# Reliant Rialto 2 All Models

Owner's Handbook



### Reliant Rialto 2 - All Models

A copy of the Owners Handbook is provided with each vehicle. Additional copies are available from your Reliant Dealer.

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The descriptions and illustrations appearing in this book are applicable to vehicles manufactured at the time of printing. The manufacturer therefore reserves the right-while retaining basic features of the models herein described and illustrated - to make at any time and without necessarily bringing this book up to date, any alterations to units, parts or accessories deemed convenient for improvement or for any manufacturing or commercial reasons.

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### Foreword

This driver's handbook gives concise information on the correct running and maintenance of the range of Rialto vehicles.

It is not intended to be a service repair manual and should any work become necessary which is not detailed in it, owners should contact a Dealer, preferably the Dealer from whom the vehicle was purchased.

# Pre-delivery inspection

The pre-delivery inspection is carried out by the Dealer supplying the vehicle. It is designed to ensure that the vehicle reaches you, the owner, in first-class condition. Continued efficiency and economy of operation depend entirely on the care and regular maintenance it receives during its life.

# After-sale service

You will have received with your vehicle a booklet 'The Key to Service'. In it is detailed the After-sales service to be carried out by a Reliant Dealer.

All Authorised Dealers are under agreement to provide an after-sales service at 1,000 miles (1,500 km) or after one month. Should you reside a long distance from the Dealer from whom you purchased the vehicle, it is that Dealer's responsibility to make prior arrangements for you to have your After-sale service carried out by a Reliant Dealer nearer to your home address.

# Warranty

The Terms of Warranty are included in the 'Key to Service' booklet. Owners should appreciate that it is essential that any 'warranty rectification' work must be carried out by a Reliant Dealer. The Warranty does To defects arising in components that have not received the essential scheduled maintenance as detailed on pages 15-16 of

this Handbook. Other matters affecting claims made under Warranty are clearly stated in the 'Key to Service' booklet.

## Your Reliant Dealer

Owners are strongly recommended to entrust their vehicle servicing to a Reliant Dealer. Authorised Dealers are constantly being advised of the latest technical developments and methods of repair and replacement and are, therefore, able to provide the best servicing, advice, or information.

An Authorised Dealer also has the special facilities and equipment necessary for major repairs or long term maintenance, not usually available to the private owner.

# Identification

In all correspondence, either with the company or your Reliant Dealer it is imperative that the full chassis and engine numbers are quoted.

These numbers are to be found on the vehicle identification plate located on the left-hand side panel of the engine compartment.

### Reliant 'R' Parts

Great care should be taken to ensure that only genuine Reliant 'R' Parts are used in the maintenance of your vehicle. 'R' Parts, stocked by all Authorised Reliant Dealers, are subject to the same rigorous quality control standards as components used in original manufacture, have a factory backed assurance of quality, and are fully warranted by Reliant.

# **Exchange scheme**

An exchange scheme for many major items and assemblies is operated by our Parts Operation; ask your Dealer for details.

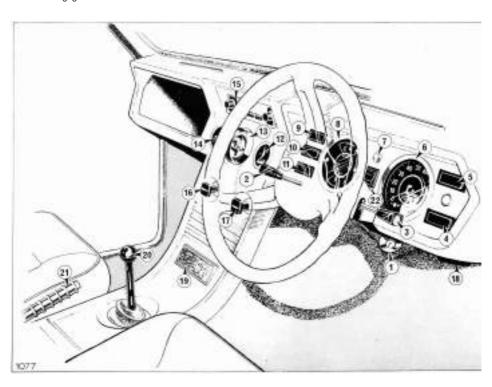
# Introducing your new vehicle

You should first familiarise yourself with the functions of the instruments and controls. To ensure safety and driving confidence, learn to handle them and interpret their readings' quickly and easily.

Figure 1 Fascia and controls

- 1 Ignition switch
- 2 Combined direction indicator, headlamp flasher, dipswitch and horn push
- 3 Combined windscreen wiperl washer switch
- 4 Heated rear screen switch (if fitted)
- 5 Heater fan switch
- 6 Speedometer
- 7 Direction indicator lamp
- 8 Combined fuel and temperature gauge
- 9 Light switch
- 10 Hazard warning switch
- 11 Rear fog guard switch

- 12 Fuel economy gauge (where fitted)
- 13 Fresh air vent
- 14 Clock (where fitted)
- 15 Radio (where fitted)
- 16 Heater control
- 17 Choke control
- 18 Heater vent
- 19 Ash tray
- 20 Gear lever 21 Hand brake
- 22 Brake test switch



# Instrument panel, switches and controls

The instruments are described as viewed from the driving seat.

## Speedometer

Located to the right of the steering wheel, the instrument indicates the speed of the vehicle and incorporates a total distance recorder.

# Direction indicator warning light

A green light, in the centre of the facia. While the indicator flashing unit is in operation the warning lamp glows intermittently in unison with the indicator lamps.

A continuous glow indicates lamp failure.

# Headlamp main-beam warning light

A blue lamp, located at the left of centre on the speedometer face. The main-beam warning lamp is illuminated when the headlamp beams are raised and will go out when the beams are dipped. (Figure 2).

### Water temperature and fuel gauge

This combined instrument is located to the left of the steering wheel and comprises two separate gauges. The upper segment of the instrument indicates the coolant temperature in the engine. (Figure 2). The lower segment of the instrument indicates the quantity of fuel in the petrol tank. When the ignition is switched on the indicator will slowly rise, due to the damping of the meter mechanism, to the final indicated reading.

# Ignition warning light

The ignition warning light is located to the left of centre on the combined temperature and fuel gauge. This red light serves as a nocharge indicator. The light should be illuminated only when the ignition is switched on without the engine running, or when the engine is idling.

When the engine speed is increased the light should dim and then go out, failure to do so indicates a fault in the charging circuit, or with the fan belt. (Figure 2).

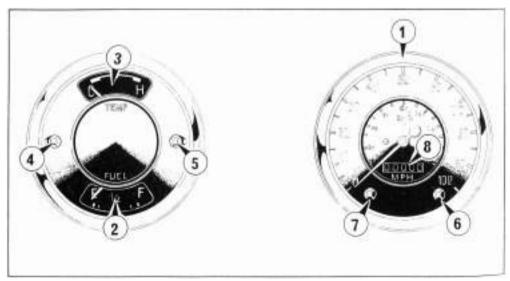


Figure 2 Instruments

- 1 Speedometer
- 2 Fuel gauge
- 3 Coolant temperature gauge
- 4 Ignition warning light
- 5 Oil pressure warning light
- 6 Hazard warning light

- 7 Main beam warning light
- 8 Total mileage recorder

### Oil pressure warning light

The oil pressure warning light, amber in colour, is located to the right of centre on the combined instrument, (Figure 2). This light should be illuminated only when the engine is at rest with the ignition switch on. Immediately the engine is starteait should extinguish, thus indicating that the oil is circulating under pressure. Should the light come on at any other time, stop the engine immediately and investigate, a low engine oil level was be the cause.

# Quartz Clock (if fitted)

Located above the centre console. The clock hands may be re-set by applying finger pressure to the knurled adjuster, rotating the adjuster until the correct time is shown.

# Fuel Economy Gauge (if fitted)

This gauge registers the amount of vacuum in the inlet manifold of the engine and can assist the driver to achieve optimum economy. With the engine stopped, the needle will rest in the 'poor' sector of the gauge. In operation the needle will travel between 'good' and 'poor' dependent upon the position of the accelerator pedal and the power being required by the driver. Under heavy acceleration, hill climbing and high speed conditions the needle will move into the 'poor' sector. Conversely under light load. down hills and deceleration the needle will move into the 'good' sector. The best fuel economy will be obtained by the driver achieving a reasonable balance in his driving, avoiding very high speeds, hard acceleration and anticipating traffic conditions.

### Combined ignition and starter switch

The ignition/starter switch is mounted to the right of the steering column (Figure 3). Clockwise rotation of the ignition key to position 1 allows the auxiliaries, radio etc., to be used without turning on the ignition. In position 2 the ignition is switched on. A further clockwise rotation of the key against spring pressure operates the starter motor. When the engine starts the key should be released instantly.



Figure 3 Ignition switch/steering lock

- O Steering locked ignition off
- 1 Steering free auxiliaries on
- 2 Ignition on
- 3 Starter

# **IMPORTANT**

The combined ignition and starter switch also operates the steering lock. It is essential that the steering lock is disengaged by turning the ignition key to position 1 before releasing the handbrake and manoeuvring the vehicle without using the engine. Freewheeling, with the engine running or disengaged, is not recommended.



# Combined side/tail lamps and headlamps switch

The light switch is a 3-position rocker type switch located at the top of the group of switches on the left-hand side of the main instrument panel. Pressure on the switch first switches on the side and rear lights and number plate lamp. Further pressure on the switch operates the headlamps. Headlamp dipping is achieved by use of the multi-switch mounted to the left of the steering column, see page 7.



# Hazard warning switch

The rocker switch operating the hazard warning lights is situated in the centre of the group of switches on the left-hand side of the main instrument panel. The switch actuates all four direction indicator lamps in unison. The warning light situated in the speedometer flashes when the device is operating.



# Rear fog lamp switch

The rocker switch operating the rear fog lamp is located at the bottom of the group of switches on the left-hand side of the main instrument panel. The switch incorporates an amber lamp which is illuminated as a warning when the rear fog lamp is switched on. The rear fog lamp will only operate when the headlamps are turned on.



### Heater switch

The heater has a booster fan controlled by a rocker switch located in the top right-hand corner of the main instrument panel (see heater controls, page 7).



### Heated rear window switch

The heated rear window is operated by a rocker switch located at the bottom of the right-hand side of the main instrument panel. The switch incorporates a green lamp which is illuminated as a warning when the heating elements are switched on. To conserve battery performance, the heating elements should be switched off when not required for de-misting the rear window.



### Brake warning light and switch

Incorporated into a switch situated in the centre of the fascia immediately above the steering column is a warning light which will illuminate if there is any loss of hydraulic brake fluid. Should the warning light illuminate, the vehicle should be brought to a standstill with light application of the foot brake and/or handbrake so that the cause of the hydraulic fluid loss can be investigated. Under no circumstances should the vehicle continue to be driven with the warning light illuminated.

The warning light circuit should be checked at least once each week by pressing the switch when the warning light should be illuminated. If the warning light fails to illuminate when the switch is depressed you should consult your Reliant Dealer.

# Windscreen wiper and washer control

The windscreen wiper and washer are controlled by a multi-purpose switch situated on the right-hand side of the steering column .(Figure 4). The switch has four positions thus:

Up (1) First position: Wiper-slow speed

(2) Second position: Wiper-fast speed

Down (3) Single (flick) Wipe

Press-in (4) Electric Washer operated while pressed

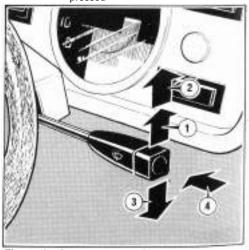


Figure 4 Combined wiper/washer switch

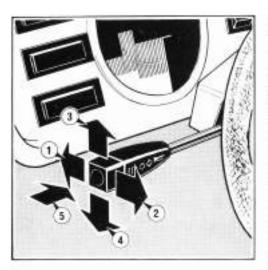
To achieve the best results from the windscreen washer, always use a suitable windscreen washer additive in the water reservoir situated on the right-hand side of the engine compartment. The direction of the windscreen washer jets can be altered with a pin inserted into the jet holes.

