



Lotus

esprit

Owners Handbook

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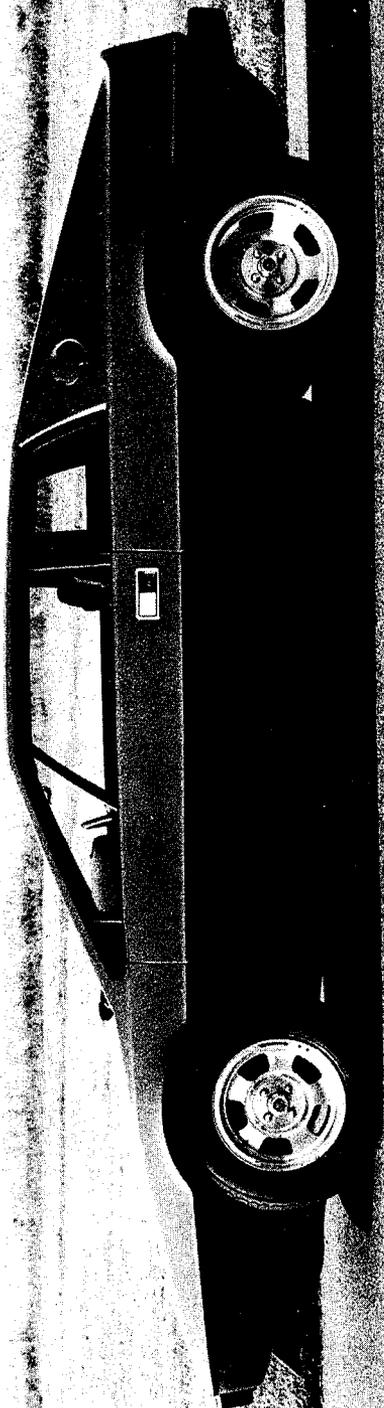
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Federal Edition



Your ESPRIT Handbook

This handbook has been written for the owner of the Lotus Esprit. Please read it and keep it in the car. It is not intended to give all the technical information required and, should any adjustment become necessary which is not detailed in the handbook, owners are strongly recommended to contact a Lotus Dealer.

Emission Control Servicing, in order to comply with the Clean Air Act, must be undertaken at the mileage stated in the relevant section of the handbook. Owners must ensure that all servicing occurs at the correct interval, otherwise the Warranty could be invalidated and legal requirements of the Clean Air Act contravened.

In line with our policy of continuous product improvement, we recommend that you keep in regular contact with your Lotus Dealer, in order that he may inform you of any technical developments that have been made to subsequent vehicles, which would improve the performance of your own vehicle.

We reserve the right to change prices, specifications and equipment at any time without notice.

Safety

The Esprit has been designed to comply with all applicable safety regulations and incorporates built in safety features, which include door side beams with anti burst locks and collapsible steering column. Other features are: excellent visibility, low bonnet line, powerful disc brakes giving repeated high performance, accurate high geared steering requiring the minimum of movement to change direction, excellent road holding with very high cornering ability, and vivid acceleration ensuring rapid overtaking with the minimum of delay. The driver should remember that there is a limit, even to the superb Lotus road holding, and should drive within his own capabilities, particularly on wet roads.

Vehicle Identification

The chassis and engine numbers will be found on a plate fixed to the rear bulkhead in the front compartment. The engine number is duplicated on the right hand rear of the cylinder block, above the starter motor. It is essential that these numbers are quoted in all correspondence.

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Taking Control

Reference numbers used throughout this book relate to controls, instruments, etc. shown in the drawings of the Control Console and Tunnel Top, and listed in the Key to these drawings.

Doors

To open either door from the outside, use the key to unlock, and lift flap. To open from the inside, unlock by moving the smaller flap away from the larger flap, and lift the larger flap. To lock from the inside, move the smaller flap so that it is in contact with the larger flap.

Each door can be locked from the inside, and unlocked from the outside, and vice versa.

The doors will open freely up to the check position. Further pressure actuates the check link, which will normally hold the door open.

Window Operating Switches (29)

The door windows are controlled by the switches located on the centre tunnel behind the gear lever — left-hand switch for left-hand window, and right-hand switch for right-hand window — the switches being energised only with the ignition key in either position I or II. Press switch front to lower the window, and press rear to raise the window, releasing the switch when the window reaches the position required, or its limit in either the lower or upper position.

If difficulty is experienced in lowering or raising the windows in extreme cold conditions, this can be remedied by using a de-icing fluid around the window seals. DO NOT use radiator anti-freeze solutions as these could have disastrous effects on the window seals and body finish.

WARNING: DO NOT leave small children unattended in the car when the ignition key is in position. Careless window operation could be dangerous.

Seats

The seats are adjustable forward and backward by pushing the adjusting lever which is situated to the lower right of each seat. After adjustment, ensure catch is re-engaged

Seat Belts

Reel Type lap and diagonal seat belts are fitted. A warning light (28) is illuminated when the ignition is 'on' and the driver's belt is not fastened. (Federal only)

The belts are released by pressing the button at the rear of the lock.

Safety Note: DO NOT attempt to adjust the seat belt tension by altering the mechanism. If any adjustment is required, this should be carried out by a Lotus Dealer.

Tailgate

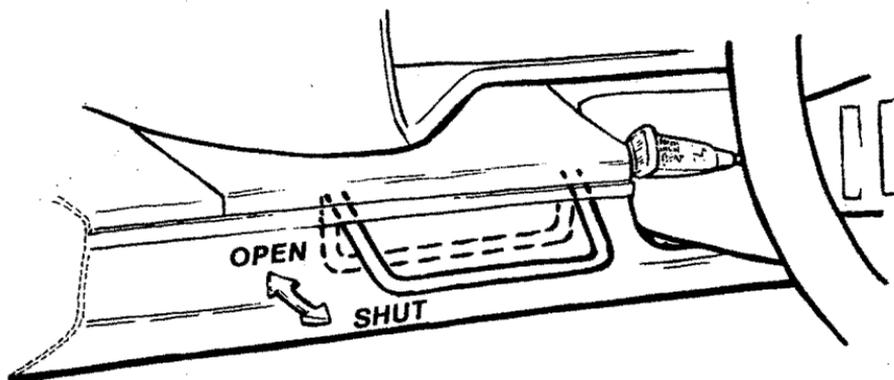
The release handle for the tailgate is located in the door pillar on the driver's side. On pulling the handle, lift the tailgate. This will remain supported by the gas struts.

To close the tailgate, pull down, and press firmly on each lower corner until the catch is fully engaged.

After lifting tailgate, the tonneau cover can be unbuttoned to reveal luggage space and engine cover.

Front Bonnet

To open, push the release lever located below the fascia on the driver's side to release the bonnet catches. Lift by hand to its fully open position, where it is supported by an overcentre strut.



CAUTION: DO NOT operate the headlamps unless the bonnet is closed. If the lamps are raised while the bonnet is open, the leading edge of the bonnet and the rear edge of the lamp pod will be damaged.

To close, release the overcentre catch, lower the bonnet and pull the release lever to lock.

Interior Lamp (27)

The interior lamp has a 2 position switch, which gives lamp On, and lamp Off. When door opens the lamp is On.

Rear View Mirror

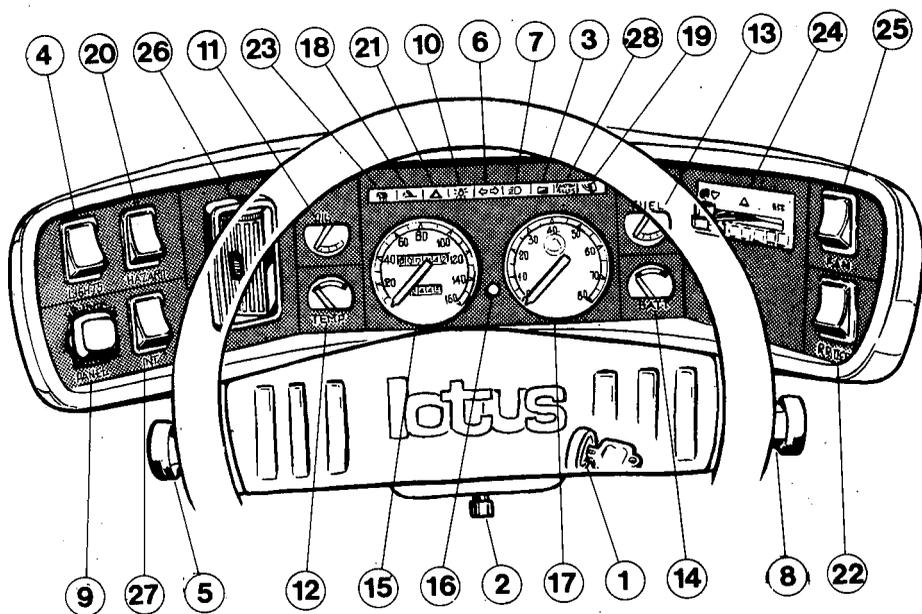
The interior rear view mirror can be dimmed to stop headlamp glare from following cars when night driving.

