so wish.

Multigrade oils, produced by the makers of the lubricants listed overleaf, are also approved for the range of SAE grades that they cover.

Recommended lubricants

These recommendations apply to temperate climates where operational temperatures may vary between approximately 10°F (–12°C) and 90°F (32°C).
Information on recommended lubricants for use under extreme winter or tropical conditions can be obtained from The Rover Co. Ltd., Technical Service Department, or a Rover Distributor or Dealer.

COMPONENTS	SAE	BP	CASTROL	DUCKHAM'S	ESSO	MOBIL	REGENT TEXACO-CALTEX	SHELL
Engine and air cleaner	20W	Energol SAE 20W	Castrolite	Duckham's NOL Twenty	Esso Motor Oil 20W/30	Mobiloil Arctic	Advanced Havoline 20W	Shell X-100 20W
Gearbox only	90 EP	Energol SAE 90 EP	Castrol Hypoy	Duckham's Hypoid 90	Esso Gear Oil GP 90/140	Mobilube GX 90	Universal Thuban 90	Spirax 90 EP
Overdrive only	20W	Energol SAE 20W	Castrolite	Duckham's NOL Twenty	Esso Motor Oil 20W/30	Mobiloil Arctic	Advanced Havoline 20/20W	Shell X-100 20W
Automatic Transmission and Power Steering	—	Energol ATF Type A	Castrol TQ Automatic Transmission Fluid	Duckham's Nolmatic AT Type A	Esso Automatic Transmission Fluid	Mobil Fluid 200	Texamatic Fluid 3528	Shell Donax T6
Rear axle	90 EP	Energol SAE 90 EP	Castrol Hypoy	Duckham's Hypoid 90	Esso Gear Oil GP 90/140	Mobilube GX 90	Universal Thuban 90	Spirax 90 EP
Front hubs, propeller shaft, rear spring and front torsion bar sleeves	—	Energrease L2	Castrolease LM	Duckham's LB 10 grease	Esso Multi-purpose grease H	Mobilgrease MP or Mobil-grease Special	Marfak Multipurpose 2	Retinax A
Brakes	Girling Crimson Brake Fluid. Specification SAE 70 R3							
Anti-freeze solution	Any good quality glycol-base anti-freeze solution							

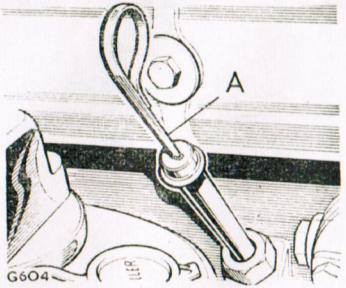
Rover parts

It is important that you should recognise the necessity of using only genuine Rover Parts or Rover Approved Parts when repair or maintenance work is being carried out on your car.

Rover parts are produced to the same high standard as those parts built into the car in its original production and it is in your best interests that you should insist that only genuine Rover Parts or Rover Approved Parts are fitted to your car.

Routine maintenance

On the following pages, in the same general order as listed in the Maintenance Section of this book, will be found full instructions on how to carry out the maintenance and adjustments required on the Rover 3 Litre Mk III models.



Engine oil level dipstick

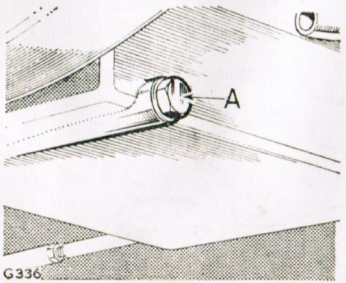
A—Dipstick at left-hand side of engine

Absolute cleanliness is essential when carrying out the maintenance work that follows.

Engine oil level—Every 750 miles (1.000 km)

Proceed as follows:

Stand the car on level ground and allow the oil to drain back into the sump. Withdraw the dipstick, wipe it clean, re-insert to its full depth and remove a second time to take the reading. Add oil as necessary; never fill above the H mark.



Engine sump drain plug

A—Drain plug at right-hand side of engine

Engine oil changes and filter replacement—Every 5,000 miles (8.000 km) or every four months, whichever comes first.

To change the engine oil:

Run the engine to warm up the oil, switch off the ignition. Remove the drain plug in the right-hand side of the sump. Allow oil to drain away completely and replace the plug.

To change filter:

1. Place oil tray under engine.
2. Unscrew the bolt in the top of the filter adaptor and remove the container and element.

3. Discard the used filter element and large rubber washer.

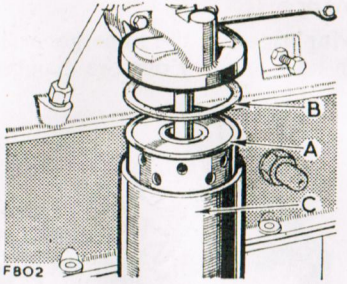
4. Wash the container in petrol.

5. Place the new filter element in the container and reassemble the unit, using the new large rubber washer supplied with the element.

6. Ensure that all the sealing washers are in position and intact, and that the container is correctly located in the adaptor.

Refill with oil of the correct grade through the filler at the right-hand front of the engine; the capacity is 11 Imperial pints, 12 US pints (6,0 litres). This includes 1 Imperial pint, 1.2 US pints (0,5 litres) for the filter.

Run engine and check for oil leaks at filter and drain plug.



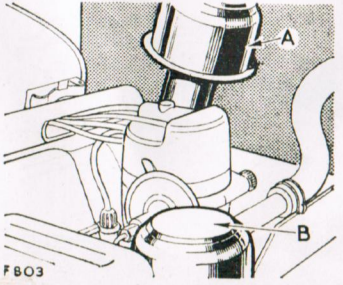
Engine oil filter

A—Oil filter element
B—Washer for filter
C—Container for oil filter

Engine breather filter—Every 10,000 miles (16.000 km)

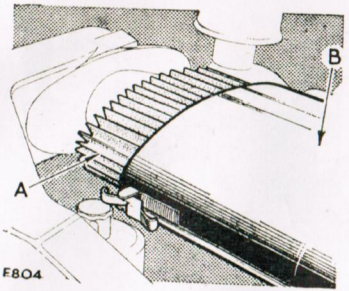
Clean as follows:

Remove the filter and wash by swilling in a dish of petrol; re-wet by dipping in clean engine oil, shake off the surplus. Replace filter with slot facing rear of engine.



Engine breather filter

A—Breather filter
B—Oil filler cap



Air cleaner

A—Element

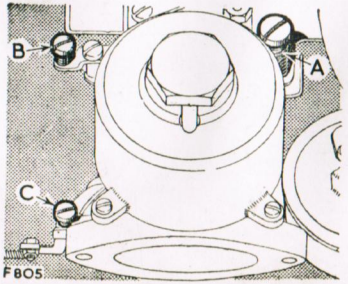
B—Container for element

Air cleaner—Every 20,000 miles (32.000 km)

Attention to the air cleaner is extremely important. Replace element more frequently under dusty conditions, as performance will be seriously affected if the car is run with an excessive amount of dust in the element.

Proceed as follows:

1. Remove bolts securing the air cleaner and lift out the complete unit.
2. Unclip end cover and withdraw element complete with frame.
3. Release wing nut on frame and remove end cap and sealing washer.
4. Discard old element and replace with new unit.
5. Ensure that the sealing washers are in position and intact, and reassemble the unit. Refit to engine.



Carburetter slow-running adjustment

A—Slow-run valve

B—Fast idle adjustment screw

C—Jet adjustment nut

Carburetter slow-running adjustment — Every 5,000 miles (8.000 km).

The only adjustments provided at the carburetter are a jet adjustment nut and a throttle adjusting screw.

Should the carburetter require adjustment for any reason, proceed as follows:

1. Run the engine until normal operating temperature is obtained. If necessary adjust the slow-run valve to give the correct idling speed.

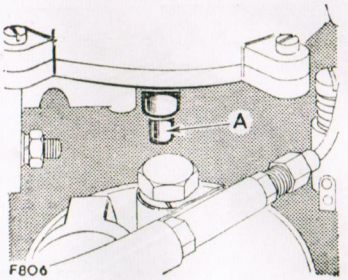
2. Lift the carburetter piston approximately $\frac{1}{32}$ in. (1 mm) by means of the lift pin situated on the right of the carburetter body. There is approximately $\frac{3}{16}$ in. (4,5 mm) free movement of the lift pin before it contacts the piston.

If the engine speeds up immediately the mixture is too rich and the jet adjustment screw must be turned anti-clockwise, thus weakening the mixture; if the engine stops immediately the mixture is too weak and the jet adjustment screw should be turned clockwise to enrich the mixture.

If the engine just falters and continues to run unevenly the adjustment is correct.

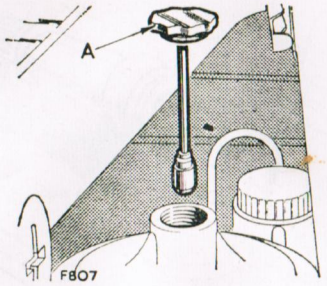
Finally adjust the slow-run valve to get a smooth idling speed.

The fast idle screw should not require adjustment.



Carburetter lift pin

A—Lift pin



Carburetter hydraulic damper

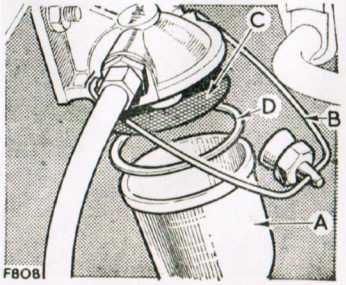
A—Cap and hydraulic damper

Carburetter hydraulic damper—Every 10,000 miles (16.000 km)

Unscrew the cap on top of the suction chamber, withdraw cap and hydraulic damper, replenish the damper reservoir as necessary with SAE 20 oil to within about $\frac{1}{2}$ in. (12 mm) from the top of the tube. Then replace cap and hydraulic damper.

Fuel sediment bowl on wing valance—Every 20,000 miles (32.000 km)

The fuel pump sediment bowl provides an additional filter between pump and carburetter.



Fuel sediment bowl

A—Bowl
B—Retainer
C—Gauze
D—Sealing washer

Clean as follows:

1. Remove the bowl by slackening the thumb screw and swinging the retainer aside.
2. Remove and clean filter gauze in petrol.
3. Ensure that the sealing washer is in good condition.
4. Replace gauze and refit bowl.

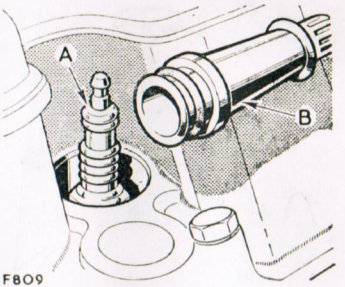
Sparking plugs—Check every 5,000 miles (8.000 km); replace every 10,000 miles (16.000 km)

The sparking plugs are fitted with plastic covers retained in the cylinder head by rubber rings. To gain access to the plugs for cleaning and gap-setting, pull up the plug covers without detaching them from the high tension leads.

Check or replace the sparking plugs as applicable; if the plugs are in good condition clean and re-set the electrode gaps to .029 to .032 in. (0,75 to 0,80 mm).

It is important that only Champion N5 or Lodge HLN sparking plugs are used for replacements.

Before refitting sparking plugs, check and adjust the contact points, also check tappet adjustment when applicable.



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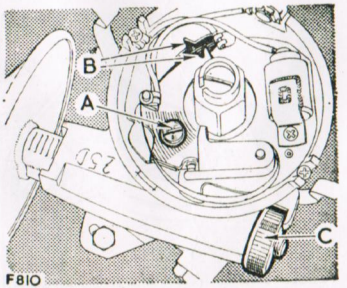
Sparking plug and cover

A—Sparking plug
B—Cover

Distributor contact points—Every 5,000 miles (8.000 km)

Check and adjust the contact points clearance as follows. This is best done while the sparking plugs are removed, previous operation:

1. Remove the distributor cap and rotor arm; then turn the engine, using the starting handle, until the contacts are fully open.
2. The clearance should be .014 to .016 in. (0,35 to 0,40 mm) with the feeler gauge a sliding fit between the contacts.
3. If necessary, slacken the screw which secures the adjustable contact and adjust by the adjuster slot until the clearance is correct; re-tighten the retaining screw.
4. Replace the rotor arm and distributor cap.



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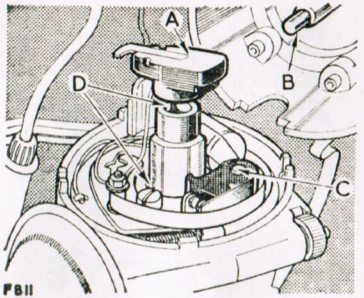
Distributor contact points

A—Securing screw for adjustable contact
B—Adjuster slot for contact points
C—Adjuster screw, ignition timing



Distributor

A—Rotor arm
B—Carbon brush
C—Contact breaker lever pivot
D—Lubricate at this point

Distributor maintenance—Every 10,000 miles (16.000 km)

Lubricate as follows:

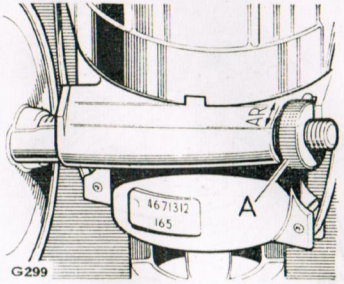
1. Remove the distributor cap and rotor arm.
2. Lightly smear the cam with clean engine oil.
3. Add a few drops of thin machine oil to lubricate the cam bearing and distributor shaft. See illustration.
4. Add a few drops of thin machine oil through the hole in the contact breaker base plate, to lubricate the automatic timing control. See illustration.
5. Remove the nut on the terminal block and lift off the spring and moving contact, also remove adjustable contact secured with a screw. Ensure that the contacts are free from grease or oil; if they are burned or blackened, clean with a fine carborundum stone and wipe with a petrol-moistened cloth. Add a smear of grease to contact pivot before replacing the contacts. Then adjust as detailed in previous operation.
6. Wipe the inside and outside of the cap with a soft dry cloth; ensure that the small carbon brush works freely in its holder.
7. Replace rotor arm and distributor cap.

Ignition timing

In addition to automatic timing advance and retard mechanism, the distributor incorporates an adjuster screw, known as the octane selector. This is a vernier adjustment attached to the distributor, fitted with a sliding portion controlled by an adjusting screw. The body of the distributor is marked R (Retard) and A (Advance) to indicate direction of turn.

Should pinking develop as a result of the need for decarbonising, the control can be retarded a little by turning the screw in a clockwise direction. Do not forget to return it to the original position after decarbonising.

In certain countries very low grade fuel is supplied, in which case it may be necessary to adjust the octane selector to avoid pinking, even with a clean engine.