# Combined direction indicator switch/dip switch/headlamp flasher and horn-push

A multi-purpose switch located on the lefthand side of the steering column. **(Figure 5).** The switch has five positions thus:

Forward Headlamp main beam
Centre Headlamp dipped beam
Back Headlamp flasher
Up Right-hand indicator
Down Left-hand indicator

Press the button on the extreme end of the switch to operate the horn.



**Figure 5** Combined direction indicator switch/dip switch/headlamp flasher and horn push

- 1 Forward headlamps on main beam
- 2 Back headlamp flasher
- 3 Up right-hand indicator
- 4 Down -left-hand indicator
- 5 Press horn

### Interior lamp switch

The interior lamp is situated above the centre of the windscreen and has an integral switch on the body of the lamp. In the "off" position, the light is operated by the door courtesy light switch fitted to the driver's door (or both front doors on some models).

### Controls

### Carburettor choke control

A pull-out control located alongside the heater control on the centre console. See 'starting procedure' **page 13** for use.

### Heater control

The heater air flow temperature can be controlled by the push-pull knob on the centre console situated on the left-hand side. The knob is pushed in to give hot air, which can be hoosted by means of the fan switch previously described.

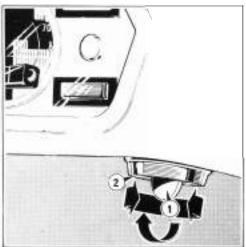


Figure 6 Heater vent

- 1 Vent flap
- 2 Directional bezel

### Heater and ventilation

Two heater outlets are situated under the fascia in both driver and passenger footwells. They comprise a simple nozzle that has an

adjustable round flap that can be opened to any position and by turning the flap the nozzle can also be rotated to give an air flow in any direction required. (Figure 6).

#### Ventilation

Face level ventilation is provided by an adjustable outlet situated centrally on the fascia above the centre console. The knurled knob, in the centre of the nozzle is turned clockwise to open. The nozzle can be rotated to give an air flow in any direction required. (Figure 7).

The air vent can be used to direct cold air at face level and, as with the heater, this air flow can be boosted by operating the heater fan switch.

### Windscreen de-frostlde-mist

To obtain maximum flow to the windscreen the two heater outlets and the ventilation outlet should be closed and the air flow boosted by operating the heater fan switch.

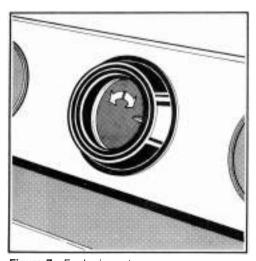


Figure 7 Fresh air vent

1 Air flow and direction control

# Radio controls (if fitted)

A detailed description of the controls of the radio, available as an optional extra, is given on page 38.

### Ash tray

An ash tray is provided in the centre console of the vehicle. The tray is removable for cleaning by pressing the spring clip at the rear of the tray to release it from the body.

### Hand controls

### Gear shift lever

The gear shift lever is floor mounted and the gear positions, marked on the gear knob, are shown in **Figure 8**; make certain that the gear lever is in the neutral position before starting the engine.

Reverse gear is located alongside top gear - a 'gate' prevents accidental engagement of reverse and the lever must be lifted over the 'gate' to engage reverse gear.

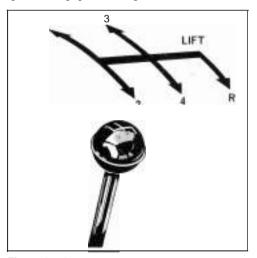


Figure 8 Gear position

### Handbrake

A rachet type handbrake lever is located alongside the driver's seat, on top of the transmission tunnel.

To release the handbrake, pull the lever slightly upwards at the same time pressing the button at the end of the hand grip. This will release the ratchet and the lever will be free to be lowered to the floor.

The handbrake operates on the rear wheels by means of a cable linkage, and is independent of the hydraulic system operation.

### Foot controls

All foot-operated controls are situated conventionally, being pendant pedals mounted on a bracket within the footwell.

### Accelerator pedal

The accelerator pedal is located to the right of the brake pedal and operates the throttle on the carburettor by means of a cable linkage.

### Brake pedal

The foot brake is operated by a pendant pedal actuating, hydraulically, internal expanding brakes at front and rear.

# Clutch pedal

The clutch pedal operates a single dry plate clutch by means of a cable linkage.

# Locks and controls on body

### **Door controls**

Both the driver's and passenger's doors are lockable from the outside, by means of tumbler locks. Zero torque, anti-burst locks are provided. There is, therefore, no need to slam

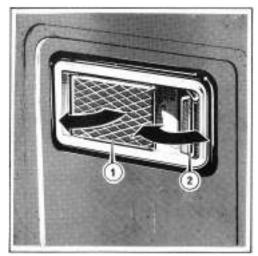


Figure 9 Interior door handle

- 1 Door handle Pull to open
- 2 Safety catch

the doors to ensure that they are locked. The door is unlocked from inside the vehicle by pulling the flush fitting lever (Figure 9) of the interior door handle. The passenger door can be locked from inside by operating the safety catch lever. The catch can be operated only when the door is closed. A conventional mechanism window winding handle raises or lowers the windows.

# Rear door or luggage compartment lock

The rear door or luggage compartment lid are opened by an external handle incorporating a tumbler lock. The lock uses the side door key provided.

Note: You should never drive your vehicle with the rear door or luggage compartment lid in the open position since this may allow dangerous exhaust fumes to be drawn into the interior of the vehicle. The luggage compartment lid on saloon vehicles should never be used to increase the load carrying capacity.

### **Engine compartment lock**

The engine compartment is opened by means of the door key which should be inserted in the tumbler lock incorporated in the engine compartment lid. This key cannot be removed from its lock until the lock is in the closed position.

### Seats

#### Front seats

Both front seats are adjustable for reach. Sitting in the seat, lift the lever indicated in Figure 10 and slide the seat to adjust, releasing the lever to secure it in the required position. Access to the rear seats is obtained by releasing the floor catch on the back of the seat frame (Figure 11) and tilting the seat forward. The catch will re-fasten when the seat is lowered.



Figure 10 Front seat adjustment

1 Adjusting lever

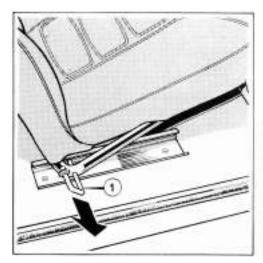


Figure 11 Seat Catch

1 Catch-pull to release

### Rear seats

The rear seat squab can be folded down to give a larger floor area in the rear of the vehicle. The squab is secured in the upright position by means of retaining straps looped over brackets on the side of the body in the rear compartment. (Figure 12). The seat cushion is attached to the heelboard of the rear pan and secured to the rear of the

seat pan with two press stud fasteners. Releasing the press stud fasteners and raising the cushions allows the squab to be released and lowered to give a flat rear floor area. (Figure 13),

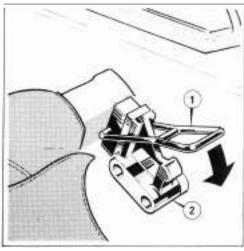


Figure 12 Rear seat catches

- 1 Retaining strap
- 2 Seat rest bracket

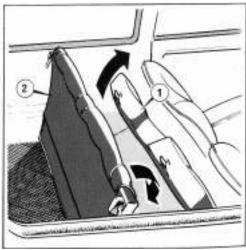


Figure 13 Rear seat folded down

- 1 Seat cushion
- 2 Seat squab

### Tool roll

A tool roll is supplied with each vehicle, containing a lifting jack, jack handle, and wheel brace

### Spare wheel

The spare wheel is located at the left-hand side at the rear of the vehicle. The wheel is held secure by means of a rubber strap with hooks locating in brackets secured to the body. **(Figure 14).** 



Figure 14 Spare wheel retaining strap

### Seat belts

Your vehicle has seat belts for both driver's and front passenger's seats. It is important that seat belts are worm on all journeys. Be sure to observe the following conditions. Failure to do so could increase the chance and/or severity of injury in an accident.

### Wearing Instructions

The complete belt layout is shown in **Figure 15.** With occupant seated, the shoulder strap must pass over the outboard shoulder and diagonally across the chest. The belt should be adjusted so that the hand will just pass between the strap and the chest with the lap strap reasonably tight. Never run the belt

under your arm. Position the lap belt as-low as possible around the hips, not the waist. Never wear the belt inside out or twisted. Do not allow more than one person to use the same belt at the same time. The seat belts are intended for use by occupants of adult build, they should not be used by a child under 10 years of age or around a child seated on an adult's lap.

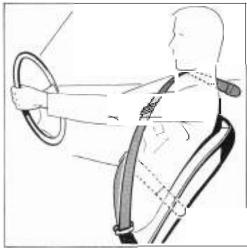


Figure 15 Safety belt wearing layout

# Seat belt adjustment

The seat belt is loosened by raising the outboard fixed position buckle 90° to the double lap strap, when the webbing will pull through quite freely. (Figure 16).

To tighten the belt simply pull on the free end

of the strap as shown in **Figure 17.** 

# Seat belt engagement and release mechanism

When engaging the tongue in the clasp mechanism, pressure should be applied until a "click" is heard. Releasing the tongue only requires light pressure on the clasp mechanism red button when the tongue will release. (Figure 18).



Figure 16 To loosen lap strap



Figure 17 To tighten lap strap

### Seat belt stowage

When the seat belts are not in use the tongue of the seat belt should be engaged into the seat belt stowage clip attached to the upper anchorage point. (Figure 19).

# Cleaning and general instructions

The nylon webbing may be cleaned by lightly brushing with a mild soap and warm water, but avoid soaking and dry naturally, away from heat. Do not boil, bleach or dye, as this

may severely reduce the effective strength of the belt. The belts should be inspected regurlarly for signs of severe fraying or having been cut. If this occurs, or the belt has been severely stressed during an accident the belt should be replaced.

No alterations or additions should be made to the seat belts in any way as such changes may render the belt ineffective.



Figure 18 Seat belt release



Figure 19 Seat belt stowage

# Starting procedure

### **IMPORTANT**

Never start or run the engine in a confined space as exhaust gas contains highly poisonous carbon monoxide which is both invisible and odourless. If you are starting your car in a garage ensure you leave the garage door open.

Engine starting will be adversely affected if an incorrect grade of fuel is used or valves, sparking plugs and ignition contact points are not serviced in accordance with the procedures covered in detail in this publication **pages 14-16.** 

Before starting the engine, ensure the gear lever is in the neutral position and that the handbrake is fully applied.

### **COLD STARTING**

Pull the choke control to the fully out position. Do not depress the accelerator pedal. Switch on the ignition and crank the engine by turning the ignition key to position 3 until the engine starts, or up to a maximum of 10 seconds. If the engine does not start, return the ignition key to position 2, pause, and repeat the cranking procedure. If the engine fails to start after 3 attempts, wait for 10 seconds and then follow the procedure for hot start.

Release the ignition key as soon as the engine has started. On driving the vehicle away, the progressive rise in engine temperature will require the choke cable control to be gradually pushed in towards the IIoff" position. This should be carried out in accordance with the engine requirements. Once a sufficiently high temperature has been reached, the choke control should be pushed fully in, as prolonged use will cause unnecessary wastage of fuel and engine wear.