Ashtray

Ashtrays are situated between the doors and each seat.

Controls Console

The layout of the controls console is as shown in the illustration, with the left hand panel providing lighting control, the central panel giving driving information, and the right hand panel housing heating controls.

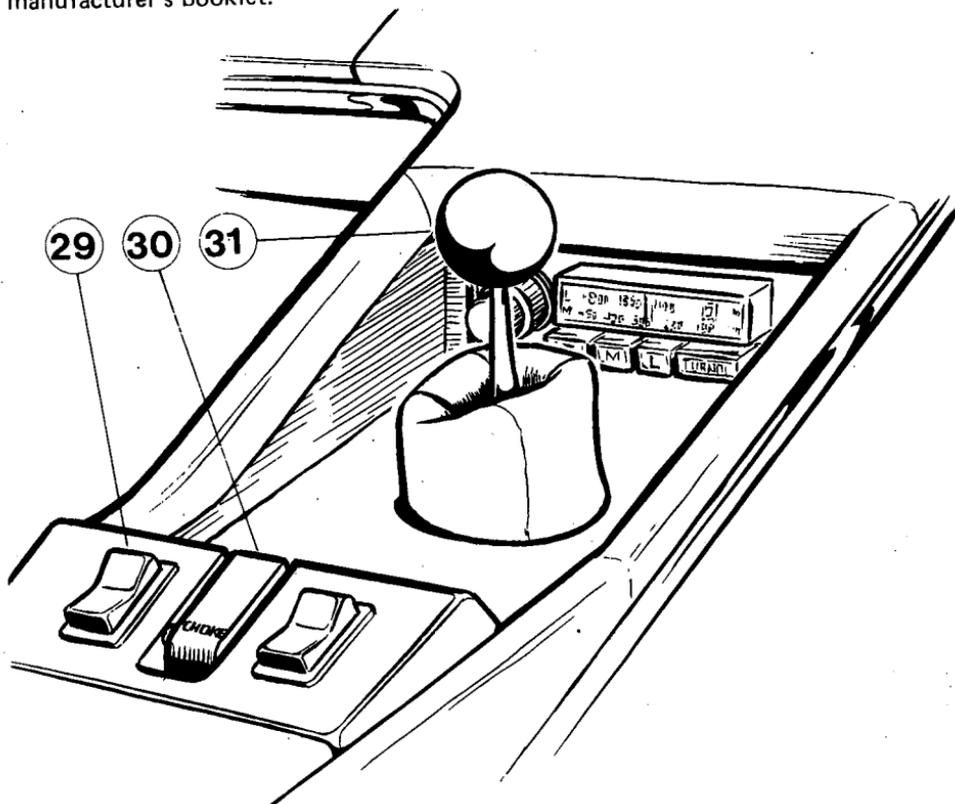


Key to Control Drawings

- | | | | |
|----|--|----|-------------------------------------|
| 1 | Ignition Switch & Steering Lock | 16 | Trip Reset Button |
| 2 | Steering Lock Button | 17 | Tachometer |
| 3 | Ignition Warning Indicator | 18 | Handbrake Warning Lamp |
| 4 | Lights Switch | 19 | Brake Warning Lamp |
| 5 | Turn Indicator/Headlamp Flasher/
Dipswitch/Horn Control | 20 | Hazard Switch |
| 6 | Turn Warning Lamp | 21 | Hazard Warning Lamp |
| 7 | Main Beam Warning Lamp | 22 | Rear Screen Demist Switch |
| 8 | Windscreen Wiper/Washer Control | 23 | Demist Warning Lamp |
| 9 | Panel Illumination Switch | 24 | Heat Controls |
| 10 | Side Lights Warning Lamp | 25 | Heater Fan Switch |
| 11 | Oil Pressure Indicator | 26 | Face Level Vent |
| 12 | Water Temperature Indicator | 27 | Interior Light Switch |
| 13 | Fuel Indicator | 28 | Fasten Belts Warning (Federal only) |
| 14 | Battery Condition Indicator | 29 | Window Control |
| 15 | Speedometer | 30 | Choke Control |
| | | 31 | Gear Lever |

Radio (when fitted)

Full instructions for operating the particular unit fitted will be found in the radio manufacturer's booklet.



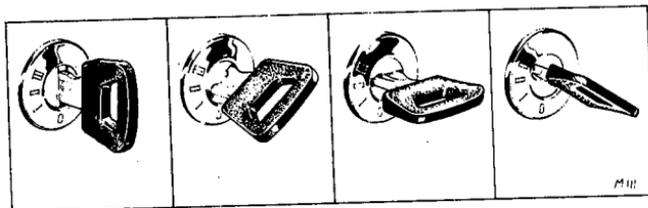
Choke Control (30)

This is between the two window switches on the tunnel top. Lift to operate the choke.

Combined ignition/starter switch and steering column lock (1)

Place key into switch at position 0. Turn to 1 to unlock steering column, and to operate the radio and other auxiliaries without engine running.

DO NOT PUSH OR
TOW THE CAR
UNLESS THE KEY IS
INSERTED INTO THE
LOCK AND TURNED
TO POSITION I OR II



Turn key to II to turn on ignition, and to III against spring pressure to start engine. When engine starts, allow key to return to position II. Turn back to I to stop engine. To remove key and lock steering column, press the button (2) which is beneath the steering nacelle, upwards, and turn key to 0.

Ignition Warning Indicator (3)

The ignition warning indicator glows red when the ignition is switched on and will go out when the engine is started.

If the indicator glows when the engine is above idling speed, this indicates some fault in the charging circuit or possibly a broken vee belt.

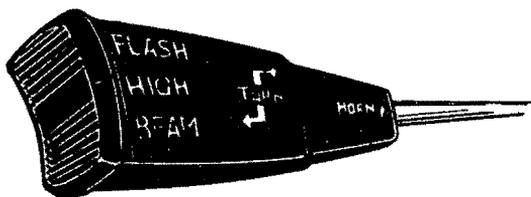
Investigate the cause and rectify as soon as possible.

Combined side, rear and headlamp switch (4)

Press down to middle position to switch on the side and rear lights, and press to lower position to raise and switch on headlights.

CAUTION: DO NOT operate the headlamps unless the bonnet is closed. If the lamps are raised while the bonnet is open, the leading edge of the bonnet and the rear edge of the lamp pod will be damaged.

Direction indicators/Headlamp Flasher / Dip-Switch/Horn (5)



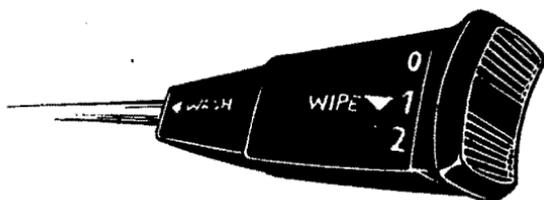
Horn: Push the knob towards the steering column to operate the horn.

Direction Indicators: Move lever down to indicate a left-hand turn, and up for a right-hand turn. Warning lamp (6) flashes when the indicators are operating. Indicators will self-cancel after turning.

Headlamp Flasher and Dip-Switch: With lighting switch at headlamp position and switch up, dipped beams are selected. With switch away from the steering wheel main beams are selected and warning lamp (7) illuminated.

Lifting switch against spring pressure flashes the main beams, raising the headlamps if lights are not already on.

Windscreen wiper/washer control (8)



Wiper: Move the lever downwards to position 1 for normal wipe, and to position 2 for fast wipe. Only use fast wipe in heavy rain. Move lever up for off.

To "flick wipe" the screen press the lever towards the steering wheel against spring pressure and hold for duration of wipe.

Do not use wiper on a dry screen.

Washer: Push the knob towards the steering column and release. A spray of one second duration will provide ample water to wash the screen.

Panel Illumination Switch (9)

When light switch is "on", rotate the knob to achieve the required brightness of panel illumination.

Oil pressure indicator (11)

Under normal running conditions the needle should be past the red mark at idle speed, vertical at 3,500 r.p.m., and towards the white sector at 6,500 r.p.m.

If the gauge fails to register or fluctuates, the engine must be stopped at once and the cause sought and rectified before restarting the engine, otherwise serious damage may result.

Water temperature indicator (12)

The normal position of the pointer should be between the blue mark (cold) and the red mark (hot).

Fuel indicator (13)

This indicates the approximate amount of fuel in the 15 gall. tank. The red sector indicates from zero to approx. 1½ galls.

Battery condition indicator (14)

This instrument registers the amount of charge which is being applied to the battery. On starting, the needle will move to the right, past vertical, then move slowly back to vertical. If the needle remains to the left, or moves to the left, investigate the cause and rectify.

Speedometer (15)

This is graduated from 0–160 m.p.h. A total mileage recorder and a trip recorder are incorporated in the instrument. The trip recorder may be turned back to zero by means of the milled knob (16) protruding from the fascia. This should be turned clockwise. The trip recorder should not be altered whilst the car is in motion.