Ignition timing

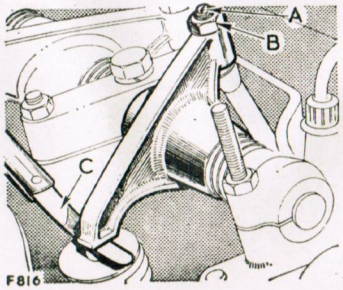
A—Adjuster screw, ignition timing

Tappet adjustment—Every 10,000 miles (16.000 km)

The correct clearance is inlet .006 in. (0,15 mm) engine hot and exhaust .010 in. (0,25 mm) with the engine hot or cold.

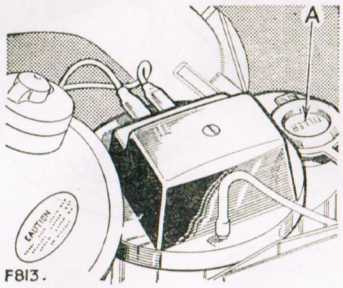
To carry out tappet adjustment, proceed as follows:

1. Rotate the engine in the running direction until the valve receiving attention is fully open and then move the engine one complete turn, to bring the tappet on to the back of the cam.



Tappet adjustment

A—Adjusting screw
B—Locknut
C—Feeler gauge



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Windscreen washer reservoir

A—Filler cap

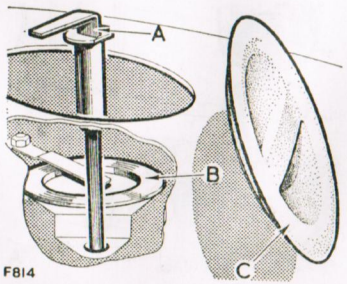
2. Check the tappet clearance with a feeler gauge. If adjustment is required, slacken the locknut and rotate the tappet adjusting screw until the clearance is correct; re-tighten the locknut, taking care to ensure that this operation does not upset the clearance.

3. Repeat for the other valves in turn.

Water level, windscreen washer—Every 5,000 miles (8.000 km)

Top up reservoir to within $\frac{1}{2}$ in. (12 mm) below bottom of filler neck.

In cold weather, to prevent freezing of the water, the reservoir should have $\frac{1}{8}$ pint of methylated spirits added to one reservoir of water.



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Gearbox oil filler and dipstick

A—Dipstick

B—Filler cap

C—Rubber plug, front

Gearbox oil level, 4-speed gearbox—Every 5,000 miles (8.000 km)

Gearbox and clutch withdrawal are lubricated as one unit. Check oil level and top up if necessary to bottom of filler plug hole.

Do not add anti-friction additives to the gearbox oil.

Both the dipstick and filler cap are accessible through the inspection hole on the top of the gearbox cover after lifting the tunnel carpet off and removing the front large rubber plug from the cover.

If significant topping up is required check for oil leaks at drain and filler plugs, all joint faces and through drain hole in bell housing.

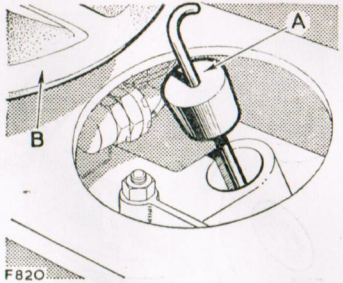
Overdrive oil level—Every 5,000 miles (8.000 km)

Check oil level and top up if necessary to the level mark on the dipstick.

Do not add anti-friction additives to the overdrive oil.

The dipstick and filler orifice are accessible through the inspection hole on top of the gearbox cover after pulling back the carpet and removing the rear large rubber plug from the cover.

If significant topping up is required check for oil leaks at drain plug and at all joint faces.



Overdrive oil level dipstick-filler plug

A—Dipstick-filler plug
B—Rubber plug, rear

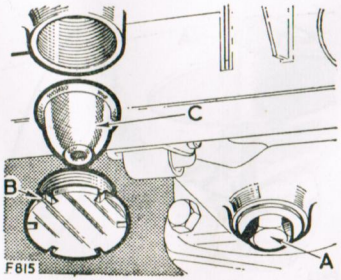
Gearbox and overdrive oil changes, 4-speed gearbox—Every 10,000 miles (16.000 km)

To change the gearbox and overdrive oil, proceed as follows:

1. Immediately after a run, when the oil is warm, drain off the oil by removing the drain plugs in the bottom of the gearbox casing and the overdrive casing.
2. Remove the overdrive oil filter, accessible through the drain plug hole, and secured by a central bolt. Clean filter in petrol and refit.
3. Replace the drain plugs and refill gearbox and overdrive through their separate fillers with the correct grade of oil.

The capacities are as follows:

Gearbox	..	3 Imperial pints; 3½ US pints (1,75 litres).
Overdrive unit	..	1½ Imperial pints; 2 US pints (0,85 litres).



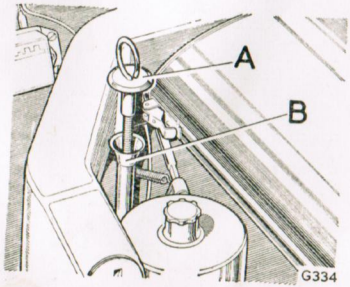
Gearbox and overdrive drain plugs

A—Gearbox drain plug
B—Overdrive drain plug
C—Overdrive filter

4. After refilling the gearbox and overdrive with oil, re-check the overdrive level after the car has been run, as a certain amount of oil will be retained in the hydraulic system.

Gearbox fluid level, automatic transmission—Every 5,000 miles (8.000 km)

The torque converter and automatic gearbox are lubricated as one unit. As the fluid for operating the torque converter is fed from the transmission casing it is essential when checking the level or topping up the automatic gearbox that the engine is run at idling speed for about two minutes to transfer fluid from transmission casing to torque converter, otherwise a false level reading will be obtained. Do not add anti-friction additives to the automatic transmission fluid. Check as follows:



Fluid level dipstick-plug in engine compartment

A—Dipstick
B—Tube for dipstick

1. Absolute cleanliness is essential. Use only nylon rag for cleaning.

2. Stand car on level ground. Engine idling and selector at the 'P' position.

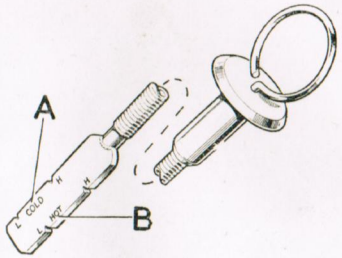
3. Lift bonnet to expose dipstick which is adjacent to the air cleaner elbow.

4. Clean area around dipstick hole. Remove dipstick, wipe dry and check fluid level. Take the dipstick reading immediately after the dipstick has been fully inserted to avoid misreadings by splashing. The difference between full and low marks on dipstick represents approximately one pint (0,5 litre). See paragraph 6.

5. With the engine idling and the selector at 'P', add the recommended grade of fluid to bring the level up to the 'full' mark. Do not overfill.

6. When the transmission is hot, top up to the upper mark on the side of the dipstick marked 'HOT'. With transmission cold, top up to the upper mark on the side of the dipstick marked 'COLD'. It is most important to ascertain if the transmission is hot or cold when topping up and to use the appropriate mark, otherwise over-filling or under-filling will result.

7. If significant topping up is required check for leakage at oil seals and sump joint, rectify immediately.



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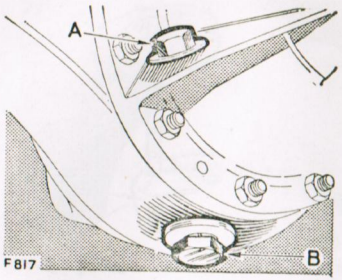
Fluid level dipstick

A—Transmission cold, top up to upper mark on 'COLD' side of dipstick

B—Transmission hot, top up to upper mark on 'HOT' side of dipstick



Rear axle differential oil level-filler plug and drain plug

A—Oil level-filler plug
B—Drain plug

Rear axle differential oil level—Every 5,000 miles (8.000 km)

Check oil level and top up if necessary to the bottom of the filler plug hole. Access to this plug is gained from underneath the car.

If significant topping up is required check for oil leaks at plugs, joint faces and oil seals adjacent to axle shaft flanges and propeller shaft driving flange.

Rear axle differential oil changes—Every 10,000 miles (16.000 km)

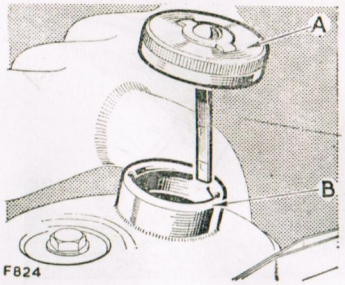
To change the differential oil, proceed as follows:

Immediately after a run, when the oil is warm, drain off the oil by removing the drain plug in the bottom of the casing. Replace the drain plug, remove filler-level plug and refill with oil of the correct grade; the capacity is approximately 3 Imperial pints, $3\frac{1}{2}$ US pints (1,75 litres).

Power steering box lubrication—Every 750 miles (1.000 km) and at every maintenance inspection

The power steering units are lubricated by the operating fluid. The only lubrication maintenance required is to check the reservoir fluid level and if necessary top up to the 'F' mark on dipstick, using one of the recommended grades of fluid.

If significant topping up is required check for oil leaks at hose connections, rocker shaft and camshaft oil seals and joint faces.



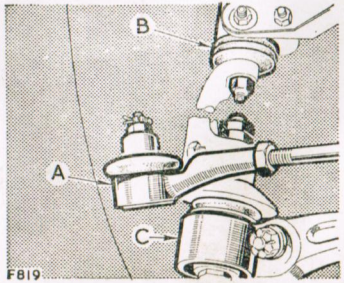
Oil filler cap and dipstick

A—Oil filler cap and dipstick
B—Reservoir

Steering swivel and ball joints—Every 10,000 miles (16.000 km)

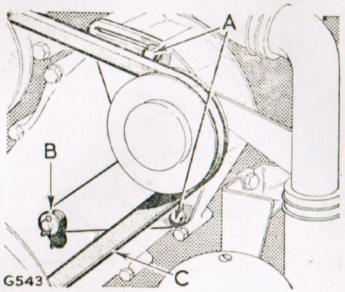
The steering joints have been designed to retain the initial filling of grease for the normal life of the ball joints; however, this applies only if the rubber boot remains in the correct position. Check to ensure that the rubber boots have not become dislodged or damaged, and check for wear in the joint.

This can be done by moving the ball joint vigorously up and down. Should there be any appreciable free movement the complete joint must be replaced.



Ball joints

A—Steering ball joint
B—Steering ball swivel, upper
C—Steering ball swivel, lower



Fan belt adjustment

A—Adjusting bolts

B—Pivot

C—Check at this point, $\frac{5}{16}$ to $\frac{7}{16}$ in. (8 to 11 mm) free movement

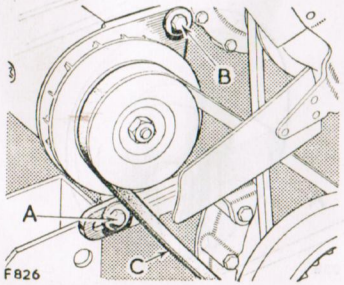
Fan and dynamo belt adjustment—Every 10,000 miles (16.000 km)

Check by thumb pressure between the jockey and crankshaft pulleys and between dynamo and crankshaft pulleys at point marked 'C'. Movement should be $\frac{5}{16}$ in. to $\frac{7}{16}$ in. (8 to 11 mm).

If necessary adjust as follows:

Fan belt

1. Slacken the two adjusting bolts securing the jockey pulley to the front cover.
2. Pivot the pulley inwards or outwards as necessary and adjust until the correct tension is obtained.
3. Tighten jockey pulley adjusting bolts.



Dynamo belt adjustment

A—Adjusting bolt

B—Pivot bolt

C—Check at this point $\frac{5}{16}$ in. to $\frac{7}{16}$ in. (8 to 11 mm) free movement

Dynamo belt

1. Slacken the pivot bolts securing the dynamo to the mounting bracket, slacken the adjusting bolt.
2. Pivot the dynamo inwards or outwards as necessary and adjust until the correct belt tension is obtained.
3. Tighten adjusting and pivot bolts.

Radiator water level—Every 750 miles (1.000 km) and at every maintenance inspection.

The radiator filler cap is under the bonnet panel.

The cooling system is pressurised and care must be taken when removing the radiator filler cap, especially when the engine is hot.

When removing the filler cap, first turn it anti-clockwise to the stop and allow all pressure to escape, before pressing it down and turning further in the same direction to lift it off.

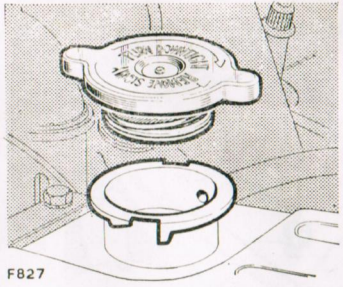
When replacing the filler cap it is important that it is tightened down fully, not just to the first stop. Failure to tighten the filler cap properly may result in water loss, with possible damage to the engine through overheating.

With a cold engine the correct water level is one inch below the bottom of the filler neck; the total capacity of the system is 26 Imperial pints, 29 US pints (14.7 litres).

Use soft water wherever possible; if the local water supply is hard, rainwater should be used.

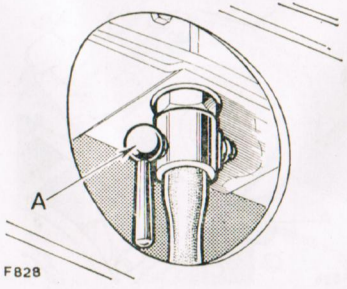
Frost precautions

It is impracticable to drain the cooling system fully as water is retained in the heating system; a good quality glycol-base anti-freeze solution must be used during cold weather.



F827

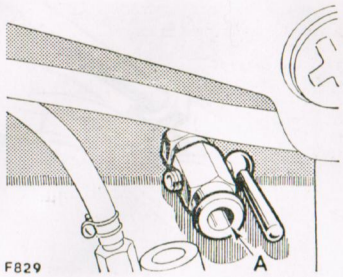
Radiator filler cap



F828

Radiator drain plug

A—Drain plug, under valance at right-hand side



Cylinder block drain tap

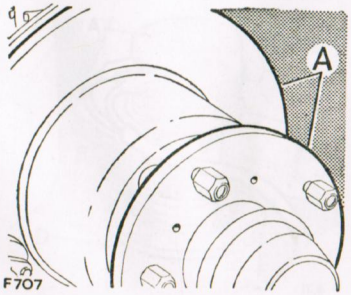
A—Drain tap, right-hand side of engine adjacent to engine breather

When the temperature is between 32°F and 0°F (0°C and minus 18°C) use one part of anti-freeze to three parts of water.