### **HOT STARTING**

Do not use the choke when starting a warm engine.

Depress the accelerator pedal fully or near fully. Maintaining this position crank the engine by turning the ignition to position 3

until the engine starts, or up to a maximum of 10 seconds. If the engine does not start, return the ignition key to position 2. Pause and, keeping the accelerator pedal fully depressed, repeat the cranking procedure until the engine starts and runs. The accelerator pedal should then be progressively closed to prevent engine over-revving and damage.

Emission control and economy requirements can mean that under *Ilhot* start" conditions, particularly after a short stop during a journey, some seconds may be required before smooth engine running is obtained due to vapourisation of the field within the carburettor body. Once cool fuel flows through the carburettor, the normal running condition will be achieved.

# Running-in

The progressive running-in of your new vehicle, and the method of achieving this, is of the utmost importance. Properly carried out, you should get durability, economy of running, and freedom from mechanical troubles. It should be remembered that 'running-in' applies not only to the engine but the gearbox, brakes and rear axle.

The process of running-in should continue for the first 1,000 miles (1,600 km). During the first 500 miles (800 km) do not exceed 50 mph (80 kph). Do not operate at full throttle in any gear.

Do not allow the engine to labour in any gear for example when attempting to drive up steep hills in a higher gear at low speed, or accelerating from very low speeds in top gear. Make full use of your gearbox, and avoid overloading the engine.

From 500 miles (800 km) to 1,000 miles (1,600 km) the running speeds in top gear may be progressively increased.

At the conclusion of 1,000 miles (1,600 km) the vehicle should be returned to the Dealer from whom it was purchased for the Aftersales service, or to the Dealer with whom it was arranged to carry out this service at the time of purchase.

Oil changes during the running-in period are very important. Use only the recommended grades of oil, given on page 17.

#### Fuel recommendations

Your new vehicle should always be operated with 97 octane (4 star) fuel. Lower grade fuels are not recommended.

# Routine servicing

For your own safety you should only carry out checks in the engine compartment with the ignition turned off except where otherwise stated. While the engine is running you should take extreme care to avoid moving parts, particularly with loose clothing.

Regular and conscientious routine inspection, maintenance, lubrication and, in general, planned servicing of your vehicle are absolutely essential to ensure trouble-free motoring. It is recommended that the routine maintenance and inspection of your vehicle should be entrusted to your Reliant Dealer, who has the experience which comes only from the close association with our products. Certain items of maintenance require special equipment and these, of course, must be carried out by your Dealer at periods prescribed. Neglect of even the simplest item can have serious consequences. The services recommended in this section of the Handbook have been developed for your vehicle. Your Reliant Dealer is well equipped for routine servicing, but for those owners who wish to carry out this work themselves, then complete information will be found in the following pages.

Lubrication is absolutely vital for your vehicle. Only the high quality recommended lubricants should be used throughout the vehicle, as cheaper oils, greases and fluids may, in time, prove to be false economy.

Always use the approved grade of engine oil, see **page 17.** 

Heavier grades can lead to difficult starting particularly in cold weather. If you use an unsuitable oil you may find that the engine becomes contaminated internally. If ever there

is any doubt about the condition of your oil then it is good policy to drain and fit a new oil filter element, and refill the sump with the correct grade of oil.

Remember that your Reliant Dealer is better equipped to provide a routine maintenance and repair service than the owner driver. Therefore, if you encounter trouble, consult your Reliant Dealer - he is at your service.

### Service schedule

The maintenance periods fall into well classified categories:

- 1 Regular day by day attention.
- 2 Maintenance at the first 1,000 miles (1.500 km) or after one month.
- 3 Maintenance at 6,000 miles (10,000 km) or six monthly intervals - Standard service.
- 4 Maintenance at 12,000 miles (20,000 km) or twelve monthly intervals Major service.

The Standard and Major service intervals are designed to ensure safety and reliability under most operating conditions. However, if your operating conditions are severe, you cover a very low annual mileage or have a high proportion of short journeys a 'supplementary' service is recommended at intervals of 3,000 miles (5,000 km) or three nlonths.

This supplementary service is particularly irnportant, with increasing vehicle mileage, after the first 12,000 miles (20,000 km) or twelve months. The Supplementary Service is limited to simple checks and adjustments, easily carried out by an owner, all of which are described in the following pages of this Handbook. This work can of course be entrusted to a Dealer, if you prefer. RecordS of thiS intermediate service, together with the Standard and Major Services should be maintained in the 'Key to Service' booklet. Presentation of this Service booklet to any Reliant Dealer will ensure proper completion of the maintenance operations.

The operations listed below should be carried out at the mileages or periods shown:

Operation		=	Salahmenty yey		17 (000m, 00,000 to 14 12 treatility (5 gar nation)	9/000H (\$1000.40	24,000+140,000 km; oz. 24, montos Maco serves	30,000 h (0,000 km)	N. (Oper 90) (EO san or 35 months Mayor served	
lubrication										
Check and top up 1011 level	Χ		X							
Change engine oil		X		Χ	X	X	X	X	Χ	
Change oil filter		X		Χ	X	X	Χ	X	Χ	
Check and top up gearbox oil		X		Χ		X		X		
Change gearbox oil					X		X		X	
Check and top up rear axle 011		X		Χ	X	X	X	X	X	
Check and top up steering box 011 level		X		X	X	X	X	X	X	
Clean oil filler cap and connecting hose			X	X	X	X	X	X	X	
Oil or grease all lubrication		X		X	X	Х	X	Χ	X	
Lubricate throttle linkage and top up				V	V	V		V	V	
carburettor damper		~	v	X X	X X	X	X	X	X	
Lubricate all locks and hinges		X	X	^	Λ	X	Χ	^	^	
General				.,				.,		
Check air cleaner element				X		Х		Χ	37	
Replace air cleaner element					Χ		Х		X	
Tighten cylinder head, sump and manifold fixIngs		Х								
Check and adjust valve clearances		X		Χ	Х	Х	Χ	X	X	
Check and adjust fan belt tension		X		X	X	X	X	X	X	
Examine and adjust distributor points		^		^	X	^	^	71	X	
Replace distributor points					^		X		Λ	
Clean coil, distributor cap and HT leads					X		X		X	
Clean and adjust spark plugs				Χ		X	,,	X		
Replace spark plugs					X		X		X	
Change fuel filters					X		X		Χ	
Replace fuel pipes and fuel pipe clips									X	
Check and top up master cylinder	Χ	X	Χ	Χ	Χ		Χ	X		
Check hydraulic system, replace flUid,						X			Χ	
Renew seals or replace units, replace hoses									X	
Inspect brake system for leaks and										
holen for chafing		X		Χ	Χ	X	X	X	X	
Examine brake shoes				X	X	Χ	X	X	X	
Adjust brakes		X	X	X	X	X	X	X	X	
Check handbrake cable and adjust				X	X	X	X	X	X	
Check security of wheels		X	X	X	X	Χ	X	Χ	X	
Adjust tyre pressures and check	V	37	37	V	V	37	V	37	v	
conditions of tyres	Х	X X	X	X	X X	X	X X	X X	X X	
Check all body suppossion		Λ		Χ	Λ	X	Λ	^	Λ	
Check all body, suspenSion, letting flxings and connections		Х		X	Χ	X	Χ	X	X	
Check front wheel bearings and adjust		^		Λ	X	Λ	X		Λ	
Repack front wheel bearings and adjust					Λ		^		X	
Check door operation / locks and hinges		Χ		Χ	Χ	X	X	X	X	
Top up battery, check connections	Χ	X		X	X	X	X	X	X	
Top up radiator coolant	Χ	X	X	Χ	X	X	X	X	X	
Check oil and water leaks		X	Χ	X	X	X	X	X	X	
Check all controls, lights, horn,										
Instruments, etc.	Χ	X	X	Χ	X	X	X	X	X	
Check headlamp alignment					X		X		X	
Check washer reservoir and top up	Χ	X	X	X	X	X	X	X	X	
Check external condition of exhaust system			X	X	X	X	X	Χ	X	
Check and, if necessary, renew windscreen									**	
wiper blade					Х		Х		X	

		SCOOL SCOOL for I	6,000m 0,000 km)	S200% S0000 km or Smerths Mack service		24,000m M0,000 km) or 24 wordtig Major servetig		34,000m 60,000 and a 34 months. Vilyte sension
Road test Check brake function Adjust ignition timing Adjust carburettor	X X	X	X X	X X X	x x	X X X	X X	X X X

# Routine maintenance-lubrication

# Grease gun points

The grease gun nipples indicated in Figure 20 should be well cleaned of dirt and old grease before application of a high pressure grease gun. Use only the grease shown on the lubrication chart on page 17.

# Engine oil level

Stand the vehicle on level ground and check the oil level by means of the dipstick which is located on the nearside of the engine between the alternator and the engine (Figure 21).

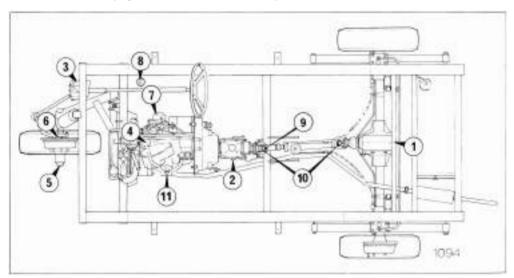


Figure 20 Lubrication points

- 1 Rear axle filler/level plug
- 2 Gearbox filler/level plug
- 3 Steering box
- 4 Oil la cap engine
- 5 Front hub
- 6 Front suspension swivel pin

- 7 Oil filter
- 8 Master cylinder top up
- 9 Propshaft splines 10 Propshaft universal joint
- 11 Carburettor dashpot top up

### Lubrication

Recommended lubricants:

The oil recommendations for use in normal operating conditions are as follows:

Engine SAE 10W/30 or 10W/40 multigrade oil to A.P.I. specification SE

or SF

Gearbox and Rear Axle SAE 80W 190 oil to A.P.1. specification GL5

Steering Box Fluid Grease to N. L. G.1. classification 00

Front Suspension

Swivel Pin Kluber Staburags NBU 12-300 KP.

Front Hub and

Grease Gun (Chassis) LithiurTl base Grease to N. L. G.1. classification L2, including

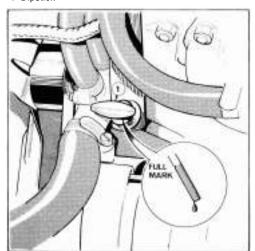
Molybdenum disulphide additives

Hydraulic brake fluid Castrol Girlng Universal brake fluid, Lockheed Super 105 or fluid

to S.A.E. specification J. 1703

Withdraw the dipstick and wipe it with a clean rag, replace, and again withdraw. The mark made by the oil at the lower end of the dipstick will indicate the level of oil. The correct level is the 'ful)' mark of the dipstick. The lower notch indicates 0.57 litres (1.0 pints) required for correct level. If necessary add oil via the oil filler cap. After

Figure 21 Engine oil level
1 Dipstick



adding oil allow a few seconds to lapse before re-checking the oil level. Use only specified grades of engine oil.

# Engine oil change and filter change

Oil changes are very important during the running-in period. The first change should the madeat 1,000 miles (1,500 km), then at 6,000 miles (10,000 km) intervals. If, however, the engine oil appears fouled before the normal servicing period is reached, the engine oil should be changed and the filter element renewed.