Tachometer (17)

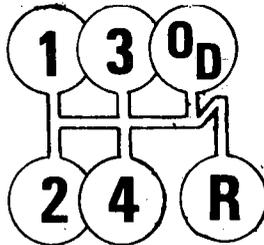
The tachometer indicates the engine's revolutions per minute. Normal maximum engine speed is 6,500 r.p.m. The distributor has a 'cut-out' type rotor arm to prevent over-revving the engine. Do not run the engine continually at the cut-out speed, which is indicated by the Red line, at 7,000 r.p.m. on the dial. Replacement of the 'cut-out' rotor arm with a conventional one invalidates the Warranty.

Foot controls

The clutch pedal, brake pedal and accelerator pedal, are arranged in the orthodox position.

Gear Lever

Moving the gear lever to the positions shown, select the appropriate gear. The lever is spring loaded away from the Overdrive/Reverse sector, and has to be lifted to obtain Reverse.



Handbrake

The handbrake is pulled upwards to hold the car stationary. If the ratchet clicks more than 7 times, have your Lotus dealer adjust it. To release, pull the handbrake slightly upwards, press the button in the top of the handgrip with the thumb, and lower the handbrake. A warning lamp (18) operates when the ignition is 'on' and the handbrake is applied.

The handbrake operates on the rear wheels only, and is independent of the hydraulic system in operation. Use the handbrake regularly, as it automatically adjusts the rear brakes.

Brake Warning Lamp (19)

If the brake warning lamp comes on when the brakes are applied, there is a fluid leakage in the hydraulic braking system, WHICH MAY MEAN THAT EITHER FRONT OR REAR BRAKES ARE NOT WORKING

Hazard warning switch (20)

When the switch is operated, all exterior direction indicators, and the Hazard Warning Lamp (21) will flash. As the switch is of the "constant-live" type, it must NOT be operated unless essential. In certain territories, the hazard warning may only be legally used on a stationary vehicle, in the event of an emergency.

Rear screen demist switch (22)

Switch is On when pressed down. A warning lamp (23) is illuminated when the screen demist is on.

Heater Controls (24)

The air temperature is controlled by the lower lever. The amount of heat can be varied between hot with lever fully back, and external air temperature with lever fully forward.

Air flow from heater to screen and footwell is controlled by the upper lever. With lever fully to the rear, air flow is off. With lever in the centre, airflow is to the screen. Moving the lever further forward mixes the airflow to the screen with the airflow to the footwell. With lever fully forward, all airflow is to the footwells.

The fan switch (25) increases the airflow to medium when pressed to its middle position, and to fast when in the lower position. Typical heater control positions are as follows:—

To defrost — place upper lever in central position, lower lever backwards and switch fan to fast. Face level vents must be closed for maximum defrost performance.

Hot air to screen and footwells — position upper lever further forward between the two arrow marks, and lower lever fully backwards. Fan speed fast, medium or off, to suit.

Hot air to footwell — position upper lever fully forward and lower lever fully backwards.

Cold air — external temperature — to footwell — position upper lever fully forward and lower lever fully forward. Fan speed to suit.

Face Level Vents (26)

These pass fresh air as required independently of the heater

STARTING PROCEDURE

USE ONLY UNLEADED GASOLINE

Starting engine when extremely cold (to -20°C)

Pull out the choke control fully. Operate the starter. Depress the accelerator pedal and increase the engine speed to 2,000 r.p.m. for five minutes, to raise the engine coolant temperature and provide adequate defrost performance from the heater. Push in the choke control progressively during warm-up.

Starting engine when cold

Pull out choke control all the way. Operate the starter. After the engine starts, push in the choke control progressively to maintain 1000 rpm. Return choke fully as engine reaches operating temperature.

Starting engine when warm

Operate the starter without moving the accelerator pedal. If the engine does not start, press the accelerator pedal right down, operate the starter, and lift the pedal immediately the engine starts. Pumping the accelerator pedal will not aid starting.

RUNNING IN

The progressive running in of a new car is very important, to ensure that the vehicle gives smooth and reliable performance, with economy and durability.

For the first 500 miles, do not exceed 3,000 r.p.m. in any gear and do not use any more throttle opening than will sustain 3,000 r.p.m. in 4th. Increase throttle opening and r.p.m. at the rate of 1,000 r.p.m. per 500 miles, so that at 1,000 miles you are using 4,000 r.p.m. and a little more throttle, at 1,500 miles 5,000 r.p.m. and at 2,000 miles 6,000 r.p.m. Thereafter, maximum throttle and r.p.m. can be used in short bursts if conditions permit. The r.p.m. and throttle opening should be gradually and smoothly increased.

GENERAL MAINTENANCE

Engine Cover

Raise the tailgate and remove the tonneau cover. Unclip the elastic straps from both sides of the engine cover, and lift cover off.

Battery

The battery is located in the right hand side of the rear compartment, and should be examined weekly to check the electrolyte level. Remove the tonneau cover and slide out the shelf from above the battery. Remove the vent chamber cover from the battery and check that the electrolyte reaches the bottom of the filler tubes on the cover. If not, pour distilled water into the filling trough until the level reaches the tubes. Wipe the battery clean and dry, and check the terminals for security and cleanliness.

Replace shelf and tonneau cover.

NOTE: The electrical system is negative earth. When using a battery charger, disconnect the battery cables.

Spare Wheel

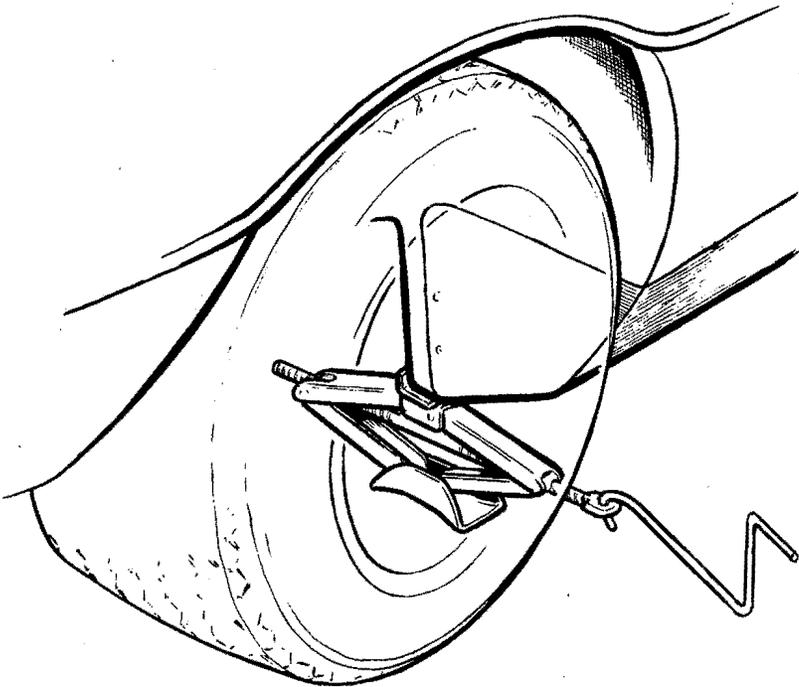
For obvious storage reasons, only a front wheel is carried. Check tyre pressure at regular intervals, and keep inflated to rear wheel pressure.

When fitting the spare wheel as a front wheel replacement, reduce to the correct tyre pressure. The wheel may then be used normally and indefinitely.

When fitting the spare wheel as a rear wheel replacement, check that the tyre pressure is correct for the rear. Only use the spare wheel on the rear for the minimum distance possible before replacing the original wheel, and drive at a lower speed than normal. When carrying the rear wheel in the front compartment the normal spare wheel location is not possible, and the straps cannot be done up.

Lifting Jack

The jack and other tools are with the spare wheel in the front compartment. Before jacking up the car, pull the handbrake firmly on. If the car is on a gradient, place chocks against the wheels which are not being raised.



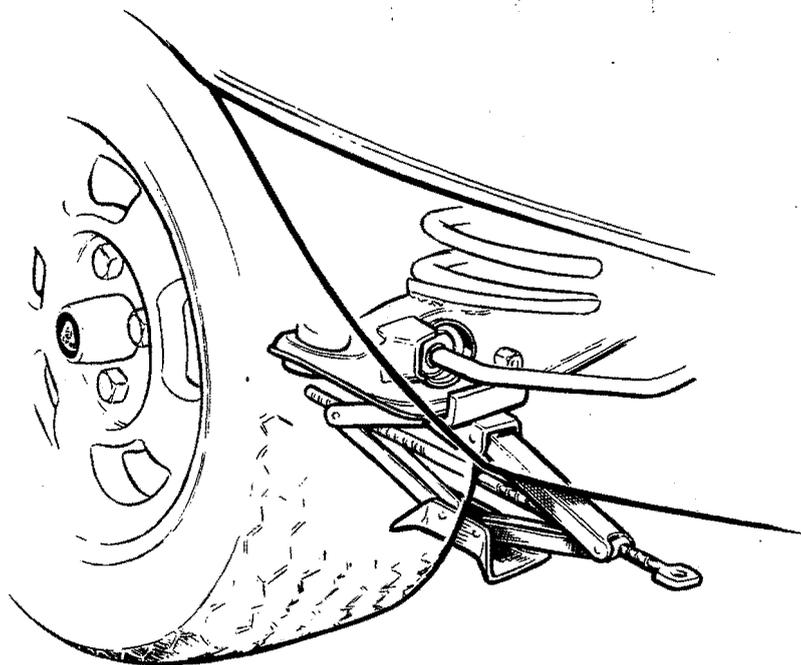
In use, the jack should be placed beneath the front lower wishbone to raise a front wheel, as shown, or forward of the rear wheel arch in the position shown, to raise a rear wheel.