Proceed as follows:

1. Ensure that the cooling system is leak-proof; anti-freeze solutions are far more 'searching' at joints than water.
2. Drain and flush the system.
3. Pour in approximately one gallon (4.5 litres) of water, add solution, then top up with water to within one inch (25 mm) below bottom of filler neck.
4. Run the engine to ensure a good circulation of the mixture.

During the winter months in Britain, cars leaving the Rover factory have the cooling system filled with 25 per cent of anti-freeze mixture. This gives protection against frost down to 0°F (minus 18°C). Cars so filled can be identified by the blue label affixed to the right-hand side of the windscreen and a blue label tied to the engine.



Front hub lubrication

A—Check for leakage at these points

Front hub lubrication—Every 10,000 miles (16.000 km)

Check front hubs for leakage. This may be seen at disc shield or inside wheel rim.

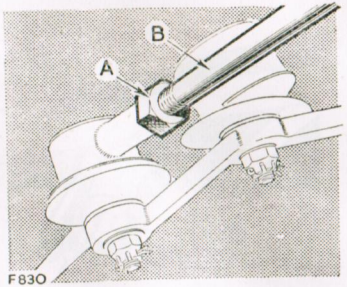
If there are signs of leakage at the above points, the necessary rectification should be carried out by a Rover Distributor or Dealer.

Wheel alignment—Every 20,000 miles (32.000 km)

Special equipment is required to check wheel alignment and this work should be carried out by your local Rover Distributor or Dealer.

For those owners who have suitable equipment, the alignment should be $\frac{1}{16}$ in. (1,5 mm) toe-in to $\frac{1}{16}$ in. (1,5 mm) toe-out.

To adjust, slacken the locknuts of the steering track rod and turn to obtain the correct alignment. Tighten locknuts and re-check. Ensure that the track rod ball joints are correctly aligned; that is, the top of the ball joint should be horizontal in the fore and aft direction.



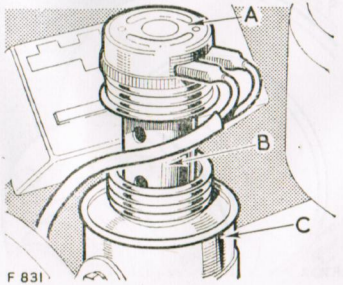
Adjustment for wheel alignment

A—Locknut
B—Steering track rod

Brake fluid reservoir—Every month and at every maintenance inspection

The reservoir cap incorporates a float and level switch which operates the amber brake warning light, should the level in the reservoir fall below the safe limit.

Check fluid level in brake reservoir, top up if necessary to rib on reservoir. Use Girling Crimson Brake Fluid Specification SAE 70 R3.



Brake fluid reservoir

A—Cap
B—Float unit
C—Reservoir

If significant topping up is required check master cylinder, brake disc and wheel cylinders and brake pipes for leakage; any leakage must be rectified immediately.

When removing reservoir cap do not disconnect the wires; care should be taken when withdrawing the float unit to ensure that the brake fluid does not drip on to the car.

Check operation of reservoir level safety switch as follows:

Ignition 'on', handbrake 'off': unscrew and lift filler cap 1 in (25 mm), warning light should be illuminated.

If the warning light is not illuminated, the operation of the float unit and the wiring connections must be investigated.

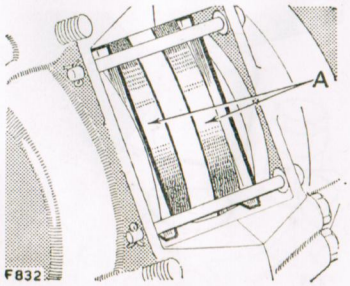
Front brake pads—Every 5,000 miles (8.000 km)

Hydraulic disc brakes are fitted at the front, and the correct brake adjustment is automatically maintained; no provision is therefore made for adjustment.

Check the thickness of the foot brake pads and renew if the minimum thickness is less than $\frac{1}{8}$ in. (3 mm), also check for oil contamination on brake pads and discs.

This operation should be carried out from underneath the car.

If replacement or rectification is necessary this should be carried out by a Rover Distributor or Dealer.



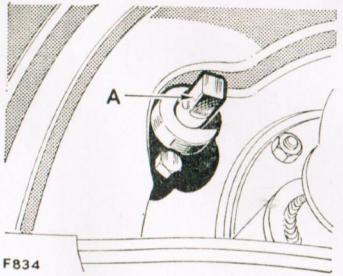
Checking foot brake pads

A—Foot brake pad, minimum thickness $\frac{1}{8}$ in. (3 mm)

Rear brake shoes—Every 5,000 miles (8.000 km)

Check and if necessary adjust the rear brake shoes as follows by means of the single adjuster at the forward side of the brake anchor plate:

1. With the rear wheels jacked up, ensure that they rotate freely; slacken the adjuster if necessary, by turning anti-clockwise.
2. Apply the foot brake to ensure that the shoes are bedded in and turn the adjuster clockwise until the linings brush the brake drum, then slacken adjuster off two clicks.



Rear wheel brake adjustment

A—Adjuster

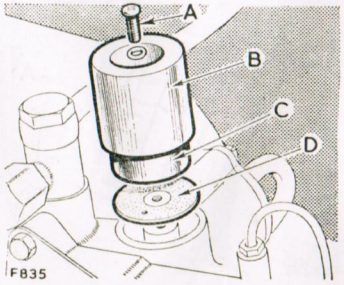
Hand brake adjustment

This is done automatically as the rear brakes are adjusted.

Brake servo air filter—Every 20,000 miles (36.000 km)

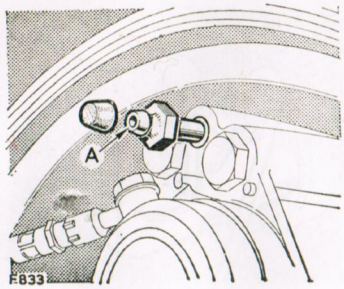
To replace filter:

1. Remove securing screw complete with washer from centre of filter cover.
2. Withdraw cover and filter.
3. Renew filter and reverse removal procedure, ensuring that the rubber washer at the base of the filter is undamaged and correctly seated.



Brake servo air filter

A—Securing screw
B—Cover
C—Filter
D—Rubber washer



Brake bleed nipple

A—Bleed nipple

Bleeding the brake system

If the brakes feel spongy, this may be caused by air in the hydraulic system. This air must be removed by bleeding the hydraulic system at each wheel cylinder. Bleeding must always be carried out at all wheels.

1. Attach a length of rubber tubing to the bleed nipple on the wheel cylinder farthest from the brake pedal and place the lower end of the tube in a glass jar containing brake fluid.
2. Slacken the bleed screw and pump the brake pedal slowly, pausing at each end of each stroke, until the fluid issuing from the tube shows no signs of air bubbles when the tube is held below the surface of the fluid in the jar.
3. Hold the tube under the fluid surface and, with the foot brake fully depressed, tighten the bleed screw.
4. Repeat for the other three wheels in turn, finishing at the one nearest the brake pedal.

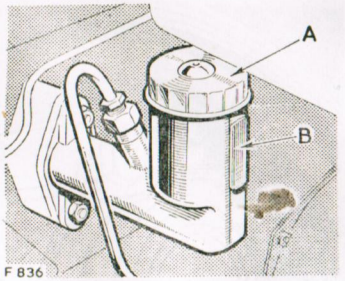
The fluid in the reservoir should be replenished throughout the operation, to prevent another air lock being formed, using only new fluid. Girling Crimson Brake Fluid. Specification SAE 70 R3.

It will be obvious that the above operation requires two people.

Clutch fluid reservoir—Every 5,000 miles (8.000 km)

Check fluid level in clutch reservoir, top up if necessary to the level mark on the reservoir body. Use Girling Crimson Brake Fluid. Specification SAE 70 R3.

If significant topping up is required, check for leaks at master cylinder, slave cylinder and connecting pipe.



Clutch master cylinder and fluid reservoir

A—Cap
B—Reservoir

Clutch adjustment—Every 5,000 miles (8.000 km)

Check, and if necessary adjust the clutch to give $\frac{3}{4}$ in. (20 mm) free movement at the pedal pad.

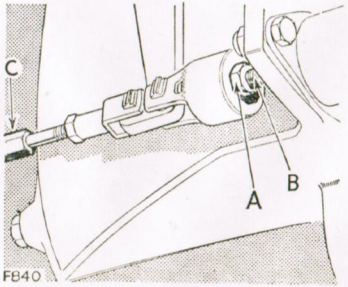
Adjustment must be made at the slave cylinder push rod and the rod between the clutch lever and cranked lever as follows:

(*a*) Slacken locknut.

(*b*) Adjust the push rod with the fingers until the free movement at the pedal is correct.

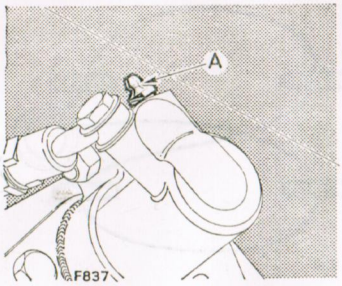
(*c*) Secure with the locknut.

Adjustment of the slave cylinder push rod must be compensated by adjustment of the rod between the clutch lever and the cranked lever otherwise clutch slip may result.



Clutch adjustment

A—Locknut
B—Slave cylinder push rod
C—Adjustment rod



Bleed nipple for clutch slave cylinder

A—Bleed nipple

For example if adjustment at the slave cylinder rod is shortened by two turns, the adjustment rod between the clutch lever and the cranked lever must be lengthened by one turn.

Bleeding the clutch system

If the level of the fluid in the clutch reservoir is allowed to fall too low or if the pipe has been disconnected, the clutch will not operate correctly due to air having been absorbed into the system.

This air must be removed by bleeding the hydraulic system at the slave cylinder as follows:

1. Attach a length of rubber tubing to the bleed nipple on the slave cylinder and place the lower end of the tube in a glass jar containing fluid.
2. Slacken the nipple and pump the clutch pedal, pausing at each end of each stroke, until the fluid issuing from the tube shows no signs of air bubbles when the tube is held below the surface of the fluid in the jar.
3. Hold the tube under the fluid surface, and, with the pedal fully depressed, tighten the bleed screw.

The fluid in the reservoir should be replenished throughout the operation to prevent another air-lock being formed, using only new fluid. Girling Crimson Brake Fluid. Specification SAE 70 R3.

It will be obvious that the above operation requires two people.

5,000 miles (8.000 km)
nd as illustrated, to equalise

very maintenance attention.
vill be obtained only if the
ures.

	Front	Rear
lb/sq in.	26	26
kg/cm²	1,4	1,4
lb/sq in.	30	30
: kg/cm²	2,1	2,1

rear tyre pressures should

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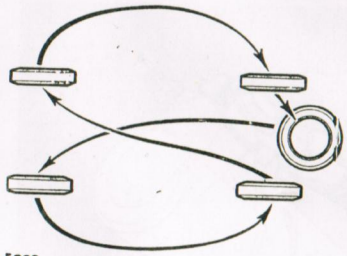


Changing wheel positions

Any unusual pressure loss in excess of 1 lb/sq in. (0,05 kg/cm²) per week should be investigated and corrected.

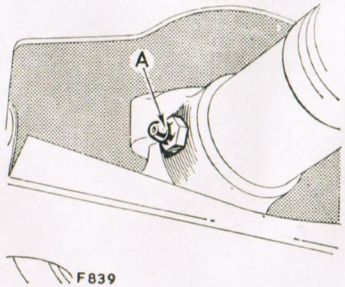
Always check the spare wheel, so that it is ready for use at any time.

At the same time, remove embedded flints, etc., from the tyre treads with the aid of a penknife or similar tool. Clean off any oil or grease on the tyres, using petrol sparingly.

Wheel and tyre units are accurately balanced on initial assembly with the aid of clip-on weights secured to the wheel rims.

Wheel balance should always be checked whenever new tyres are fitted to ensure that the dynamic balance of the wheel and tyre is correct.

When tyres are changed, road wheels should be carefully checked for possible damage.



Propeller shaft lubrication
A—Lubrication nipple

Propeller shaft lubrication—Every 5,000 miles (8.000 km)

Apply one of the recommended greases at the lubrication nipple on the sliding portion of rear propeller shaft.

Fully sealed journals are fitted and these require no lubrication.

Battery acid level—Every month and at every maintenance attention.

The battery is located in the luggage boot at the right-hand side under a metal cover. Check acid level as follows:

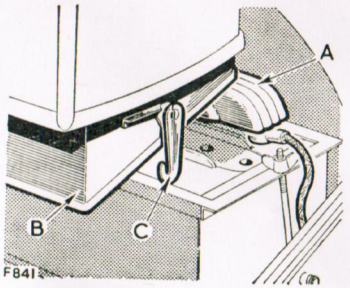
1. Remove the battery cover by releasing the locating clips.
2. Wipe all dirt and moisture from the battery top.
3. Remove the filler cover. If necessary add sufficient distilled water to raise the level to the top of separators. Replace the filler cover. Avoid the use of a naked light when examining the cells.
4. Replace battery cover and retain by means of the clips.

In hot climates it will be necessary to top up the battery at more frequent intervals.

In very cold weather it is essential that the car is used immediately after topping up, to ensure that the distilled water is thoroughly mixed with the electrolyte. Neglect of this precaution may result in the distilled water freezing and causing damage to the battery.

Battery terminals—Every 10,000 miles (16.000 km)

Remove battery terminals, clean, grease and refit. Replace terminal screw, do not overtighten. Do not use the screw for pulling down the terminal.



Battery acid level
A—Filler cover
B—Battery cover
C—Securing clip

Headlamp beam setting—Every 10,000 miles (16.000 km)

This operation is best done with special equipment and should be carried out by your local Rover Distributor or Dealer.

Oilcan lubrication—Every 10,000 miles (16.000 km)

Apply a few spots of oil to throttle linkage, handbrake linkage, door locks, etc.

Do not allow oil to contaminate brake pads or discs.

Rubber seals in brake system—Every 40,000 miles (64.000 km)

Renew all rubber seals in master cylinder wheel cylinders and caliper pistons. This should be done every three years if mileage travelled is less than 40,000 (64.000 km). Refill with correct fluid, that is, Girling Crimson Brake Fluid. Specification SAE 70 R3.

The above work must be carried out by your local Rover Distributor or Dealer.

PART TWO

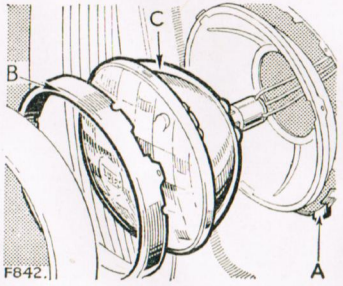
GENERAL INFORMATION

This section of the book gives details of headlamp light unit and bulb changing, circuit diagram, seat adjustment and jacking points, etc.