Draining of the sump will be easier if carried out when the car has just completed a run, and the oil is warm and will therefore flow more readily. Allow to drain thoroughly. Refill with the specified lubricant.

The sump drain plug will be found at the lefthand rear end of the sump. (Figure 22), and care should be taken to ensure that no dirt or grit enters the sump whilst the plug is removed or when it is being refitted. Clean the plug thoroughly and check the condition of the washer. If damaged the washer should be replaced otherwise oil leaks may result. Screw the plug in tightly.

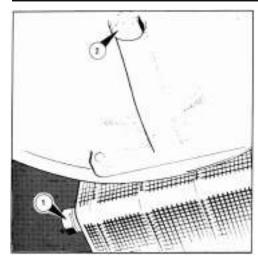


Figure 22 Sump and gearbox drain plugs
1 Sump drain plug

2 Gearbox drain plug

The oil filter should be renewed as and when necessary, but at least at every 6,000 miles (10,000 miles). For location of the oil filter see **Figure 23.** It is screwed into a boss cast on the crankcase wall. The thread is the normal right-hand thread.

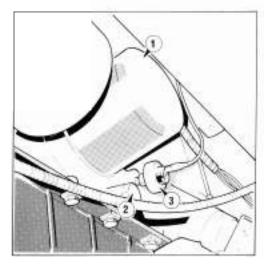


Figure 23 Engine oil filter

1 Oil filter 3 Oil pressure switch

2 Oil pressure relief valve

### Oil filler cap

The oil filler is located at the forward end of the valve rocker cover.

The cap is a push/pull fit. The oil filler cap contains a wire gauze element and should be washed in clean paraffin every 6,000 miles (10,000 km). Dip the capin clean oil and wipe thoroughly before refitting. The oil filler cap also acts as an engine ventilator and is connected via a hose to the carburettor. It is important that the hose is maintained in good condition and connected securely. Air leaks will result in misfiring and erratic running.

### Gearbox oil level

Drain and refill the gearbox after the first 12,000 miles (20,000 km) and thereafter every 12,000 miles (20,000 km). Refill the gearbox to the level of the combined oil level/filler plug, shown in **Figure 24.** The gearbox should be topped up if necessary at every 6,000 miles (10,000 km). In all cases use only the recommended grades of lubricant. The gearbox capacity is 0.64 litres [1] pints).

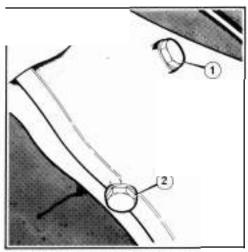


Figure 24 Gearbox oil filler/level plug

1 Filler / level plug 2 Drain plug

### Rear axle oil level

The rear axle oil level should be carefully checked by means of the combined filler and level plug. (Figure 25.) If necessary, add the recommended oil until the level reaches

the level plug hole. The axle does not have a drain plug. The initial oil fill and the recommended oil for topping up the rear axle are formulated to give a sludge free axle life.

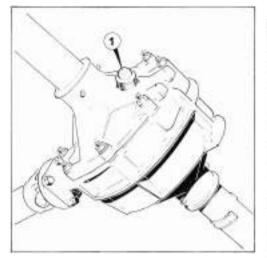


Figure 25 Rear axle oil level/filler plug 1 Level/filler plug

### Steering box

Every 6,000 miles (10,000 km) or 6 months, the steering box should be topped up, by means of the combined square headed filler and level plug located on the left-hand side of the steering box, with the specified Fluid grease using an oil can or dispenser with a flexible spout. (Figure 26). The capacity of the box is 0.19 litres [4] pints.

# Front suspension

Every 6,000 miles (10,000 km) or 6 months, the swivel pin needle roller bearings should be lubricated by applying a grease gun containing KLUBER STABURAGS NBU 12/300.KP grease to the two grease nipples on the front brake back plate. (Figure 27). Remove thefront brake drum when greasing the swivel pin bearings to ensure any excepts grease is not allowed to contaminate the brake linings.

Note: KLUBER STABURAGS NBU 12/300. KP grease is a specially formulated product with high resistance to corrosion and salt contamination. No other grease should be used to lubricate the swivel pin roller bearings. Grease for this application should be used from a grease gun specifically kept for this purpose.

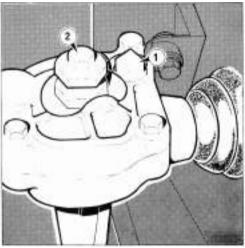


Figure 26 Steering box oil filler plug
1 Filler plug
2 Adjuster

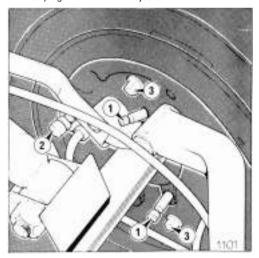


Figure 27 Front suspension - grease nipples 1 Grease nipple 2 Bleed screw 3 Adjuster

### Front wheel bearings

The front wheel bearings are lubricated on initial assembly. Re-lubrication of front wheelbearings should be carried out every 36,000 miles (60,000 km) or 3 years, whichever

occurs first. The lubrication and adjustment of front wheel bearings is a specialised operation which should be entrusted to your Reliant Dealer.

# Rear wheel bearings

The rear wheel hub bearings are packed with grease on assembly and do not require further attention.

### Handbrake cable

The handbrake cable is nylon lined and requires no lubrication other than application of grease to exposed areas of inner cable, especially in adverse weather conditions, paying particular attention to the handbrake pulley.

### Lubrication of distributor

The cam spindle governor weights and breaker arm pivot should be lubricated with engine oil every 12,000 miles (20,000 km) or 12 months. To lubricate the cam spindle remove the rotor and apply two drops of oil to the felt pad in the top of the cam. (Figure 28).

The cam should be lightly lubricated with Shell Retinax 'A' or an equivalent grease. Only a film of engine oil should be applied to the hollow breaker arm pivot post, ensuring that none contaminates the distributor points.



Figure 28 Distributor - general view

- 1 Locking adjustment screw 4 Terminal post
- 2 Cam spindle lubrication pad 5 Low tension lead
- 3 Breaker arm pivot post

Caution: Do not over lubricate any part of the distributor. The presence of dirt, oil or water on the ignition points, the central carbon brush, or the contact segments in the distributor cover, will cause erratic running or may even prevent the engine from running at all.

### Drive shaft

A nipple, located on the small end of the shaft permits greasing of the splines. Each universal joint is also lubricated by means of a grease nipple situated on the spider of the joint, **(Figure 29).** Grease should be applied to each nipple every 6,000 miles (10,000 km).



Figure 29 Drive shaft grease nipples

- 1 Sliding spline grease nipple
- 2 Universal Joint grease nipple

### Carburettor-lubrication

The dash-pot in the suction chamber requires topping up with clean engine oil every 6,000 miles (10,000 km). Unscrew the plastic cap from the top of the carburettor suction chamber and withdraw the damper. (Figure 30).

Top up the dash-pot until the oil level is 13mm (½ inch) above the top of the hollow piston rod. Refit the damper and replace the plastic cap. Care should be taken when handling the damper to ensure that the spindle'is not bent.

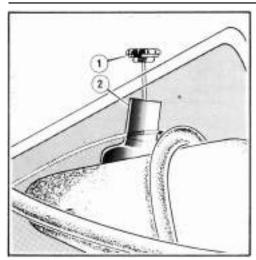


Figure 30 Carburettor - Lubrication
1 Cap 2 Dash -pot

# **Door hinges**

The pivots of the door hinges have an oil lubrication hole situated halfway up the hinge pivot, indicated in **Figure 31.** 

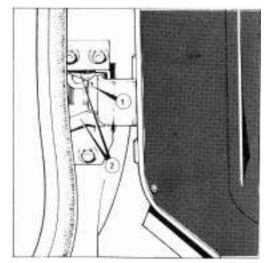


Figure 31 Door hinges lubrication
1 Pivot lubrication hole 2 Restraint spring
The lower hinges have a door restraint leaf spring incorporated in the assembly.

(Figure 31). Both the pivot lubricator and restraint spring should be oil lubricated every 6,000 miles (10,000 km) to maintain easy operation of the door hinges.

### Hydraulic fluid reservoir

It is essential to only use the specified brake hydraulic fluid to top up the translucent hydraulic fluid reservoir situated in the engine compartment. (See Figure 32). The fluid level should be maintained approximately 22 mm. ( $\frac{2}{8}$  inch) below the front joint flange of the reservoir.

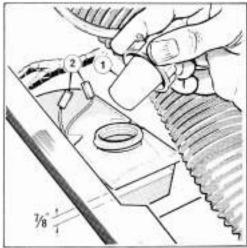


Figure 32 Brake master cylinder

- 1 Cap
- 2 Electrical contacts

If it should be necessary to top up the fluid level, alvvays use new hydraulic fluid direct from the original container. in which it is supplied. Carefully disconnect the two electrical leads to the fluid level sensor on top of the reservoir and clean around the sensor before unscrewing it from the reservoir. Top up as necessary to a level 22 mm. (% inch) below the front joint flange of the reservoir. Replace the sensor and re-connect the sensor leads. Check the operation of the brake warning light and switch. (page 6).

Take care not to spill brake fluid on paintwork. If there is any sign of continued brake fluid loss you should advise your Reliant Dealer so that the brake system can be examined.

**Note:** At 18,000 miles (30,000 km) or 18 months the hydraulic fluid should be changed. The fluid may slowly, over

prolonged use, absorb moisture and this can lead to brake failure. It is recommended that this work should be entrusted to your Reliant Dealer.

# Routine maintenance checks and adjustments

### Service access panels

Three service access panels are provided to facilitate maintenance and repair of the **vehicle.(Figure 33).** These panels are situated at each side and to the rear of the engine as follows

- To the left-hand side of the driver's footwell giving access to the starter motor fuel pump, oil filter, spark plugs, cylinder ' head nuts and valve rocker adjustment screws.
- To the right-hand side of the passenger footwell giving access to the carburettor, exhaust pipe flange and alternator etc.
- In front of the centre console giving access to the rear of the engine. Removal of this panel requires the choke and heater controls to be disconnected - work which should be entrusted to your Reliant Dealer.

The side access panels can be reached by gently pulling away the carpet from its "Velcro" fixing at the centre console and along the side of the footwells. The side access panels are secured by screws - care should be taken when pulling aside the right-hand panel which incorporates (on models fitted with a radio) an earth wire running into the engine compartment.

Note: To prevent engine fumes entering the passenger compartment, the vehicle must never be driven with the access covers removed or incorrectly fitted or the cover gaskets damaged.



Figure 33 Access panels

- 1 Retaining screw
- 2 Access panel

### Valve Clearances

Tappet adjustment

It is necessary to maintain the correct tappet adjustment at all times, although many thousands of miles can be covered between settings. If the settings are too large, the engine will lose power and be noisy in operation. If they are too close, there is danger of the valve burning out with a resultant loss of power. To adjust the tappets, remove the rocker cover and adjust in the following order:

- No. 1 Valve with No. 8 valve fully open.
- No. 2 Valve with No. 7 valve fully open.
- No. 3 Valve with No. 6 valve fully open.
- No. 4 Valve with No. 5 valve fully open.
- No. 5 Valve with No. 4 valve fully open.
- No. 6 Valve with No. 3 valve fully open.
- No. 7 Valve with No. 2 valve fully open.
- No. 8 Valve with No. 1 valve fully open.