Wheel removal

Use the wheel nut wrench to slacken the wheel nuts half a turn anti clockwise. Raise the wheel with the jack, remove the wheel nuts, and remove the wheel from the studs.

Wheel Replacement

Place the wheel on the studs. Fit wheel nuts, ensuring that the dished part of the washers are facing the wheel, and tighten to a torque loading of 65 lbs.ft (9 kg.m). Lower car from the jack, check the security of wheel nuts at weekly intervals.



Tyres

The complete wheel and tyre assemblies must be balanced at each service.

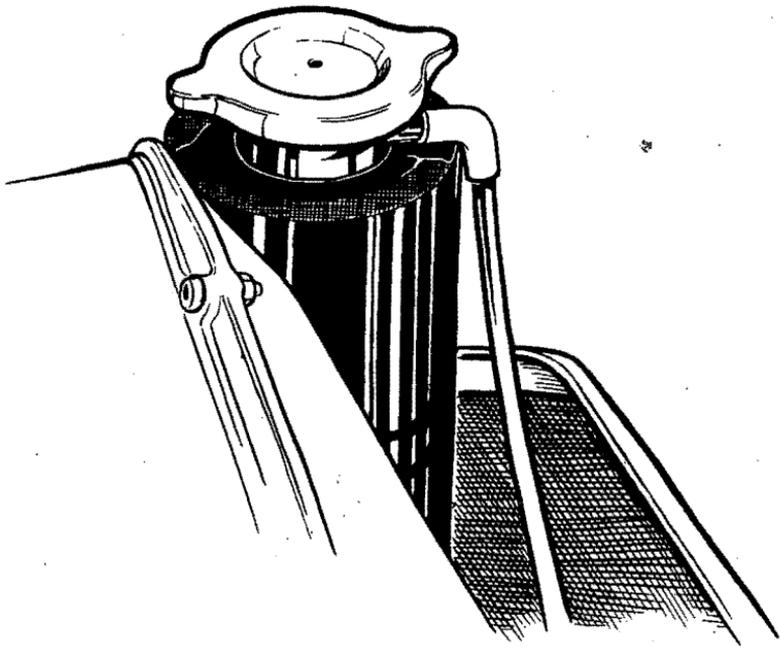
IMPORTANT: Balancing must be carried out with the wheel locating on the central spigot, not on the studs.

Maintain the tyres at the pressure recommended in Technical Data. Check pressures each week, or every 1,000 miles.

In order to maintain the correct handling feel and minimum steering wheel feedback it is very important that radial and lateral run out of the tyre is to the high standard required by Lotus Cars. If any difficulty is experienced with replacement tyres, refer to the tyre manufacturer.

Cooling System

The cooling system is pressurised and the engine should be stopped and allowed to cool before removing the header tank cap, which is at the right front side of the engine compartment. It is important that the coolant should contain a corrosion inhibitor to protect the aluminium alloy of which the greater part of the Lotus engine and the radiator, is made.



When new, the car has coolant with either "Shell-safe" or Union Carbide "UT814" inhibitor Anti-freeze to a ratio of 40% for very cold territories and 30% for others.

To drain the system, set the heater temperature control lever fully forward, remove the cap from the header tank, and open the drain tap on the radiator. To fill the system, shut the drain tap, and set the temperature level to "Def". Fill with coolant to within 25mm (1 in) of the bottom of the filler neck on the header tank.

Check that the heater system is free of air locks. If necessary, release the outlet (upper) hose clip at the back of the engine to expel any air, re-tighten the hose clip and top up the header tank.

Replace the header tank cap.

Windscreen Washer

Keep the washer reservoir, situated to the left of the front luggage compartment, topped up with water and a suitable solvent.

Air spoiler

The spoiler, situated beneath the nose of the car, is essential to the correct function of the cooling system. Check regularly that no paper, leaves, etc. are covering the air intake grille. Take care when parking the car nose into the kerb, and on driveway, ramps, and in multi-storey car parks. If any damage is sustained by the spoiler, it should be repaired as soon as possible.

If it is necessary to drive the car with a damaged spoiler, pay particular attention that the water temperature indicator does not show a serious rise in temperature.

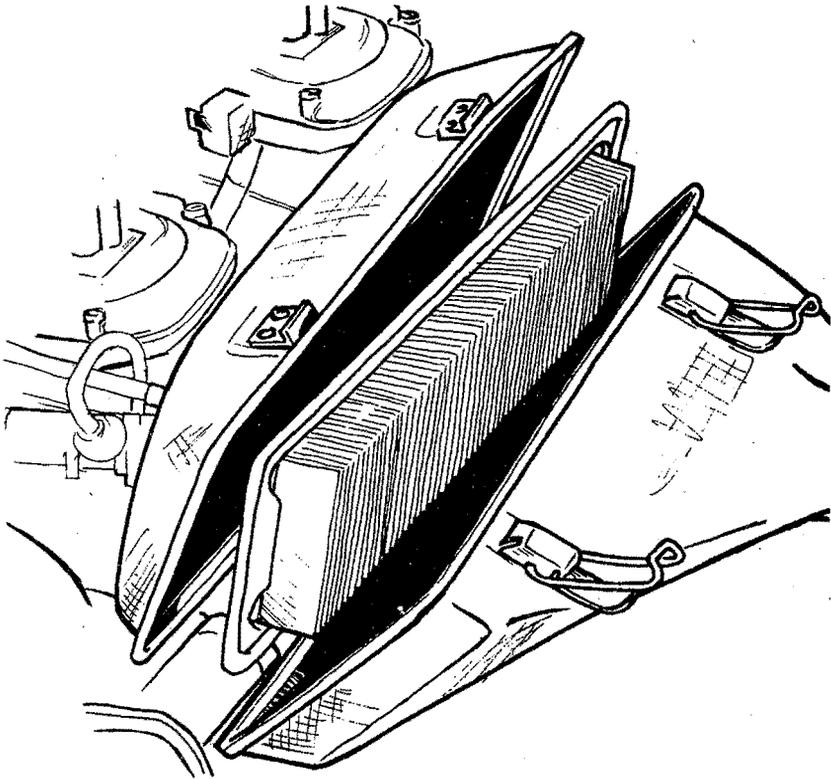
Alternator Belt

The belt is correctly tensioned when a total of .5in (12mm) movement can be obtained on the longest run of the belt.

To adjust the tension, slacken the bolt on the slotted adjusting arm, move the alternator until the correct tension is achieved, then tighten the bolt. Run engine briefly, switch off, and re-check belt tension.

Air cleaner

The intervals at which the air cleaner will require a new filter element vary. In areas where the roads are dust free, the intervals given in the Service Schedule should be adhered to, but where the roads are dusty, or the atmosphere foggy or polluted, attention will be needed at more frequent intervals.



To renew element

Unhook the latches which hold the cover to the air cleaner body, leave the hoses attached to the cover and pull open. Remove the cleaner element, take off the rubber seal and discard the element. Ensure the seal is in good condition (replace

if necessary) and fit in position on the new element. Clean the inside of the air cleaner body and cover, keeping dust out of the carburettor intakes. Fit new element with its metal face towards the carburettors. Replace cover and secure with its bolts.

Brakes

Hydraulically operated disc brakes are used, divided into separate front and rear systems, operated from the tandem master cylinder. In the unlikely event of a failure in the braking system, the driver will still have either the front or the rear brakes operating.

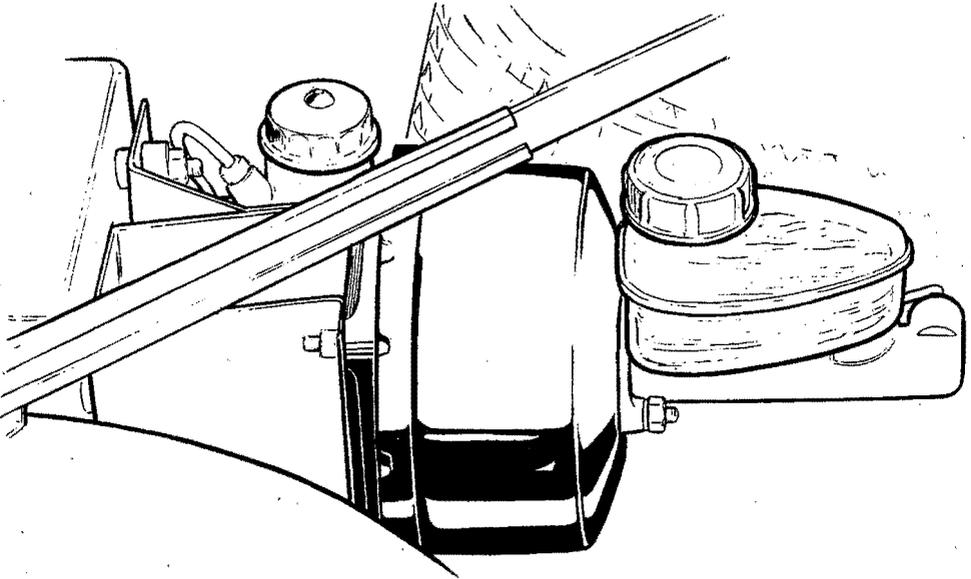
Any failure will be signalled by the BRAKES WARNING LAMP glowing RED. See page.