Headlamps

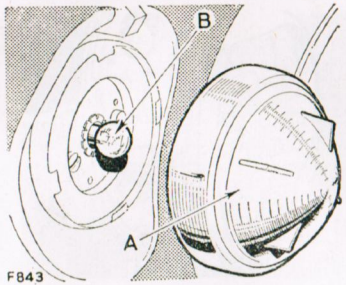
To replace light unit or bulb:

1. Insert a screwdriver under the rim at the bottom centre and gently lever off the rim; this is the only place where a screwdriver may be inserted without possible damage to the paintwork.
2. Remove the dust excluder retained by three recessed head screws.
3. Sealed beam type: Withdraw the headlamp unit and disconnect the plug at the rear. Replace the unit and reassemble.
4. Replacement bulb type: Press in the light unit against the tension of the springs on the three adjustment screws, turn it anti-clockwise and withdraw. Release spring clips and move bulb holder; the bulb can then be replaced and the unit reassembled.
5. All types: Ensure that the headlamp rim is pushed right on to the retaining clips.



Headlamp light unit replacement

A—Insert screwdriver at this point
B—Retaining rim
C—Light unit



Side lamp bulb replacement

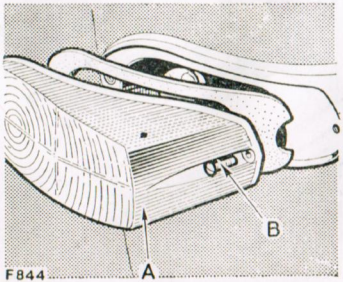
A—White lens
B—Bulb

Wing lamps

To replace side lamp or flasher lamp bulb.

Side lamps:

1. Turn the rim in an anti-clockwise direction, and withdraw complete with lens.
2. Renew the bulb, ensure that the washers are in position and refit the lens and rim.



Flasher lamp bulb replacement

A—Amber lens
B—Retaining screws

Flasher lamps:

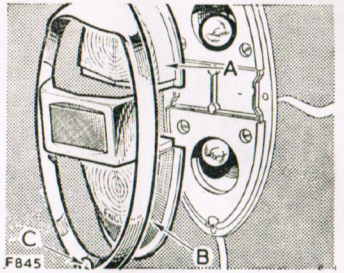
1. Remove the retaining screws and withdraw the lens.
2. Renew bulb and replace lens, ensure washer is in position, then secure with the retaining screws.

Rear lamps

To replace flasher, tail or number plate illumination bulbs.

Tail and flasher lamp

1. Remove retaining screw and lift off the rim.
2. Remove appropriate lens; upper amber for the direction indicator lights, lower red for the stop-tail light. Renew bulb.
3. To replace, locate the lens in the rubber bead.
4. Slip the rim over the retaining clip at the top and replace the securing screw. Ensure that the rubber bead fits snugly round the rim.

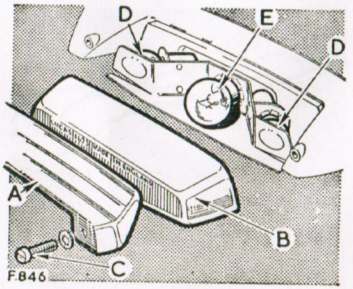


Rear lamp bulb replacement

A—Amber lens
B—Red lens
C—Retaining screws

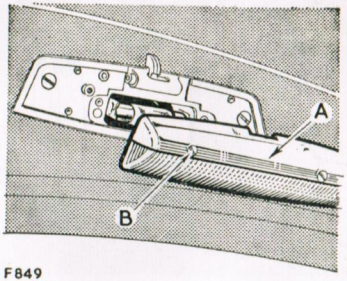
Number plate illumination and reversing lamp

1. Remove two retaining screws and lift off top cover.
2. Remove lens.
3. If necessary, slightly withdraw bulb holder and replace bulb as required.
4. Push bulb holder into position, replace lens and retain by means of the top cover and securing screws.



Number plate illumination and reversing lamp

A—Cover
B—Glass
C—Retaining screws
D—Number plate illumination bulbs
E—Reverse light bulb



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Interior light bulb replacement

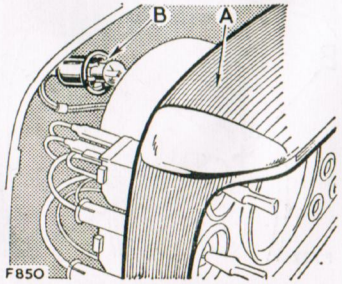
A—Cover

B—Retaining screws

Interior lights

To replace interior light bulbs. One lamp above each door:

1. Remove two screws retaining cover.
2. Replace bulb and refit cover.



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Panel and warning light bulb replacement

A—Panel

B—Bulb holder

Instrument panel and warning lights

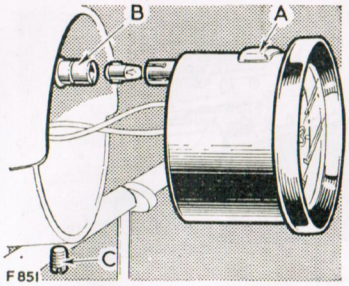
To replace any of the light bulbs:

1. Remove two screws from underside of panel.
2. Swing panel upwards and forwards.
3. Replace bulb as required and refit panel.

Clock

To replace clock illumination bulb:

1. Slacken screw beneath clock at underside of facia rail and withdraw clock.
2. Remove bulb holder and replace bulb.
3. Reverse removal procedure.



Clock illumination bulb replacement

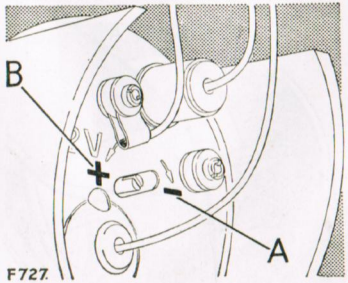
A—Clock moulding
B—Bulb holder
C—Fixing screws

To regulate clock:

1. Remove clock, as above.
2. Adjust as required by means of screw at rear of clock.

Clock gaining	turn to — mark
Clock losing	turn to + mark

This regulation should be attempted only if the clock gains or loses more than two or three minutes per week.

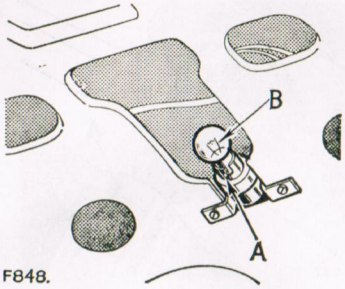


Clock adjustment

A—Clock gaining, turn to — mark
B—Clock losing, turn to + mark

Boot light

A—Bulb holder
B—Bulb



F848.

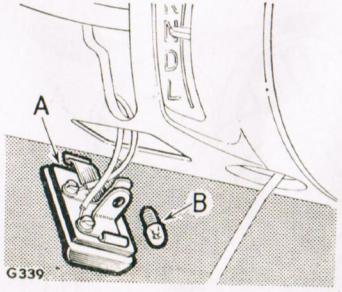
Boot light, underside of boot lid

To replace bulb:

1. Lift boot lid.
2. Remove and replace bulb as required.

Automatic transmission indicator plate illumination bulb replacement

A—Cover plate
B—Bulb



G339

Automatic transmission indicator plate illumination bulb

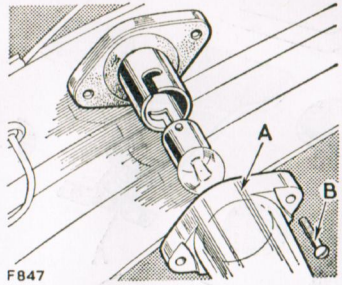
To replace bulb:

1. Unclip cover plate from steering column shroud.
2. Renew bulb and clip cover plate back on to the shroud.

Bonnet light. Coupé models

To replace either of the bonnet light bulbs:

1. Lift the bonnet, then remove two screws retaining glass cover.
2. Replace bulb and refit cover.



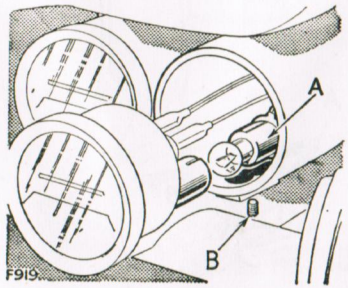
Bonnet light bulb replacement

A—Glass cover
B—Retaining screws

Additional instruments. Coupé models

To replace instrument bulb:

1. Slacken screw beneath instrument and withdraw unit.
2. Withdraw the rubber sleeve and bulb holder from the rear of the instrument body.
3. Replace bulb and reverse removal procedure.



Instrument bulb replacement Coupé models

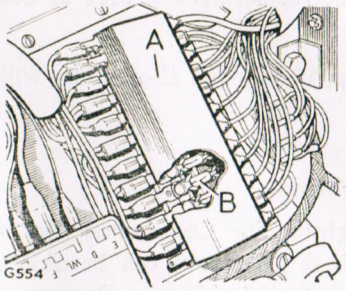
A—Bulb holder
B—Securing screw

Fuses

The fuses are located on the bulkhead under the bonnet. To replace a fuse:

1. The cover, which indicates the function of each fuse, should be pulled off.
2. Replace fuse as required:

Fuse Number	Fuse Protects	Fuse, Amps
1–2	Battery control, that is, clock, cigar lighters, interior lights, headrest light	15
3–4	Ignition control, that is, stop, reverse and flasher lights, screen washer, water temperature and fuel gauges, tachometer, automatic transmission inhibitor switch, oil pressure transmitter	15
5–6	Parking lights	5
7–8	Side and tail lights	5
9–10	Panel lights	5
11–12	Headlamp RH main beam	10
13–14	Headlamp LH main beam	10
15–16	Headlamp RH dip beam	10
17–18	Headlamp LH dip beam	10
19–20	Screenwiper motor	15
21–22	Heater motor	15
23–24	Overdrive	35



Fuse block

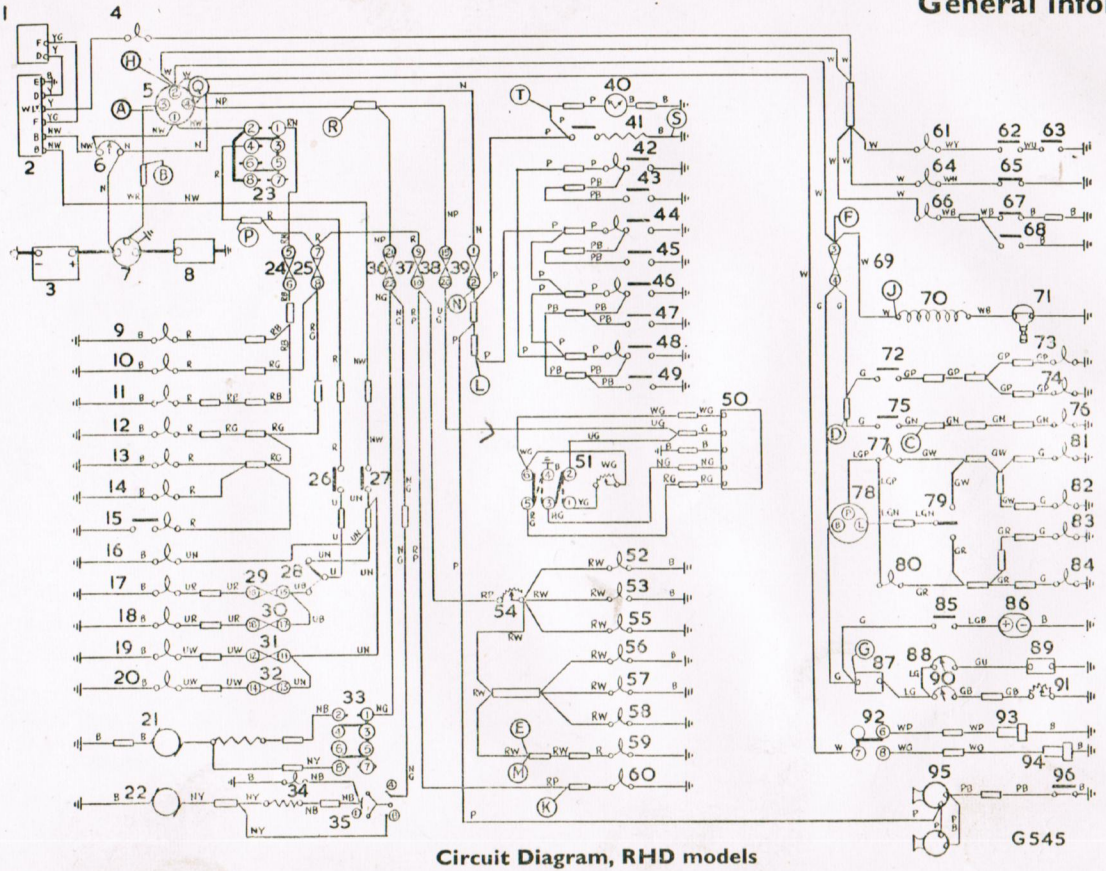
A—Cover
B—Fuses

3. Ensure correct replacement is used as detailed above. Replace cover.

A spare 10-amp, 15-amp and 25-amp fuse will be found in the fuse block cover.

Continental lighting

Changes of lighting for Continental touring may be required. Advice on the best procedure can be obtained from The Rover Company Limited, Technical Service Department.