When adjustment is made, **Figure 34**, the valve must be in the fully closed position. Tappet clearances are 0.152mm (0.006 inch) cold, 0.254mm (0.010 inch) hot. Replace rocker cover using a new cork sealing gasket.

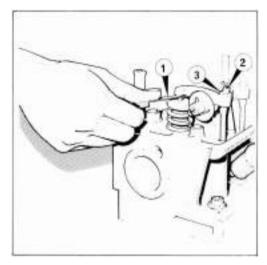


Figure 34 Valve clearance - tappets

1 Feeler gauge 3 Locknut

2 Adjusting screw

### Fan belt adjustment

Regularly examine the fan belt tension, which should allow 13mm (½ inch) movement when the belt is pushed and pulled at a point midway between the alternator and water pump pulleys. (Figure 35), If necessary, adjust the tension by loosening the alternator front mounting both, then loosen the adjustment locking screw at the front of the alternator allowing the alternator to be moved on the slotted strap. When correct tension is obtained, securely tighten the bolt and screw.

**Note:** The front lower mounting must be slackened completely before making any adjustment as any strain on the lower fixings could distort or damage the mountings. Regularly examine the fan belt for wear.

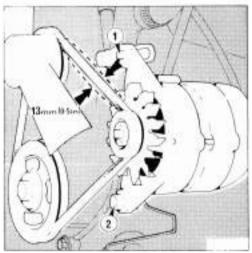


Figure 35 Fan belt adjustment

- 1 Adjustment locking screw
- 2 Alternator front mounting bolt

# Brakes-checking and adjustment

The brake linings should be examined for wear at least every 6,000 miles (10,000 km). Check and adjust brakes as detailed below.

Before jacking up the vehicle, it is essential that the vehicle is on a level surface and that the handbrake is securely 'on'. Work should never be carried out underneath the vehicle when it is raised on a jack, unless a proper chassis stand is used to support the vehicle.

### Front

- 1 Jack up the vehicle until the front wheel is clear of the ground. (Figure 39).
- 2 Remove the road wheel and fully slacken off the brake adjuster. Remove the brake drum.

**Note:** The relative position of the drum to the hub should be noted before removal for correct replacement.

- 3 Check the lining material thickness. Linings that are bonded to the shoes must not be allowed to wear below first an inch in thickness. Riveted linings should be changed when the material wears within 312 of an inch of the rivet heads.
- 4 If the linings are serviceable replace the brake drum, ensuring that it is re-aligned

with the hub as originally fitted. Replace the road wheel and adjust as follows: Turn the adjuster (Figure 36) of one shoe anti-clockwise to bring the lining away from the drum. Turn the other shoe adjuster until the drum is locked', then slacken back until the wheel is just sufficiently free to rotate without binding.

5 Rotate the other adjuster clockwise until the drum is locked, then slacken back until the wheel is again just sufficiently free to rotate without binding.

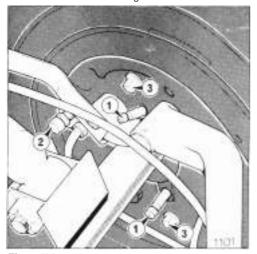


Figure 36 Brake adjuster - front

- 1 Grease nipple
- 3 Adjuster
- 2 Bleed screw

**Note:** This adjustment must be performed accurately to obtain a minimum clearance between the linings and drum, with consequent minimum pedal travel.

### Rear

- 7 Jack up the vehicle until one rear wheel is clear of the ground. (Figure 40).
- 2 Check the linings as described for the front wheel.
- 3 If the linings are serviceable replace the drum and road wheel and adjust as follows:

Release the handbrake and whilst rotating the wheel turn the square headed adjuster spindle (Figure 37) until the shoes touch the drum.

4 Slacken the adjuster two clicks, when the wheel should rotate freely. Repeat with the other wheel.

### Brake shoe rep/acemenr

When it becomes necessary to renew the brake shoes it is essential that only genuine Reliant .R' Part brake shoes are used. It is recommended that this work should be entrusted to your Reliant Dealer. Always fit shoes as axle sets, never individually or as a single wheel set. Serious consequences could result from out-of-balance braking, due to mixing of linings.

'R' Part brake shoes sets are obtainable from Reliant Dealer.

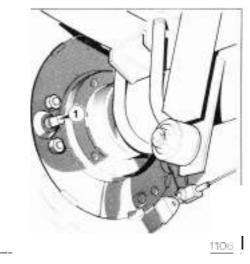


Figure 37 Brake adjuster – rear

1 Adjuster

### J-/andbrake ad/ustment

Before adjusting the handbrake cable, always adjust the rear brakes. To adjust the cable:

- 7 Ensure the handbrake lever and cable inner are in the iff position.
- 2 Slacken off the lockn'uts shown in Figure 38. Adjustment can then be effected by means of the main adjuster screws. Adjust the two screws equally. Re-tighten the locknuts securely.

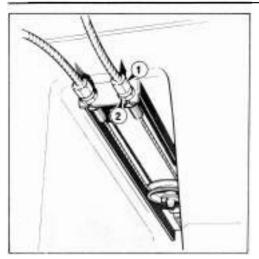


Figure 38 Handbrake adjusters
1 Adjuster nut 2 Locknut

used to support the vehicle.

### Jacking up

Before jacking up the vehicle, it is essential that the vehicle is on a level surface and that the handbrake is securely 'on'. Work should never be carried out underneath the vehicle when it is raised on a jack, unless a proper chassis stand is

#### Front

The front wheel can be raised by positioning the jack at the front end of either main longitudinal chassis member. It must not be 'Positioned under the tubular radius arm. (Figure 39).

# Rear

The recommended rear jacking point is at the extreme rear end of the longitudinal frame member. (Figure 40).

### Wheels and wheel nuts

The wheel retaining nuts should be checked periodically. The polished hub caps fitted to the rear wheel, spring over projections on the wheel, and should be removed to gain access to the four wheel nuts. Plastic wheel covers (where fitted) should be pulled straight out from the wheel with the fingers; do'not use levers as this will damage the wheel covers. When checking wheel nuts for

tightness do not use an extension, as ordinary pressure exerted on the handle of the tool supplied with your vehicle is quite sufficient. If a torque spanner is used to tighten the wheel nuts the correct torque figure is 4.15-4.85 kg/m (30-35 lb/ft).

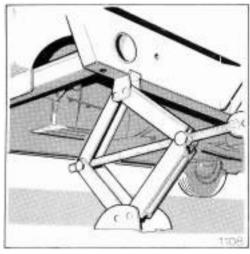


Figure 39 Jacking position - front

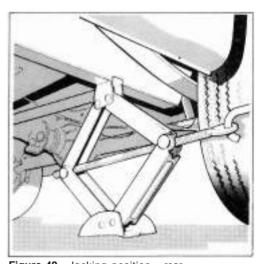


Figure 40 Jacking position - rear

### Clutch adjustment

The ciutch cable is adjusted as follows:

- 1 Unscrew the locknut (Figure 41).
- 2 Pull back the clutch cable inner.

disengaging the shaped end of the adjuster, on the threaded portion of the cable, from the trunnion located in the clutch operating arm.

- 3 Rotate adjuster along the thread and relocate on the trunnion.
- 4 The cable is correctly adjusted when the clutch and brake pads are level and there is approx. 1.5 mm (.'6 inch) free movement of the clutch operating arm at the trunnion.

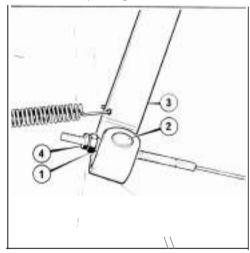


Figure 41 Clutch adjuster

- 1 Adjuster nut 2 Trunnion
- 3 Operating arm
- 4 Locknut

### **Exhaust Emission**

Your vehicle has been manufactured to conform with legislation on exhaust emission. The law requires that carbon monoxide (CO) emission must not exceed 4  $\frac{1}{2}$  % with the idle speed increased by 250 rpm or decreased by 100 rpm from the manufacturer's recommendation.

The tamper proof carburettor fitted has the mixture adjustment sealed at the factory by means of semi-circular plastic shrouds with a 'snap' fastening fitted around the mixture adjusting nut after the correct mixture has been obtained. If an attempt is made to remove these shrouds the fasteners will break off.

The information in this Handbook includes

details of 'slovv running' and 'fast idle' choke adjustments. These are the only adjustments within the scope of the lowner without specialised equipment.

If satisfactory performance cannot be obtained from these adjustments then the necessary tuning or servicing of the carburrettor should be carried out by an authorised Reliant Dealer. Any adjustment made without the necessary specialised equipment, or the breaking of tamper proof sealing devices, will result in the vehicle failing to comply with Emission Regulations specified by the Department of the Environment.

### **Carburettor Adjustment**

The following information includes details of 'slow running' and 'fast idle' adjustments. It cannot be over emphasised that these are the only adjustments to be carried out by the owner.

# Adjusting the carburettor

Before adjusting the carburettor it is essential that maladjustment or faults from other sources are eliminated. Therefore, it is important to check the following:

- (a) Valve clearances
- (b) Spark plug condition
- (c) Contact breaker gap
- (d) Ignition timing and advance
- (e) Possible air leakage into the induction system.

The latter will result in a weak mixture which will cause misfiring and erratic running. Air leaks can be caused by a deteriorated or loose breather hose, from oil filler cap to carburettor; a worn or split '0' ring in the oil filler cap; a damaged rocker cover gasket or overtightened rocker cover nuts, or even the oil level dipstick not being correctly seated in its tube.

## Idling or slow running adjustment

- 7 Run the engine until it reaches normal operating temperature.
- 2 Turn the throttle adjusting screw (Figure 42) clockwise to increase speed, or

anticlockwise to decrease, until the desired idling speed is obtained.

The exhaust note should be regular and even when idling at the correct idling speed of 900 rpm. The carburettor is adjusted, on manufacture, to idle at this speed. However, should the idle speed alter over a period of time, e.g. when running-in a new vehicle, and the above adjustment although restoring the correct idle speed results in erratic running, this would indicate that the mixture requires adjustment and the vehicle should be returned to an authorised Dealer for this to be carried out.

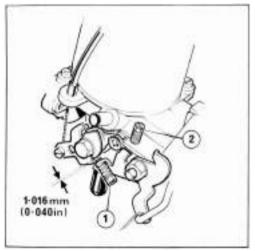


Figure 42 Carburettor adjustment

- 1 Fast idle adjustment screw
- 2 Throttle adjustment screw

### Fast idle (choke) adjustment

Pull out the mixture control (choke) until the linkage is just about to move the jet. Start the engine and adjust the fast idle screw (Figure 42) to give an engine speed of 2,250 rpnl.

Push the control fully in and check that there is a clearance of 1.016 mm (0.040 in) between the end of the screw and the cam. The mixture control cable should have approximately 1.6 mm [ in ) free movement before it commences to pull on the cam lever.

Note: Any adjustment of idling or slow running must be followed by a check on the fast idle adjustment.

**Note:** If engine performance indicates the symptoms of fuel starvation or carburettor jet blockage, the carburettor dashpot oil level and the conditions of the in-line fuel filter should be checked before attempting to dismantle the carburettor.

Should the carburettor require attention it is most important that the flexible fuel line push-on connections at the carburettor and the fuel pump are not damaged when disconnected. The clipped push-on connections should not normally be tampered with unless absolutely necessary and if removed they must be carefully inspected on replacement, to ensure that there are no fuel leaks before restarting the engine.