The handbrake is mechanically operated through a cable linkage and operates on the rear brakes only.

Brake adjustment, to compensate for pad wear, is automatic.

Brake fluid reservoir

Every week, check the level of fluid in the dual reservoir, making sure that both front and rear sections are full. If necessary, remove the cap and top up with the specified fluid.



Clutch fluid reservoir

Every week, remove the cap and check the level of fluid in the reservoir. Top up with the specified fluid, if necessary.

Hydraulic pipes

It is of vital importance that there are no leaks in the hydraulic system. Check at every service.

Every six months inspect all brake pipes for corrosion. Renew where necessary.

Brake seals, hoses and fluid

The brake manufacturers recommend that at 40,000 miles or three years, whichever is reached first, the braking system be completely overhauled by your Lotus Dealer, and all washers seals and hoses renewed. Hydraulic servo units should be stripped, all old seals and air filters discarded, component parts cleaned and examined and, if in good condition, the unit rebuilt with the appropriate service kit.

It is also recommended that the brake fluid is renewed every 12 months.

Brake pads

Examine these at every service. If brakes are in very frequent use, as when driving in mountainous conditions, it is advisable to examine at intervals of 1,000 miles. A metallic hiss may be heard from the disc brakes when the car is moving. This is quite normal, but if it develops into a metallic squeal when the brakes are applied, the pads are almost certainly due for renewal. In the interests of safety see your Lotus Dealer without delay. Always use genuine Lotus parts on replacement. Under no circumstances allow the pads to wear below 2.5 mm (or .1in) thickness.

Carburettor Adjustment

Idling adjustment is by screw 2.

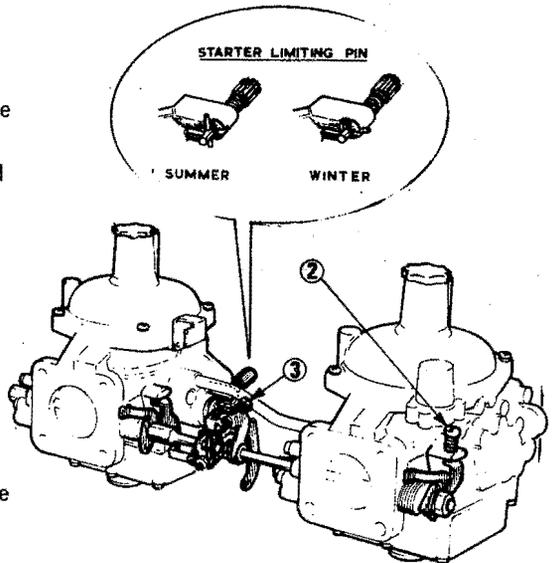
The engine speed at idling should be 950 – 1,000 r.p.m.

Throttle balance between front and rear carburetters is adjusted by screw 3.

The choke limiting pin should be turned to the Winter position for improved starting in very cold weather.

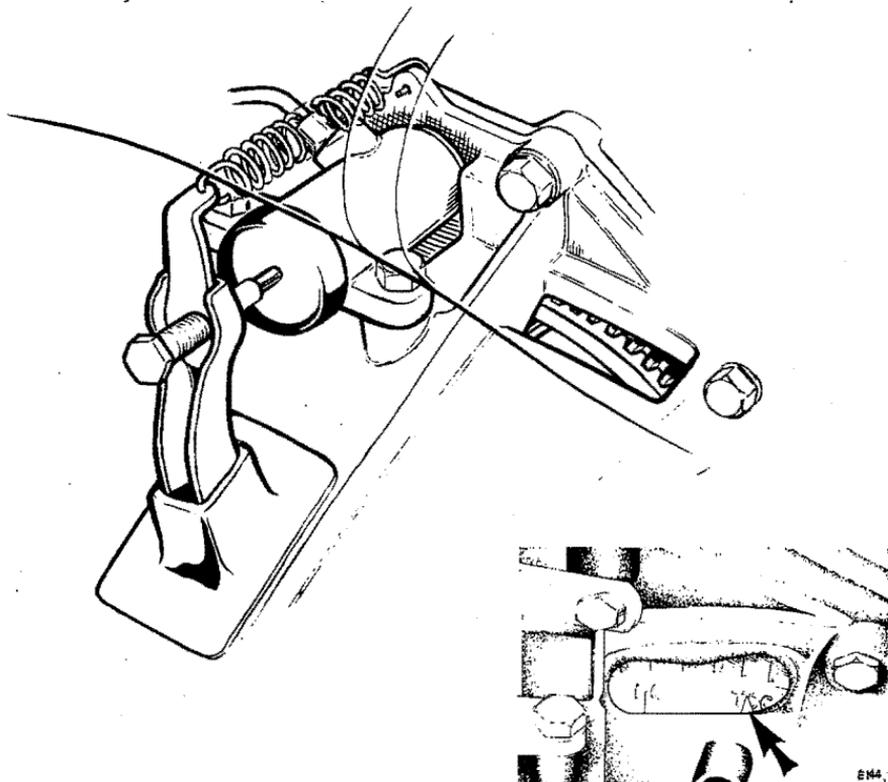
Adjustments, other than to idling speed, should only be made by a Lotus Dealer.

IMPORTANT: Note that exhaust emission regulations must always be complied with.



Clutch adjustment

The clutch is correctly adjusted when a clearance of 3mm (.12in) can be felt at Lever. If Adjustment is required, turn the adjusting nut in required direction.



Ignition timing

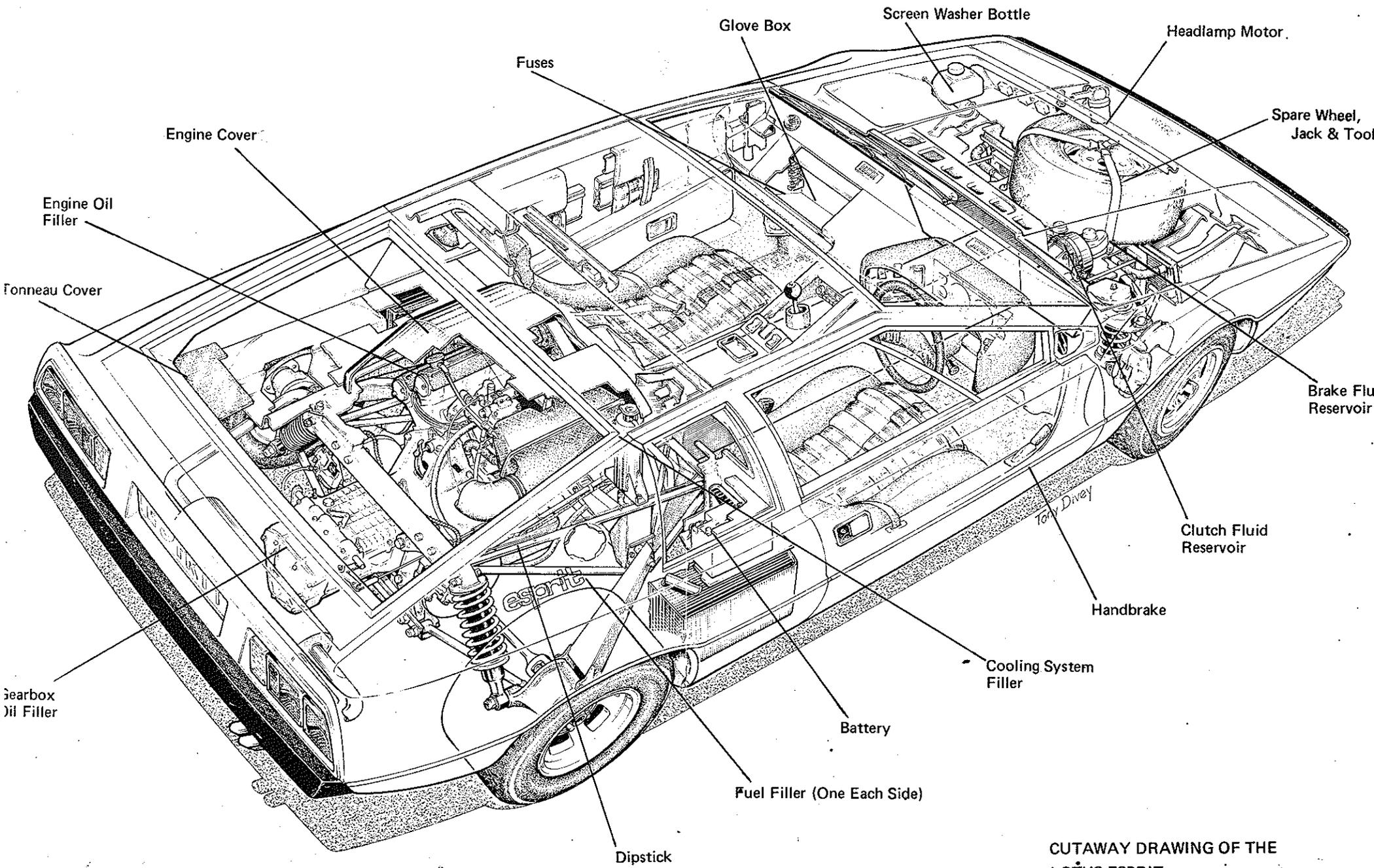
Every B and C service, check that the ignition timing is correct. Refer to Technical Data.