Circuit Diagram, RHD models

Key to circuit diagram, RHD models

1 Dynamo
2 Current voltage regulator
3 Battery
4 Warning light, ignition
5 Switch, ignition and starter
6 Ammeter
7 Starter solenoid
8 Starter motor
9 Side lamp, RH (park)
10 Side lamp, LH
11 Tail lamp, RH (park)
12 Tail lamp, LH
13 } Rear number plate
14 } illumination
15 Switch and lamp, boot
16 Warning light, main beam
17 Headlamp, RH, dip beam
18 Headlamp, LH, dip beam
19 Headlamp, RH, main beam
20 Headlamp, LH, main beam
21 Heater motor, two-speed, front
22 Heater motor, two-speed, rear
23 Switch, side, tail and park lamps
24 Fuse, 5–6 (5 amp)
25 Fuse, 7–8 (5 amp)
26 Switch, headlamp
27 Switch, headlamp flasher
28 Switch, headlamp dip
29 Fuse, 15–16 (10 amp)
30 Fuse, 17–18 (10 amp)
31 Fuse, 11–12 (10 amp)
32 Fuse, 13–14 (10 amp)
33 Switch, heater, front
34 Heater illumination, rear
35 Switch, heater, rear
36 Fuse, 21–22 (15 amp)
37 Fuse, 9–10 (5 amp)
38 Fuse, 19–20 (15 amp)
39 Fuse, 1–2 (15 amp)
40 Clock
41 Cigar lighter
42 Interior lamp and switch, front, RH
43 Switch, front door, RH
44 Interior lamp and switch, front, LH
45 Switch, front door, LH
46 Interior lamp and switch, rear, LH
47 Switch, rear door, LH
48 Interior lamp and switch, rear, RH
49 Switch, rear door, RH
50 Screen wiper motor
51 Switches, screen wiper
52 } Panel illumination, LH
53 }
54 Switch, panel illumination
55 Speedometer illumination
56 } Panel illumination, RH
57 }
58 Grouped instrument illumination
59 Clock illumination
60 Cigar lighter, front, illumination
61 Warning light, choke
62 Switch, choke
63 Thermostat, choke
64 Warning light, oil pressure
65 Switch, oil pressure
66 Warning light, brake fluid level and hand brake
67 Switch, hand brake
68 Switch, brake fluid level
69 Fuse, 3–4 (15 amp)
70 Ignition coil
71 Distributor
72 Switch, stop light
73 Stop light, RH
74 Stop light, LH
75 Switch, reverse light
76 Reverse light
77 Warning light, LH, direction indicators
78 Direction indicator unit
79 Switch, direction indicators
80 Warning light, RH, direction indicators
81 Direction indicator, front, RH
82 Direction indicator, rear, RH
83 Direction indicator, rear, LH
84 Direction indicator, front LH
85 Switch, windscreen washer
86 Windscreen washer
87 Regulator, 10 volt
88 Gauge, water temperature
89 Transmitter, water temperature
90 Gauge, fuel
91 Tank unit, fuel
92 Switch, fuel pump change-over
93 Fuel pump, main
94 Fuel pump, reserve
95 Horns
96 Switch, horns

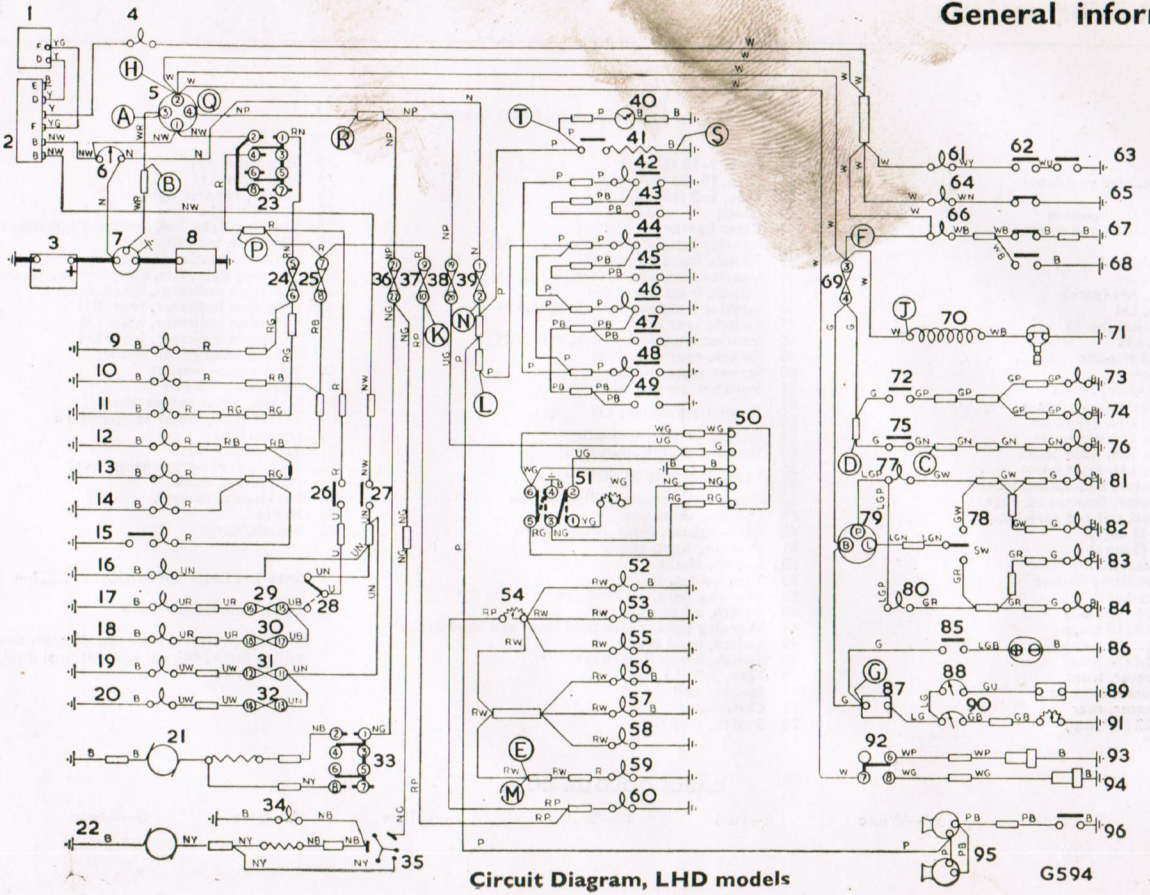
Snap and Lucar connections —□—

Earth connections —⏚

Encircled letters on circuit diagram show pick-up points for additional and optional equipment.
See Page 46

CABLE COLOUR CODE

B—Black P—Purple W—White R—Red N—Brown Y—Yellow U—Blue G—Green L—Light



Circuit Diagram, LHD models

G594

Key to circuit diagram, LHD models

1 Dynamo
2 Current voltage regulator
3 Battery
4 Warning light, ignition
5 Switch, ignition and starter
6 Ammeter
7 Starter solenoid
8 Starter motor
9 Side lamp, LH (park)
10 Side lamp, RH
11 Tail lamp, LH (park)
12 Tail lamp, RH
13 } Rear number plate
14 } illumination
15 Switch and lamp, boot
16 Warning light, main beam
17 Headlamp, RH, dip beam
18 Headlamp, LH, dip beam
19 Headlamp, RH, main beam
20 Headlamp, LH, main beam
21 Heater motor, two-speed, front
22 Heater motor, two-speed, rear
23 Switch, side, tail and park lamps
24 Fuse, 5–6 (5 amp)
25 Fuse, 7–8 (5 amp)
26 Switch, headlamp
27 Switch, headlamp flasher
28 Switch, headlamp dip
29 Fuse, 15–16 (10 amp)
30 Fuse, 17–18 (10 amp)
31 Fuse, 11–12 (10 amp)
32 Fuse 13–14 (10 amp)
33 Switch, heater, front
34 Heater illumination, rear
35 Switch, heater, rear
36 Fuse, 21–22 (15 amp)
37 Fuse, 9–10 (5 amp)
38 Fuse, 19–20 (15 amp)
39 Fuse, 1–2 (15 amp)
40 Clock
41 Cigar lighter
42 Interior lamp and switch, front, RH
43 Switch, front door, RH
44 Interior lamp and switch, front, LH
45 Switch, front door, LH
46 Interior lamp and switch, rear, LH
47 Switch, rear door, LH
48 Interior lamp and switch, rear, RH
49 Switch, rear door, RH
50 Screen wiper motor
51 Switches, screen wiper
52 } Panel illumination, LH
53 }
54 Switch, panel illumination
55 Speedometer illumination
56 } Panel illumination, RH
57 }
58 Grouped instrument illumination
59 Clock illumination
60 Cigar lighter, front, illumination
61 Warning light, choke
62 Switch, choke
63 Thermostat, choke
64 Warning light, oil pressure
65 Switch, oil pressure
66 Warning light, brake fluid level and hand brake
67 Switch, hand brake
68 Switch, brake fluid level
69 Fuse, 3–4 (15 amp)
70 Ignition coil
71 Distributor
72 Switch, stop light
73 Stop light, RH
74 Stop light, LH
75 Switch, reverse light
76 Reverse light
77 Warning light, LH, direction indicators
78 Switch, direction indicators
79 Direction indicator unit
80 Warning light, RH, direction indicators
81 Direction indicator, front, RH
82 Direction indicator, rear, RH
83 Direction indicator, rear, LH
84 Direction indicator, front, LH
85 Switch, windscreen washer
86 Windscreen washer
87 Regulator, 10 volt
88 Gauge, water temperature
89 Transmitter, water temperature
90 Gauge, fuel
91 Tank unit, fuel
92 Switch, fuel pump change-over
93 Fuel pump, main
94 Fuel pump, reserve
95 Horns
96 Switch, horns

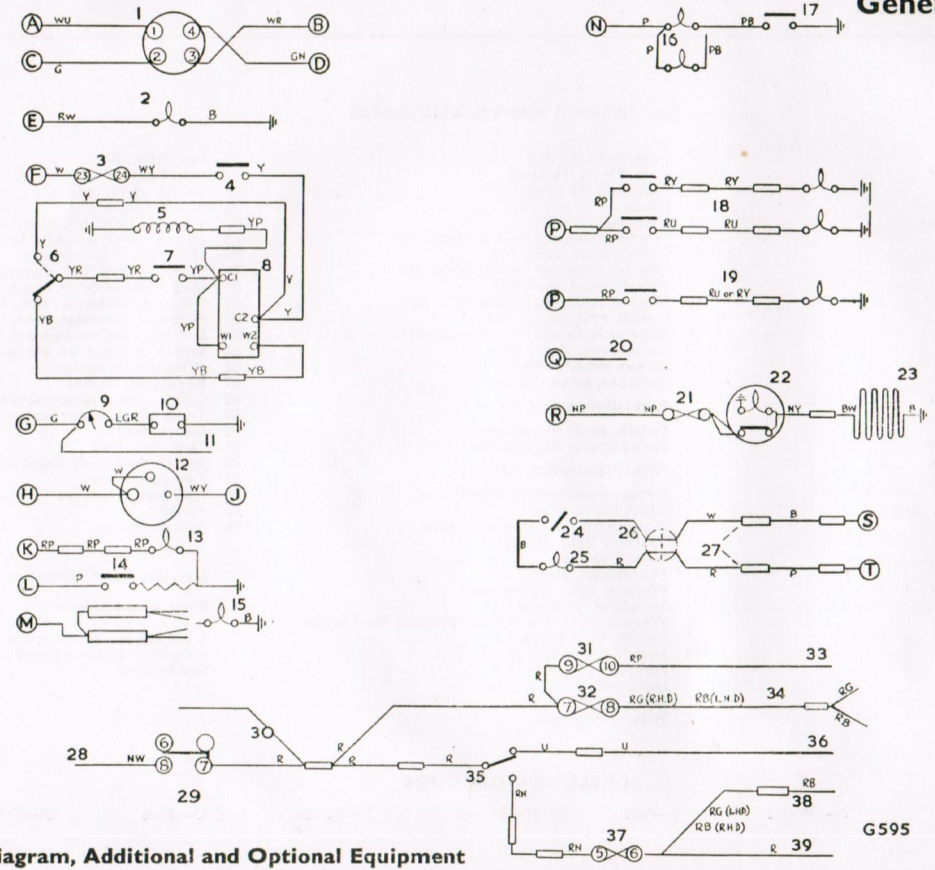
Snap and Lucar connections —□—

Earth connections —|||||—

Encircled letters on circuit diagram show pick-up points for additional and optional equipment.
See Page 46

CABLE COLOUR CODE

B—Black P—Purple W—White R—Red N—Brown Y—Yellow U—Blue G—Green L—Light



Circuit Diagram, Additional and Optional Equipment

Key to circuit diagram, additional and optional equipment

1 Switch, inhibitor
2 Gear change illumination
} Automatic transmission

3 Fuse, 23–24 (35 amp)
4 Switch, gearbox
5 Solenoid
6 Switch, column
7 Switch, throttle
8 Relay
} Overdrive

9 Gauge, oil pressure
10 Transmitter, oil pressure
11 To screenwasher switch
12 Tachometer
13 Rear cigar lighter illumination
14 Cigar lighter
15 Nacelle illumination, four lamps
16 Bonnet lamp
17 Switch, bonnet lamp
} Coupé

18 Auxiliary lamps, two switched separately
19 Auxiliary lamps, one or two common switch
20 Radio pick-up
21 Fuse (10 amp) in line heated backlight
22 Switch, illuminated, heated backlight
23 Heated backlight
} Optional equipment

24 Switch, headrest lamp
25 Headrest lamp
26 Plug and socket, headrest lamp
27 Pick-up point when two lamps are fitted
} Optional equipment

28 Feed from ignition and starter switch
29 Switch, side lamp
30 Connection for fog lamp etc.
31 Fuse, 9–10 (5 amp)
32 Fuse, 7–8 (5 amp)
33 To cigar lighter illumination
34 To tail lamps
35 Switch, headlamp
36 To dip switch
37 Fuse, 5–6 (5 amp)
38 To RH side lamp
39 To LH side lamp
} North American Dollar Area Cars

Snap and Lucar connections —□—

Earth connections —|||—

Encirled letters on circuit diagrams refer to pick-up points on main diagrams.

See Pages 42 and 44

CABLE COLOUR CODE

B—Bla. P—Purple W—White R—Red N—Brown Y—Yellow U—Blue G—Green L—Light

Jacking the car

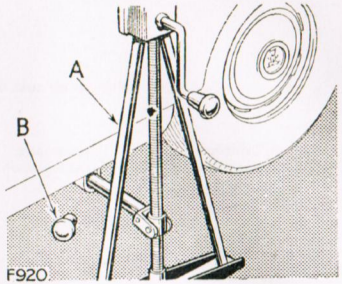
Four tubular jacking brackets are fitted under the body lower rail, behind the front wheels and just in front of the rear wheels.

To raise one corner of the car:

1. Remove the rubber dust excluder from the appropriate jacking point.

2. Fit the pivoted extension on the jack right into the bracket. This extension can be lowered or raised by turning the handle either one way or the other.

3. Turn the handle until the road wheel is clear of the ground. To lower the car, reverse these operations.

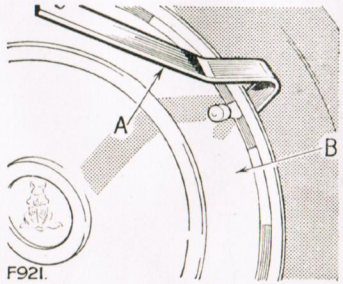


Jacking the car
A—Jack
B—Rubber plug

If it is desired to raise the car with means other than those supplied, suitable jacking points are:

Front: Under the centre of the front cross-member.

Rear: Under the axle casing.



Removing hub cover

A—Special tool
B—Hub cover plate

Wheel changing

1. Prise off the hub cover plate, using the special tool provided.
2. Slacken the five double-ended wheel nuts.
3. Jack up the corner of the car. See previous page.
4. Remove the nuts and gently withdraw the wheel over the studs.
5. If available, place a drop of oil on the stud threads, to assist in subsequent removal.
6. Fit the wheel, tighten the nuts as much as possible, then lower the car to the ground and lock the nuts securely.
7. Replace the hub cover plate.