Fuel pipes must never be pulled from

Fuel pipes must never be pulled from connectors with the securing clamp still fitted as this can damage the pipe.

Over a prolonged period of time fuel pipes are subject to wear and deterioration. For this reason it is strongly recommended that fuel pipes are renewed at intervals of 36,000 miles (60,000 km) or 3 years.

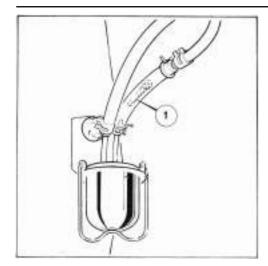
### **Fuel Overflow System**

All models are fitted with a fuel overflow system providing a closed carburetter breather circuit.

The fuel overflow reservoir is mounted underneath the left-hand side body front wing and secured in position by the lower door hinge fixings. The bowl should be checked and cleaned every 6,000 miles (10,000 km) or six monthly. Use petrol for cleaning and wipe thoroughly where refitting. (Figure 43).

### Fuel filters

Two in-line fuel filters are fitted to the vehicle. One is fitted in the fuel line adjacent to the fuel overflow reservoir under the left-hand side body front wing. (Figure 43). The other in-line filter is situated on the frame side member forward of the fuel tank. (Figure 44). Both fuel filters should be renewed every 12,000 miles (20,000 km) or 12 months. The filters should be fitted with the elements located as shown in Figures 43 and 44.



**Figure 43** Fuel overflow reservoir 1 Inline filter

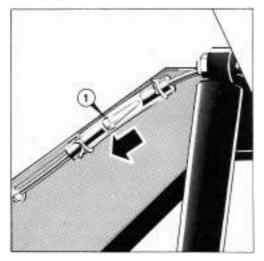


Figure 44 In-line fuel filter

1 Filter element

# Air cleaner assembly

A dry paper element type of air cleaner is fitted to your vehicle. **(Figure 45).** The air cleaner should be serviced every 6,000 miles (10,000 km), replacing the element if necessary. The paper element of the filter should be replaced every 12,000 miles (20,000 km).

To replace the paper element first clean the

outside of the air cleaner body and remove the single screw and washer from the centre of the filter container. Carefully withdraw the container complete with the element. Clean the container interior before fitting the new element.

The plastic ends of the new element should be smeared with petroleum jelly or grease to facilitate sealing on replacement. The air intake should be positioned in the winter months directly above the exhaust manifold, enabling warm air to be drawn from the manifold.

**Note:** The frequency necessary for cleaning or replacing the element will naturally depend upon the severity of the operating conditions and where there are heavy dust concentrations or unusually severe conditions more frequent attention should be given to the cleanliness of the unit.

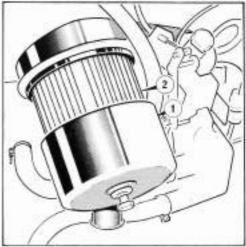


Figure 45 Air cleaner
1 Body 2 Element

# Distributor-contact breaker points

Special sliding contact breaker points are incorporated in the distributor to extend service life and reduce mannerance to a minimum. The points should be adjusted to 0.38 mm (0.015 inch) at 12,000 miles (20,000 km) and replaced at 24,000 miles (40,000 km) by your Reliant Dealer.

The procedure for adjustment and replacement of the contact breaker points is as follows:

### To adjust

- 1 Remove the distributor cap and rotor arm.
- 2 Turn the engine so that the heel of the contact breaker is on the highest point of the cam. '(It may be necessary to remove sparking plugs to eliminate resistance caused by compression),
- 3 Slacken the slotted headed screw (Figure 46) in the contact plate and adjust until the gap is 0.38 mm (0.015 inch). The gap is measured with a suitable feeler gauge and pressure should be applied to the points, with the feeler gauge inserted between them, whilst the screw is being tightened.
- 4 Retighten the screw and make a further check with the feeler gauge in case tightening the screw has altered the setting.
- 5 Reposition the rotor arm squarely on the distributor cam boss with the slot and lug in line. Press the rotor into position on the spindle.

**Note:** When the rotor is fitted to the spindle the lower face does not abut the cam.

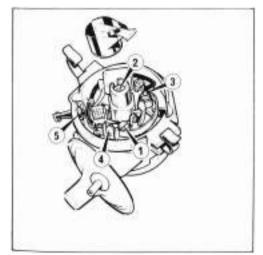


Figure 46 Distributor - general view

- 1 Locking adjustment screw 4 Terminal post
- 2 Cam spindle lubrication pad 5 Low tension lead
- 3 Breaker arm pivot post

### To rep/ace

- 1 Remove the distributor cap and rotor arm.
- 2 Press the terminal end of the moving contact spring towards the cam.

  (Figure 47). This will disengage the spring from the insulating piece attached to the terminal post, the capacitor lead and low tension fly-lead can then be detached from the folded end of the spring, Remove the slotted screw securing the fixed-contact and lift the contact-breaker assembly from the base plate.
- 3 When replacing the contact breaker set it is important to note that the capacitor and low tension fly-lead connecting terminal in the folded end of the moving-contact spring, has the cable clips facing outwards, otherwise the lower clip may foul the fixed contact plate and short-circuit the contact breaker. (Figure 47).
- 4 Replace the slotted headed screw and adjust the contact breaker points as previously described. Set the contact gap to 0.40 to 0.45 mm (0.016 to 0.018 inch) to allow for initial bedding-in of the plastic heel.
- 6 Replace the rotor arm and distributor cap.

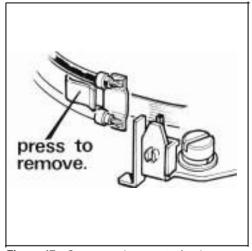


Figure 47 Correct replacement of points

# Sparking plugs

The sparking plug gaps should be maintained at 0.64 mm (0.025 inch). Provided the carburettor mixture is correct, a set of plugs will serve for at least 6,000 miles (10,000 km) without attention. When attention is necessary, however, the plugs should be cleaned on a machine such as is installed in most modern garages. Keep the points in a clean condition, and ensure that the plug is firmly screwed home. When adjusting the points, the central electrodes must not be moved. Always lever the earth electrodes as necessary to obtain the required gap. The sparking plugs should be replaced, in sets, every 12,000 miles (20,000 km).

# Cooling system

To avoid the danger of scalding, you should only check the coolant level in the radiator when the engine is cold and with the ignition switched off. If the engine appears to have overheated for any reason, or has been operated recently, allow the engine to cool before checking the coolant level, covering the cap with a thick cloth and turning the cap slowly to release the pressure in the system.

Each week, you should check that the coolant level in the radiator is above the radiator down tubes and the top tank is approximately thto thirds full—this allows for coolant expansion when the engine is hot.

In production, non-phosphated anti-freeze to British Standard specification: BS.3151 is added to the water in the cooling system to prevent internal corrosion in the engine and radiator and to provide protection against frost damage. The anti-freeze solution should be retained in the engine throughout the year and replaced with fresh solution every 12 months, after flushing the system With water, to give continued corrosion resistance.



Figure 48 Cylinder block drain plug

1 Drain plug

The anti-freeze solution should be maintained at a concentration of 30% (specific gravity read on a hydrometer of 1.050) and this will afford frost protection down to -16°C (+ 3°F). For greater frost protection follow the anti-freeze manufacturer's instructions.

The cooling system may be flushed by

removing the cylinder block drain plug on the left-hand side of the engine indicated in Fig. 48 and by inserting a hose in the radiator filler orifice allowing water to flow through until clean. The radiator may be further flushed by disconnecting the radiator bottom hose. Check the condition of the hose before replacement. After the flushing operation, the cylinder block drain plug should be re-fitted and the cooling system re-filled with antifreeze solution of the correct type and to the correct concentration.

Never lever pp the radiator when removing hoses since this can damage the radiator core.

### Oil and water leaks

After a period of running-in, gasketed joints and hoses will have settled down, and it is advisable to ensure that all joints are correctly tightened, and that there are no oil or water leaks.

# **Towing Instructions**

If your vehicle is towed by another vehicle, always use an approved rigid-bar pick-up trailer intended for the purpose and which supports the front wheel. The use of a tow rope is not recommended on three-wheeled

vehicles because of the possibility of it fouling the front wheel and steering mechanism. If the vehicle is to be pushed, the ignition key should be turned to position 1 to unlock the steering mechanism.

# **Tyres**

Your vehicle may be fitted with either 5.20 x10 crossply or 145 x10 radial ply tyres. It is essential that when replacing tyres the 'all crossply' or 'all radial ply' condition including the spare wheel is maintained. Regular inspection of tyres should be made to check the condition of the tyre tread and walls. Flints, etc., should be removed from the tyre tread, if neglected they may work through the cover.

# Repairs

The insertion of a plug to repair a puncture in a tubeless tyre must be regarded as a temporary repair only. A permanent vulcanised repair **must** be made as soon as possible.

### Valves and caps

See that the valve caps are screwed down firmly by hand, too much force will damage the rubber valve seating. The cap prevents the entry of dirt into the valve and forms an additional seal on the valve, preventing any leakage if the valve core is damaged.

### **Pressures**

Tyre pressures should be checked before a run when the tyres are cold. During use, the pressures will increase and the additional pressure should not be released since in determining the tyre pressures this increase has been taken into account. Under-inflation can also result in damage to the walls and the tread itself due to excessive flexing.

The correct tyre pressures are as follows:

Front: Rear:

Normal load: 2.12 kg/sq.cm 1.69 kg/sq.cm

(30 p.s.i.) (24 p.s.i.)

Full load: 2.12 kg/sq.cm 2.12 kg/sq.cm

(30 p.s.i.) (30 p.s.i.)

### Tyre rotation

Close attention to tyre inflation and the mechanical condition of the vehicle will not always prevent uneven tyre wear. It is therefore recommended that the front tyre is interchanged with the rear tyres at least every 6,000 miles (10,000 km). The rotation sequence should include the spare wheel.

Subsequent interchanging of front and rear tyres should be as indicated by the appearance of the tyres, with the object of keeping the wear of all tyres as even and uniform as possible.

# Ignition

The ignition system is of the ballast resistor type and depends on the battery for its electrical supply. The main components apart from the battery are the coil and distributor. The coil needs no maintenance, apart from keeping the terminals tight and clean.

### Distributor

The distributor incorporates a vacuum advance and retard mechanism, which regulates the amount of ignition advance according to the requirements of the engine. Special sliding contact breaker points are incorporated in the distributor to extend service life and reduce martinarior to a minimum. The contact breaker points should be adjusted at 12,000 miles (20,000 km) and replaced at 24,000 miles (40,000 km) by your Reliant Dealer. The lubrication requirements of the distributor are covered on page 20.

# Ignition timing marks

The ignition timing should normally be set by your Reliant Dealer using appropriate equipment. However, the ignition timing can be set statically following the procedure indicated below.

Two marks are stamped on the crankshaft pulley **(Figure 49)** indicating TDC and 10° of crankshaft rotation. The TDC mark aligned with the pointer on the timing cover indicates that pistons 1 and 4 are at top dead centre. Your vehicle should be timed to TDC.