Spark Plugs

Every B and C service, renew the sparking plugs. Set the plug point gap as specified in technical data.

Fuel Filter

Every B and C service, fit a new fuel filter into the fuel line, after lifting the floor board along the right side of the engine compartment.



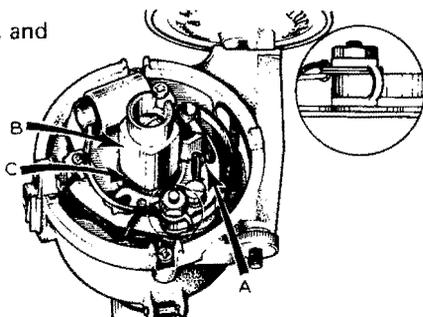
CUTAWAY DRAWING OF THE
LOTUS ESPRIT

Distributor

At every B and C service, replace the contact breaker points and set the gap as specified in technical data.

Lightly lubricate the cam B, and

the centrifugal weights C.



BULB AND LIGHT UNIT REPLACEMENT

Fuses

Eight circuits are protected by fuses:—

Headlight motor (up and down), offside side lights, nearside sidelights, ignition controlled circuits, auxiliary controlled circuits and two permanent live circuits.

Side lamps and Flasher

Undo the screws, and remove lens. The 5w. bulb is the side lamp, and the 21w. bulb is the flasher. Replace bulbs as necessary, then refit lens, correctly positioning the foam rubber seal, and replace and tighten the two screws.

Rear lamps and Brake lamps

Undo the four screws and remove the lens. The lower 21w. bulb is the brake lamp, and the upper 5w. bulb the rear lamp. Replace the bulb, refit the lens, and replace and tighten the screws.

Rear Flasher lamps

Undo the two screws and remove the lens. Replace the 21w. bulb, refit the lens, slipping the inner edge under the rear lamp lens, and replace and tighten the screws.

Reverse lamps

Undo the two screws and remove the lens. Replace the 21w bulb, refit the lens, slipping the inner edge under the rear lamp lens, and replace and tighten the screws.

Headlamps

The headlamps are raised and lowered by an electric motor. This is mounted in the front compartment, next to the left hand lamp pod. For maintenance, or in an

emergency, the lamps may be raised by turning the motor by hand, using the knurled knob which protrudes through the bottom of the motor. The bonnet must be removed.

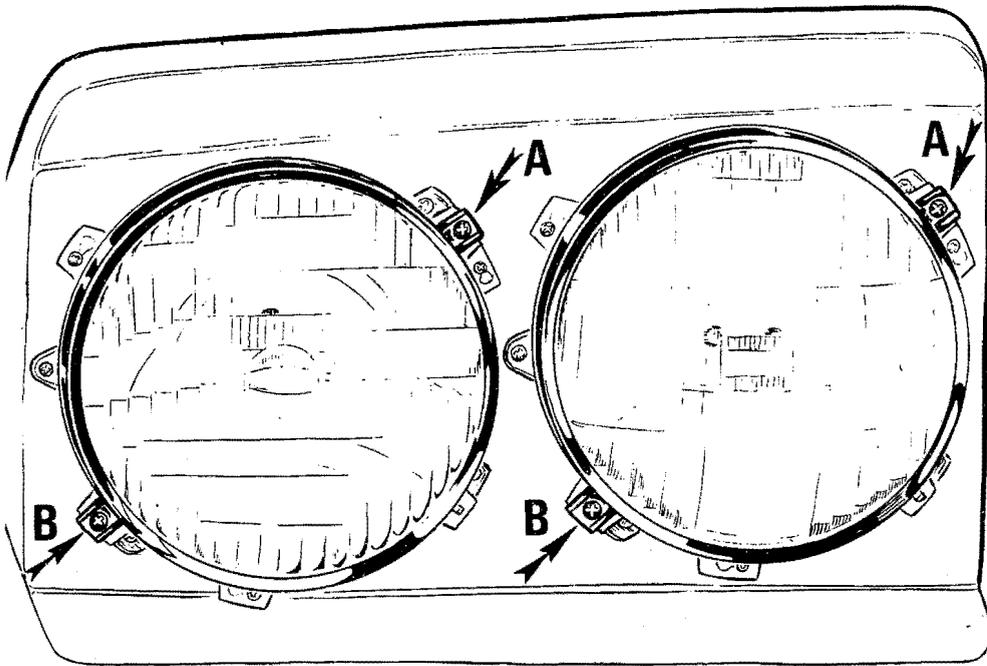
Both the lamps give the main beam, and the outer lamps the dipped beam. Remove the front bezel.

Remove the cross-headed screws securing the front rim, and withdraw front rim.

Lift the light unit from its location and detach the cable connector plug. Where detachable bulbs are used, the bulb is removed by dis-engaging the two ends of its spring retaining clip from the tabs on the bulb seating rim.

Replace in reverse order.

Check alignment (see below) and replace the front bezel.



Headlamp beam alignment

Remove the front bezel from any headlamp to expose its two trimming screws. Screw A raises or lowers the beam; Screw B adjusts the beam laterally. The main beam direction must comply with legal requirements, and should normally only be adjusted by your Lotus dealer.

After adjustment, replace the bezel.

Number plate lamps

Undo the two screws and remove the lens and combined bulb holder. Replace the 6w. festoon bulb, refit the lens, and replace and tighten the two screws.

Interior lamp

Pull out the entire lamp assembly from its location to gain access to the bulb. Replace the bulb and push lamp back into place.

Fascia and Warning lamps

It is necessary to remove the instrument cowl in order to replace a Fascia or Warning lamp bulb, and this operation should be done by your Lotus dealer.

BODY CARE

When washing the vehicle, use plenty of cold water. Never attempt to remove dust or mud from the body work when dry, as this will damage the finish.

Car shampoos will assist washing. Use only preparations of reputable manufacture. When dust and mud have been removed with sponge and water, dry with a chamôis leather.

Provided that the car is kept clean by frequent washing, it will be found that polishing is almost unnecessary. The bodywork can be protected with a good soft waxpolish, using a haze remover first to remove all "traffic film" and old polish.

During the winter months many countries use salt on the roads to assist in the clearance of ice and snow. Thoroughly wash the bodywork, the underside of the body wings, and the chassis, either weekly or more frequently, depending on local conditions, to remove any salt deposit and prevent its corrosive action.

Windscreen

When washing the windscreen, the wiper blade may only be lifted away from the screen a small distance, to avoid damaging the pantograph mechanism. Wash the wiper blade with clean water.

Bright metal

Wash with the bodywork, rinse thoroughly with clean water, allow to dry, polish lightly with a soft cloth.

Alloy Wheels

Wash frequently, using a car shampoo and a soft brush. Make sure that any salt is washed off immediately, before it can eat into the alloy.

Upholstery and roof lining

Normal usage dirt should be removed with warm soapy water. Avoid vigorous detergents. Mud, after it has dried, can be removed by brushing. Oily stains can be removed by careful, very small applications of Thawpitt, Fabriclene, or a similar cleaning agent. It must be used in moderation otherwise halo effects occur.

LUBRICATION

Regular lubrication is essential for long life and sustained performance. The correct intervals for lubrication should be strictly followed. It is most important that only the grade of lubricant shown in the Recommended Lubricants table is used, otherwise serious damage may result.

When checking oil levels, the car should be standing on a level surface.

Engine

Use the dipstick, located at the rear of the engine to check engine oil level daily. The correct oil level is to the upper mark on the dipstick.

Allow at least 5 minutes from stopping the engine, so that the oil drains into the sump, before checking the oil level.