Body care

It is always preferable to clean the bodywork with water and sponge, using plenty of water; wherever possible the surface should be freely hosed. After drying with a chamois leather, it should be polished in the usual manner, using any of the good brands of wax car polish.

As an alternative, if the body is only dusty, it can be wiped over with a soft, dry cloth and then polished, but great care must be taken to avoid scratching the surface.

It is well periodically to wash the underside of the car, to prevent mud pockets and the consequent tendency for rust formation.

The use on the roads during frosty weather of salt, sometimes in quite strong concentrations, is now widely practised. Whilst special protection has been provided for the under surfaces of the body, etc., due to its highly corrosive nature, salt deposited should be washed off as soon as possible by thorough under washing of the car.

Chromium cannot rust, but in instances where it is used on ferrous metals, it does not prevent the accumulation of red oxide

on the chromium surface. Although continual polishing is not necessary, dirt must be removed periodically if the original high polish is to be maintained.

Ordinary metal polishes cannot be used, as some of them contain solutions which act as a solvent to chromium. The occasional use of a good brand of polish that has been specially prepared for chromium plate will be found useful.

This car is trimmed with high class leather free from any artificially embossed grain. Nature should show itself in every piece of high class leather. The growth marks, vein marks and other natural marks and variations of grain that go to make up the character are the charm and hallmark of top grade leather. It is most important that detergents are not used when cleaning the seats, etc. Use a damp cloth with a little mild soap if necessary.

PART THREE

GENERAL DATA, SALOON AND COUPÉ MODELS

Engine

Bore	3.063 in. (77,8 mm)
Stroke	4.134 in. (105 mm)
Number of cylinders	Six
Cylinder capacity	183 cu. in. (2.995 cc)
Compression ratio	8.75:1 (8:1 for certain export territories only)
BHP:	
8.75:1 compression ratio	134 at 5,000 rpm
8:1 compression ratio	129 at 4,750 rpm
Maximum torque:	
8.75:1 compression ratio	169 lb/ft (23.37 kg.m)
8:1 compression ratio	161 lb/ft (22.25 kg.m)
Firing order	1, 5, 3, 6, 2, 4
Sparking plugs—8.75:1 compression ratio	Champion N5 or Lodge HLN } 14 mm with suppressors
Sparking plugs—8:1 compression ratio	Champion N5 or Lodge HLN } and waterproof covers
Sparking plug point gap	.028 to .033 in. (0,71 to 0,83 mm)
Distributor contact breaker gap	.014 to .016 in. (0,35 to 0,40 mm)
Ignition timing, static—full retard	3° BTDC 8.75:1 and 8:1 compression ratio

Tappet clearance—inlet	.006 in. (0,15 mm) hot
Tappet clearance—exhaust	.010 in. (0,25 mm) hot or cold
Valve timing (No. 1 exhaust valve peak)	106° BTDC
Oil pressure	55 to 65 lb sq in. (3,8 to 4,6 kg/cm²) at 30 mph (50 kph) in. top gear with engine warm
Lubrication	Full pressure
Oil filter—internal	Gauze pump intake filter in sump
Oil filter—external	Full-flow

Clutch, 4-speed gearbox

Type	Single dry plate, 10 in. diameter. Hydraulic operation
Adjustment	$\frac{3}{4}$ in. (20 mm) free movement at pedal pad

Gearbox, 4-speed

Single helical constant mesh with synchromesh on top, third and second speeds. Laycock De-Normanville automatic overdrive 1.286:1 ratio with Rover control

Gearbox, automatic transmission

The automatic transmission consists of two main components:

1. A three-element hydrokinetic torque converter coupling capable of torque multiplication at an infinitely variable rate between 2:1 and 1:1.
2. A torque - speed responsive and hydraulically operated gearbox comprising a planetary gear set providing three forward ratios and reverse.

Propeller shafts

Type	Open type with centre bearing and support

Rear axle

Type	Spiral bevel with semi-floating shafts	
	4-speed box with overdrive	Automatic transmission
Ratio	4.3:1	3.54:1

Gear ratios

Overdrive	.778:1
Top	1.0:1
3rd	1.274:1
2nd	1.887:1
1st	3.376:1
Reverse	2.968:1

High (top)	1.0:1
Intermediate (2nd)	1.45:1
Low (1st)	2.39:1
Reverse	2.09:1

Fuel system

Fuel pump	Dual SU high pressure. Electric, located in luggage boot behind rear trim panel
Carburetter	SU HD 8. Single horizontal, dustproof
Air cleaner	Paper element type

Cooling system

Type	Pump, fan and thermostat, pressurised
Fan and dynamo belt adjustment	$\frac{5}{16}$ to $\frac{7}{16}$ in. (8 to 11 mm) free movement

Electric system

Type	Negative earth
Voltage	12 volt } Battery located in luggage boot under metal
Battery capacity	57 AH } cover at right-hand rear
Ignition system	Coil
Charging circuit	Current-voltage regulator

Replacement headlamp units and bulbs

Headlamp units sealed beam:	
RHD	Lucas Sealed Beam 12 v 60/45 w
LHD Except North America and Europe	Lucas No. 417 12 v 60/40 w
LHD Europe except France	Lucas No. 410 12 v 45/40 w Duplo
LHD France	Lucas No. 411 12 v 45/40 w Duplo (yellow)
North America	Sealed unit
Side lamps	Lucas No. 989 12 v 6 w
Stop-tail lamps	Lucas No. 380 12 v 21/6 w
Direction indicator lamps	Lucas No. 382 12 v 21 w
Rear number plate lamp	Lucas No. 989 12 v 6 w

Cigar lighter illumination	Tex No. GBP-V-2.2 12 v 2.2 w
Speedometer and grouped instruments, tachometer on Coupé	Lucas No. 984 12 v 3.6 w
Nacelle illumination, Coupé	Lucas No. 987 12 v 2.2 w
Instrument panel lights	Lucas No. 987 12 v 2.2 w
Warning lights	Lucas No. 987 12 v 2.2 w
Interior lights, festoon bulb	Lucas No. 254 12 v 6 w
Automatic transmission selector indicator lamp	Lucas No. 280 12 v 1.5 w
Panel plate	Carr Fastener No. 82/036 12 v 1.2 w
Clock	Lucas No. 281 12 v 2 w
Reverse lamp	Lucas No. 382 12 v 21 w
Rear luggage boot lamp	Lucas No. 222 12 v 4 w
Handbrake warning light	Lucas No. 281 12 v 2 w
Bonnet lights, Coupé models	Tex SP No. 209 12 v 6 w

Suspension

Front	Laminated torsion bar
Rear	Progressive rate semi-elliptic leaf

Hydraulic dampers Telescopic, anti-aeration, non-adjustable

Brakes

Foot brake	Hydraulic servo assisted, disc brakes at front, drum brakes at rear
Hand brake	Mechanical linkage to rear wheels

Steering

Type			Power assisted
Ratio: straight ahead			15.6:1
full lock			10.2:1
Front wheel alignment			$\frac{1}{16}$ in. (1,5 mm) toe-in to $\frac{1}{16}$ in. (1,5 mm) toe-out
Camber angle	$1\frac{1}{2}°$ positive	Cars with Standard suspension	Static unladen position
Castor angle	$\frac{1}{4}°$ positive	Cars with Standard suspension	Static unladen position
Swivel pin inclination	$4\frac{1}{2}°$	Cars with Standard suspension	Static unladen position
Camber angle	2°	Cars with High suspension marked H on serial number plate	Static unladen position
Castor angle	1° negative	Cars with High suspension marked H on serial number plate	Static unladen position
Swivel pin inclination	4°	Cars with High suspension marked H on serial number plate	Static unladen position

Tyres

Size .. .. Avon Turbospeed or Dunlop Roadspeed 6.70 in. x 15 in.

Pressures:

	Front	Rear
Speeds up to 105 mph (168 kph) and normal loads—		
lb/sq in.	26	26
kg/cm²	1,8	1,8
Speeds over 105 mph (168 kph) and normal loads—		
lbs/sq in.	30	30
kg/cm²	2,1	2,1

When the car is driven fully laden, the rear tyre pressures should be increased by 4 lb/sq in. (0,3 kg/cm²).

When high speed touring, the tyre pressures should be checked much more frequently, even to the extent of a daily check.

Recommended lubricants

These recommendations apply to temperate climates where operational temperatures may vary between approximately 10°F (–12°C) and 90°F (32°C).

Information on recommended lubricants for use under extreme winter or tropical conditions can be obtained from The Rover Co. Ltd., Technical Service Department, or the local Rover Distributor or Dealer.

COMPONENTS	SAE	BP	CASTROL	DUCKHAM'S	ESSO	MOBIL	REGENT TEXACO-CALTEX	SHELL
Engine and air cleaner	20W	Energol SAE 20W	Castrolite	Duckham's NOL Twenty	Esso Motor Oil 20W/30	Mobiloil Arctic	Advanced Havoline 20/20W	Shell X-100 20W
Gearbox only	90 EP	Energol SAE 90 EP	Castrol Hypoy	Duckham's Hypoid 90	Esso Gear Oil GP 90/140	Mobilube GX 90	Universal Thuban 90	Spirax 90 EP
Overdrive only	20W	Energol SAE 20W	Castrolite	Duckham's NOL Twenty	Esso Motor Oil 20W/30	Mobiloil Arctic	Advanced Havoline 20/20W	Shell X-100 20W
Automatic Transmission and Power Steering	—	Energol ATF Type A	Castrol TQ Automatic Transmission Fluid	Duckham's Nolmatic ATF Type A	Esso Automatic Transmission Fluid	Mobil Fluid 200	Texamatic Fluid 3528	Shell Donax T6
Rear axle	90 EP	Energol SAE 90 EP	Castrol Hypoy	Duckham's Hypoid 90	Esso Gear Oil GP 90/140	Mobilube GX 90	Universal Thuban 90	Spirax 90 EP
Front hubs, propeller shaft, rear spring and front torsion bar sleeves	—	Energrease L2	Castrolease LM	Duckham's LB 10 grease	Esso Multi-purpose grease H	Mobilgrease MP or Mobil-grease special	Marfak Multipurpose 2	Retinax A
Brakes	Girling Crimson Brake Fluid. Specification SAE 70 R3							
Anti-freeze solution	Any good quality glycol-base anti-freeze solution							

Capacities

Component	Imperial unit	US unit	Litres
Engine sump oil	10 pints	12 pints	5,5
Extra when refilling after fitting new filter	1 pint	1.2 pints	0,5
Gearbox oil } 4-speed	3 pints	3½ pints	1,75
Overdrive oil } models	1½ pints	2 pints	0,85
Gearbox oil, automatic transmission, with oil cooler	14 pints	17 pints	8,0
Rear axle oil	3 pints	3½ pints	1,75
Power steering unit	3 to 3½ pints	3½ to 4 pints	1,75 to 1,8
Fuel tank	14 gallons	17 gallons	63,5
Including a reserve of	1½ gallons	2 gallons	7
Cooling system	26 pints	29 pints	14,7

Dimensions, all models

Overall length	15 ft. 6½ in. (4,74m)
Overall width	5 ft. 10 in. (1,78 m)
Overall height, Saloon models	Standard suspension 5 ft. 1 in. (1,55 m) High suspension* 5 ft. 1½ in. (1,56 m)
Overall height, Coupé models	Standard suspension 4 ft. 10 in. (1,46 m) High suspension* 4 ft. 10½ in. (1,47 m)
Wheelbase	9 ft. 2½ in. (2,80 m)
Track, front	4 ft. 7 5/16 in. (1,39 m)
Track, rear	4 ft. 8 in. (1,41 m)
Ground clearance (under silencer)	7⅛ in. (180 mm)
Turning circle between kerbs	40 ft (12,2 m), lock to lock 2½ turns

* Identified by letter 'H' on car number plate affixed to left-hand front door pillar.

PART FOUR

FREE SERVICE AND MAINTENANCE SCHEDULES

The regular carrying out of the following scheduled services is an extremely important factor in maintaining the value of the car and contributing to its reliability.

In addition to the regular maintenance schedules, details are also provided of the work to be done on the Free Service Inspection after the car has covered approximately its first 1,000 miles (1.500 km).

See Part One of this book for detailed information on the servicing required.

Provision has been made in this section for a certifying signature that the various services have been carried out so that there is a permanent record of these having been completed.

The word "check", where used, implies "rectify or investigate as necessary".

It will be noted that certain maintenance work which is required from time to time, but not necessarily at specified mileages, has been omitted from these schedules. This will include such work as decarbonising, brake pad and brake lining replacement, etc., the need for which will vary very much according to circumstances, and a Rover Distributor or Dealer should be consulted about such points at the time other service work is being carried out.

SUMMARY OF MAINTENANCE ATTENTION WHICH SHOULD BE CARRIED OUT AT OR AROUND SPECIFIED MILEAGES UP TO A TOTAL OF 40,000 MILES (64.000 KM)

IMPORTANT—ACTION BY OWNER

1. Every 750 miles (1.000 km) check engine oil level, power steering oil level, and water level in radiator and windscreen washer reservoir.
2. Drain and refill engine sump every four months if mileage covered is less than 5,000 (8.000 km).
3. Every month check tyre pressures and inspect tyre treads; when high-speed touring the tyre pressures should be checked much more frequently, even to the extent of a daily check. If front wheel tread wear is uneven check wheel alignment.
4. Every month check brake fluid level and battery acid level.
5. Owners are under a legal obligation to maintain all exterior lights in good working order, this also applies to headlamp beam setting, which should be checked at regular intervals. Distributor or Dealer Service.
6. When all the vouchers in this book have been completed owners are advised to apply to their Rover Distributor or Dealer for a copy of the Continuation Maintenance Schedule Book to enable the good work of preventive maintenance to be continued for another 40,000 miles (64.000 km).
7. It should be noted that the sequence of normal maintenance attention repeats itself every 20,000 miles (32.000 km).

AT 1,000 MILES (1,500 KM)

Free Service.

AT 5,000 MILES (8.000 KM)

Drain and refill engine sump (every 5,000 miles (8.000 km) or every four months, whichever comes first).

Renew external oil filter element.

Check carburetter slow running.

Check and clean sparking plugs. Gap .028 to .033 in. (0,70 to 0,80 mm). *Important*—Use only Champion N5 or Lodge HLN sparking plugs.

Check distributor contact points. Gap .014 to .016 in. (0,35 to 0,40 mm).

Check water level in radiator (anti-freeze in winter).

Check water level in screen washer reservoir (add methylated spirits in winter).