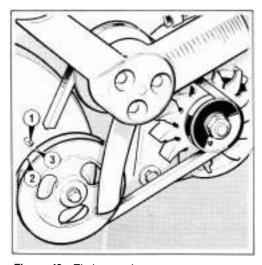


Figure 49 Timing marks

- 1 Timing pointer
- 2 TOC mark
- 3 100 BTOC mark

# Procedure for timing (static)

- 1 Rotate in a clockwise direction until the TDC mark is aligned with the pointer on the front cover. At this point the distributor rotor arm should be opposite the No. 1 or No. 4 segment on the distributor cap.
- 2 Slacken the distributor clamping bolt and slightly turn the distributor body until the contact breaker points are just breaking and retighten the clamp bolt. Do not overtighten.
- 3 If after road test further adjustment is required again slacken the clamp bolt and carefully rotate the distributor and retighten the bolt.

The firing order is 1,3,4,2 and if it becomes necessary at any time to disconnect all the plug leads, it is advisable to mark them in relation to the sparking plug to which they are connected.

# Electrical equipment

### **Polarity**

This vehicle, has a **negative** earth electrical system.

### High tension leads

If the high tension cables show signs of breaking or perishing they should be replaced. Use only the correct'R' Part replacement leads as they have the correct resistance value to comply with Suppression Regulations.

#### **Alternator**

The only attention the alternator needs, from the owner driver, is to maintain it in a clean condition. Wipe away any dirt or oil which may collect around the slip ring end cover ventilation apertures.

The bearings are packed with grease during assembly and do not require attention.

**Note:** Serious damage can occur to the alternator if the following points are not observed:

Ensure that the negative terminal of the battery is earthed. Reversed cable connections will burn out the alternator diodes.

- 2 Never earth the output (B + ) terminal of the alternator. It should be connected directly to the battery positive terminal.
- 3 Always disconnect the battery earth cable at the battery before removing the alternator or its connecting wires. Serious damage to the wiring harness and the alternator can result from accidentally earthing the output terminal.
- 4 Never attempt to operate the alternator with the output lead between the battery and the output terminal disconnected. A very high voltage will develop which could burn out the rotor or damage the diodes.
- 5 When the battery is to be re-charged in the car, disconnect both battery cables before connecting a charger.
- 6 If a slave battery has to be used to start the engine, ensure the leads are connected correctly, i.e. positive to positive, negative to negative.

#### Starter motor

The starter motor is mounted on the rear right-hand side of the engine. Should the starter pinion jam in mesh with the flywheel, it may be released by switching off the ignition, selecting top gear, and rocking the car to and fro with the handbrake off. Preferably, the square end of the starter motor shaft should be turned in a clockwise direction until the pinion is free from the flywheel ring gear.

When starting the engine, if it fails to start at the first turning of the switch, allow the engine to come to rest before trying again, otherwise the teeth on the starter ring or the starter pinion may be damaged. Do not use the starter motor to manoeuvre the vehicle.

#### Fuses

The fuse box is mounted on the engine compartment rear bulkhead. (Figure 50). The fuses cover those circuits indicated in the key to the illustration and are all rated at 35 amps. A blown fuse is indicated by the failure of all the units protected by it, and is confirmed by examination of the fuse when withdrawn. Before renewing a blown fuse inspect the wiring applicable for evidence of a short circuit. Always use a replacement fuse of the correct rating.

The radio, if fitted, is protected by a separate in-line fuse located behind the facia.

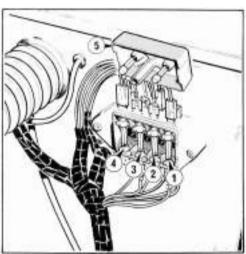


Figure 50 Fuse box

- 1 Battery control circuit fuse
- 2 Ignition/wiper/washer and heated rear screen circuit fuse
- 3 Rear/side lights circuit fuse
- 4 Spare fuse position
- 5 Fuse box cap with spare fuses

### **Battery**

The battery fitted to your vehicle is designed for minimum maintenance in service. The battery terminals should be kept clean and tight. A smear of grease or petroleum jelly will prevent corrosion. Periodically examine the level of acid in the battery and top up with distilled vvater as and when necessary. The correct electrolyte level is when the cell separators are just covered. This can be seen with the filler caps removed. Do not overfill.

Each cell is topped up individually. Wipe the top of the battery after topping up. Never use ordinary tap water to top up your battery as it contains impurities detrimental to the battery. The efficiency of the battery should be occasionally checked by means of a hydrometer, which shows the specific gravity of the acid. The specific gravity readings and their indications are as follows:

1.280-1.30 fully charged

1.280-1.30 fully charged about 1.20 half charged about 1.150 fully discharged When disconnecting the battery always disconnect the negative (earth) lead first. When reconnecting the battery connect the negative (earth) lead last.

**Caution:** Never use a naked light when examining the battery. The vapour given off by the battery is highly inflammable.

## Jump leads:

If your car has a flat battery, you can start the engine by connecting jump cables from a second battery, positive (+) to positive (+) negative (-) to negative (-). Connect the cables to the charged battery first to avoid the possibility of sparks near a charged battery. If the boost battery is in another vehicle, start the engine of the boosting vehicle and keep it running at a fast idle while you start your vehicle. After starting your vehicle, allow the engines of both vehicles to return to normal idle speed (i.e. choke in) before disconnecting the battery. Take care to ensure the jump leads do not touch each other or metal parts of the vehicles.

### **Headlamps**

The headlamps are mounted to the vehicle body behind the front grille panel which is secured by four crosshead screws.

The headlamps may be adjusted after removing the front grille using beam setting

equipment normally available at your Reliant Dealer. Alternatively, they may be set, on main beam, so that with a normal load the beams are projected straight ahead and horizontal. Vertical and horizontal adjustment screws are positioned at the edge of the headlamp units as shown in **Figure 51**.

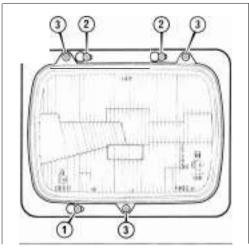


Figure 51 Headlamp securing screws

- 1 Vertical adjuster
- 2 Horizontal adjusters
- 3 Rim Securing screw

The headlamp bulb can be replaced after removing the front grille by undoing the three headlamp rim securing screws from the headlamp adjustment plate (Figure 52) Pull out the headlamp unit, pull back the rubber shroud which protects the headlamp plug, and disconnect the plastic plug from the rear of the headlamp unit. Remove the rubber gaiter from the rear of the headlamp. The headlamp bulb is retained in the headlamp unit with a spring clip which should be released so that the bulb can be replaced. Clean and replace the rubber gaiter (note: the gaiter is marked 'Top' and must be positioned correctly), push the centre of the gaiter down around the headlamp bulb holder. Clean the inside of the rubber shroud, re-connect the plastic plug and replace the rubber shroud (the rubber shroud fits over the rubber gaiter). The headlamp unit can then be refitted to the adjustment plate with the screws previously

removed. Adjust the headlamp beam as described above.

The headlamp reflector should not be touched as this will cause early deterioration of the reflector surface.

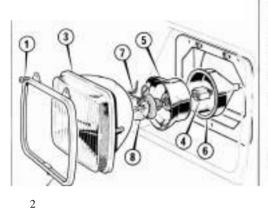


Figure 53 Front indicator/side light

- 1 Lens securing screw
- 2 Lens
- 3 Bulb

Figure 52 Headlamp/side light bulb removal

- 1 Rim securing screw
- 2 Rim
- 3 Lens
- 4 Plug
- 5 Rubber gaiter
- 6 Rubber shroud
- 7 Retaining clip
- 8 Headlamp bulb

# Stop/tail and rear indicator lamps

Access to the bulbs in the rear lamp cluster is obtained by removing the two cross headed screws securing the lamp lens assembly to the lamp body. Removal of the lens assembly leaves both bulbs easily accessible. Care should be taken when replacing the lens assembly to ensure the lenses are fitted the correct way round. (Figure 54).

# Front indicator lamps and side lamps

The lens of the front flashing indicator and side lamp is retained by two screws. When replacing a bulb remove the two screws, the lens can then be removed and the bulb replaced in the conventional manner. (Figure 53).

# Rear fog guard lamp

Access to the bulb is obtained by removing the two screws securing the lamp lens to the lamp body. (Figure 55).

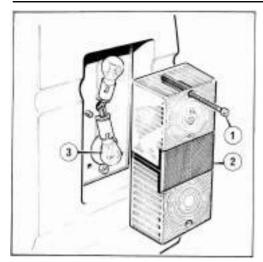


Figure 54 Rear light unit

- 1 Lens securing screw
- 2 Lens
- 3 Bulb

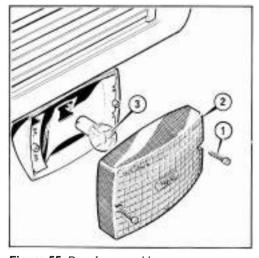


Figure 55 Rear fog guard lamp

- 1 Screw
- 2 Lens
- 3 Bulb

### Brake warning light and switch

The warning light is illuminated with the ignition 'on' whenever the hydraulic fluid falls below its correct level in the hydraulic fluid reservoir underneath the bonnet or the test

switch is held 'on'. (See page 6). To replace the bulb, gently prise off the front of the switch using a suitable instrument and unscrew the bulb from the spring holder within the bulb housing.

### Oil warning lamp

The oil warning lamp should light only when the engine is at rest, with the ignition switch on, and immediately the engine reaches idling speed it should extinguish, thus indicating that the oil is being circulated under pressure in the engine lubricating system.

To replace the bulb, withdraw the bulb holder from its housing at the rear of the instrument.

### Ignition warning lamp

The ignition warning lamp should only operate with the engine at rest or turning over very slowly, and should extinguish immediately the engine revolutions are increased. Failure to do so indicates a fault in the charging circuit. To replace the bulb, withdraw the bulb holder from its housing at the rear of the instrument.

### Main beam warning light

The main beam warning lamp only lights when the headlamp is deflected from the dipped to the main beam position. Housed in the specific the lamp bulb is replaced by withdrawing the bulb holder from its housing at the rear of the instrument.

### Hazard warning lamp

The hazard warning lamp flashes intermittently in unison with the exterior indicator lamps. Housed in the speedometer the lamp bulb is replaced by withdrawing the bulb holder from its housing at the rear of the instrument.

### Indicator warning lamp

The warning lamp, mounted centrally between the two instruments incorporates a bulb holder which can be prised from the lamp lens from behind the fascia.

### Heated rear window switch indicator lamp

The switch for the heated rear window has an integral light unit. The bulb is removed from the switch after removing the switch from the fascia. The switch is located in the fascia moulding by two lugs, on the narrow ends of the switch, that must be depressed before the switch can be withdrawn from the front of the fascia

# Rear fog lamp switch indicator lamp

The switch for the rear fog lamp has an integral light unit. The bulb is removed from the switch after removing the switch from the fascia. The switch is located in the fascia moulding by two lugs, on the narrow ends of the switch, that must be depressed before the switch can be withdrawn from the front of the fascia.

### Interior lamp

Situated above the interior rear view mirror, the interior light has an integral switch within

the light unit. Removal of the bulb is facilitated by the removal of the lamp lens. Pressure on the sides of the lens releases the spring securing lugs. (Figure 56).

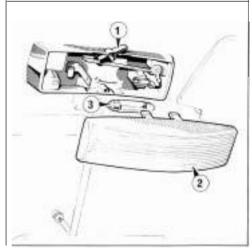


Figure 56 Interior light - access to bulb
1 Switch 2 Lens 3 Bulb

Bulb list				
	'R' Part			
Bulb	No.	Voltage	Wattage	Cap type
Headlamp	17622	12	45/40	LUCAR
Front side lamp	92867	12	5	SCC
Stop and tail	17713	12	21 / 5	SBC Stagg
Front and rear indicator	17721	12	21	SCC
Main instrument illumination	16761	12	3	Capless
Warning light - oil	16761	12	3	Capless
Warning light - ignition	16761	12	3	Capless
Wdrning light - main beam	16761	12	3	Capless
Warning light - hazard	16761	12	3	Capless
Warning light - rear screen				
switch	90457	12	1.2	Capless
Warning light - indicators	17139	12	2	BA7S
Warning light - brake fluid level	92868	14	0.56	LES
Warning light - rear fog lamp	90457	12	1.2	Capless
Interior lamp	6706	12	6	Festoon
Battery indicator gauge				
illumination	17602	12	2.2	MES
Quartz clock illumination	17602	12	2.2	MES
Number plate lamp	17746	12	5	MCC
Rear fog guard lamp	17721	12	21	SCC

### Number plate lamp

The bezel to fine number plate lamp is secured by two screws. Access to the bulb is gained by removing the bezel and folding back the rubber flange retaining the glass lens. (Figure 57).



Figure 57 Rear number plate lamp

- access to bulb
- 1 Bezel 2 Rubber flange 3 Lens

### Instruments

Access to the fascia instruments and switches is gained from below the fascia on either side of the steering column.

### Radio (if fitted)

The radio, mounted in the fascia, is located centrally above the fresh air outlet.

### Radio controls

The smaller knob on the left-hand control not only switches the radio *on* and *off* but also governs the volume. The lever below the left-hand knob varies the bass and treble tones. Either long or medium wave stations may be tuned with the right-hand control knob, or by depressing the push-button of the required station which can be pre-set. (Figure 58). To change from the medium to long wave depress one of the two right-hand push-buttons and then tune to the station required.

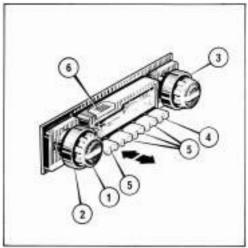


Figure 58 Radio controls

- 1 On-offIvolume
- 2 Tone control
- 3 Wave band control knob
- 4 Wave band selector button
- 5 Pre-set station selector button
- 6 Aerial trimmer screw access

# Push-button setting

Any four medium wave band stations and two long wave stations may be pre-set for automatic selection by means of the push-button controls. To set a push-button for a medium wave band station first switch on the radio and then depress one of the four medium wave buttons. Tune in accurately with the manual tuning knob to the required station, fully withdraw the depressed medium wave push-button (Figure 58) and then push this button in to lock the tuning.

When each push-button has been set in this way it is only necessary to depress the correct push-button obtain the station desired. To pre-set the long wave band push-buttons, carry out the above instructions, using the two right-hand push-buttons.

For optimum results from the receiver it is advisable to ensure that the aerial mast is kept clean, and that the sliding sections are occasionally lubricated with a petroleum jelly. Should the overall quality and sensitivity of the receiver show a noticeable deterioration, or

should interference become excessive, do not immediately suspect the receiver. The fault is more often with the installation, and all leads and suppressors should be checked. The suppression equipment fitted is rigorously tested and will withstand extremes of temperature and vibration. An engine in a poor state of tune can produce vibratory conditions sufficient to damage the suppressors. This will cause an increase in engine interference, and should be remedied immediately.

# **Bodywork**

The bodywork of your vehicle is manufactured entirely of glass reinforced plastic, which is an inert material completely impervious to rust and corrosion. It is highly resistant to damage and upon impact may crack or shatter, but the section will retain its original shape and no panel beating is necessary for repairs.

The repair procedure for small areas of damage is quite simple and can often be undertaken by an owner. Your Reliant Dealer has the necessary experience to effect any major repair or replace body panels.

### Cleaning

The body panels should be washed, using plenty of water, and dried off with a leather. For the occasional, more thorough cleaning, after washing, the vehicle should be polished with a non-abrasive car polish. Use a soft rag dipped in petrol to remove greasy stains on panels.

Do not use detergent or household cleaners as they may cause damage.

### Interior

Use a vacuum cleaner where possible to remove dust and dirt from the vehicle interior.

Wash leather cloth upholstery with luke warm, non-caustic soapy water. Do not use detergent or household cleaners as these may cause damage. Rinse and dry thoroughly. Fabric panels on seats should be brushed to remove surface dust or dirt. A clean sponge dipped in soap solution can be effective in removing stains. Do not soak the fabric. Work from well outside the stain towards the centre to avoid patches. Sponge with clean water and dry with a clean cloth. When dry vacuum or brush. Spillages should be mopped up immediately. Do not allow to soak in.

Wipe fascia and instrument panels, door casing, etc., with a damp cloth only. Wax or other polishes should not be used inside the vehicle.

# Windscreen wiper blade

It is recommended that the wiper blade is changed every 12 months to maintain clear efficient wiping of windscreen glass. To remove the wiper blade from the wiper arm press the small spring lever located at the blade end of the wiper arm in an upwards direction. Slide the wiper blade and pivot pin out of wiper arm. To fit new blade, push pin fully into hole in wiper arm. The spring lever will self lock the wiper blade pivot pin.

# General data and specification

4-in-line **Engine** Number of cylinders Bore of cylinders 62.50mm (2.46") Stroke of crankshaft 69.09mm (2.72") Cubic capacity 848cc (51.77 cu in) Compression ratio 10.5'1 Hot Valve clearances Inlet 0.25mnl (0.010") Exhaust 0.25mm (0.010") Cold 0.152mm (0.006") Inlet Exhaust 0.152mm (0.006") Performance data Brake horse power 37.5 at 5.000 rpm (maximum) Torque (maximum) 6.84 kg/m (49.5 lb ft) at 3.000 rpm Lubrication system Pump Submerged eccentric rotor type Filter External full flow type Oil pressure 3.16 kg/sq.cm (45lb/sq.in) Ignition system 12 volt battery and coil negative earth Contact breaker gap 0.38mm (0.015") Sparking plugs - type Autolite AGR 32 O.64mm (0.025") -gap Firing order 1,3,4,2 Ignition timing TDC Dwell angle  $57^{\circ} \pm 5^{\circ}$ Cooling system Pressurised radiator, pump assisted circulation and three bladed fan driven by a 'V' belt from engine pulley

Radiator cap pressure

0.492 kg/sq.cm (7 lb/sq. in)

Fuel system	Carburettor Fuel pump Air cleaner	Emission controlled SU type HS2 1½ " Mechanical Paper element type
Clutch	Туре	Single dry plate 158.75mm (6.25") diameter
	Operation	Cable
Gearbox	Four forward speeds	and reverse. Synchromesh on all forward gears.
	Ratio:	Top 1.00:1 Third 1.32: 1 Second 2.05: 1 First 3.88: 1 Reverse 3.25: 1
Rear axle	Type Ratio	Spiral bevel gear, semi-floating 2.78: 1
Steering	Type Turning circle	Worm and peg 8.23m (27.0 ft)
Brakes	System	Hydraulically operated, internal expanding to all wheels
	Size-front rear	177.8 x 38.1 mm (7" x 1.50") 177.8 x 31.75mm (7" x 1.25")
	Handbrake	Lever type operating rear brakes mechanically by cable linkage
Suspension	Front	Patented leading arm suspension controlled by heavy duty coil spring and hydraulic damper unit.
	Rear	Single leaf rear springs, damper assisted with anti-roll bar
Chassis data	Type Wheelbase Track Ground clearance	Box section with tubular crossmembers 2159.0mm (85.0") 1244.6mm (49.0") 127.0mm (5.0")

Body floor area

42							
•	Type Size - standa -option	ard 520 x 1	Crossply or Radial ply, in vehicle set 520 x 10 Crossply 145 x 10 Radial				
Capacities Engine (including filter) Gearbox Rear axle Steering box Cooling system, including Fuel tank	cluding filter) ox stem, including heater			3.13 litres (5.50 pints) 0.64 litres (1.125 pints) 1.28 litres (2.25 pints) 0.19 litres (0.33 pints) 2.84 litres (5 pints) 27.27 litres (6 gallons)			
General dimensions							
		2-door	Van	3-door			
Overall length - GLS mo - except		3410 mm (134.0") 3 3380 mm (133.0")	3380 mm (133.0")	3410 mm (134.0") 3380 mm (133.0")			
Overall height Overall width Ground clearance (laden) Track (rear) Wheel base	all models	1400 mm (56.0") 1450 mm (57.0") 127 mm (5.0") 1244 mm (49.0") 2159 mm (85.0")					
Loading capacity max. behind front seats		0.85cu.m (30 cu. ft)	1.42cu. m (50 cu. ft) 1.13cu. m	1.0cu. m (35.5 cu. ft)			
behind rear seats		0.24cu. m (8.5 cu. ft)	(40 cu. ft)	0.4cu . m (14.6 cu . ft)			
Loading height Rear door opening height Rear door opening width Internal body height Internal body width	Van and 3-door models			533 mm. (21 .0") 762 mm. (30 .0") 856 mm. (33.7") 865 mm. (34 .0") 1145 mm. (45 .0")			
Internal floor length (behind driver)	•		1219 mm.				

(48.0")

1.161 mm. (12.5 sq. ft)

### Maximum vehicle weights

GrosS laden vehicle weight	794 kg (1750 lb)
Approx. maximum payload (including driver)	349 kg (770 lb)
Max. allowable front axle weight	274 kg (605 lb)
Max. allowable rear axle weight	549 kg (1210 lb)

### Warning-Maximum loads and weight distribution

It is essential when a heavy load is carried in your vehicle, that the load is positioned centrally and forward of the rear axle, and where possible evenly distributed. The luggage compartment lid on saldon models should never be used to increase the load carrying capacity.

It is most important that a heavy load is NEVER positioned at the extreme rear of the vehicle behind the rear axle.

The Railto 2 door an'd 3 door models are homologated as private vehicles with a seating capacity of four persons including the driver. The Rialto Van is homologated as a commercial vehicle with a seating capacity of two persons including the driver. The seating capacity of the Rialto Van may be increased to four persons (including the driver) when an approved rear seat is fitted.

The maximum vehicle weights given above must not be exceeded. The towing of caravans and trailers is not recommended.

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Filling Station Information

Fuel: Four-star. Tank Capacity 6 gallons (27.27 litres)

Engine Oil: SAE 10W/30 or IOW/40 Multigrade to API specification SE

or SF.

Antifreeze: Non-phosphated to British Standard: 8S.3151

Brake Hydraulic Castrol/Girling Universal Brake Fluid, Lockheed
Fluid: Super 105 or Fluid to Specification, 11703

Fluid: Super 105 or Fluid to Specification J1703

Tyre Pressures: Front: Rear:

Normal load 2.12 kg/sq. cm 1.69 kg/sq. cm

(30 p.s.i.) (24 p.s.i.)

Full load 2.12 kg/sq. cm 2.12 kg/sq. cm

(30 p.s.i.) (30 p.s.i.)

DAILY:

Check operation of:

lights

horn

warning indicators screen wiper/washer

mirrors

WEEKLY:

**Contract** 

oil level

coolant I

screen washer brake fluid level

brake ridid lever

tyre pressures/condition