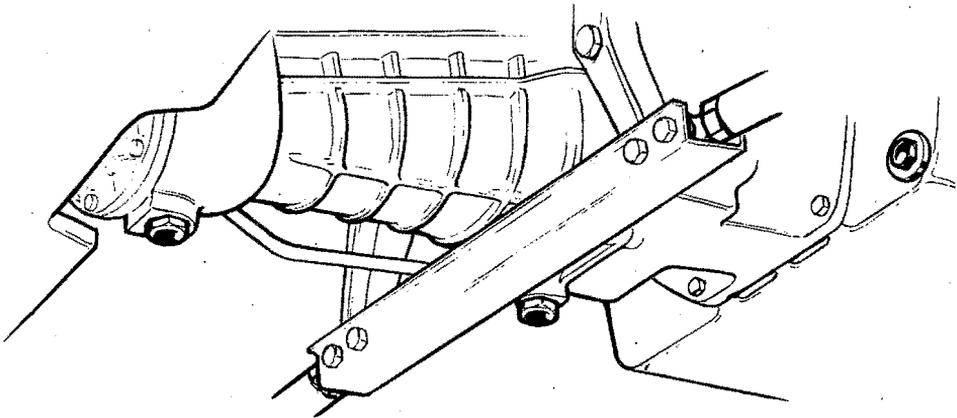
Top up if necessary, through the oil filler on the rear of the inlet camshaft cover. Do not overfill, and replace the filler cap securely.

Draining the Sump

Renew the oil at the first 500 miles, and at A, B, and C services. The drain plug is located at the rear right hand of the sump.

Drain the sump when the oil is warm and flows more readily. Allow to drain thoroughly, clean the drain plug, and replace.

Renew the oil filter. (See below). Fill the engine with new oil of the correct grade to the top mark on the dipstick.



Gearbox

Renew the oil at the Free Service and at every B and C service.

The filler plug is on the top of the gearbox at the left rear, and is reached through the floor after removing the closing plug. An oil level plug is on the left hand side of the gearbox, and two drain plugs are beneath the box, as shown.

Drain the gearbox when the oil is warm.

Remove all four plugs. Clean and replace the drain plugs when the old oil has drained thoroughly. Fill the gearbox with new oil of the recommended grade up to the level plug hole, and replace level and filler plugs.

Oil Filter

Renew the oil filter at the Free Service and at every A, B and C service.

Unscrew the filter canister by turning in an anti-clockwise direction, and discard. Clean the mating face on the crankcase and screw on the new filter by hand, but not too tightly. Start the engine and check for oil leaks, tightening the filter further if necessary.

Drive shafts

Every service, grease the drive shafts inner and outer universal joints. Use a grease gun filled with the recommended lubricant, and pump until grease exudes from the joints.

Front Hubs

Every B and C Service the front hubs should be re-packed by your Lotus Dealer with the recommended lubricant.

RECOMMENDED LUBRICANTS

Engine (above and below 0°C) Mobil SHC *must* be used when no oil cooler is fitted.

When an oil cooler is fitted lubricants listed below may be used.

Lotus Cars Ltd recommend Valvoline oils and greases, as follows:

Engine (above 0°C)	Valvoline HD 20W/50 All Climate or Racing Oil
Engine (below 0°C)	Valvoline HD 10W/40 All Climate
Transmission	Valvoline X-18-SAE 80
Steering Unit	Valvoline X-18-SAE 90
Drive Shafts	Valvoline X-All Grease
Front Hubs	Valvoline Multilith No 2 Grease

When Valvoline products are unobtainable, the lubricants listed below are approved:

	Duckhams	Texaco	Shell	Esso	Castrol	BP	Mobil
Engine (above 0°C)	Q 20W/50	Havoline 20W/50	Super 100	Uniflow 10W/50	GTX	Super Viscostatic 20W/50	Mobil Super
Engine (below 0°C)	Q 10W/40	Havoline 10W/40	Super 10W/30	Uniflow 10W/50	Castrolite	Super Viscostatic 20W/50	Mobil Super
Transmission	Hypoid 80	Multigear EP 80	Spirax 80 EP	Esso	Castrol	Energol EP SAE 80	Mobilube HD 80
Steering unit	Hypoid 90	Multigear EP 90	Spirax 90 EP	Gear oil GX 85W/140	Hypoy	Energol EP SAE 90	Mobilube HD 90
Drive shaft	Duckhams	Marfak	Shell	Esso	Castrol	BP	Mobilgrease
Front Hubs	LB10	All-purpose	Retinax A	Multi-Grease	Grease LM	Energrease L2	MP

Brake Master Cylinder Reservoir: Castrol Girling Universal Brake and Clutch Fluid.

Servicing Intervals – Refer to Maintenance Schedules

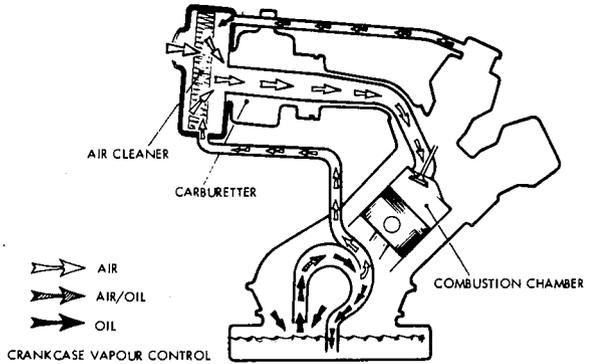
VEHICLE EMISSION CONTROL

Controlling Vehicle Emissions

The various systems to control emissions are as follows:—

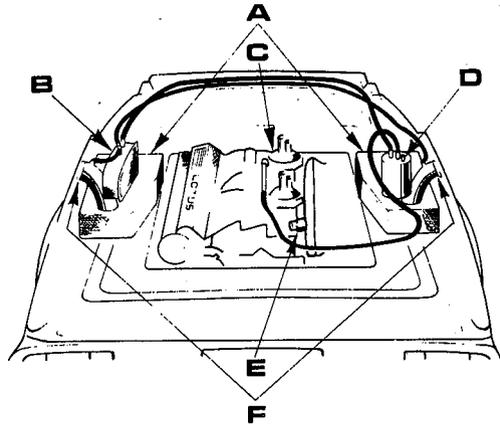
Crankcase Vapour Control

Any crankcase vapour is fed to the engine air intake, and burned during combustion.



Evaporation Control

The Evaporation Control System prevents gasoline vapours from escaping to atmosphere from the fuel tank and carburettors, by routing the vapours through a charcoal canister when the engine is not running. When the engine is running, air is drawn through the canister, purging the gasoline vapours from the charcoal. The air and vapour mixture is then routed to the engine, and burned during engine combustion.



- A — Fuel Tanks
- B — Evaporative Loss Tank
- C — Carburettors

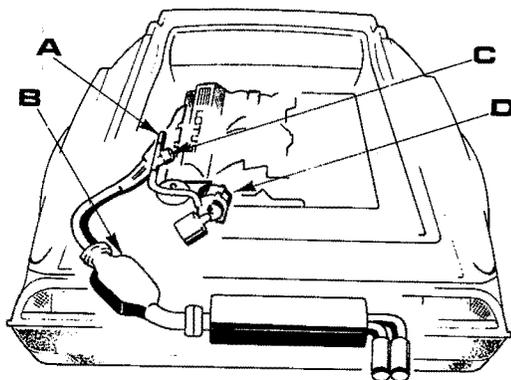
- D — Charcoal Canister
- E — Anti-run on Valve
- F — Unleaded Fuel Restrictors

Anti Run-on System

The anti Run-on valve, which is linked to the oil pressure switch, ensures that the engine stops when the ignition is turned off, and vents any evaporative emissions from the carburettor float chambers.

Exhaust Emission Control

Control of exhaust emissions is accomplished by careful engine design, together with an air pump and an exhaust catalyst. Complete effectiveness of the system depends upon the correct setting of engine idle speed, ignition timing and carburettor settings, and the use of unleaded gasoline.



- A — Air Injection Manifold
- B — Exhaust Catalytic Converter
- C — Diverter Valve
- D — Air Injection Pump

Required Maintenance

Vehicle Emission Control System

The required Maintenance Services, marked with a * on the Maintenance Schedule, must be undertaken at the mileages specified to ensure the continued proper functioning of the emission control system. These, and all other listed Maintenance Services, must be undertaken to provide optimum vehicle performance and reliability. More frequent maintenance may be needed for vehicles operating in dusty areas, on short trip driving or in other severe conditions.

Inspection and service should also be performed anytime a malfunction is suspected.

Emission Control Systems Warranty

Lotus Cars Limited warrants to the ultimate purchaser and each subsequent purchaser that his Lotus is designed, built, and equipped so as to conform at the time of sale with all U.S. emission standards applicable at the time of manufacture and that it is free from defects in materials and workmanship which would cause it not to meet these standards within the period of 5 years or 50,000 miles, whichever occurs first. Failures, other than those resulting from defects in material or workmanship, which arise solely as a result of owner abuse and/or lack of proper maintenance are not covered by the warranty.