Check gearbox and overdrive oil levels, top up if necessary to marks on dipsticks.

Check fluid level in automatic transmission, top up if necessary to full mark on dipstick.

Check differential oil level, top up if necessary to bottom of filler plug hole.

Check fluid level in power steering reservoir, top up if necessary to high mark on dipstick.

Check fluid level in brake reservoir, top up if necessary to rib on filter. Use Girling Crimson Brake Fluid (Specification SAE 70 R3).

Check operation of brake reservoir level safety switch.

Ignition 'on', hand brake 'off' unscrew and lift filler cap, 1 in. (25 mm) warning light should be illuminated.

Check thickness of front brake pads, minimum $\frac{1}{8}$ in. (3 mm), also check for oil contamination on brake pads and discs.

Check and if necessary adjust rear wheel brakes. This automatically adjusts the hand brake.

Check fluid level in clutch reservoir, top up if necessary to bottom of filler neck. Use Girling Crimson Brake Fluid (Specification SAE 70 R3).

Check clutch pedal adjustment. $\frac{3}{4}$ in. (20 mm) free movement at pedal pad.

Change round, wash and examine all road wheels for possible damage. Finally tighten all road wheel nuts.

Check tyre pressures. Normal motoring, front and rear: 26 lb/sq in. (1,8 kg/cm^2). Inspect tyre treads.

Lubricate propeller shaft sliding joint.

Check battery acid level.

Road test, carry out any adjustments required. Run car on reserve fuel pump for a short period to ensure that the pump operates correctly. Check operation of all lights and instruments. After test, check for oil, fuel or fluid leaks at all plugs, flanges, joints and unions. Check brake pipes and hoses for chafing and looseness. Report any defects.

Wipe clean all controls, handles, etc., clean windscreen and lights.

AT 10,000 MILES (16.000 KM)

As 5,000 miles (8.000 km) plus:

Clean and re-oil engine breather filter.

Check oil in carburetter hydraulic damper.

Replace sparking plugs. Gap .028 to .033 in. (0,70 to 0,80 mm).

Important—Use only Champion N5 or Lodge HLN sparking plugs.

Clean and lubricate distributor.

Check tappet clearance: Inlet .006 in. (0,15 mm) engine hot. Exhaust .010 in. (0,25 mm) engine hot or cold.

Check fan and dynamo belts $\frac{5}{16}$ in. to $\frac{7}{16}$ in. (8 to 11 mm) free movement, when checked midway between pulleys.

Drain and refill gearbox and overdrive in place of checking oil level.

Drain and refill differential in place of checking oil level.

Check that rubber boots on steering ball joints and ball swivels are not dislodged or damaged.

Check front hubs for leakage.

Clean, grease and tighten battery terminals.

Check headlamp beam setting.

Apply a few spots of oil to throttle linkage, hand brake linkage, door locks, etc.

SUMMARY OF MAINTENANCE ATTENTION—*continued*

AT 15,000 MILES (24.000 KM)

As 5,000 miles (8.000 km).

AT 20,000 MILES (32.000 KM)

As 5,000 miles (8.000 km) and 10,000 miles (16.000 km) plus:

Replace air cleaner element.

Clean sediment bowl and filter on wing valance.

Check front wheel alignment, $\frac{1}{16}$ in. (1,5 mm) toe-in to $\frac{1}{16}$ in. (1,5 mm) toe-out.

Renew air filter element on brake servo.

AT 25,000 MILES (40.000 KM)

As 5,000 miles (8.000 km).

AT 30,000 MILES (48.000 KM)

As 10,000 miles (16.000 km).

AT 35,000 MILES (56.000 KM)

As 5,000 miles (8.000 km).

AT 40,000 MILES (64.000 KM)

As 20,000 miles (32.000 km) Plus:

Renew all rubber seals in brake system. This should be done every three years if mileage covered is less than 40,000 (64.000 km). Refill with correct fluid. Girling Crimson Brake Fluid (Specification SAE 70 R3).

NEW CAR
PRE-DELIVERY CHECK

Carried out by
Rover Distributor or
Dealer

NAME.....

ADDRESS.....

.....

.....

We certify that the New Car Pre-delivery Check has been completed

Signature.....

Date.....

FREE SERVICE AT
1,000 MILES (1.500 KM)

Carried out by
Rover Distributor or
Dealer

NAME Corby Motors.

ADDRESS CLOL.

.....

We certify that the Free Service has been completed

Signature R Powell.

Mileage 1212.

Km.....

Date 30.1.67.

MAINTENANCE
ATTENTION AT
5,000 MILES (8.000 KM)

Carried out by
Rover Distributor or
Dealer

NAME ARTHY Ltd

ADDRESS

CHCH

We certify that the 5,000-mile (8.000 km) maintenance attention has been completed.

Signature.....

Mileage 7068

Km.....

Date 17.10.67

MAINTENANCE ATTENTION AT 10,000 MILES (16.000 KM)

Carried out by Rover Distributor or Dealer

NAME.....

ADDRESS.....

.....

We certify that the 10,000-mile (16.000 km) maintenance attention has been completed.

Signature.....

Mileage.....

Km.....

Date.....

MAINTENANCE ATTENTION AT 10,000 MILES (16.000 KM)

For recommended lubricants and capacities see Part Three of this book, pages 58 and 59

Owner's signature.....**giving authority for the work detailed below to be carried out**

Engine

- Drain and refill engine sump
- Renew external oil filter element
- Clean and re-oil engine breather filter
- Check carburetter slow running
- Check oil in carburetter hydraulic damper
- Replace sparking plugs. Gap .028 to .033 in. (0,70 to 0,80 mm) *Important*—Use only Champion N5 or Lodge HLN sparking plugs
- Check distributor contact points. Gap .014 to .016 in. (0,35 to 0,40 mm)
- Lubricate and clean distributor
- Check tappet clearance. Inlet .006 in. (0,15 mm) engine hot. Exhaust .010 in. (0,25 mm) engine hot or cold
- Check water level in radiator (anti-freeze in winter)
- Check water level in screen washer reservoir (add methylated spirits in winter)
- Check fan and dynamo belts $\frac{5}{16}$ in. to $\frac{7}{16}$ in. (8 to 11 mm) free movement when checked midway between pulleys

Gearbox and overdrive

- Drain and refill gearbox and overdrive

Automatic transmission

- Check fluid level, top up if necessary to 'full' mark on dipstick.

Rear axle

- Drain and refill differential

Steering and suspension

- Check fluid level in power steering reservoir, top up if necessary to 'high' mark on dipstick
- Check that rubber boots on steering ball joints and ball swivels are not dislodged or damaged
- Check front hubs for leakage

Brakes. See also Road Test

- Check fluid level in reservoir, top up if necessary to rib on filter Use Girling Crimson Brake Fluid (Specification SAE 70 R3)
- Check operation of reservoir level safety switch. Igniion 'on', hand brake 'off', unscrew and lift filler cap 1 in. (25 mm); warning light should be illuminated
- Check thickness of front brake pads, minimum $\frac{1}{8}$ in. (3 mm) also check for oil contamination on brake pads and discs
- Check and if necessary adjust rear wheel brakes. This automatically adjusts the hand brake

Clutch

- Check fluid in reservoir, top up if necessary to rib on filter. Use Girling Crimson Brake Fluid (Specification SAE 70 R3)
- Check clutch pedal adjustment, $\frac{3}{4}$ in. (20 mm) free movement at pedal pad

Wheels and tyres

- Change round, wash and examine all road wheels for possible damage. Finally tighten all road wheel nuts
- Check tyre pressures and inspect tyre treads. Front and rear: 26 lb/sq in. (1,8 kg/cm^2)

CONTINUED OVERLEAF

MAINTENANCE ATTENTION AT 10,000 MILES (16.000 KM)

MAINTENANCE ATTENTION AT 10,000 MILES (16.000 KM)—*continued*

Propeller shaft

Lubricate sliding joint

Electrical

Check battery acid level

Clean, grease and tighten battery terminals

Check headlamp beam setting

Oil can lubrication

Apply a few spots of oil to throttle linkage, hand brake linkage, door locks, etc.

Road test

Give car a thorough road test and carry out any adjustments required Run car on reserve fuel pump for a short period to ensure that the pump operates correctly

Check operation of all lights and instruments

After test, check for oil, fuel, fluid or grease leaks at all plugs, flanges, joints and unions. Check all brake pipes and hoses for chafing or looseness

Report any defects

Cleaning

Wipe clean all controls, handles, etc., clean windscreen and lights

MAINTENANCE ATTENTION AT 15,000 MILES (24.000 KM)

For recommended lubricants and capacities see Part Three of this book, pages 58 and 59

MAINTENANCE ATTENTION AT 15,000 MILES (24.000 KM)

Carried out by Rover Distributor or Dealer

NAME.....

ADDRESS.....

.....

We certify that the 15,000-mile (24.000 km) maintenance attention has been completed.

Signature.....

Mileage.....

Km.....

Date.....

Owner's signature.....**giving authority for the work detailed below to be carried out**

Engine

- Drain and refill engine sump
- Renew external oil filter element
- Check carburetter slow running
- Check and clean sparking plugs. Gap .028 to .033 in. (0,70 to 0,80 mm) *Important*—Use only Champion N5 or Lodge HLN sparking plugs
- Check distributor contact points. Gap .014 to 0.16 in. (0,35 to 0,40 mm)
- Check water level in radiator (anti-freeze in winter)
- Check water level in screen washer reservoir (add methylated spirits in winter)

Gearbox and overdrive

- Check gearbox and overdrive oil levels, top up if necessary to marks on dipsticks

Automatic transmission

- Check fluid level, top up if necessary to 'full' mark on dipstick

Rear axle

- Check differential oil level, top up if necessary to bottom of filler plug hole

Steering and suspension

- Check fluid level in power steering reservoir, top up if necessary to 'high' mark on dipstick

Brakes. See also Road Test

- Check fluid level in reservoir, top up if necessary to rib on filter. Use Girling Crimson Brake Fluid (Specification SAE 70 R3)
- Check operation of reservoir level safety switch. Ignition 'on', hand brake 'off', unscrew and lift filler cap 1 in. (25 mm); warning light should be illuminated
- Check thickness of front brake pads, minimum $\frac{1}{8}$ in. (3 mm), also check for oil contamination on brake pads and discs
- Check and if necessary adjust rear wheel brakes. This automatically adjusts the hand brake

Clutch

- Check fluid in reservoir, top up if necessary to bottom of filler neck. Use Girling Crimson Brake Fluid (Specification SAE 70 R3)
- Check clutch pedal adjustment $\frac{3}{4}$ in. (20 mm) free movement at pedal pad

Wheels and tyres

- Change round, wash and examine all road wheels for possible damage. Finally tighten all road wheel nuts
- Check tyre pressures and inspect tyre treads. Front and rear: 26 lb/sq in. (1,8 kg/cm^2)

Propeller shaft

- Lubricate sliding joint

Electrical

- Check battery acid level

Road test

- Give car a thorough road test and carry out any adjustments required
- Run car on reserve fuel pump for a short period to ensure that the pump operates correctly
- Check operation of all lights and instruments
- After test, check for oil, fuel, fluid or grease leaks at all plugs, flanges, joints and unions. Check all brake pipes and hoses for chafing or looseness
- Report any defects

Cleaning

- Wipe clean all controls, handles, etc., clean windscreen and lights

MAINTENANCE ATTENTION AT 15,000 MILES (24.000 KM)

MAINTENANCE ATTENTION AT 20,000 MILES (32.000 KM)

Carried out by Rover Distributor or Dealer

NAME.....

ADDRESS.....

.....

We certify that the 20,000-mile (32.000 km) maintenance attention has been completed.

Signature.....

Mileage.....

Km.....

Date.....

MAINTENANCE ATTENTION AT 20,000 MILES (32.000 KM)

For recommended lubricants and capacities see Part Three of this book, pages 58 and 59

Owner's signature.....**giving authority for the work detailed below to be carried out**

Engine

Drain and refill engine sump

Renew external oil filter element

Clean and re-oil engine breather filter

Replace air cleaner element

Check carburetter slow running

Check oil in carburetter hydraulic damper

Clean sediment bowl and filter on wing valance

Replace sparking plugs. Gap .028 to .033 in. (0,70 to 0,80 mm). *Important* —Use only Champion N5 or Lodge HLN sparking plugs

Check distributor contact points. Gap .014 to .016 in. (0,35 to 0,40 mm)

Lubricate and clean distributor

Check tappet clearance. Inlet .006 in. (0,15 mm) engine hot. Exhaust .010 in. (0,25 mm) engine hot or cold

Check water level in radiator (anti-freeze in winter)

Check water level in screen washer reservoir (add methylated spirits in winter)

Check fan and dynamo belts $\frac{5}{16}$ in. to $\frac{7}{16}$ in. (8 to 11 mm) free movement when checked midway between pulleys

Gearbox and overdrive

Drain and refill gearbox and overdrive

Automatic transmission

Check fluid level, top up if necessary to 'full' mark on dipstick

Rear axle

Drain and refill differential

Steering and suspension

Check fluid level in power steering reservoir, top up if necessary to high mark on dipstick

Check that rubber boots on steering ball joints and ball swivels are not dislodged or damaged

Check front hubs for leakage

Check front wheel alignment:
$\frac{1}{16}$ in. (1,5 mm) toe-in to $\frac{1}{16}$ in. (1,5 mm) toe-out

Brakes. See also Road Test

Check fluid level in reservoir, top up if necessary to rib on filter. Use Girling Crimson Brake Fluid (Specification SAE 70 R3)

Check operation of reservoir level safety switch. Ignition 'on', hand brake 'off', unscrew and lift filler cap 1 in. (25 mm); warning light should be illuminated

Check thickness of front brake pads, minimum $\frac{1}{8}$ in. (3 mm), also check for oil contamination on brake pads and discs

Check and if necessary adjust rear wheel brakes. This automatically adjusts the hand brake

Renew air filter element on brake servo

Clutch

Check fluid in reservoir, top up if necessary to rib on filter neck

Use Girling Crimson Brake Fluid (Specification SAE 70 R3)

Check clutch pedal adjustment, $\frac{3}{4}$ in. (20 mm) free movement at pedal pad

CONTINUED OVERLEAF

MAINTENANCE ATTENTION AT 20,000 MILES (32.000 KM)

MAINTENANCE ATTENTION AT 20,000 MILES (32.000 KM)—*continued*

Wheels and tyres

Change round, wash and examine all road wheels for possible damage. Finally tighten all road wheel nuts

Check tyre pressures and inspect tyre treads. Front and rear: 26 lb/sq in. (1,8 kg/cm^2)

Propeller shaft

Lubricate sliding joint

Electrical

Check battery acid level

Clean, grease and tighten battery terminals

Check headlamp beam setting

Oil can lubrication

Apply a few spots of oil to throttle linkage, hand brake linkage, door locks, etc.

Road test

Give car a thorough road test and carry out any adjustments required

Run car on reserve fuel pump for a short period to ensure that the pump operates correctly

Check operation of all lights and instruments

After test, check for oil, fuel, fluid, or grease leaks at all plugs, flanges, joints and unions. Check all brake pipes and hoses for chafing or looseness

Report any defects

Cleaning

Wipe clean all controls, handles, etc., clean windscreen and lights

MAINTENANCE ATTENTION AT 25,000 MILES (40.000 KM)

For recommended lubricants and capacities see Part Three of this book, pages 58 and 59

MAINTENANCE ATTENTION AT 25,000 MILES (40.000 KM)

Carried out by Rover Distributor or Dealer

NAME.....

ADDRESS.....

.....

We certify that the 25,000-mile (40.000 km) maintenance attention has been completed.

Signature.....

Mileage.....

Km......

Date.....

Owner's signature.....**giving authority for the work detailed below to be carried out**

Engine

Drain and refill engine sump

Renew external oil filter element

Check carburetter slow running

Check and clean sparking plugs. Gap .028 to .033 in. (0,70 to 0,80 mm) *Important*—Use only Champion N5 or Lodge HLN sparking plugs

Check distributor contact points. Gap .014 to .016 in. (0,35 to 0,40 mm)

Check water level in radiator (anti-freeze in winter)

Check water level in screen washer reservoir (add methylated spirits in winter)

Gearbox and overdrive

Check gearbox and overdrive oil levels, top up if necessary to marks on dipsticks

Automatic transmission

Check fluid level, top up if necessary to 'full' mark on dipstick

Rear axle

Check differential oil level, top up if necessary to bottom of filler plug hole

Steering and suspension

Check fluid level in power steering reservoir, top up if necessary to 'high' mark on dipstick

Brakes. See also Road Test

Check fluid level in reservoir, top up if necessary to rib on filter.

Use Girling Crimson Brake Fluid (Specification SAE 70 R3)

Check operation of reservoir level safety switch. Ignition 'on', hand brake 'off', unscrew and lift filler cap 1 in. (25 mm); warning light should be illuminated

Check thickness of front brake pads, minimum $\frac{1}{8}$ in. (3 mm), also check for oil contamination on brake pads and discs

Check and if necessary adjust rear wheel brakes. This automatically adjusts the hand brake

Clutch

Check fluid in reservoir, top up if necessary to bottom of filler neck. Use Girling Crimson Brake Fluid (Specification SAE 70 R3)

Check clutch pedal adjustment $\frac{3}{4}$ in. (20 mm) free movement at pedal pad

Wheels and tyres

Change round, wash and examine all road wheels for possible damage. Finally tighten all road wheel nuts

Check tyre pressures and inspect tyre treads. Front and rear: 26 lb/sq in. (1,8 kg/cm^2)

Propeller shaft

Lubricate sliding joint

Electrical

Check battery acid level

Road test

Give car a thorough road test and carry out any adjustments required

Run ca ron reserve fuel pump for a short period to ensure that the pump operates correctly

Check operation of all lights and instruments

After test, check for oil, fuel, fluid or grease leaks at all plugs, flanges, joints and unions. Check all brake pipes and hoses for chafing or looseness

Report any defects

Cleaning

Wipe clean all controls, handles, etc., clean windscreen and lights

MAINTENANCE ATTENTION AT 25,000 MILES (40.000 KM)

MAINTENANCE ATTENTION AT 30,000 MILES (48.000 KM)

Carried out by Rover Distributor or Dealer

NAME.....

ADDRESS.....

.....

We certify that the 30,000-mile (48.000 km) maintenance attention has been completed.

Signature.....

Mileage.....

Km......

Date.....

MAINTENANCE ATTENTION AT 30,000 MILES (48.000 KM)

For recommended lubricants and capacities see Part Three of this book, pages 58 and 59

Owner's signature.....**giving authority for the work detailed below to be carried out**

Engine

- Drain and refill engine sump
- Renew external oil filter element
- Clean and re-oil engine breather
- Check carburetter slow running
- Check oil in carburetter hydraulic damper
- Replace sparking plugs. Gap .028 to .033 in. (0,70 to 0,80 mm). *Important* —Use only Champion N5 or Lodge HLN sparking plugs
- Check distributor contact points. Gap .014 to .016 in. (0,35 to 0,40 mm)
- Lubricate and clean distributor
- Check tappet clearance. Inlet .006 in. (0,15 mm) engine hot. Exhaust .010 in. (0,25 mm) engine hot or cold
- Check water level in radiator (anti-freeze in winter)
- Check water level in screen washer reservoir (add methylated spirits in winter)
- Check fan and dynamo belts $\frac{5}{16}$ in. to $\frac{7}{16}$ in. (8 to 11 mm) free movemen when checked midway between pulleys

Gearbox and overdrive

- Drain and refill gearbox and overdrive

Automatic transmission

- Check fluid level, top up if necessary to 'full' mark on dipstick

Rear axle

- Drain and refill differential

Steering and suspension

- Check fluid level in power steering reservoir, top up if necessary to 'high' mark on dipstick
- Check that rubber boots on steering ball joints and ball swivels are not dislodged or damaged
- Check front hubs for leakage

Brakes. See also Road Test

- Check fluid level in reservoir, top up if necessary to rib on filter. Use Girling Crimson Brake Fluid (Specification SAE 70 R3)
- Check operation of reservoir level safety switch. Ignition 'on', hand brake 'off', unscrew and lift filler cap 1 in. (25 mm); warning light should be illuminated
- Check thickness of front brake pads, minimum $\frac{1}{8}$ in. (3 mm) also check for oil contamination on brake pads and discs
- Check and if necessary adjust rear wheel brakes. This automatically adjusts the hand brake

Clutch

- Check fluid in reservoir, top up if necessary to rib on filter. Use Girling Crimson Brake Fluid (Specification SAE 70 R3)
- Check clutch pedal adjustment, $\frac{3}{4}$ in. (20 mm) free movement at pedal pad

Wheels and tyres

- Change round, wash and examine all road wheels for possible damage Finally tighten all road wheel nuts
- Check tyre pressures and inspect tyre treads. Front and rear: 26 lb/sq in. (1,8 kg/cm²)

CONTINUED OVERLEAF

MAINTENANCE ATTENTION AT 30,000 MILES (48.000 KM)

MAINTENANCE ATTENTION AT 30,000 MILES (48.000 KM)—*continued*

Propeller shaft

Lubricate sliding joint

Electrical

Check battery acid level

Clean, grease and tighten battery terminals

Check headlamp beam setting

Oil can lubrication

Apply a few spots of oil to throttle linkage, hand brake linkage, door locks, etc.

Road test

Give car a thorough road test and carry out any adjustments required

Run car on reserve fuel pump for a short period to ensure that the pump operates correctly

Check operation of all lights and instruments

After test, check for oil, fuel, fluid or grease leaks at all plugs, flanges joints and unions. Check all brake pipes and hoses for chafing or looseness

Report any defects

Cleaning

Wipe clean all controls, handles, etc., clean windscreen and lights

MAINTENANCE ATTENTION AT 35,000 MILES (56.000 KM)

For recommended lubricants and capacities see Part Three of this book, pages 58 and 59

MAINTENANCE ATTENTION AT 35,000 MILES (56.000 KM)

Carried out by Rover Distributor or Dealer

NAME.....

ADDRESS.....

.....

We certify that the 35,000-mile (56.000 km) maintenance attention has been completed.

Signature.....

Mileage.....

Km......

Date.....

Owner's signature.....**giving authority for the work detailed below to be carried out**

Engine

Drain and refill engine sump

Renew external oil filter element

Check carburetter slow running

Check and clean sparking plugs. Gap .028 to .033 in. (0,70 to 0,80 mm). *Important*—Use only Champion N5 or Lodge HLN sparking plugs

Check distributor contact points. Gap .014 to .016 in. (0,35 to 0,40 mm)

Check water level in radiator (anti-freeze in winter)

Check water level in screen washer reservoir (add methylated spirits in winter)

Gearbox and overdrive

Check gearbox and overdrive oil levels, top up if necessary to marks on dipsticks

Automatic transmission

Check fluid level, top up if necessary to 'full' mark on dipstick

Rear axle

Check differential oil level, top up if necessary to bottom of filler plug hole

Steering and suspension

Check fluid level in power steering reservoir, top up if necessary to 'high' mark on dipstick

Brakes. See also Road Test

Check fluid level in reservoir, top up if necessary to rib on filter. Use Girling Crimson Brake Fluid (Specification SAE 70 R3)

Check operation of reservoir level safety switch. Ignition 'on', hand brake 'off', unscrew and lift filler cap 1 in. (25 mm); warning light should be illuminated

Check thickness of front brake pads, minimum $\frac{1}{8}$ in. (3 mm), also check for oil contamination on brake pads and discs

Check and if necessary adjust rear wheel brakes. This automatically adjusts the hand brake

Clutch

Check fluid in reservoir, top up if necessary to bottom of filler neck. Use Girling Crimson Brake Fluid (Specification SAE 70 R3)

Check clutch pedal adjustment, $\frac{3}{4}$ in. (20 mm) free movement at pedal pad

Wheels and tyres

Change round, wash and examine all road wheels for possible damage. Finally tighten all road wheel nuts

Check tyre pressures and inspect tyre treads. Front and rear: 26 lb/sq in. (1,8 kg/cm^2)

Propeller shaft

Lubricate sliding joint

Electrical

Check battery acid level

Road test

Give car a thorough road test and carry out any adjustments required

Run car on reserve fuel pump for a short period to ensure that the pump operates correctly

Check operation of all lights

After test, check for oil, fuel, fluid or grease leaks at all plugs, flanges, joints and unions. Check all brake pipes and hoses for chafing or looseness

Report any defects

Cleaning

Wipe clean all controls, handles, etc., clean windscreen and lights

MAINTENANCE ATTENTION AT 35,000 MILES (56.000 KM)

MAINTENANCE ATTENTION AT 40,000 MILES (64.000 KM)

Carried out by Rover Distributor or Dealer

NAME.....

ADDRESS.....

.....

We certify that the 40,000-mile (64.000 km) maintenance attention has been completed.

Signature.....

Mileage.....

Km......

Date.....

MAINTENANCE ATTENTION AT 40,000 MILES (64.000 KM)

For recommended lubricants and capacities see Part Three of this book, pages 58 and 59

Owner's signature.....**giving authority for the work detailed below to be carried out**

Engine

- Drain and refill engine sump
- Renew external oil filter element
- Clean and re-oil engine beather filter
- Replace air cleaner element
- Check carburetter slow running
- Check oil in carburetter hydraulic damper
- Clean sediment bowl and filter on wing valance
- Replace sparking plugs. Gap .028 to .033 in. (0,70 to 0,80 mm). *Important*—Use only Champion N5 or Lodge HLN sparking plugs
- Check distributor contact points. Gap .014 to .016 in. (0,35 to 0,40 mm)
- Lubricate and clean distributor
- Check tappet clearance. Inlet .006 in. (0,15 mm) engine hot. Exhaust .010 in. (0,25 mm) engine hot or cold
- Check water level in radiator (anti-freeze in winter)
- Check water level in screen washer reservoir (add methylated spirits in winter)
- Check fan and dynamo belts $\frac{5}{16}$ in. to $\frac{7}{16}$ in. (8 to 11 mm) free movement when checked midway between pulleys

Gearbox and overdrive

- Drain and refill gearbox and overdrive in place of checking levels

Automatic transmission

- Check fluid level, top up if necessary to 'full' mark on dipstick

Rear axle

- Drain and refill differential in place of checking oil level

Steering and suspension

- Check fluid level in power steering reservoir, top up if necessary to 'high' mark on dipstick
- Check that rubber boots on steering ball joints and ball swivels are not dislodged or damaged
- Check front hubs for leakage
- Check front wheel alignment: $\frac{1}{16}$ in. (1,5 mm) toe-in to $\frac{1}{16}$ in. (1,5 mm) toe-out

Brakes. See also Road Test

- Check fluid level in reservoir, top up if necessary to rib on filter. Use Girling Crimson Brake Fluid (Specification SAE 70 R3)
- Check operation of reservoir level safety switch. Ignition 'on', hand brake 'off', unscrew and lift filler cap 1 in. (25 mm); warning light should be illuminated
- Check thickness of front brake pads, minimum $\frac{1}{8}$ in. (3 mm), also check for oil contamination on brake pads and discs
- Check and if necessary adjust rear wheel brakes. This automatically adjusts the hand brake
- Renew air filter element on brake servo
- Renew all rubber seals in brake system. This should be done every three years if mileage covered is less than 40,000 (64.000 km). Refill with correct fluid. Girling Crimson Brake Fluid (Specification SAE 70 R3)

Clutch

- Check fluid in reservoir, top up if necessary to rib on filter neck. Use Girling Crimson Brake Fluid (Specification SAE 70 R3)
- Check clutch pedal adjustment, $\frac{3}{4}$ in. (20 mm) free movement at pedal pad

CONTINUED OVERLEAF

MAINTENANCE ATTENTION AT 40,000 MILES (64.000 KM)

MAINTENANCE ATTENTION AT 40,000 MILES (64.000 KM)—*continued*

Wheels and tyres

Change round, wash and examine all road wheels for possible damage. Finally tighten all road wheel nuts

Check tyre pressures and inspect tyre treads. Front and rear: 26 lb/sq in. (1,8 kg/cm²)

Propeller shaft

Lubricate sliding joint

Electrical

Check battery acid level

Clean, grease and tighten battery terminals

Check headlamp beam setting

Oil can lubrication

Apply a few spots of oil to throttle linkage, hand brake linkage, door locks, etc.

Road test

Give car a thorough road test and carry out any adjustments required

Run car on reserve fuel pump for a short period to ensure that the pump operates correctly

Check operation of all lights and instruments

After test, check for oil, fuel, fluid or grease leaks at all plugs, flanges, joints and unions. Check all brake pipes and hoses for chafing or looseness

Report any defects

Cleaning

Wipe clean all controls, handles, etc., clean windscreen and lights

NOW THAT ALL THE VOUCHERS IN THIS BOOK HAVE BEEN COMPLETED YOU ARE STRONGLY ADVISED TO APPLY TO YOUR ROVER DISTRIBUTOR OR DEALER FOR A COPY OF THE CONTINUATION MAINTENANCE SCHEDULE BOOK TO ENABLE THE GOOD WORK OF PREVENTATIVE MAINTENANCE TO BE CONTINUED FOR ANOTHER **40,000 MILES (64.000 KM)**

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