TECHNICAL DATA

ENGINE

Type:	Lotus 907
No of cylinders:	4
Capacity:	1973 cc — 120.4 cu in
Bore:	95.2 mm — 3.75 in
Stroke:	69.2 mm — 2.72 in
Compression Ratio:	8.4:1
Firing Order:	1 — 3 — 4 — 2
Oil Pressure (Hot):	Not below — 5 lbs in sq. at idle, 35 at 3,500 rpm, 45 at 6,500 rpm and above.
Ignition Timing:	8° B.T.D.C. — static, 0° at 950 — 1000 rpm
Spark Plugs:	Type — Champion N9Y Gap — .58 mm — .023 in
Valves:	4 per cylinder, twin overhead camshafts
Valve Clearances:	Inlet .127 — .178 mm — .005 — .007 in (Cold)
Distributor Points Gap:	Exhaust .254 — .305 mm — .010 — .012 in .35 — .40 mm, .014 — .016 in
Engine Idle Speed:	950 — 1000 rpm
Carburettor:	Zenith — CD 175 SE (two)

TRANSMISSION

Type: Manual 5 forward gears (All synchromesh) and reverse

Internal Ratios	mph	&	kph per 1000 rpm
Fifth .76:1	21.85		35.16
Fourth .97:1	17.15		27.59
Third 1.32:1	12.58		20.24
Second 1.94:1	8.56		13.77
First 2.92:1	5.69		9.15
Reverse 3.46:1	—		—
Final drive 4.375:1	—		—

CAPACITIES

Engine (incl Filter)	— Dry 6 litres (10.5 imp pts, 12.6 US pts)
	— Refill 4.8 litres (8.5 imp pts, 10.2 US pts)
Difference between high and low dipstick marks:	0.85 litres (1.5 imp pts, 1.8 US pts)
Transmission:	2.25 litres (4 imp pts, 4.8 US pts)
Cooling System:	10.8 litres (19 imp pts, 22.8 US pts)
Fuel Tank:	67 litres (14.75 imp gall, 17.7 US gall)

ELECTRICAL

Voltage/Polarity:	12V/Negative Earth
Alternator:	Motorola 55 amp
Battery:	44 amp hr @ 20 hr rating
Headlamps:	Four 5½ in diameter units, two in each headlamp pod
No of Fuses:	8 (inside glove department)

FRONT SUSPENSION

Independent by twin upper wishbones, with single lower link and anti-roll bar providing lower location. Coil springs and telescopic shock absorbers.

Steering:	Rack and pinion
*Front Wheel Toe In:	3 to 5 mm $\frac{1}{8}$ in to $\frac{3}{16}$ in
*Camber Angle:	0° to $-\frac{1}{2}^{\circ}$
Castor Angle:	3° to $3\frac{1}{2}^{\circ}$
Swivel Pin Angle (kpi):	9°
*At Ride Height (2 people in car)	

REAR SUSPENSION

Independent by diagonal trailing arm and lateral link with fixed length drive shafts. Coil springs and telescopic shock absorbers.

*Camber Angle:	0° to $-\frac{1}{2}^{\circ}$
*Rear Wheel Toe In:	8 to 10 mm, $\frac{5}{16}$ to $\frac{3}{8}$ in
*At Ride Height (2 people in car)	

BRAKES

Girling Hydraulic with type 28 Supervac-Servo. Split front to rear system, disc all round.

Front:	Disc diameter 250 mm, 9.7 in
Rear:	Disc diameter 275 mm, 10.82 in
Handbrake:	Mechanical rear wheels only

WHEELS AND TYRES

Wheel Type:	Bolt on alloy
	Size — Front: 6JK x 14
	— Rear: 7JK x 14
Tyres:	Type — Dunlop "SP Sport Super"
	Size — Front: 205/60 VR x 14 (Radial)
	— Rear: 205/70 VR x 14 (Radial)
Tyre Pressure:	1.3 kg.cm.sq, 18 lbs in. sq. — Front
	1.9 kg.cm.sq, 27 lbs in.sq. — Rear

DIMENSIONS

Height:	111 cm (43.75 in)
Width:	186 cm (73.24 in)
Length:	426 cm (167.71 in)
Wheel Base:	244 cm (96 in)
Track:	Front 151.13 cm (59.50 in)
	Rear 151.13 cm (59.50 in)
Ground Clearance:	15.24 cm (6 in)
Kerb Weight:	1052.35 kg (2320 lbs)

REGISTRATION OF SALE.

Owner's Name:

Address:

Chassis No.:

Engine No.:

Colour:

Date of Purchase:

Dealer's Stamp

Date:

PRE-DELIVERY INSPECTION.

P.D.I. carried out by:

Dealer's Stamp

Date:

Distributor/Dealer stamp:

P.D.I. carried out by:

Date:

REGISTRATION OF SALE

Chassis No.:

Engine No.:

Colour:

Tyre Identification:

1									
2									
3									
4									
5									

Date of Sale/Registration

Owner:

Address:

Received the above vehicle, the Pre-Delivery Inspection having been carried out by the Lotus Main Dealer to my satisfaction.

Owner's signature:

PRE-DELIVERY INSPECTION

Mechanical

- Check coolant level, and check system for leaks.
- Check engine, gearbox and rear axle oil levels, and check for leaks.
- Check security of engine oil filter.
- Check brake fluid reservoir level.
- Check fuel system for leaks. Completely fill fuel tank and check for leaks.
- Check clutch adjustment.
- Check tightness of wheel nuts.
- Check tyre pressures including spare.
- Check engine idling speed.
- Check power-assisted steering fluid level and system for leaks (when fitted).
- Check automatic transmission fluid level (when fitted).

Electrical

- Check battery electrolyte level.
- Check operation of all lamps.
- Check operation of horns and direction indicators.
- Check operation and park position of windscreen wipers.
- Check operation of windscreen washers.
- Check operation of all instruments.
- Check operation of headlamps and door windows.
- Check operation of radio unit.
- Check operation of heater and fan (when fitted).
- Check operation of air conditioning equipment and fan (when fitted).

Body

- Check operation of doors and locks.
- Check bonnet release mechanism.
- Check tailgate release mechanism.
- Check interior trim for damage and cleanliness.
- Check operation of seat belts.
- Check all bright work and paint for condition.
- Check presence of tool kit and literature pack.

Road Test

- Carry out brief road test and submit report, with details of any additional attention required.
- Submit a defect report where necessary.

Wash the car and polish as detailed in Bulletin 1974/37.

This inspection is to be declared subject to the following conditions:

- It is the responsibility of the supplying Distributor/Importer/Dealer to ensure that the car is delivered to the customer in the best possible condition.
- All costs incurred during the Inspection are the responsibility of the supplying Distributor/Importer/Dealer.
- Failure to return a signed copy of this Inspection to Lotus Cars Limited by the Distributor/Importer/Dealer, may result in warranty claims on the particular car being rejected.

CHANGE OF OWNER

CHANGE OF OWNER

Second Owner's
Name

Address:

Date of
First Transfer:

Dealer's Stamp:

Date:

Dealer's Stamp

Date:

Chassis No:

Engine No:

Colour:

Date of Transfer:

Second Owner:

Address:

Second Owner's
Signature:

CHANGE OF OWNER

CHANGE OF OWNER

Third Owner's
Name

Address:

Date of
Second Transfer:

Dealer's Stamp

Date

Dealer's Stamp

Date

Chassis No:

Engine No:

Colour:

Date of Transfer:

Third Owner:

Address:

Third Owner's
Signature

FREE AFTER SALES SERVICE



Lotus



Lotus

FREE

FREE

SERVICE

SERVICE VOUCHER

VOUCHER

500 miles

500 miles

Owner:

Address:

Owner:

Registration No:

Chassis No:

Engine No:

Colour:

Date of Purchase:

The 500 mile Free Service has been completed in accordance with the Maintenance Schedule and to the Owners satisfaction.

The 500 mile Free Service has been completed to my satisfaction.

Owners
Signature:

Dealer's Stamp

Dealer's Stamp

Date

Date:

A SERVICE

6,000 miles

Owners Signature:

Mileage:

Date:

This Service has been completed in accordance with the Maintenance Schedule.

Dealers Stamp:

Signature:

B SERVICE

12,500 miles

Owners Signature:

Mileage:

Date:

This Service has been completed in accordance with the Maintenance Schedule.

Dealers Stamp:

Signature:

A SERVICE

18,500 miles

Owners Signature:

Mileage:

Date:

This Service has been completed in accordance with the Maintenance Schedule.

Dealers Stamp:

Signature:

C SERVICE

25,000 miles

Owners Signature:

Mileage:

Date:

This Service has been completed in accordance with the Maintenance Schedule.

Dealers Stamp:

Signature:

This Service has been completed
in accordance with the
Maintenance Schedule.

A SERVICE

31,000 miles

Dealers Stamp:

Owners Signature:

Signature:

Mileage:

Date:

This Service has been completed
in accordance with the
Maintenance Schedule.

B SERVICE

37,500 miles

Dealers Stamp:

Owners Signature:

Signature:

Mileage:

Date:

This Service has been completed
in accordance with the
Maintenance Schedule.

A SERVICE

43,500 miles

Dealers Stamp:

Owners Signature:

Signature:

Mileage:

Date:

This Service has been completed
in accordance with the
Maintenance Schedule.

C SERVICE

50,000 miles

Dealers Stamp:

Owners Signature:

Signature:

Mileage:

Date: